ATP 3-06
MCTP 12-10B



URBAN OPERATIONS

JULY 2022
INCORPORATING CHANGE 1, JUNE 2025

DISTRIBUTION RESTRICTION. Approved for public release; distribution is unlimited.
*This publication supersedes ATP 3-06/MCTP 12-10B, dated 7 December 2017.

HEADQUARTERS, DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES MARINE CORPS

This publication is available at the Army Publishing Directorate site (https://armypubs.army.mil), and the Central Army Registry site (https://atiam.train.army.mil/catalog/dashboard).

This publication is available at the U.S. Marine Corps Doctrine website (https://doctrine.usmc.mil).

Change No. 1
Army Techniques Publication
No. 3-06

Headquarters
Department of the Army
Washington, D.C., 20 June 2025

Urban Operations

1. Change 1 to ATP 3-06, 21 July 2022, replaces all occurrences of the term “gender” with the term “sex” in accordance with Executive Order 14168, dated 20 January 2025.

2. A plus sign (+) marks modified content.

3. ATP 3-06, 20 June 2025, is changed as follows:

Change Version Page(s)	Change Description
Page 1-14	Replaces “gender” with “sex”
Page 4-31	Replaces “gender” with “sex”
Page 6-4	Replaces “engenders” with “promotes”

4. An updated Authentication page has amended the prior authentication reflected in the rear of this publication.

DISTRUBUTION RESTRICTION: Approved for public release; distribution is unlimited.

This page intentionally left blank.

***ATP 3-06**
MCTP 12-10B

Army Techniques Publication
No. 3-06

Headquarters
Department of the Army
Washington, DC

Marine Corps Tactical Publication
No. 12-10B

Headquarters
Marine Corps Tactics and Operations Group
Marine Corps Air-Ground Task Force Training Command
Marine Corps Air-Ground Combat Center
Twentynine Palms, CA

21 July 2022

URBAN OPERATIONS

Contents

		Page
	PREFACE	**v**
	INTRODUCTION	**ix**
Chapter 1	**THE URBAN ENVIRONMENT**	**1-1**
	Importance of Urban Operations	1-1
	Urban Terrain	1-4
	Urban Population	1-12
	Urban Infrastructure	1-19
Chapter 2	**FOUNDATIONS OF URBAN OPERATIONS**	**2-1**
	Understanding Urban Operations	2-1
	Necessity of Urban Operations	2-3
	Risk Considerations	2-17
	Fundamental Considerations Of Urban Operations	2-22
Chapter 3	**URBAN OPERATIONS EFFECTS ON WARFIGHTING FUNCTIONS AND TACTICS**	**3-1**
	Warfighting Functions	3-1
	Command and Control Warfighting Function	3-1
	Movement and Maneuver/Maneuver Warfighting Function	3-6
	Intelligence Warfighting Function	3-10
	Fires Warfighting Function	3-14
	Sustainment/Logistics Warfighting Function	3-21
	Protection/Force Protection Warfighting Function	3-23
	Key Tactical Considerations	3-25
Chapter 4	**URBAN OFFENSIVE OPERATIONS**	**4-1**
	Purpose of Urban Offensive Operations	4-1
	Characteristics of Offense	4-5
	Offensive Battlefield/Battlespace Organization	4-9
	Forms of Urban Offensive Maneuver	4-16

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes ATP 3-06/MCTP 12-10B, dated 7 December 2017.

Types of Offensive Operations 4-21
Considerations of Urban Offense 4-22

Chapter 5 URBAN DEFENSIVE OPERATIONS 5-1
Purpose of Urban Defensive Operations 5-1
Characteristics of Defense 5-2
Defensive Battlefield/Battlespace Organization 5-11
Forms of Urban Defense 5-12
Types of Urban Defense 5-16
Considerations of Urban Defense 5-20

Chapter 6 URBAN STABILITY OPERATIONS 6-1
Purpose of Urban Stability Operations 6-1
Characteristics of Urban Stability Operations 6-1
Stability Operations Tasks 6-4
Considerations of Urban Stability Operations 6-17

Chapter 7 LARGE-SCALE COMBAT OPERATIONS 7-1
Purpose of Urban Operations in Large-Scale Combat 7-1
Characteristics of Urban Operations in Large-Scale Combat Operations 7-4
Tactical Enabling Tasks 7-9

Appendix A OFFENSIVE URBAN OPERATIONS VIGNETTE A-1

Appendix B DEFENSIVE URBAN OPERATIONS VIGNETTE B-1

Appendix C STABILITY OPERATIONS VIGNETTE C-1

Appendix D URBAN OPERATIONS TRAINING D-1

Appendix E COMBINED AND PARTNERED URBAN OPERATIONS E-1

SOURCE NOTES ..... Source Notes-1

GLOSSARY Glossary-1

REFERENCES References-1

INDEX Index-1

Figures

Figure 1-1. Planning across phases and urban operational variables with the urban triad 1-2
Figure 1-2. The multi-domain extended urban battlefield 1-6
Figure 1-3. Major urban patterns 1-10
Figure 1-4. Basic internal street patterns 1-11
Figure 1-5. Urban functional areas 1-11
Figure 1-6. Simplified analysis of urban society 1-13
Figure 1-7. Urban infrastructure categories 1-23
Figure 2-1. Army strategic roles, competition continuum, and range of military operations 2-2
Figure 2-2. General settings of urban operation tactical sequencing 2-10
Figure 2-3. Levels of warfare, end state, objectives, effects, tasks (JP 5-0) 2-14
Figure 2-4. Operation AL FAJR: Second Battle of Al Fallujah, November 2004 2-16
Figure 2-5. Risks associated with urban operations 2-18
Figure 3-1. Combat power model 3-2

Figure 3-2. Methods to increase communications effectiveness during urban operations 3-5
Figure 3-3. Decision making during execution (ADP 5-0) 3-27
Figure 4-1. Clockwise from top-left. 1. Operation COBRA breakout, approach to Aachen; 2. VII Corps Westwall penetration; 3. First Army completed encirclement; 4. Search and attack of Aachen 4-3
Figure 4-2. Encirclement of Aachen 4-4
Figure 4-3. Initial attack in Brittany 4-7
Figure 4-4. Subsequent disposition of forces in Brittany. 4-8
Figure 4-5. Rolling battleship 4-10
Figure 4-6. Combined arms section 360 teaming 4-11
Figure 4-7. Combined arms section 4-12
Figure 4-8. Lane attack approach 4-13
Figure 4-9. Envelopment isolates a city 4-17
Figure 4-10. Turning movement 4-17
Figure 4-11. Infiltration. 4-18
Figure 4-12. Penetration 4-19
Figure 4-13. Frontal assault/Frontal attack 4-20
Figure 4-14. Flank attack 4-21
Figure 4-15. Required urban reconnaissance actions 4-25
Figure 4-16. Shaping through isolation 4-26
Figure 4-17. Critical sensor-to-shooter links 4-29
Figure 4-18. Reactions to isolation 4-30
Figure 4-19. Coordination of special operations forces and conventional capabilities 4-32
Figure 5-1. Defense of Bastogne 5-3
Figure 5-2. (1) German Attacks to Seize Stalingrad, Summer 1942, (2) German Attacks to Seize Stalingrad, September 1942, (3) Soviet Attacks trap German 6th Army 5-8
Figure 5-3. Offensive and defensive urban operations framework 5-10
Figure 5-4. Perimeter defenses and engagement area control measures 5-14
Figure 5-5. Slope terminology and oblique defilade 5-16
Figure 5-6. Example corps area defense in depth 5-17
Figure 5-7. Urban mobile defense with defense of a linear obstacle 5-18
Figure 5-8. Delay through an urban area 5-19
Figure 6-1. Stability tasks in decisive action (top), and across the range of military operations (bottom) 6-3
Figure 6-2. The stabilization framework 6-5
Figure 6-3. Integrated stability operations tasks 6-6
Figure 6-4. Bosnia-Herzegovina region, 1992–1995 6-8
Figure 6-5. Bosnia-Herzegovina, Serb, and Croat-Muslim boundaries in 1995 6-9
Figure 6-6. Sample, purpose-based stability lines of effort 6-15
Figure 7-1. Thirty-six global cities with populations over ten million (Demographia 2021) 7-6
Figure 7-2. Jakarta seen from NASA imagery data over time; it approaches 35 million in 2021 7-7
Figure A-1. Field army area of operations for urban operations A-2

Figure A-2. Field army and corps doctrinal template example A-4
Figure A-3. Division area of operations for offensive urban operations A-5
Figure A-4. Division and brigade combat team area of operations for offensive urban operations A-6
Figure B-1. Corps/Marine expeditionary force urban area defense area of operations B-2
Figure B-2. Division/Marine division mobile defense area of operations B-3
Figure B-3. Brigade combat team/Marine air-ground task force area defense area of operations….. ..... B-4
Figure C-1. Division and brigade combat team stability operations C-2
Figure D-1. Modern city terrain complexity D-2
Figure D-2. Example of live to constructive training for dense urban terrain D-4

Tables

Table 1-1. Urban functional area advantages and disadvantages 1-12
Table 1-2. Conurbation and population infrastructure densities 1-16
Table 2-1. Urban operational implications (JP 3-06) 2-15
Table 2-2. Risk vulnerabilities and mitigation measures 2-21
Table 2-3. Fundamentals of urban operations 2-22
Table 3-1. Warfighting functions by Service 3-1
Table 3-2: Urban operations biometric impacts 3-13
Table 3-3. Fires warfighting function tasks (ADP 3-19) 3-14
Table 3-4. Sustainment principles and urban operations 3-23
Table 3-5: Protection tasks in urban operations 3-24
Table 3-6. Level of threat 3-24
Table 3-7. General principles of the law of war 3-29
Table 3-8. General engineering support tasks 3-30
Table 5-1. Typical and urban operations planning force ratios 5-22
Table 5-2. Approximate defensive frontages and depths 5-22
Table 5-3. Brigade and below opposed rates of advance (km/hr) 5-23
Table 5-4. Division opposed rates of advance (km/hr) 5-24
Table 6-1. Example measures of effectiveness 6-19
Table A-1. Example maneuver-sustainment integration and planning A-3
Table D-1. Measures of collective task proficiency (FM 7-0) D-5
Table D-2. Urban training: Leaders guide to objective assessment of training D-8

Preface

ATP 3-06/MCTP 12-10B is a dual-designated Army and Marine Corps manual that provides Soldiers/Marines with many of the concepts and techniques associated with conducting urban operations (UO). This publication supersedes ATP 3-06/MCTP 12-10B dated 7 December 2017.

The principal audience for ATP 3-06/MCTP 12-10B includes Army/Marine Corps commanders, leaders, unit staffs, and Soldiers/Marines. Commanders and staffs of Army/Marine Corps headquarters serving as a joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the conduct of joint UO (see JP 3-06). Trainers and educators throughout the Army/Marine Corps will also use this manual.

Commanders, staffs, and subordinates ensure their decisions and actions comply with applicable U.S., international, and in some cases, host-nation laws and regulations. Commanders at all levels ensure their Soldiers/Marines operate in accordance with the law of war and the rules of engagement (ROE) (see FM 6-27/MCTP11-10C).

ATP 3-06/MCTP 12-10B uses joint terms where applicable. Selected joint, Army, and Marine Corps terms and definitions appear in both the glossary and the text. In doctrinal publications, the normal convention for identifying terms is through the use of italics. Since this is a dual-designated Army and Marine Corps manual, the following protocol is used to distinguish proponency (authority) for information and terms:

- Underlined text—Marine Corps-specific text.
- Term in italics and underlined—Marine Corps-specific definitions.
- Term in italic, definition in plain text—joint terms and Army terms with proponent publication other than ATP 3-06/MCTP 12-10B with the proponency publication in parentheses.
- Term in bold italic, definition in bold—terms for which ATP 3-06/MCTP 12-10B is the proponent publication.

ATP 3-06/MCTP 12-10B applies to the Active Army, Army National Guard, United States Army Reserve, and the Marine Corps/Marine Corps Reserve of the United States unless otherwise stated.

This publication contains copyrighted material.

The proponent of ATP 3-06/MCTP 12-10B is the United States Army Combined Arms Center. The preparing agency is the Combined Arms Doctrine Directorate, United States Army Combined Arms Center. Send comments and recommendations on DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, United States Army Combined Arms Center, Fort Leavenworth, ATZL-MCD (ATP 3-06), 300 McPherson Avenue, Fort Leavenworth, KS 66027-2337; by e-mail to: usarmy.leavenworth.mccoe.mbx.cadd-org-mailbox@mail.mil; or submit an electronic DA Form 2028.

U.S. Marine Corps readers of this publication are encouraged to submit suggestions and changes to Marine Corps Tactics and Operations Group via e-mail: mctogdoctrine@usmc.mil.

This page intentionally left blank.

Acknowledgements

The copyright owners listed here have granted permission to reproduce material from their works.

Concrete Hell: Urban Warfare from Stalingrad to Iraq by Louis A. DiMarco by permission of Osprey Press. Copyright © 2012 by Louis A. DiMarco.

The City in History: Its Origins, Its Transformations, and Its Prospects by Lewis Mumford, Mariner Press with fair-use permission from Harper Collins Publishers, 1968.

"The Marawi Crisis: Urban Conflict and Information Operations" by Charles Knight and Katja Theodorakis. Copyright © 2019 by Australian Strategic Policy Institute.

Reimagining the Character of Urban Operations for the U.S. Army: How the Past Can Inform the Present and Future. Gian Gentile, David E. Johnson, Lisa Saum-Manning, Raphael S. Cohen, Shara Williams, Carrie Lee, Michael Shurkin, Brenna Allen, Sarah Soliman, and James L. Doty III, (Santa Monica, CA by permission of Rand Corporation, 2017.

Reprinted from *This Kind of War: The Classic Korean War History* by T. R. Fehrenbach by permission of the University of Nebraska Press. Copyright © 1963 by T. R. Fehrenbach. Copyright © 2008 by Potomac Books, Inc.

On War by Carl von Clausewitz. Copyright © 1979 by Princeton University Press.

Heavy Matter: Urban Operations' Density of Challenges. Russell W. Glenn. Copyright © by Rand Corporation, 2000.

An Attack on Duffer's Downtown. Russell W. Glenn. Santa Monica, CA by permission of RAND Corporation, 2001.

Numbers, Predictions, and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles by Trevor N. Dupuy. Copyright © Bobbs-Merril, 1979.

"Lessons in Command and Control from the Los Angeles Riots" by Christopher M. Schnaubelt. Copyright © *Parameters*, 1997.

Demographia World Urban Areas, 17th Annual edition. Copyright © by Demographia, 2021.

This page intentionally left blank.

Introduction

Operations in and around cities are one of the greatest challenges U.S. forces face. Unyielding population growth, urbanization of littoral areas, and greater resource needs drive instability that causes competition, crisis, or conflict. The commensurate shift of Army strategic roles as defined in FM 3-0 refocuses ATP 3-06/MCTP 12-10B on conducting UO across the competition continuum and in armed conflict as part of larger campaigns and major operations. These operations are conducted amongst civilians and against various threats to include hybrid threats, conventional or regular forces, irregular forces, terrorists, and criminal elements. Winning requires the ability to transition more rapidly between competition, crisis, and conflict paradigms than enemy forces can. In operations, winning also requires greater acceleration of change between task level combinations and permutations of decisive action (offense, defense, and stability). However, our forces cannot forget the past quarter century's lessons involving urban fighting conducted in limited stability, contingency, and counterinsurgency operations.

This manual provides commanders and staffs specific information they will need to plan and conduct UO. The manual also provides operational- and tactical-level war linkages and extra-organizational considerations in support of training and partnered or combined operations. It provides scenarios, templates, and examples of products that may be used in the conduct of operations. Readers of this publication use ADP 3-0, ADP 3-07, ADP 5-0, and ADP 6-0; FM 3-0; and MCDP 6 for details concerning roles and responsibilities Soldiers/Marines use to facilitate ease of command and control among participant members executing UO. Commanders may modify products as necessary to meet mission requirements. Local standard operating procedures may also provide examples of products more suitable to specific situations.

The chapters are organized by topic and have been updated to reflect changes to Army/Marine Corps doctrine. For Army readers, this publication reflects changes in ADP 2-0, ADP 3-0, ADP 5-0, ADP 6-0, and ADP 7-0.

CHAPTER SUMMARIES

The following briefly introduces and summarizes changes by chapter:

Chapter 1 addresses the basic characteristics that constitute the urban environment. It discusses Army roles, tactical and operational considerations, and the urban environment by describing terrain, population, and infrastructure.

Chapter 2 presents the foundations of UO. It discusses the understanding—and the necessity of—UO, risk considerations, and fundamental tasks.

Chapter 3 details the effects of the urban environment on warfighting and tactics. It describes each warfighting function along with key tactical considerations.

Chapter 4 describes the purpose and characteristics of urban offensive operations. It discusses urban offensive battlefield/battlespace organization, forms and types of urban offense, and urban offensive considerations.

Chapter 5 describes the purpose and characteristics of urban defensive operations. It discusses urban defensive battlefield/battlespace organization, forms and types of urban defense, and urban defensive considerations.

Chapter 6 discusses urban stability operations, their purpose and characteristics, tasks, considerations, and activities in urban terrain.

Chapter 7 details large-scale combat operations in urban environments, their purpose, characteristics, and tactical enabling tasks.

SUMMARY OF CHANGES

The revision of ATP 3-06/MCTP 12-10B, dated 21 September 2021, has the following changes:

- Bridges operational to tactical levels of the urban warfare gap.
- Reintroduces the concept of large-scale combat operations and introduces consolidation of gains. Offers general urban operation tactical sequencing under the framework of a competition continuum across the range of military operations. Discusses urban operations under the developing framework of 'competition, crisis, and conflict' in terms of whole-of-government limited contingency operations.
- Distinguishes between large-scale combat operations and large-scale ground combat operations.
- Reintroduces the hybrid threat and distinguishes enemy and adversary definitions.
- Removes ADRP references.
- Removes some urban environment and operational process description redundancies from JP 3-06; ADP 2-0, 3-0, 5-0, 6-0, and 7-0; ATTP 3-06.11; MCRP 2-10B.1; and ATP 3-06.1, ATP 3-60, and ATP 2-01.3.
- Updates mission command philosophy to an approach and changes the mission command warfighting function to command and control in accordance with ADP 6-0 and the joint force.
- Describes dense urban terrain nomenclatures and examples, and for planning purposes, generally quantifies population size, density, and structural density into appropriate city-sized nomenclatures.
- Adds operational headquarters offense, defense, and stability operations example scenarios.
- Limitations of this publication. ATP 3-06 does not address urban operations defense support to civil authorities (see ADP 3-28). The decisive action techniques in an urban environment through offensive, defensive, and stability operations described in this manual are sufficient to support homeland defense, should the need arise.

Chapter 1
The Urban Environment

This chapter provides foundational details on the urban environment in the context of urban operations. It describes the operational and tactical implications of urban areas and the characteristics of urban terrain, populations, and infrastructure.

IMPORTANCE OF URBAN OPERATIONS

If war is about politics, it is going to be fought where people live. It will be fought, in my opinion, in urban areas.

General Mark Milley

1-1. The effective conduct of limited contingency operations or large-scale combat operations requires a basic understanding of urban environments. Global urbanization trends show increases in littoral regions, dense urban areas, and migration to urban areas. In some cases, this results in destabilization from overpopulation or a lack of resources or infrastructure and reduced government ability to provide essential functions such as governance, infrastructure services, and security. The adverse effects of natural disasters within cities compound these shortfalls. The Army defines ***urban operations*** **as operations across the range of military operations planned and conducted on, or against, objectives on a topographical complex and its adjacent natural terrain, where manmade construction or the density of population are the dominant features.** In the Marine Corps, military operations on urbanized terrain (MOUT) are all military actions that are planned and conducted on a topographical complex and its adjacent natural terrain where manmade construction is the dominant feature. It includes combat in cities, which is that portion of military operations on urbanized terrain involving house-to-house and street-by-street fighting in towns and cities (*Marine Corps Supplement to the DOD [Department of Defense] Dictionary of Military and Associated Terms*, hereafter referred to as USMC Dictionary).

UNDERSTANDING THE URBAN ENVIRONMENT

1-2. The urban environment comprises three parts: (1) complex manmade physical terrain, (2) population of significant size and density, and (3) supporting infrastructure. JP 3-06 refers to these three parts as the urban triad. Cities are unique for the density of these three features—that density is a key aspect of the inherent complexity of urban operations.

1-3. Within the context of a headquarters' large-scale combat operation or campaign plan, urban operations (UO) within those plans seek to gain domain supremacy and generally phase through an escalatory progression. This progression consists of mobilization from competition, seizing initiative, preparation and defense, offensive and domination stages, stability and consolidating gains, and then enabling civil authority with a reduction in violence and a return to competition. Within the operational area, some variables may be functionally aligned with some primary staff proponents (augmented by special and coordinating staff) that will aid rapid decision making, continuity, and UO visibility before, during, and after large-scale combat operations See figure 1-1 on page 1-2, ADP 3-0, and FM 6-0 for numbered general (G) or brigade combat team (BCT) and below (S) staff descriptions.

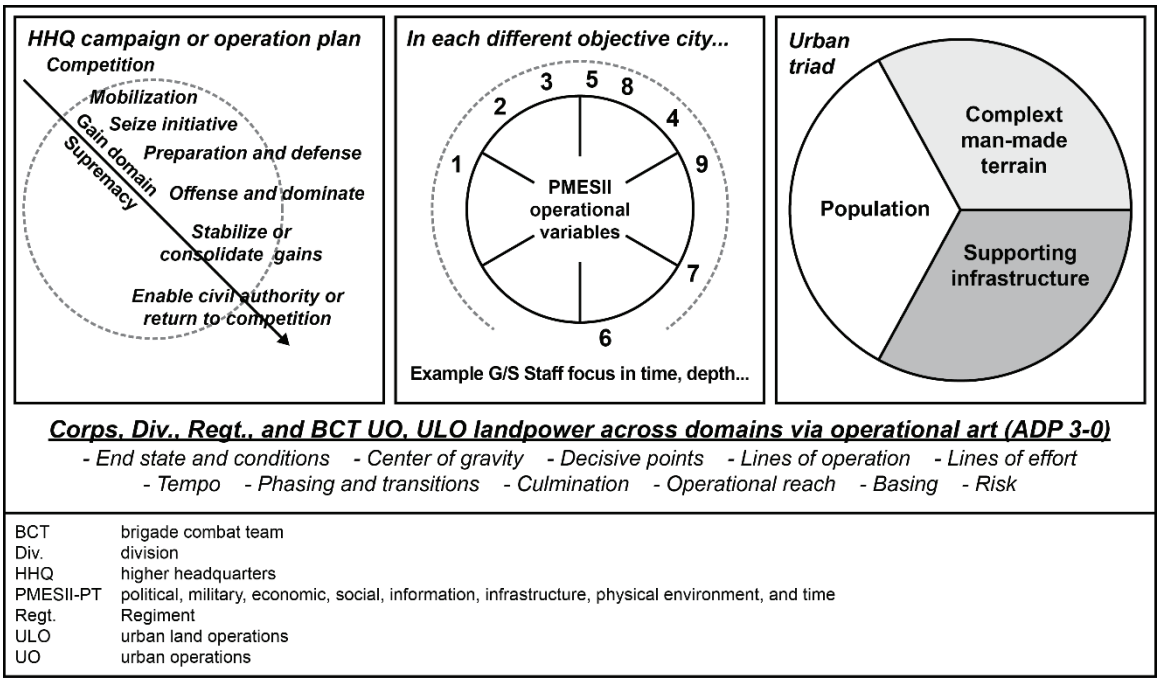


Figure 1-1. Planning across phases and urban operational variables with the urban triad

1-4. The urban environment consists of population, terrain, and infrastructure. People are often the distinguishing feature of urban areas, and their density proportionally drives the need for varying, increasingly complex infrastructure. The people within a city present physical needs that drive commodity and economic flow demands, and they generally demonstrate resilience in the face of adversity during offensive combat, defensive combat, or stability UO. In the urban environment, commanders determine key terrain based on the terrain's functional, political, economic, or social significance. All principles of joint operations—objective, offensive, mass, maneuver, economy of force, unity of command, security, surprise, simplicity, restraint, perseverance, and legitimacy—apply to UO (see ADP 3-0 for more information).

1-5. The complex and dynamic interactions and relationships among the key components of people, terrain, and infrastructure create an overlapping and interdependent system of systems that presents unique challenges. A *system* is a functionally, physically, and/or behaviorally related group of regularly interacting or interdependent elements; that group of elements forming a unified whole (JP 3-0). The ebb and flow of various commodities and resources change cyclically over time due to availability or civil or military action. Understanding the operational variables of political, military, economic, social, information, infrastructure, physical terrain, and time (PMESII-PT) is critical to conducting mission analysis and intelligence preparation of the battlefield/battlespace (IPB) within the military decision-making process (MDMP)/Marine Corps planning process (MCPP) and the operations process, and is critical to establishing and maintaining a common operational picture (COP) in an urban area. As with any operations, understanding the mission variables of mission, enemy, terrain, troops available, time, and civil considerations (METT-TC/METT-T) is also crucial. Civil considerations of areas, structures, capabilities, organizations, people, and events (ASCOPE) significantly affect UO. See ADP 5-0, ADP 6-0, FM 6-0, FM 3-57, and ATP 3-55.4 for detailed operational environment descriptions.

1-6. A population of significant size and density inhabits, works in, and uses the manmade and natural terrain. The dynamic nature and density of the elements of the urban triad are what make UO so complex. The closeness of civil, enemy, and friendly forces correlates with the quantity of forces, time, and resources required to control cities in part or in whole. Area and volume of manmade terrain and infrastructure complicates terrain analyses and are essential considerations. Higher headquarters help set conditions for subordinates by reducing complexity. They use their greater knowledge, experience, and resources to identify key aspects of operational design, expedite IPB, and mission analysis so units can focus on preparing for combat.

1-7. Widespread use of information technologies provides simple, effective command and control (C2) architecture to civilian and threat groups. Social media and broad communications options proliferate possibilities for populations to take sides and mobilize against one side or another. Army/Marine Corps forces must consider these networks, the desired behaviors, and the effects forces need to achieve to shape the urban environment favorably. As seen in the vignette below contrasting operations in Japan and Iraq, the method and quality of networks used by governance apparatuses is key to positive urban operation and even campaign outcomes.

Offensive Urban Operations Enable Follow-through and Stability Operations: WWII Japan versus Operation IRAQI FREEDOM Governance

Military governance in Japan and Germany from 1945–1955 was significantly more effective than governance in Iraq after Operation IRAQI FREEDOM (OIF) from 2003–2013. Successful large-scale combat operations in and around urban centers enabled initiative, security, and peace agreements in all cases. However, WWII actions showed that preparing adequate U.S. military governance forces early in 1942 via designated civil affairs units attending U.S. universities and school paid off in building regional expertise. The resultant understanding of cultural power structures was essential to an effective return to stability in Japan and Germany (although the populace was more resistant in Germany.)

Japan and Germany were demilitarized, but not pacified nor stripped of a remaining organic, competent bureaucratic structure. This was likely impossible in Iraq, because the populace would not have accepted the same Shia governance head and structure from Saddam Hussein's violent regime. In the total war of WWII, overwhelming joint urban offensive operations imposed physical will through violence on German populations, forcing them to psychologically acknowledge defeat. Additionally, but different from Germany's attritional surrender through culmination, the Japanese Emperor (largely viewed as a deity in that society)—in the interest of reconstruction—directed the population to submit to occupation after the shock of nuclear attacks at Hiroshima and Nagasaki.

Cultural habituation differences between Japanese, German, and Iraqi populations also showed extant bureaucratic and industrial tendencies already began during the late 1800s—early 1900s in Japan and Germany, while Iraq needed new leadership and power structures to develop those tendencies post-defeat. The de-Baathification process removed Iraqi Army structure, and lack of strong, moral leadership hindered national unity. Little distributed military governance oversight systems existed at the city, province, or district levels, and U.S. forces and civilians general lack of understanding of Iraqi culture and tribal power networks hindered stability. Additionally, friction prevailed from a Sunni governance structure over a Shia majority. Finally, problems in U.S. unity of command from civilian-led coalition provisional authority; a civil affairs advisory role; and military governance capacity long since divested after Vietnam resulted in inefficiency and cross-purposes among U.S., host-nation, and other governmental agencies. WWII offensive UO capability reinforced a disciplined military governance structure that better defined hierarchical responsibilities to consolidate gains.

Although not initially politically desired, WWII military leaders convinced President Roosevelt to allow this arrangement as opposed to a civilian-led governance structure. Contrary to Iraq, the WWII model in Japan enabled reporting, follow-through, and adjustment of peace and reconstruction progress efforts toward U.S. interests.

URBAN TERRAIN

1-8. Understanding the employment of munitions effect is vital in urban terrain. Some 60 percent of the world's buildings are composed of penetrant resistant brick or concrete, thus dampening weapon effects and complicating blast, fragment, ballistic, or manual breaching. Angled construction of flat, hard, and smooth surfaces can mean that up to 25 percent of rounds miss desired points of impact due to urban terrain

interference. Planners consider munitions employment and that sustainment/logistics requirements will increase in addition to accounting for—

- Increased consumption of small-arms ammunition and explosives.
- Increased consumption of terminally guided munitions.
- Decreased consumption of certain large-caliber and area-type munitions.
- Increased consumption of nonlethal munitions.

For additional information on munitions effects in the urban environment and sustainment/logistics considerations, see ATTP 3-06.11. Buildings, streets, and other infrastructure have varied patterns, forms, and sizes. The actual size and scope of the urban area of operations (AO) is many times that of a similarly sized portion of undeveloped natural terrain. Multistoried buildings have more defensible area than open spaces, and this increased volume and density makes UO more resource intensive in time, manpower, and material.

1-9. Operations in urban areas may also radically alter the physical characteristics of a city. Operations may cause uncontrollable fires, loss of electricity, and flooding from disabled pumping stations. Entire buildings or blocks may be destroyed, affecting the survivability, mobility, or countermobility of both friendly and threat forces. Weakened construction increases the risk of injury to Soldiers/Marines and civilians. Total collapse of a building may not eliminate its defenders. Of additional concern is the likely presence of toxic industrial material. *Toxic industrial material* is a generic term for toxic, chemical, biological, or radioactive substances in solid, liquid, aerosolized, or gaseous form that may be used, or stored for use, for industrial, commercial, medical, military, or domestic purposes (JP 3-11). Even natural gases or nontoxic debris and concrete dust from collapsed buildings can be hazardous, as was evident after the 9/11 attack on the Twin Towers.

URBAN SPACES AND SURFACES

1-10. UO address the depth, breadth, and height of an AO in terms of airspace and surface, supersurface, subsurface, and maritime spaces. Commanders and staffs also consider operations across multiple domains and effects from or within cyberspace, space operations, and information dimensions. Commanders determine how those aspects can affect an urban operation, the area of interest, and the area of influence. Dimensions include physical, information, and human areas. In urban environments, commanders and staffs broaden their scope to include supersurface and subsurface areas (see figure 1-2 on page 1-6) that extend a commander's AO. Supersurface and subsurface areas magnify the complexity of the urban terrain. Greater complexity requires greater unit capability and combat capacity within each echelon to deal with the strain of urban combat (see figure 1-5 on page 1-11).

1-11. Subsurface systems can be divided into three categories of substructures and civil works. Category I includes basements, shelters, and parking garages. Category II includes aqueducts, sewers, subways, transportation, underground malls, and utility tunnels. Category III includes military industrial grade facilities capable of self-sustaining large military forces and equipment with multiple ingress and egress routes. See ATP 3-21.51 for more information on subterranean operations. Commanders consider activities that occur outside buildings and subterranean areas (the external space) as well as the activities happening unseen in and between buildings and subterranean systems (the internal space). This internal volume further challenges C2 and information collection and increases the combat power required to conduct UO. Commanders develop methods and techniques to help themselves, their staffs, and their subordinate commanders and staffs to represent, visualize, and reference these multiple dimensions.

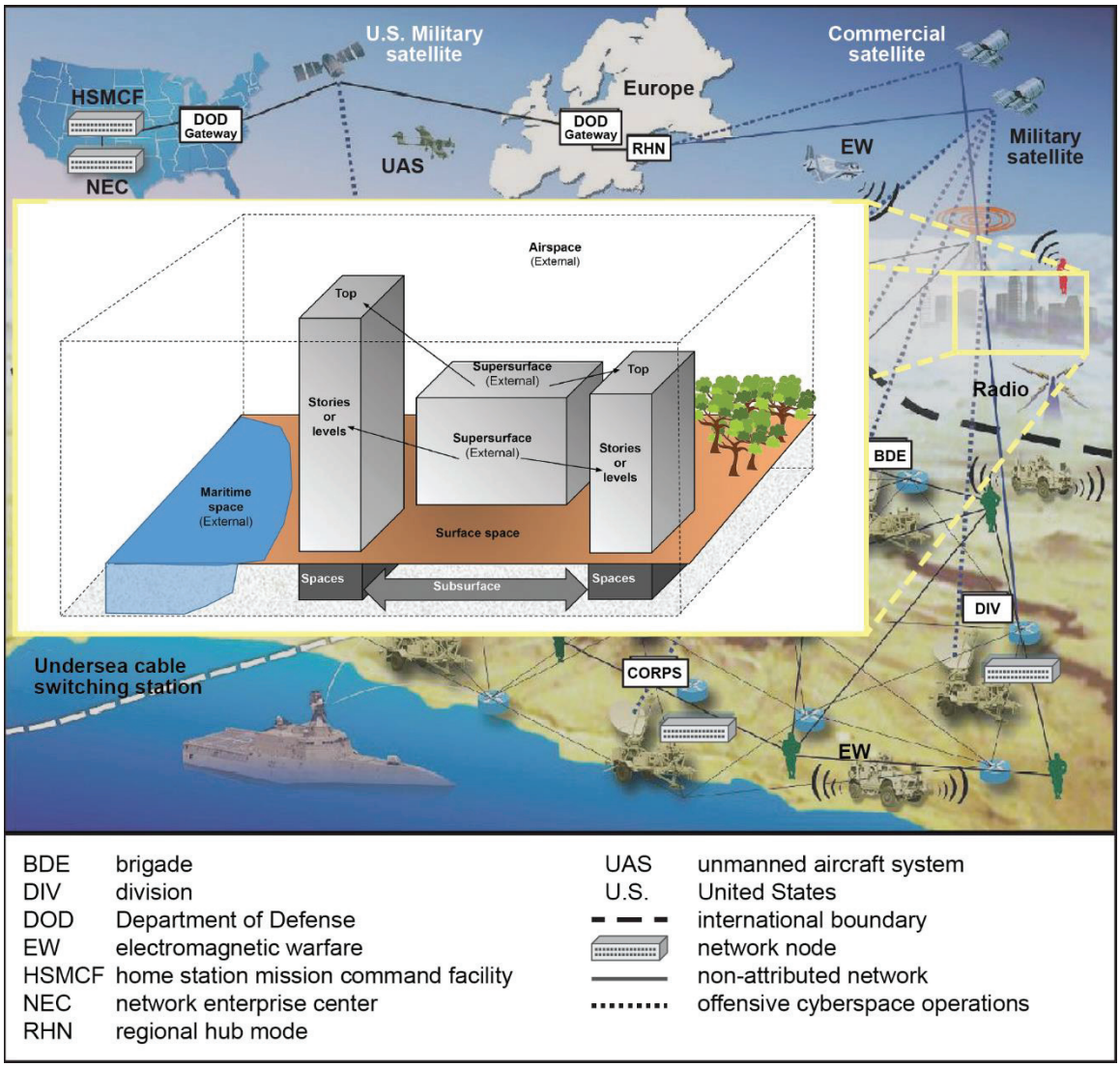


Figure 1-2. The multi-domain extended urban battlefield

Domain, Dimension, and Environment Layer Characteristics and Considerations

1-12. The *space domain* is the area surrounding Earth at altitudes of greater than or equal to 100 kilometers above mean sea level (JP 3-14). Space is a physical domain like land, sea, and air within which military activities are conducted. Proliferation of advanced space technology allows almost universal access in almost every urban area with some level of space-enabled capability with military applications. Forces must be prepared to operate in a denied, degraded, and disrupted space operational environment (D3SOE).

1-13. *Electromagnetic spectrum management* is the operational, engineering, and administrative procedures to plan and coordinate operations within the electromagnetic operational environment (JP 3-85). *Electromagnetic spectrum operations* are coordinated military actions to exploit, attack, protect, and manage the electromagnetic environment (JP 3-85). The electromagnetic (EM) spectrum crosses all domains, and it provides a vital link between the space and cyberspace domains. The crossing of many bands of the EM spectrum often occurs in congested urban spaces where military operations also compete to leverage and gain EM advantage. Space operations depend on the spectrum for the transport of information and the control of space assets. Space operations provide a specific capability of transport through the space domain for long haul and limited access communications. Space assets provide a key global connectivity capability for

cyberspace operations. Conversely, cyberspace operations provide a capability to execute space operations. This interrelationship is an important consideration across cyberspace operations, and it is particularly important when conducting targeting in cyberspace.

1-14. Cyberspace and the electromagnetic spectrum will grow increasingly congested, contested, and critical to successful operations. Army forces must be able to operate in cyberspace and the EM spectrum, while controlling the ability of others to operate there. Rapid developments in cyberspace and the EM spectrum present continuous challenges. While Army forces cannot defend against every kind of intrusion, commanders and staffs must take steps to identify, prioritize, and defend their most important networks and data. They must also adapt quickly and effectively to enemy and adversary presence inside cyberspace systems.

1-15. *Cyberspace* is a global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers (JP 3-12). Friendly, enemy, adversary, and host-nation networks, communications systems, computers, cellular phone systems, social media, and technical infrastructures are all part of cyberspace.

1-16. The *information environment* is the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information (JP 3-13). The information dimension is not separate or distinct from the urban environment but is inextricably part of it. Any activity that occurs in the information dimension simultaneously occurs in and affects one or more of the physical domains and dimensions. Most threat forces recognize the importance of the information dimension and emphasize information warfare as part of their strategic and operational methods.

1-17. **Airspace.** The *air domain* is the atmosphere, beginning at the Earth's surface, extending to the altitude where its effects upon operations become negligible (JP 3-30). Airspace is the area above the ground usable by aircraft and aerial munitions. In urban areas, airspace is broken up by manmade structures of different heights and densities and the irregularities of natural terrain. This produces an urban canyon effect that can adversely impact operations. Urban canyons often cause higher wind speeds with unpredictable wind direction and turbulence that can cause some munitions to miss their targets (increasing risk for both collateral damage and fratricide) and that significantly increase risks for rotary-wing operations near the surface.

1-18. The *land domain* is the area of the Earth's surface ending at the high water mark and overlapping with the maritime domain in the landward segment of the littorals (JP 3-31).

1-19. **Surface Areas.** Surface areas include exterior ground-level areas of streets and roads, parks and fields, and any other exterior space. For purposes of analysis, the ground floors of buildings and the surfaces of waterways are also part of the surface dimension. These surface areas follow natural terrain and are broken up by manmade features.

1-20. **Supersurface Areas.** Supersurface areas are the roofs and upper floors of buildings, stadiums, towers, or other structures. These areas also include the internal floors or levels (intrasurface or superstructure).

1-21. **Subsurface Areas.** Subsurface areas are below ground level and consist of sewer and drainage systems, subway tunnels, utility corridors, or other subterranean spaces. This dimension includes areas both below the ground and below water. These areas can be used for cover and concealment, movement, and engagement, but their use requires intimate knowledge of the area.

1-22. The *maritime domain* is the oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals (JP 3-32).

1-23. The *littoral* comprises two segments of operational environment: 1. Seaward: the area from the open ocean to the shore, which must be controlled to support operations ashore. 2. Landward: the area inland from the shore that can be supported and defended directly from the sea. (JP 2-01.3). The Marine Corps' amplification is a zone of military operations along a coastline, consisting of the seaward approaches from the open ocean to the shore, which must be controlled to support operations ashore, as well as the landward approaches to the shore that can be supported and defended directly from the sea (USMC Dictionary).

1-24. The maritime domain is a vast maneuver space that frequently intersects and influences key urban areas, allows for tactical maneuver in the air, on the surface, and beneath the surface of the water. However,

even in open ocean areas, distant landmasses and supporting shore infrastructure may affect naval operations primarily due to the range of an adversary's weapons systems and sensors. Littoral areas may contain geographic features such as straits or chokepoints that restrict tactical maneuver or affect weapon and sensor effectiveness. Both the open ocean and littoral portions of the operational area and area of interest should be analyzed. Key military aspects of the maritime domain can include maneuver space and chokepoints; natural harbors and anchorages; manmade infrastructures; sea lines of communications, whether the nation is a signatory to the United Nations Convention on the Law of Sea, and ocean surface and subsurface characteristics.

Urban Littorals

1-25. Multiple planning requirements exist prior to the execution of urban operations within the littorals. A primary consideration is coordination with the U.S. Navy and the U.S. Coast Guard. This includes understanding how to best support them to enable their full support of ground forces. An additional consideration is the need to conduct a thorough IPB to understand the urban area and its characteristics. This includes the urban area's density (supersurface, surface, and subsurface layers), sprawl, population, and its supporting infrastructure. That is, the IPB should fully examine the combined "clutter" of the urban area, to include the natural terrain features of the littorals (the islands, shoals and shallows, harbors, and choke points). These may restrict tactical maneuver options for ground forces the U.S. Navy, and the U.S. Coast Guard, in addition to potentially impacting the effectiveness of weapons and sensors. U.S. forces will need to understand enemy capabilities, from weapons (for example, artillery, missiles, underwater mines, and autonomous systems such as unmanned aircraft and unmanned underwater vehicles) to sensors (for example, electronic countermeasures, cyberspace, and space operations) which will have an impact on the conduct of urban operations within the littorals.

1-26. The descriptive term "urban littorals" usually assumes the meaning of major cities on the coast, but can also include inland cities adjacent to significant rivers or large bodies of water. Well-known examples for the former include New York City (Atlantic Ocean); Chicago, Illinois (large body of inland water—Lake Michigan); Manilla, Philippines (Pacific Ocean); and Mumbai, India (Arabian Sea). Some examples for the latter include Saint Louis, Missouri (Mississippi River), Cologne, Germany (Rhine River), Volgograd (Stalingrad), Russia (Volga River) and the cities of Nanjing and Shanghai, the People's Republic of China (Yangtze River).

1-27. Controlling or having access to the urban littorals or inland rivers or large bodies of water provides U.S. forces with maneuver and logistic capabilities during operations across the competition continuum. When using the descriptive phrase urban littorals, several broad qualities exist for planning considerations, to include the—

- **Population**. Urban littorals commonly have significant urban populations. This descriptor is often combined with urban sprawl and population density, particularly within a littoral and riverine environment, to include inland waterways.
- **Economy**. Cities within a littoral environment generally have tremendous regional, national, and in some instances, international economic impacts and influence. This includes both sanctioned and unsanctioned (criminal) national and transnational economic activities.
- **Information environment**. This refers to the interconnected nature of the world's cities, a significant number of which exist within a littoral environment, and include the Internet, communications capabilities (for example, laptops, smart phones, and tablets), television/cable, satellite dishes/satellites, and more traditional forms of print media, such as newspapers, journals, banners, graffiti, and finally, word of mouth.
- **Infrastructure**. This supports the daily transfer/transportation of goods and services, that is, the inflow/outflows supporting the city, such as electricity, oil, natural gas, and manufactured goods, all supported through the use of highways, freight rail, commuter rail, airports, and ports.
- **Centers of industry**. Significant centers of industry exist throughout major metropolitan centers within the world's littoral environments that produce myriad products. These range from the most sophisticated electronics to vehicles, and the production of commodities and chemicals (to include manufacture, storage, and shipment). The location of such manufacturing centers of industry within the littorals provides access for both workers, materials for manufacturing processes, and

the final products themselves, via supporting infrastructure (for example, airports, freight rail, highways, and ports).

- **Government**. Cities within the littorals generally include both significant modern infrastructure (for example, skyscrapers) and sophisticated service capabilities (such as hospitals), professional emergency services (such as emergency medical technicians, police, and fire departments), and areas of outgrowth, or sprawl, whether modern suburbs or shanty towns. The modernity (or lack thereof) of a city is often a direct reflection of the capability of a government to ensure for the equitable distribution of emergency services and life-sustaining energy (electricity, oil, natural gas, and water) through policies and regulation that ensure equitable distribution. Units conducting urban operations in concert with or despite governments may ask:
  - How capable is the government in enacting fair policies or enforcing regulations?
  - Is the government equitable or corrupt in regulating goods and services or enforcing the law/justice, and does the government have control over the city?

1-28. Considering government corruption, understanding urban littorals generally includes a discussion of demographics, in essence, the sheer number and density of the population, to include disparities involving wealth (economic and social). Government effectiveness is directly correlated to corruption levels (political and courts) and the ability to ensure the effective regulation of life-sustaining services, in addition to the maintenance of infrastructure, combined with the ability to manage or prevent criminal activity, from local to international. The higher the corruption level, the greater the inability of the government to manage the equitable distribution of the life-sustaining functions of the city. This includes providing energy (electricity, oil, and natural gas), water and wastewater management, and services (such as police, fire, and emergency). When a government cannot manage a city, this creates a power vacuum and in some cases results in "no-go" zones for police and even military forces. By default, and in some cases by design, this could defer management of an urban area to an unofficial or shadow government, which could include a criminal entity, such as the most sophisticated national and transnational criminal enterprises, gangs, random, loosely organized street thugs, or even a sophisticated, multi-billion dollar corporation.

URBAN PATTERNS

Men come together in the city to live; they remain there in order to live the good life.

Aristotle

1-29. Urban physical patterns are tied to their historical purpose, yet cities typically do not expand in a uniform or rational manner. Geography, commerce, religion, climate, and location play a major role in understanding a city's background. Pre-modern cities (Rome, for example) typically expanded from a core location of power in commerce, religion, or governance and have fortress-like commonalities for protection/force protection or ease of force projection. Post-modern cities (Los Angeles, for example) tend to prioritize expanded lines of communication that ease designed transportation and commerce to and from urban, suburban, and rural areas. In any pattern case, units planning urban operations recognize the impacts that various city patterns may have with adjacent natural terrain and how those combined features may facilitate or impede branch or sequel plans from friendly or enemy interests as part of a larger operation or campaign perspective.

1-30. Four major urban patterns include satellite, network, linear, and segment (see figure 1-3 on page 1-10). Central to two of the patterns (satellite and network) is the hub or dominant urban area from where outlying urban areas radiate. A segmented urban area is often a hub because it is a larger urban area. In offensive and defensive operations, the hub is a pivot or strongpoint. It becomes a major obstacle to an attacker. If attackers choose to bypass the urban area (hub) located along the axis of advance without first isolating the area, they risk exposure of their flank or lines of communications (LOCs) to attack from the hub as well as from dependent urban areas or subordinate satellite patterns. Commanders understand the value and influence of the hub to the economic, political, or cultural wellbeing of the surrounding area because stability tasks normally focus on people.

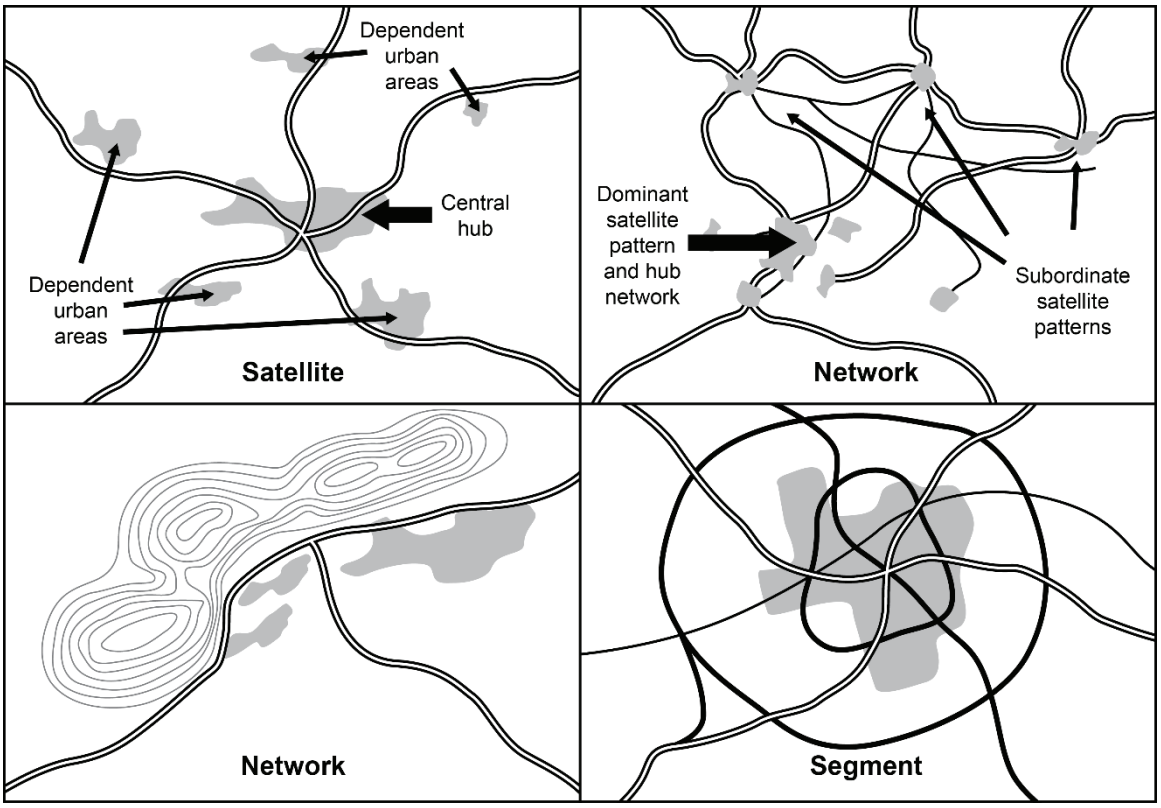


Figure 1-3. Major urban patterns

BASIC STREET PATTERNS

1-31. Lesser patterns in the urban area result from the layout of the streets, roads, highways, and other thoroughfares. These patterns evolve from influences of natural terrain, the original designer's personal prejudices, and changing needs of the inhabitants. Urban areas can display any of three basic patterns and their combinations: radial, grid, and irregular (see figure 1-4). Street patterns and widths influence all Army/Marine Corps warfighting functions; however, they greatly affect movement and maneuver/maneuver, C2, and sustainment/logistics. Street construction methods, materials, and standards can have impacts beyond the basic patterns. For example, in some portions of older Middle Eastern cities, streets were designed for foot and animal traffic—consequently the roads are too narrow for many military vehicles and armor. Like larger city network patterns, units planning urban operations recognize impacts of street or other LOC patterns may have with adjacent natural terrain. They determine how those combined features may facilitate or impede branch or sequel plans from friendly or enemy interests as part of a larger operation or campaign perspective.

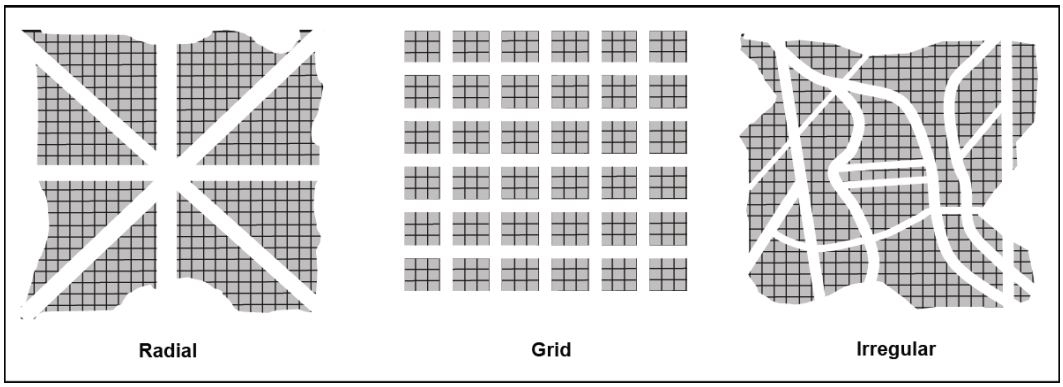


Figure 1-4. Basic internal street patterns

FUNCTIONAL AREAS

1-32. Urban areas have commonalities in function. They are the centers of population, finance, politics, transportation, industry, and culture. Models vary, but figure 1-5 illustrates the general forms and internal functions, and table 1-1 on page 1-12 lists some additional advantage or disadvantage considerations. Some functional areas may overlap. For example, high-rise buildings are located in core areas as well as in outlying areas and may be used for residential purposes. Commanders and their staffs identify specific building types and construction and understand weapons' effects on them. Functional areas in less developed nations may manifest themselves less clearly than in developed nations. Common graphics and myriad overlays created in planning can simplify these areas of operation and help Soldiers/Marines to predict in what kind of environment they may be operating (for additional explanation, see MCIA 2700-002-03).

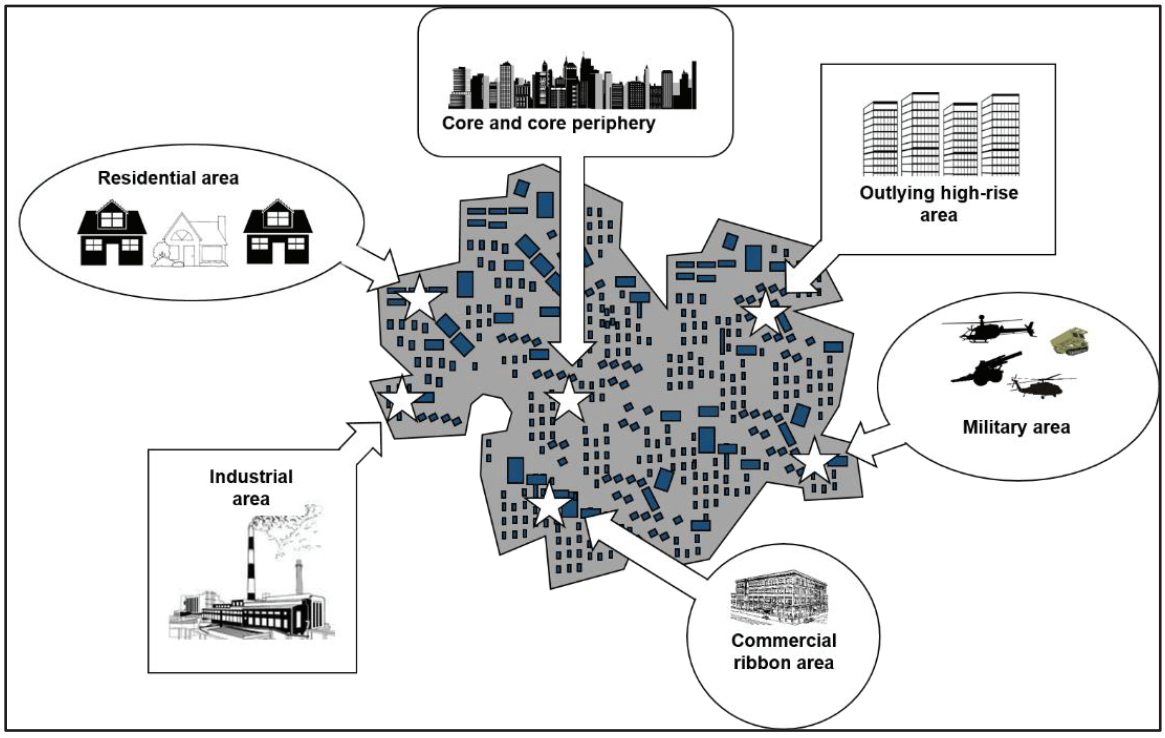


Figure 1-5. Urban functional areas

Table 1-1. Urban functional area advantages and disadvantages

Functional Area	*Example*	*Advantages*	*Disadvantages*
Core and periphery	High rise, parking garages, subways, public centers	Key terrain hubs of commerce, transportation, governance. Key to stability operations. Density provides greater protection, but potential for canalizing or "funnel-fan" effect.	Core areas are the densest surface, subsurface areas by volume. Contains mobility restrictions to offense. Congests C2. More resource intensive.
Outlying high-rise	Multi-story apartments, offices, parks, stadiums, hospitals	Dispersed LOCs, opportunity for layered standoff in defense. Increased observation and fields of fire.	Lightly clad construction requires reinforcement in defense. Can divert combat power from key terrain objectives in other areas. Greater civilian transit presence.
Military area	Walls, bunker, equipment and ammunition depots, garrisons	A fortified source of sustainment, and force projection for military forces. Placed deliberately to protect a function or feature of a city, region, or nation.	Serves as a strongpoint to defense of an urban area. Limited external mobility of internal forces may enable isolation.
Commercial ribbon area	Multi-story stores, offices, restaurants	Connects residential and core areas. Less dense than core, periphery, and industrial areas.	Vulnerable civil commerce sites. Key in stability operations. More dense than residential areas.
Industrial area	APOD/SPOD, manufacturers, warehouses	Near transport, and LOC hubs. Heavy construction. Can enable sustainment/logistics and force projection.	TIM risk to forces and civilian, vulnerable support areas. Offers antiaccess penetration points.
Residential area	Suburbs, slums, homes, row houses, compounds,	Uniform design pattern. Open LOCs. A base of support for civilian population.	Light clad construction. Often contains vulnerable supporting infrastructure (power, water, C2 nodes).

APOD	aerial port of debarkation	LOC	line of communications
C2	command and control	SPOD	sea port of debarkation
FF	friendly forces	TIM	toxic industrial material

URBAN POPULATION

1-33. Urban operations are within military endeavors that involve contests of human wills. People within cities are the most centrally dynamic and militarily significant objective within a city because they hold the power or potential to change a city's function and importance. Without people, a city ceases to function, and a city becomes merely other terrain. While not unique to warfare, urban centers and operations within them have the propensity to condense and amplify the best and worst traits of the human character and experience. Extreme violence, destruction, and brutality typified large-scale combat in urban areas up to WWI, when some restrictions on military action were implemented by national authorities to reduce human suffering, for example the implementation of Geneva Conventions. Following WWII, U.S. Army forces engaged in large cities with a population over 750,000 at least nine times. Battles resulted in massive destruction within the city, and even then success was not ensured. Invading armies terrified immobile population centers, and historical urban battles typically ended in one of three statuses: (1) the army attacked and seized the area quickly, (2) the army ground the city defenders' means of resistance down in a protracted attritional siege, or (3) the city-state submitted or negotiated to the interests of the attacker. Only rarely have attacking armies conceded their efforts or positions without decisive battle. Finally, if an occupying force did withdraw, they often decided to either do so as an economy of force measure or while destroying aspects of the city to deny them to the adversary. For example, withdrawing German forces in WWII destroyed occupied ports in France and Belgium to deny their logistic use by the Allies.

1-34. Historical urban combat results were that either most of a city's occupants were displaced; killed through combat, disease, or starvation; enslaved, with their property destroyed or plundered; or the citizens and their property became subject to the victor. Retributive atrocities by armies against city occupants sometimes occurred based on the passions of an attacker, and although a brutal fact, these methods had the effect of deterring further conflict or resistance in some cases. Contrary to large-scale combat UO, urban limited contingency operations in the contemporary operational environment are rarely successful if conducted ad hoc without physically isolating the city or the key objective therein. Partial or total destruction of an urban area is still a possibility, as duly authorized, to defeat a threat and meet U.S. objectives.

GROUPS

1-35. Understanding how specific elements of an urban society affect operations and vice versa begins with analyzing population composition, size, and location (see figure 1-6). After determining the presence and numbers of civilians relative to decisive points, commanders decide whether civilian proximity and density represent a significant risk to the mission, for example, displaced civilians clogging LOCs. When civilians are the primary focus of an operation, this analysis helps determine decisive points. When planning UO, commanders consider the patterns of life of the population and their movements in an urban area, including maritime traffic. Especially in stability operations, identifying and understanding trends and patterns of activity (and disruptions) may provide critical information to commanders. In large-scale combat operations or UO where time is of the essence, detailed group analyses may not be an option due to fast-paced movement. Forces generally understand and accept that, if they enter urban areas, the offense may be canalized or a defense may buy time. On the other hand, these areas may need to be isolated or handed off to rear or support area forces for later operations. Civilians may view U.S forces as hostile and violently resist. They also may passively resist by supporting an adversary or insurgency or they may surrender. Commanders decide if engaging with a hostile civilian population that supports an adversary facilitates larger operations. If population groups are being liberated from oppressive adversaries, U.S. forces might be seen as liberators, for a time. Whether seen as hostile or as liberators, U.S. forces quickly transition to consolidate gains, often to host-nation security forces (HNSF) or governance apparatuses. These forces provide security and conduct stability operations to prevent insurgency, disease, privation, or crime.

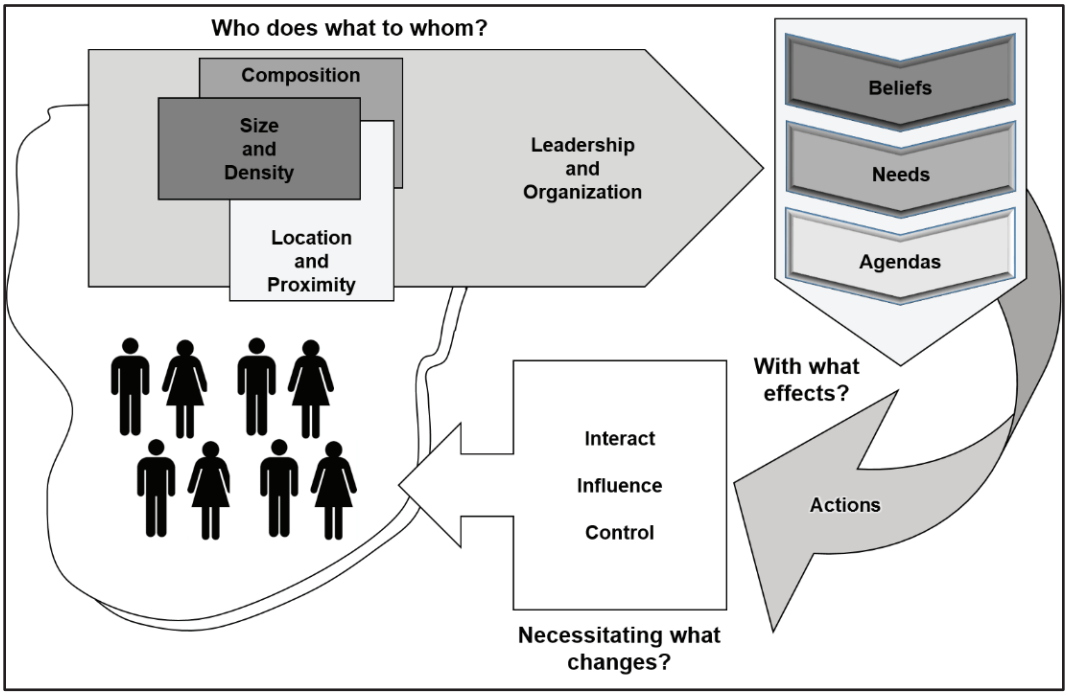


Figure 1-6. Simplified analysis of urban society

1-36. + Commanders determine the composition of—or the identifiable groups or organizations within—the civilian urban population. They conduct this analysis before large-scale combat operations or major limited contingency operations in which later stability operations are envisioned, to understand the political, economic, social, and informational operational variables. These will affect the operational environment and enemy as part of IPB and the MDMP/MCPP. Race, religion, national origin, tribe, clan, economic or social class, party affiliation, education level, union memberships, age, sex, occupation, or any other significant social demographic may categorize aspects of varying groups. Intelligence section cells, chaplains, engineers, and civil affairs subject matter experts advise tactical staffs and commanders on urban area beliefs, needs, agendas, and operational variables in the region or nation state the joint operations area entails. Physical and ideological overlaps and divisions may exist between groups. Contemporary hybrid threats and complex urban areas may have varied competing interests. Overlaps provide early focus for analysis and suggest ways to affect more than one group simultaneously. In some cases, groups have radically different ideologies but are, or can be, united by a single characteristic. This single characteristic can be a plan's line of operation (LOO) or line of effort (LOE) objective task and purpose that drives subordinate echelon action. Commanders strive to understand the intricacies of who does what to whom. Staffs continually assess relevant population groups and keep the commander apprised of changes. Such understanding further identifies the urban society's sources of power, influence (both formal and informal), and decisive points that hold the keys to controlling or protecting this potential center of gravity (COG). Commanders have expert, detailed, and current knowledge and information to avoid developing simplistic models of social interaction that may inadvertently mislead or add to a flawed course of action (COA).

Beliefs, Needs, and Agendas

1-37. Commanders identify and analyze groups that focus on specific segments of urban society to determine their beliefs, needs, and agendas. Adversary elements within a population either need to be co-opted, coerced by various means, or destroyed. Determining how interests motivate groups to future action or inaction helps commanders; previous patterns of activity are critical in this regard. Commanders' analyses seek to: (1) determine why groups and their leaders act as they do, and (2) conduct operations that place forces in the most advantageous position possible. Commanders consider political, economic, cultural, and religious factors and prioritize them in analyses to influence and persuade beliefs, needs, or agendas. At operational levels and above, urban problems may not be wholly solved through military action, although military action should provide a base of security for diplomatic, informational, or economic joint, interagency, intergovernmental, and multinational (JIIM) actions. Commanders may use focus groups, informants, longitudinal studies, social media analysis, and social network analysis to understand needs and understand changing civilian perceptions. Overall, commanders understand and account for cascading second- and third-order effects of their actions and decisions.

1-38. Civilian attitudes toward forces can be unfavorable, neutral, or favorable. Commanders conduct information operations (IO) to prevent civilian interference with their operations. *Information operations* are the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own (JP 3-13). Marine forces may conduct operations similar to IO that are called operations in the information environment (OIE), which is the integrated planning and employment of Marine air-ground task force (MAGTF) naval, joint, and interagency information capabilities, resources, and activities. These enhance the Marine Corps' single-battle concept and provide defensive, offensive, exploitative effects and support in order to operate, fight, and win in and through a contested information environment. If the population is evacuated or supports multinational forces, then the environment helps the security of defending U.S. forces. However, if the population is present and hostile, then security may be difficult. Friendly civilians may help identify enemy forces attempting to conduct reconnaissance and may help mask defense preparations. However, hostile elements of the population may pass information and intelligence to the enemy and assist enemy reconnaissance to infiltrate the urban area or provide guides, manpower, or resource support for enemy forces. In other cases, a concealed enemy force may infiltrate the civilian populace. For example, as a modern day Trojan horse, infiltration support by the Viet Cong into central Vietnam was important to the North Vietnamese Army and Viet Cong assault troop access and surprise prior to their attack of Hue City in 1968. Commanders take measures to ensure strict control of hostile populations, use reconnaissance and reporting, and conduct populace and resources control

to mitigate this threat (FM 3-57). If resources permit, commanders consider removing potentially hostile civilians from the area.

Leadership and Organization

1-39. Commanders understand leadership and the social hierarchy. They understand who has authority and responsibility as well as how identified groups interact with authority and distribute responsibility. In large-scale combat operations or operations against hybrid threats, commanders must understand conventional enemy force, irregular and criminal network leaders, and organizational structure. Groups centered on one leader, designated officially or unofficially, produce decisions and initiate actions. However, these groups are vulnerable to disruptions if key personalities are removed, coerced, or co-opted. Groups with shared or redundant leadership take longer to make decisions, yet better resist change and outside influence. Enemies can also conduct and capitalize on this type of decentralized mission command approach to operations.

1-40. In UO, particularly stability operations, leaders at all levels devote considerable effort to identifying and cultivating relationships of mutual trust and respect with civilian leaders in their AO. This civilian leadership includes political, religious, tribal or clan, ethnic, and economic leaders. Commanders attention toward, and discussion with, identified leaders increases or, in some instances, decreases the targeted leaders' prestige and power. While this may be intentional, commanders ensure that leaders they choose to interact with are legitimate and accepted in the eyes of the urban population. Otherwise, commanders may further imbalance an already weak power structure and exacerbate an unstable situation. In unique circumstances, commanders may need to identify, interact with, and influence the leadership of criminal organizations. In these cases, communication must be clear and effective, and all leaders must be aware of its implications. See FM 3-07 and MCWP 3-03 for using interpreters and conducting productive meetings and negotiations.

General Population Size

1-41. Urban areas are commonly classified according to the general size of their population instead of by their landmass. These categories establish common descriptions for shared understanding when considering a given city; they do not address the variations between cities with the same population size. Homogeneity of groups in smaller population areas enables easier understanding of beliefs, needs, and agendas. However, treating an urban population as a completely homogenous, single entity leads to false assumptions, cultural misunderstandings, and poor situational understanding. Coalescence of urban areas leads to expanded LOCs, and congeals smaller suburban areas and people groups over time. However, especially in megacities, commanders and staffs can clarify large-scale combat operation LOO and LOE plans that isolate and control key physical and population terrain aspects, thus economizing forces. A *line of operation* is a line that defines the interior or exterior orientation of the force in relation to the enemy or that connects actions on nodes and/or decisive points related in time and space to an objective(s) (JP 5-0). Greater complexity requires greater unit capability and capacity at echelon to deal with the strain of urban combat. Although city sizes constantly change, table 1-2 on page 1-16 demonstrates some descriptive nomenclature and population size, urban area, and volume considerations for selected historical operations and modern-day cities. These examples serve as general references for operational art, design, and planning.

Table 1-2. Conurbation and population infrastructure densities

Nomenclature	*Population Range*[a]	*Population Density (/KM²)*[b]	*Area (KM²)*	*Structural Density (M³/KM²)*[c]	*Historical Operational Example*	*Current Example*
Suburb	0–4,999	1,250	1–4	Low 500–4999		Quantico, VA
Village	5K–9,999	1,900	3–5	Low 5–49K		St. Roberts, MO
Town	10K–49,999	2,500	5–20	Low–Mod. 50–499K	WWII, Defense of Bastogne, 1944	Key West, FL
City	50K–99,999	3,100	10–32	Low–Mod. 500–999K	WWII, Encirclement of Aachen, 1944	Manhattan, KS
Divisional City	100K–199,999	3,500	20–65	Mod. 1MM	Vietnam War, Defense of Hue City, 1968	Colorado Springs, CO
Area City	200K–299,999	4,300	30–70	Mod. 3MM	OPERATION (OPN) IRAQI FREEDOM, Seizure of Fallujah, 2004	Fayetteville, NC
District City	300K–399,999	4,900	40–80	Mod.–Hi 5MM	-WWII, Defense of Stalingrad, 1944 - OPN ECLIPSE, Seizure of Raqqa, 2017	Honolulu, HI
Provincial City	400K–499,999	5,500	40–90	Mod.–Hi 7MM	UNOSOM, Raid of Mogadishu, 1993. OIF, Control of Ramadi, 2006.	Pierce, WA
Regional City	500K—999,999	6100	40–250	Mod.–Hi 9MM	OPN IRAQI FREEDOM, Stability of Basra, 2007	El Paso, TX
Echelons Above Corps [d]						
Metroplex [e]	1MM–4,999,999	6,600	40–100K	Hi 12–15MM	-Amphibious Encirclement, Manila, 1944 - OPN EAGLE STRIKE, Seize Mosul, 2016-2017	Dallas-Fort Worth, TX
Metropolis [f]	5MM–9,999,999	6–10K	40K–50K	Hi 15–18MM	None	Los Angeles, CA
Megacity [g]	10MM +	7K +	50K +	Hi 20MM +	None	New York City, NY

Notes.
General functional descriptions cities help qualify an operational environment. For example, 'The capital metroplex of Washington, DC...'
a) Based on census data (see references), civil affairs estimates, or other population data.
b) An estimate and for illustrative purposes only; each city is unique. Population is combined with how city limit areas are defined. Ideally, the urban area to be considered ends where the population, terrain, or infrastructure's effects end and will not affect operations. In other words, terrain analysis indicates a greater propensity of favorable observation, fields of fire (lethal/nonlethal, direct/indirect, at optimized range and standoff), cover and concealment, avenues of approach, key terrain seizure/retention.
c) To be determined during mission analysis, intelligence preparation of the battlefield and JIPOE based on computer aided city digital volume analysis (such as CAD, sketchMAP [Unclassified], DCGS database [Classified] imagery).
d) Cities of this scale in population, area, or density will usually require multiple divisions, corps, or their force ratio equivalents along with functional/multifunctional brigade and joint combined arms to effectively conduct large-scale combat operations.
e) Has a generally larger propensity of landmass city-state, or multi-city limit area, compared to greater population density.
f - Has a generally larger population density, as compared to city limit area(s).
g) A 0.84 KM^2 section in dense downtown Manhattan measured 15,215,894 M^3, resulting in this structural density.
K - figure in thousands (for example, 1K = 1,000)
KM - kilometer
MM - figure in million (for example, 1MM = 1,000,000)

Interaction, Influence, and Control

1-42. Commanders and staffs cultivate an organizational understanding of UO AO group sizes, locations, compositions, culture, and leadership to identify advantageous interaction opportunities and determine where to assert influence. They assess group interests, capabilities, and anticipated repercussions of military actions. The distribution of positive, truthful stability actions of Army or Marine Corps forces in support of UO builds credibility at tactical, operational, and strategic levels. Gaps in credibility or legitimacy only hamper UO efforts, but enemy credibility or truth gaps (lies or deception operations) are exploited through persistent control of messaging and frequent communication with the media. IO efforts should result in cognitive dissonance in an adversary's narrative and reinforce doubt of their success or efficacy in the larger urban framework. Controlling social media cyberspace denies an enemy's ability to interrupt friendly force news-cycle efforts and adds legitimacy to other nonmilitary JIIM efforts.

1-43. Commanders develop or modify COAs as appropriate after conducting ample mission analysis and IPB of urban areas (see ADP 5-0). COAs should seek to exploit disadvantages asymmetrically to gain positional advantage, impose order over chaos, or prevent chaos. Certain COAs, especially in stability operations, may be needed to improve interactions between Army/Marine Corps forces and civilians, and between other agencies, to accomplish common goals. Some COAs influence favorable support, stabilize neutral groups, or neutralize hostile groups. Still other COAs may implement more forceful means to control and protect—but never punish—civilians. COAs may include the following population considerations:

- Cities cannot self-sustain; they must be replenished from external resource flows. Humanitarian aid may be necessary.
- Cities are generally hubs or nodes of economic and political power. Security provided by the host nation, United States, or a combination of those forces enables continuity.
- Information-related capabilities, especially Soldier and leader engagement and civil affairs operations, help assess population variables and their effects on operations (see FM 3-13 and ATP 3-13.5).
- Establishing security cooperation partnerships economizes forces and adds legitimacy.
- Stability operation security control mechanisms can include buffer zones, restricted areas, checkpoints, roadblocks, curfews, protection and restoration of critical resources, amnesty or weapon control programs, screening civilians, conducting negotiations (directly or as a mediator), conducting displaced persons operations, conducting detainee operations, and implementing an evacuation or stay-put order or policy.

1-44. Commanders complete a risk assessment for each COA and propose control measures. A control measure is a means of regulating forces. Control measures can be permissive (which allows something to happen) or restrictive (which limits how something is done). Commanders weigh the resources needed for the control measures used. Many measures require significant resources that may initially exceed the capabilities of the force to impose and enforce. When possible, commanders control activities using HNSF and local law enforcement. This requires HNSF that are capable and aligned in intent. Other elements of the environment such as terrain and infrastructure may fragment efforts and make imposing control measures difficult throughout the area. Effective commanders carefully assess and understand the urban society's interests (beliefs, needs, and agendas) before implementing any populace and resource control measures to manage a society. Inappropriate controls—particularly if civilians perceive them as punishment—may aggravate a situation. Finally, an appropriate COA may require no specific action toward the urban society. In most cases, training and discipline grounded in cultural understanding and sensitivity help mitigate many potentially adverse effects resulting from military-civilian interaction. See ATP 3-39.33 for additional civilian control measures and considerations.

Support and Control of the Population

1-45. A population's varying levels of support, or lack of support, for friendly forces directly impacts operations in urban areas. Army/Marine Corps forces desire behaviors that support friendly action in any operation. As directed in Department of Defense Directive (DODD) 5100.01, roles and missions in large-scale combat operations require Army forces to occupy territories abroad and provide for the initial establishment of a military government pending transfer of this responsibility to other authority. This may require consolidation of gains through stability operations made possible only through establishment of broad

security and a military government operations (MGO) structure. Marine forces, in support of naval campaigns, establish or protect sea bases or otherwise, as directed in DODD 5100.01, to conduct complex expeditionary operations in the urban littorals and other challenging environments. Marines also support security and stability operations of the military government until these operations can be transferred to another authority. Army and Marine forces enable security and other stability operations tasks in cities (see ADP 3-07, ATP 3-07.5, and FM 3-07).

1-46. MGO stem from national agreements in the 1907 Hague Convention and four Geneva Conventions through 1958. Post-conflict conduct accords with international humanitarian laws of occupation. Forces that have sufficient authority over enemy territory can implement the duties imposed by the law of occupation. Aside from security, and while not required in all cases these duties may include allowing humanitarian organizations full access to occupied territory; protecting life and property where possible; and declining to co-opt or coerce civilians into a fighting force or to influence voluntary or involuntary civilian migrations. In regime change, a peer threat's national and subordinate governance system has been destroyed or is nonexistent. Joint or theater plans include the possibility that no other agency besides U.S. forces can reestablish governance. Commanders are cautious to understand and plan for the capabilities needed, including acknowledging that a U.S. conception of governance may not fit another nation's or culture's pre-conflict governance structure with regard to operational variables (PMESII).

1-47. U.S. armed forces in limited contingency operations have the capacity to implement security for other follow-on U.S. or international agencies, primarily conducting governance support in cities. For large-scale combat operations, capacity would be task-organized, expanded, and augmented. For example, MGO units designed early in WWII were unable to follow large-scale forces until after the wide cessation of hostilities, peer-threat forces were defeated or surrendered, and peace terms and plans were enacted. Rear or support area forces such as the following may assume basic governance roles—

- Judge advocate officers.
- Military police units processing enemy prisoners of war.
- Civil affairs forces conducting transitional military authority.
- Maneuver enhancement brigades conducting key infrastructure protection to limit insurgency or criminal behavior.

These rear or support area forces may conduct the following activities—

- Facilitate justice or a judicial system.
- Enforce laws, populace and resources control measures, and curfews.
- Promote large-scale economic recovery and reconstruction.

1-48. Combat unit leaders and commanders may become responsible for security operations and stability tasks at the city, county, regional, or national levels. They may be acting in similar capacities to U.S. mayors, managers, the city council, judges, police, jailers, emergency services, or larger regional or national gubernatorial roles as their rank, scope, or echeloned unit capacity increases.

1-49. Large-scale combat operations units may be reorganized by task to focus on stability operations. Some rear or support area forces ideally are formed, trained, and rehearsed for this purpose before large-scale combat operations begin. Once formed and trained, units consolidate gains by leveraging any remaining feasible rule of law systems (people and processes, absent unacceptable levels of corruption) so the units may focus on unsecure areas. For example, U.S. Department of State diplomats typically operate in secure host nations to facilitate the elements of national power in diplomacy, information, and economic progress. U.S. forces under MGO operate differently because, in that case, enemy territory is occupied, not a "host nation," and force structure is limited. Capacity may be expanded at the higher commander's discretion. In high-intensity, large-scale conflict, military or constabulary forces set security conditions before civil agencies are leveraged toward U.S. interests (see figure 2-1 on page 2-2). This may not be the case in limited contingency operations in urban environments, where governance is conducted more by host-nation, U.S., partner, or international civil agencies.

1-50. Positive population sentiment helps to deny bases of support to occupying enemies or insurgents, but may place civilians at risk for coercion or co-option. Evacuation of civilians is preferable when possible, rather than foreign humanitarian assistance that usually requires a host-nation request or Department of State (DOS) support. A *dislocated civilian* is a broad term primarily used by the Department of Defense that

includes a displaced person, an evacuee, an internally displaced person, a migrant, a refugee, or a stateless person (JP 3-29). For doctrine on how a geographic combatant commander (GCC) or joint task force (JTF) may conduct dislocated civilian support missions, see JP 3-29.

1-51. A *friendly* is a contact positively identified as a friend using identification, friend or foe and other techniques (JP 3-01). A *neutral* is, in combat and combat support operations, an identity applied to a track [or *unknown* person(s), see JP 3-01] whose characteristics, behavior, origin, or nationality indicate that it is neither supporting nor opposing friendly forces (JP 3-0). Neutral behavior in a population is more nuanced. While normally an advantage over hostile behavior, a neutral population does not readily provide information to friendly forces. While a neutral population can be seen as a disadvantage, a truly hostile population presents commanders with more significant security and resource difficulties. An *adversary* is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0). An *enemy* is a party identified as hostile against which the use of force is authorized (ADP 3-0). A *hybrid threat* is the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting effects (ADP 3-0).

1-52. To influence the behavior of a population, commanders often require external resources to support humanitarian and governance requirements. Approaches to information operations must include proactive positive interaction with the populace through various media or in person. Simultaneously, a counter-effort to negate enemy force information operations messages are required as well. The two efforts must complement each other. Every military action or inaction influences the relationship between the local populace and friendly forces, and by extension, mission success or failure. Again, diplomacy, information, and economic U.S. government means are not the same as MGO typically found and needed after large-scale combat. In protracted limited contingency operations, commanders establish security for the instruments of national power (diplomatic, informational, economic) to return to a whole-of-government approach in providing humanitarian aid and other influential responses. With this security priority awareness, commanders take one or more actions:

- Coordinate and plan operations with interagency and coalition partners.
- Implement and assess effective civil-military programs.
- Take immediate actions necessary to maintain support of a friendly populace, neutralize or gain the support of hostile or neutral elements, or do any combination of these activities to achieve precise effects and accomplish the mission.

1-53. While the mission variables of civil considerations (ASCOPE) are inherent to most operations, their overall importance is a function of mission and time. Some operations, such as raids or support to host-nation forces, may result in little or momentary contact with the local population. Other operations, such as a prolonged counterinsurgency, may require continuous and close support of the population. Commanders consider three objectives regarding civilians of an urban area:

- Minimize interference between civilians and UO, and vice versa. In large-scale combat operations offense and defense, shielding or moving civilians away from combat operations is required. This may involve keeping them in place or relocating them to temporary facilities.
- Maximize population support of friendly operations by providing JIIM security, resolving grievances, and returning their lives to states of relative peace.
- Meet or exceed all legal, moral, and humanitarian obligations.

URBAN INFRASTRUCTURE

1-54. Urban infrastructures are designed to support urban inhabitants and their economy. They form the essential link between physical terrain and urban society. During urban stability operations, restoration or repair of urban infrastructure may be decisive to mission accomplishment. During urban operations, destroying, controlling, or protecting vital parts of the infrastructure and its surrounding integrated network LOCs or nodes may be critical to the larger major operation. An irregular threat force operating in an urban area relies on the area's water, electricity, and sources of bulk fuel to support forces. This is true particularly when its bases or facilities are physically located in or near the area. Near-peer adversaries possess and seek to maintain their own internal lines of supply and communication, but they can benefit from drawing bases of support from the local operational area, thus depriving the population or friendly forces of sustainment

resources. Isolating either threat type from these sources of support strains adversary operational capacity and endurance. This dilemma may help shape positions of advantage, but commanders should expect reciprocal attempts to disrupt friendly force or civilian supply or communication lines. Controlling key nodes of air, land, and sea transport within large urban areas and the extended periphery enables sustainment/logistics and prevents enemy resupply. Influencing key radio, television, internet, and newspaper facilities isolates the threat and prevents it from influencing the urban populace.

A System of Systems

1-55. Urban infrastructure consists of six categories: economics and commerce, administration and human services, energy, cultural, communications and information, and transportation and distribution. Hundreds of systems exist within these six categories. In stability operations, irregular threats will attempt to disrupt system attributes to achieve their aims. In large-scale combat operations, hybrid or conventional threats will seek to gain positional advantage in one or more related urban areas. They may do this across a broad front or reinforce any attack or penetration attempt. Additionally, whether sequentially or simultaneously, large-scale combat operations threats may maintain a layered defense of interrelated urban areas and their systems to delay, disrupt, deceive, or attrite friendly forces. Each system has a critical role in the smooth functioning of the urban area. Since the infrastructure categories overlap, this section covers each category individually and in relation to others for determining an appropriate COA.

Interdependence and Conurbation

1-56. Commanders understand and weigh intentional and unintentional destruction of any portion of the internal, interdependent urban infrastructure categories and corresponding cascading effects on other systems of infrastructure. Commanders may be able to gain an operational advantage while minimizing unwanted and unintended effects by relying more on the expertise of Army/Marine Corps engineer and civil affairs units; local urban engineers, city planners, and public works employees; and others with infrastructure-specific expertise. Integration of cyberspace activities with conventional fires contributes synergistic effects against an adversary, whether using cyberspace to shape for follow-on lethal fires or the reverse. For example, in preparation for the air campaign of Operation DESERT STORM, a computer virus was introduced into the C2 system of the Iraqi air defense, shutting it down. That cyberspace activity was followed by deep aviation operations. After understanding the technical aspects of the area's systems and subsystems, commanders then developed the best COA.

1-57. Urban infrastructure and its periphery are also interdependent to adjacent larger operational or strategic conurbations within an operational area. A conurbation is an extensive urban area resulting from the expansion of several cities or towns so that they coalesce but usually retain their separate identities. Planning should include consideration of friendly and enemy operational effects to larger linked and dependent series of urban systems. In other words, what happens to an infrastructure element in one city may affect categories in another. Planners should consider which elements of urban infrastructure categories are mutually dependent or are simply exclusive to that area. Degrees of correlation and causality will vary. While a large city or megacity may be a national or regional hub of power and resources, forces benefit in considering subordinate adjacent city or regional infrastructure control effects. Understanding adjacent urban area interdependencies supports promotion of friendly lines of effort or the defeat of enemy indirect lines of effort. For instance, in Operation IRAQI FREEDOM challenges and opportunities arose from identifying single points of failure in the design of the previous regime's energy infrastructure. Insurgent attacks disrupted oil and gas supply lines in northern Iraq that fueled electricity and refinement production facilities in the south-central region of the country. These facilities provided the electricity needed to run the pumps in the north, but degraded distribution-hampered infrastructure categories in the entire region. Because of this cyclic hindrance in the energy infrastructure category, all other infrastructure categories were hindered.

Structure and People Assessments

1-58. Each category of infrastructure consists of both a physical (terrain) component and human dimension. Conduct of a thorough PMESII-ASCOPE crosswalk as detailed in ATP 2-01.3 and ATP 3-55.4 reveals infrastructure-related linkages of areas, structures, and capabilities. Human-related analysis can be found in understanding the organization, people, and event-related topics. Further, a detailed study of structures and

capabilities is described through sewage, water, energy, academic, trash, medical, safety, other (SWEAT-MSO) assessments in ATP 3-34.81/MCRP 3-34.3(MCWP 3-17.4). Additional detailed consideration lists can be found in MCIA 2700-002-03. For example, the physical component of the electrical segment of the energy infrastructure consists of power stations, substations, a distribution network of lines and wires, and necessary vehicles and repair supplies and equipment. The human dimension of this same segment consists of the supervisors, engineers, linemen, electricians, and others who operate the system as well as the end users who rely on it. Any of these components can constitute a target for friendly or enemy forces, and effects on them will disrupt the subsystem for a time. Commanders understand and recognize both physical and human dimensions in their assessments. Large cities may necessitate multiple teams and assessments of subordinate urban sections (suburbs, neighborhoods, or adjacent towns) to aggregate a holistic urban visualization for planning.

Potential Impact on Future Operations

1-59. Destroying or incapacitating infrastructure impacts future operations and inhabitants of the urban area. This destruction should be mitigated but may be unavoidable in urban operations; units should plan for reconstruction efforts during transition to stability operations and return of control to HNSF. If planning identifies a need, units may seek future conditions-based rule of engagement clearances or authorities related to acceptable levels of destruction. However, an inherent right of self-defense will always remain. In partnered or stability operations, destroying urban infrastructure during initial phases of an operation may require commanders to assume responsibility for repair, maintenance, and cleanup, and operation of those same facilities later. Although exceptions exist, commanders cannot destroy or significantly damage the infrastructure of a foreign urban center during operations and expect the population to remain friendly to U.S. or multinational partners. On the other hand, early repair or restoration of critical or essential infrastructure improves civil-military relations, speeds transition back to competent civilian authorities, and aids in overall successful mission accomplishment. Still, support from the urban society is only one factor that commanders weigh in developing appropriate COAs.

Resource Intensive

1-60. Requirements to protect, restore, or maintain critical infrastructure inside a city diverts substantial amounts of resources and manpower needed elsewhere and places additional constraints on subordinate commanders. In consolidating gains after large-scale combat operations, plans should include methods and forces to restore critical infrastructure reconstruction to the control of host-nation populations or forces as part of the peace process. Civilian infrastructure is more difficult to secure and defend than military infrastructure. The potentially large and sprawling nature of many systems such as water, power, transportation, communications, and government, make their protection a challenge. Yet, the infrastructure of an urban area gives commanders essential logistics and support. Therefore, the initial expenditure of time and other resources is necessary to support concurrent or future operations. Legal considerations, however, affect using the infrastructure and acquiring the urban area's goods and services. Commanders, their staffs, and subordinates—often to the individual Soldier/Marine—know the limits of battlefield/battlespace acquisition techniques (confiscation, seizure, and requisition) in support of mission accomplishment. In stability operations, safeguarding or restoring critical urban infrastructure for military or civilian use is normally a decisive point in the overall operation. Conducting a thorough PMESII-ASCOPE cross-walk, as described in ATP 2-01.3 and ATP 3-55.4 is essential to understanding and visualizing population and infrastructure intersections, groups, and linkages, and to determining resources needed based on the type of operation conducted.

1-61. Keys to understanding the magnitude of the resources and manpower required to restore civil infrastructure include an initial infrastructure assessment and a detailed infrastructure survey using engineer expertise. An initial assessment provides the commander immediate feedback concerning the status of basic services needed to meet the urgent needs of the urban population. Systems assessed are based on the commander's vision of the overall end state and the operational and mission variables. For the Army, those mission variables are mission, enemy, terrain and weather, troops and support available-time available and civil considerations (METT-TC). Joint forces and the Marine Corps use mission, enemy, terrain and weather, troops and support available-time available (METT-T). The engineer infrastructure assessment is accomplished by or with others who have sufficient expertise to provide the type and quality of information

required. These include civil affairs, medical, and chemical personnel as well as local experts, if available. Those tasked with this assessment routinely consult others for subject matter expertise. Those consulted include friendly forces and intergovernmental agencies currently operating in the urban area, urban civilian leadership, and even subject matter experts outside the theater.

1-62. While an infrastructure assessment facilitates resolution of immediate challenges to urban reconstruction and restoration, it also provides the initial basis for determining conditions of successful transition. Commanders and planners expand and refine their understanding. As a necessary follow-on, commanders initiate a detailed infrastructure survey. U.S. Army Corps of Engineers personnel assigned to forward engineer support teams normally conduct this survey. As with the assessment, the commander incorporates other technical specialty personnel in the survey team to enhance the quality and accuracy of the product. See ATP 3-34.80 and FM 3-34 for engineering details.

Density

1-63. The density of terrain, population, and infrastructure in a city influences how both threat and U.S. forces operate, complicating the ability of friendly forces to employ fires, movement and maneuver/maneuver, and to collect intelligence. Variations in city functional area type (see figure 1-5 on page 1-11) can affect operational maneuver. For example, large cities over 250,000 people may have very dense cores, such as New York City, while some have denser suburb or commercial rings, such as Los Angeles. Similarly, London and Athens have comparable population densities. From Demographia's, "World Urban Areas" 2021 report, “Yet, the core densities in Athens are considerably higher than in London. The Athens suburbs, however, are among the least dense in the high income world.” Constraints on mobility increase risks to mutual support, reinforcement, sustainment/logistics, casualty evacuation, personnel replacement, and equipment reconstitution. While sea basing can reduce Army/Marine Corps protection/force protection and sustainment/logistics requirements ashore, commanders must account for the additional time and distances involved during the planning of movement and maneuver/maneuver and sustainment/logistics. The urban environment affects the conduct of military operations, but the nature of those operations also shapes the urban security environment itself. A complex example may envision reducing districts to rubble in one area, driving the population into different neighborhoods or out of the city, region, or country altogether, coupled with changing cultural or spatial relationships between locations in the city, thus affecting the viability of key infrastructure.

1-64. The tactical problem of UO encompasses both the threat and the entirety of the urban environment. Military operations that devastate large amounts of infrastructure may result in more civilian casualties than those caused by combat directly, in essence, causing a manmade disaster. Excessive destruction of infrastructure that causes widespread suffering among people may turn initially neutral or positive sentiment toward U.S. forces and partners into hostility that can rapidly mobilize populations against them and change the nature of the military problem. Additionally, excessive destruction increases the cost and time necessary to recover from the destruction caused by combat.

1-65. Operating in an urban area always presents the danger of being overwhelmed and defeated, as a large, hostile, civilian population can severely disrupt operations while providing both an immediate (albeit untrained) recruiting source and concealment for an enemy. Significant planning and situational awareness is necessary to prevent forces from being fixed and destroyed piecemeal. Tactically mobile, mutually supporting units are critical to success in complex, dense urban terrain. Irregular enemies may attempt to isolate friendly forces using infiltration under dense urban cover and civil C2 means abundantly available in dense urban areas. These means may include information leveraged from social media, civilian unmanned aircraft systems (UASs), open-source or crowd-sourced media information, and civilian systems such as cell phones, satellite phones, or handheld radios. Additionally, dense urban terrain may enable shaping operation or deception attacks from improvised explosive devices (IEDs) or direct engagements with security forces in dense urban areas to draw them away from enemy key terrain objectives or their decisive points. *Command and control* is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission (JP 1). Conventional adversaries may use a combination of irregular and network-based conventional C2 structures. EM interference, denial of internet and Global Positioning System (GPS) services, and physical obstacles may demand more reliance on decentralized C2 and mission-type orders by friendly forces. The most successful small units are well-trained, disciplined, joint and combined forces who prepared for operations through ample integration and rehearsals.

URBAN INFRASTRUCTURE CATEGORIES

1-66. Simple or complex, all systems fit into six broad infrastructure categories (see figure 1-7). Like the displayed technique in figure 1-1 (on page 1-2) of aligning staff sections with operational variables, commanders may choose to align staff members or designate representatives with focus on distinct infrastructure categories. They are continuous and persistent, although they may exist in varying states of use and efficiency. Commanders analyze key facilities in each category and determine their role and importance throughout all phases of the urban operation.

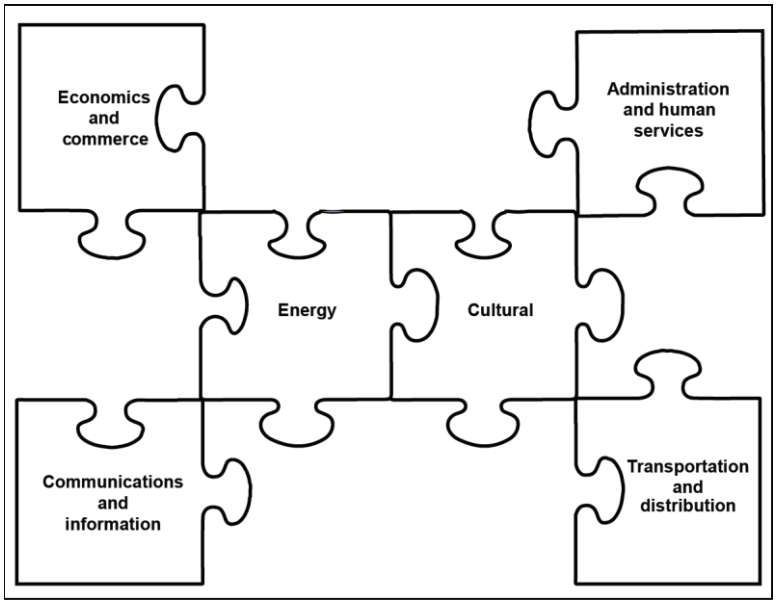


Figure 1-7. Urban infrastructure categories

Economics and Commerce

1-67. The economic and commerce category encompasses—

- Business and financial centers to include stores, shops, restaurants, hotels, market places, banks, trading centers, and business offices.
- Recreational facilities such as amusement parks, golf courses, and stadiums.
- Outlying industrial, mineral, and agricultural features to include strip malls, farms, food processing and storage centers, manufacturing plants, mines, and mills.

1-68. An essential aspect of this category during operations may be the political sensitivity of U.S. or allied industries investing and operating in a foreign country, particularly during stability operations. An enemy or a disgruntled civilian population may attack or disrupt commercial activities as a political statement against the U.S. or its allies. Food production assists commanders in food services and is essential during relief operations. During long-term stability operations, visible, material, and tangible economic progress creating or restoring (and protecting) businesses, agriculture, and overall jobs is often critical to—

- Generating or maintaining an urban population's support of Army/Marine Corps forces and operations.
- Reducing urban support to threat forces and operations to include eliminating civilians as a potential manpower pool for insurgent or terrorist organizations and activities.
- Lowering other hostile civilian activities such as protests and riots.
- Transitioning the urban area back to legitimate civilian responsibility and control.

1-69. The economics and commerce category of urban infrastructure produces and stores toxic industrial chemicals used in agriculture (insecticides, herbicides, and fertilizers), manufacturing, cleaning, and research (to include biological agents). Fertilizer plants provide a key material in terrorist and insurgent bomb-making

activities. A thorough analysis of this category of infrastructure may be essential to understanding how urban insurgencies are funded and supported. By understanding the resourcing of an insurgency, commanders can understand the true organization of the insurgency and suggest methods to isolate insurgents from their economic or financial support. In their overall assessment of this category of infrastructure, commanders also consider activities and influence of criminal organizations or elements.

Administration and Human Services

1-70. This wide-ranging category covers urban administrative organizations and service functions concerned with an urban area's public governance, health, safety, and welfare. The administration and human services category encompasses—

- Governmental services, which includes embassies and diplomatic organizations.
- Activities that manage vital records, such as birth certificates and deeds.
- The judicial system.
- Hospitals and other medical services and facilities.
- Public housing and shelter.
- Water supply systems.
- Waste and hazardous material storage and processing facilities.
- Emergency and first-responder services such as police, fire, and rescue.
- Prisons.
- Welfare and social service systems.

Energy

1-71. The energy category of infrastructure provides for essential services and resources for the urban population. Losing the support of essential elements of infrastructure has an immediate, destabilizing, and life threatening impact on the inhabitants of the urban area. In stability operations, numerous parts of both the energy and the administrative and human services categories of infrastructure often rise to critical importance before all other elements. Complete restoration of these essential services is often a lengthy, resource-intensive civil-military operation. If tasked, leaders assess SWEAT-MSO to determine the best COA for restoring essential services (Soldiers/Marines reference ATP 3-34.81/MCRP 3-34.3 [MCWP 3 17.4] for further considerations).

Cultural

1-72. The cultural category of infrastructure encompasses many organizations and structures that provide the urban populace with its social identity and reflect its culture. This infrastructure category overlaps with many recreational facilities included under the economics and commerce infrastructure. For example, an urban society may radically follow soccer matches and teams, hence, soccer stadiums relate to the society's cultural infrastructure. Some of these facilities, particularly religious structures, are protected targets and others require security and law enforcement protection from looting and pilferage. However, commanders quickly educate, inform, and continually remind the urban populace and media that cultural infrastructure may lose its protected status when used by threats for military purposes. Cultural infrastructure includes—

- Religious organizations, places of worship, and shrines.
- Schools and universities.
- Museums and archeological sites.
- Historic monuments.
- Libraries.
- Theaters.

Communications and Information

1-73. The communications and information infrastructure category consists of facilities as well as formal and informal means to transmit information and data from place to place. Communications and information

infrastructure in an urban area controls the flow of information to the population and the enemy. This category includes—

- Telecommunications, such as telephone (to include wireless), telegraph, radio, television, and computer systems.
- Police, fire, and rescue communications systems.
- Public address, loudspeaker, and emergency alert systems.
- The postal system.
- Newspapers, magazines, billboards and posters, banners, graffiti, and other forms of print media.
- Internet and social media.
- Informal human interaction that conveys information such as messengers, public speeches or proclamations, protests, and everyday conversations.
- Other inventive informal means such as burning tires and honking horns.

1-74. Communications and information link all the other elements in an interdependent "system of systems" more than any other element of the infrastructure. Commanders use the communications and information category to coordinate, organize, and manage urban activities and to influence and control urban society. Commanders are aware of how loss or degradation in communications impacts operations, both in its impact on conduct of friendly operations as well as on local populace atmospherics. The urban environment experiences similar impacts to communications failures, but urban governments and administrations are generally less prepared to deal with a collapsed communications and information infrastructure than trained Army/Marine Corps forces.

1-75. Militarily, a functioning urban communications and information system serves as an alternate means of communications and information sharing for both friendly and threat forces and can be easily secured with civilian, off-the-shelf technologies. Threats may make use of commercial systems intertwined with legitimate civilian users, making it impractical to prevent use of these assets. Friendly or enemy forces may use these systems to influence public opinion, gain information, pass intelligence, support deception efforts, or support information operations.

1-76. Threats and friendly forces have used social media as an information source, a method to pass intelligence, a targeting method, and an information operations platform. Commanders consider various open-source feeds in addition to traditional methods for data mining and denial to adversaries. Internet access is increasingly the mechanism by which people receive and share information. In many parts of the world, it is considered a basic right. While situations exist where intentional internet outages make sense, they have the potential for creating adverse public sentiment against Army/Marine Corps forces. Therefore, commanders expect operations to occur within this context and must use caution when analyzing social media, balancing the information obtained against other sources and collection methods.

Increased Impact on Information Technology

1-77. In many urban areas, information technology links categories of urban infrastructure. Information technology links functions and systems in an urban area and connects the area to other parts of the world. This latter aspect creates important implications of a major operation for commanders. The authority to conduct certain types of cyberspace operations is often retained at the strategic level specifically because the impact may extend beyond the immediate theater. However, given the importance of such means, commanders should not hesitate to request such assets or seek to synchronize tactical operations with existing cyberspace efforts to leverage their effects (for more information on cyberspace operations and electromagnetic warfare, see FM 3-12).

Pervasive Media Presence

1-78. The media is central to communications and information infrastructure and is a critical operational concern. Compared to other environments (jungles, deserts, mountains, and cold weather areas), the media has more access to UO. This is because of ready access to transportation routes such as airports, sea and river ports, and major road networks; power sources and telecommunications facilities; and existing local media structures. The increased prevalence of smartphones and connectivity has placed both access and the ability to contribute to conversations on various media platforms in the hands of more people. Cellular phone internet

access provides near-real-time reporting by civilians via informal media sources. Soldiers/Marines are likely to have their activities recorded in real time and shared instantly, both locally and globally. In sum, friendly forces must have an expectation of observation for many of their activities and must employ information operations to deal with this reality effectively. Their challenge is to balance transparency with operations security. Information operations provides the means to strike the right balance.

Information Dimension

1-79. Communications and information are subsets of the information dimension in which a complex relationship exists among information, the populace, policy formulation, the exercise of government, and military operations. The commander, staff, and especially the information operations officer, must understand the information dimension in all its complexity to determine how it affects military operations and, in turn, how military operations affect the information dimension. Greater complexity requires greater unit capability and capacity at echelon to deal with the strain of urban combat (for more information on affecting the information dimension to operational and decisive advantage, see FM 3-13).

1-80. Many variables make up the information dimension. The most essential to achieving success are the various relevant actors and audiences that compose the populace, ranging from allies to neutrals to the enemy. Within an urban setting, the diversity of these audiences and actors, the complexity and momentum of their interactions, and the competition for scarce resources are more pronounced. Effective commanders understand who the various actors and audiences are in the AO, what motivates them, and how they receive information and make decisions. This information enables commanders to influence the actors in concert with their own desired end state.

Induced Cooperation Through Credibility

1-81. Successful relations between friendly forces and relevant audiences evolve from regular interaction based on credibility and trust. More information sharing is usually better than less, except when the safety of personnel is at stake, or operational security is paramount. Commanders should not withhold information to protect the command from embarrassment, but may resolve potential issues by sharing pertinent information at lower leader or partner levels sooner rather than later. They consider relevant audience interests as part of the normal planning process and work to ensure that the information presented is accurate, timely, and consistent with operations security. Because the media arrives in the urban area before the conduct of operations, early deployment of public affairs assets may be critical. Commanders, through their information operations officer or representative, synchronize, coordinate, and deconflict information-related capabilities in such a manner that the words, images, and deeds of the unit project a coherent and credible narrative.

1-82. Additional credibility may be built during shaping operations or competition periods. For example, shared training or education courses or site visits can set conditions from which future credibility can grow from. Units nurture cooperation through effective transition or handover of mission units or resources to ensure essential continuity of both operations and messaging. In other words, previous promises, agreements, or arrangements made to civil populace or security force partners should be not be forgotten, should be understood by the incoming unit, are enacted, or are suitably modified or addressed to avoid future grievances. These actions consolidate gains by facilitating trust and credibility built at home and abroad over time.

Transportation and Distribution

1-83. The transportation and distribution category of infrastructure consists of—

- Networked highways and railways to include bridges, subways and tunnels, underpasses and overpasses, ferries, and fords.
- Ports, harbors, and inland waterways.
- Airports, seaplane stations, and heliports.
- Mass transit.
- Cableways and tramways.
- Transport companies and delivery services that facilitate the movement of supplies, equipment, and people.

1-84. Similar to communications and information, the transportation and distribution facet of the urban environment provides the physical link to all other categories of infrastructure. Transportation and distribution systems are multi-modal and multi-nodal. Cargo moves seamlessly through modern ports and airfields because of the uniform standardized shipping containers that can be moved by train, plane, truck, or boat. This standardization drives containers to move through multiple nodes as they shift from one mode of transportation to another. Each modal or nodal shift provides an opportunity to impact or intercept cargo—an opportunity for criminal, terrorist, or enemy actions to jeopardize the force. The very nature of transshipping nodes requires porosity and consequently every access point represents vulnerability.

1-85. Army/Marine Corps forces deploying into a theater of operations depend on ports and airfields. Seizure and protection of these critical transportation nodes directly impact the projection of combat power. Until forces secure these facilities, force projection is confined to forcible entry options. Once in theater, transportation and distribution systems in the urban area contribute greatly to the movement of forces, maneuver, and logistics operations throughout the AO. Control of decisive points in this infrastructure affects the military operation and the normal functioning of the urban area and surrounding rural areas. Commanders consider the impact of their operations, both logistic and security, on the city economic and commerce infrastructure. Army/Marine Corps forces strive to limit their impact on vital commerce and supply chains when using ports and airfields. Military transportation systems can augment existing facilities to increase throughput. Supplies traveling through the transportation and distribution system may be military-specific supplies (such as ammunition and repair parts) and supplies for both the military and urban population (such as food, medicine, oil, and gas). A given system has finite capacity. Commanders consider the effects of using commercial infrastructure, because the system also supports the movement of military forces and the urban area's population for which it was designed. Commanders of a major operation develop innovative methods that limit the transit of threat supplies and reinforcements while facilitating the movement of their own resources and those of civilians. Civilian considerations attempt to minimize hardship and promote normalcy in the urban area and increase in significance as the need for legitimacy increases.

1-86. Most urban areas, particularly in developing countries, have two forms of transportation and distribution systems that exist simultaneously: a formal system and an informal or paratransit system. Large organizations, bureaucracy, imported technology, scheduled services, and fixed fares or rates characterize formal systems. Informal systems are characterized by low barriers to entry; family and individual entrepreneur organizations; adapted technology; flexible routes, destinations, and times of service; and negotiated prices. The informal system is more decentralized and covers a much greater portion of the urban area than the formal system. The informal transportation and distribution system includes a waterborne element, is more likely to function through turbulence and conflict, and extends hundreds of kilometers beyond the urban area. Accordingly, commanders must understand both systems to establish effective movement control and isolate the enemy.

This page intentionally left blank.

Chapter 2
Foundations of Urban Operations

This chapter details UO, their necessity, and most risks involved. The chapter concludes by describing the fundamental tasks of successful operations in an urban environment.

UNDERSTANDING URBAN OPERATIONS

The art of war is simple enough. Find out where your enemy is. Get at him as soon as you can. Strike at him as hard as you can and as often as you can, and keep moving on.

General Ulysses S. Grant

2-1. Urban operations may occur across the competition continuum and range of military operations (see figure 2-1 on page 2-2 and FM 3-0), and in competition, crisis, or conflict settings. UO may span offensive, defensive, and stability tasks planned and conducted on or against objectives on a topographical complex and its adjacent natural terrain, where manmade construction or the density of population are dominant features. They may occur sequentially or simultaneously in contiguous, noncontiguous, linear, or nonlinear AOs. UO may be the commander's sole mission or one of several tasks nested in a larger operation. In large-scale combat or limited contingency operations, units conduct stability operations simultaneously, with high-intensity decisive action offensive and defensive operations, as they consolidate gains. UO compress and amplify lethality, danger, mission risk, and the need for resources, and they require significant Soldier/Marine, leader, and unit toughness and endurance. Army/Marine Corps leaders in UO should strive to—

- Understand the urban environment in competition below armed conflict, crisis, and large-scale combat operations settings to determine competition continuum decisive points (see FM 3-0).
- Shape the OE, positioning trained and ready forces to conduct integrated, synchronized combined arms shaping, sustaining, and supporting efforts, thus establishing conditions for success.
- Prevent conflict through joint force support of flexible deterrence and response options.
- Mass joint and partnered effects and synchronize combat power through direct or indirect approaches on decisive points in urban areas, main efforts, and COGs to prevail in large-scale combat operations.
- Converge capabilities across multiple domains and dimensions and against combinations of objectives to create multiplicative effects against a system, formation, or capability.
- Continually consolidate gains essential to retain and exploit the initiative and limit sources of instability, and possibly insurgency.
- Transition the area to control of another force, agency, or legitimate and functional civilian-controlled government.

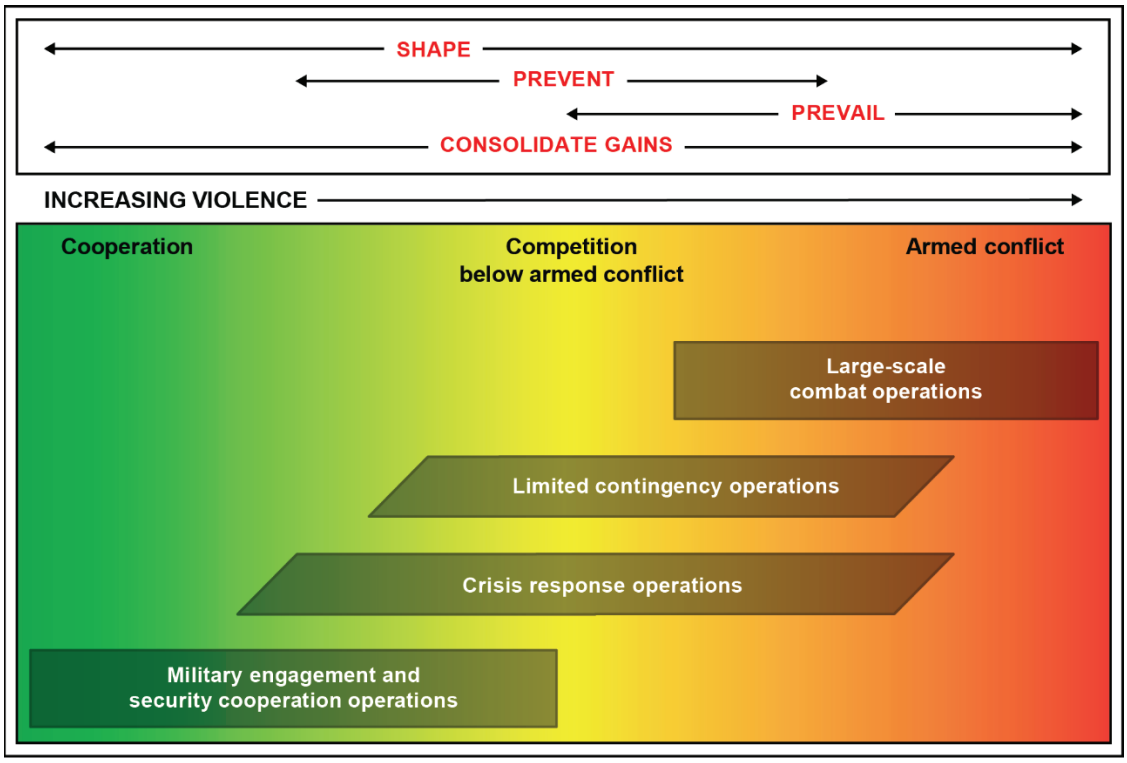


Figure 2-1. Army strategic roles, competition continuum, and range of military operations

2-2. Commanders understand and consider that interdependent factors influencing a city extend far beyond an area's physical confines. For example, a source providing electrical power to an urban energy system may be located outside the urban area, or social media effects may influence sympathetic forces or civilian diaspora abroad, which increases threat support. While the physical infrastructure, terrain, and enemy are important to define an urban area, the most important variable a commander contends with is the populace. Leaders must firmly decide if UO are proper or necessary.

2-3. Most major UO require application of joint service capabilities in decisive action. Distributed and decentralized operations require that lower echelons are granted greater authority, to enable freedom of action. With a mission command approach, enabled units also assume a greater responsibility for coordination and deconfliction among adjacent units and higher headquarters, to mitigate risk. A JTF may be designated to command all services and functions in or around an urban area. In such cases, the responsible joint force commander designates support relations between major land units and joint functional commands. The major land units may include Army forces, Marine Corps forces, or a mixture of both in a joint force land component command. Large-scale ground combat operations of significant size in a metroplex, metropolis, or megacity may necessitate C2 by a headquarters above corps, such as a theater or field army. Joint functional commands may include a special operations task force, a military information support operations task force, a civil-military operations task force, and other capabilities as the joint force commander requires based on an assessment of the situation.

2-4. While expeditionary forces may be among the first to arrive, those forces operate within a larger JIIM task organizational structure (see appendix E for more on joint and multinational UO). Commanders leverage resources from special operations forces (SOF), the DOS, and the theater of operations to build their intelligence picture and understand an operational environment for a reach-forward and continental U.S.-based reachback that mitigate a reduced footprint in austere environments. These methods are complemented by existing infrastructure and information resident within a city—whether derived from historical information, traditional human intelligence (HUMINT) sources, or less traditional means, such as social media, or open-source intelligence.

NECESSITY OF URBAN OPERATIONS

Since men live upon the land and not upon the sea, great issues between nations at war have always been decided—except in the rarest of cases—either by what your army can do against your enemy's territory and national life, or else by fear of what the fleet makes it possible for your army to do.

Sir Julian Corbett

2-5. Only landpower can secure a city or its population. *Landpower* is the ability—by threat, force, or occupation—to gain, sustain, and exploit control over land, resources, and people (ADP 3-0). However, landpower application is not exclusive, and is further dependent on sea and air power to facilitate its execution. For example, in WWII the German Luftwaffe changed focus from military airfield targets to cities. The bombing of London in the Battle of Britain produced massive casualties and destruction, influenced population resolve and material resource flows, yet failed to destroy the city or its elements as a system. London remained functional and Britain regained air supremacy; complementing expeditionary sea resupply across the Atlantic Ocean further protected from German air or sea attacks. This further supported the subsequent Allied combat power build, European mainland invasion in 1944, and eventual Allied victory over Nazi Germany in 1945. In another example, shelling and bombing of Tokyo by ship and aircraft fires killed over 80,000 people and destroyed more of the city than the nuclear explosions on Hiroshima and Nagasaki, respectively. Yet Tokyo and its residents functioned independently until ordered to submit by their emperor and until the arrival of Allied ground forces. Commanders decide early in planning a major operation if conducting urban operations in their area of responsibility is necessary and possible. The *area of responsibility* is the geographical area associated with a combatant command within which a geographic combatant commander has authority to plan and conduct operations (JP 1). Offensive UOs typically require a minimum of three to five times the force ratios needed for rural combat. This ratio is subject to many factors, not least of which of unit composition, disposition, strength, experience, and time available. Similarly, a UO defense may benefit from inverse force ratios as an economy of force measure (FM 6-0).

2-6. Commanders determine whether operations should focus on destruction of the enemy force, if there are other reasons to secure urban terrain, or some combination of both. They consider the location and intent of the threat force; critical infrastructure or capabilities that are operationally or strategically valuable; the geographic location of an urban area; and the area's political, economic, or cultural significance. Humanitarian concerns may require control of an urban area or necessitate operations within it. Commanders conduct UO because doing so provides a tactical or operational variable advantage, and consider that not doing so threatens the larger campaign. However, JP 3-06 recommends asking the key questions below, which help commanders and staffs determine whether to conduct UO among a population in context of a larger campaign or major operation:

- What is the desired end state?
- Is political, military, economic, social, informational, and infrastructure (PMESII) control of an urban area necessary to attain the desired end state? If so, what degree of control is required?
- What operational objectives are necessary in order to attain the desired level of control?
- Can the force accomplish the necessary objectives with the means and time available?
- Are the anticipated consequences and costs of achieving those objectives justified by the importance of the end state?

TACTICAL ADVANTAGE

2-7. Cities encapsulate key junctures and routes of commerce, and can provide a significant tactical and operational advantage to the commander who controls lines of communications. Control of features such as bridges, railways, road networks, airstrips, and ports can significantly impact future operations. Defending a broad, large-scale network of urban strongpoints may be critical to maintaining operation or campaign lines of communication or supply. The enemy can use urbanized areas as a base of operations from which it launches its own offensive operations. Attacking those bases to separate the enemy from its support infrastructure may be advantageous. The necessary advantage provided by application of overwhelming combat power along multiple axes of attack is common in large-scale combat operations. However, this may result in higher civilian casualties when it occurs in or around a populated area. For instance, in WWII Berlin,

2.5 million Soviet forces on three fronts captured an entrenched triple-layered German defense force of just over 500,000 in approximately three weeks. Over 100,000 civilian casualties and other tragedies also resulted. In competition below armed conflict, shaping the OE, and preventing large-scale combat operations or preparing for crises may give advantage. Examples include operational or strategic exterior lines, and coalitions or allies united in their purpose to gain and exploit positions of advantage. While enemy use of an urban defense is a stronger form of warfare, exterior line advantages in isolating a force via limited engagement may enable success. In this case, there will be a cost in time and munitions usage, but most defenders capitulate as they reach culmination, and there will be a potential savings in friendly force casualties.

POLITICAL ADVANTAGE

2-8. The political importance of a built-up area may justify the use of time and resources to secure it. Capturing a city could change control of the seat of local, regional, or national government or controlling one of these locations may facilitate a representative process such as elections. At the very least, it could deal the enemy a decisive psychological blow. However, commanders should be cautious in weighing the true military advantage of securing an urban area versus being able to meet objectives and goals through actions outside of them. As in Stalingrad in 1944 during WWII, the perceived prestige of capturing an otherwise geographically obscure objective enabled Soviet forces to distract German adversaries, exact extreme casualties, and consolidate gains and forces to conduct an operational scale envelopment. This attrition severely impaired German national combat power to the point of no return. German objectives did not include capturing Russia's political COG in Moscow, but erred in focusing on the strategic sustainment oil reserves beyond the trans-Caucasus region to fuel their war effort—Stalingrad held keys to that axis of advance. Subsequently, the capture of Germany's capital, Berlin, was not originally in Allied military interest or necessity at U.S. request, as Allies were focused on the German force COG and its destruction. However, the passion and political enmity of Soviet forces drove the capture of Berlin to exact revenge for high casualty rates and other atrocities encountered at the hands of the German military. Berlin's capture served as a symbolic, geographic, military, and political focal point in the minds of Soviet forces.

ECONOMIC ADVANTAGE

2-9. Large, dense cities are typically regional, national, or global centers of an economy. Most of them are located within 200 kilometers of a maritime region, sea, or ocean, and therefore can support joint force projection. In large-scale ground combat operations, isolation and capture of an especially large economic city may be economically advantageous. These are designated by size or density nomenclatures as an echelon above corps sized city (with sub-types such as metroplex, metropolis, or megacity—see table 1-2 on page 1-16). Such cities have economies of scale so large by themselves, in part or in whole, that they may be an objective in and of themselves within U.S. interests or their control may deny an adversary's ability to wage war by limiting their economic or industrial base. The destruction or capture of key industrial and commercial cities, or decisive elements of them, results in denial of production and distribution of major adversary or enemy force equipment and supplies. This strikes at the enemy's future ability to wage war. The requirement for a logistics base, especially a port or airfield, may play a pivotal role in an enemy's ability to continue a conflict. Capture of such cities may prove extremely beneficial to the attackers, who can use these resources to their advantage. After large-scale combat operations, plans should include leveraging efforts to return dignity and hope to populations as they focus on regaining normalcy, commerce, and industry, rejoining the global economy.

THREAT METHODS

2-10. If a conventional enemy force is too operationally significant to bypass, or it is a threat to support operations and LOCs, the commander may have to contain or destroy the enemy force. A commander also considers if the terrain is either too constricted to allow bypass of the urban area or if the city's location commands dominating terrain that might pose a threat if left unsecured. A planning factor that should not be overlooked is the combat power ratio of insurgents to friendly host-nation nationals within the urban area. Stability operations after offensive or defensive operations will often require host-nation neutral and friendly forces to rebuild effective governance. An influential factor on urban area bypass decisions could be the ability for host-nation forces to maintain control. Finally, commanders consider the five broad peer-threat

methods as they pertain to their AO, often used in combination in support of large-scale combat operations (see FM 3-0 for additional information):

- Information warfare.
- Preclusion.
- Isolation.
- Sanctuary.
- Systems warfare.

2-11. In limited contingency operations or large-scale combat operations, insurgent or irregular threats typically seek to operate in and among the populace and dense urban terrain, resorting to using neutral government, medical, or religious sites and civilian shielding as sanctuary. This method is used because threat forces cannot or will not risk open or conventional warfare loss against a larger, superior conventional military force. For example, the Islamic State chose Mosul's dense urban terrain to offset Iraqi and U.S. military force advantages. They launched attacks from Mosul (the sanctuary) and defended the city using a sparse approximate force ratio of 1:10 for over nine months before falling. The objectives of these examples of insurgency are typically to leverage defensive urban terrain advantages and drastically increase resource costs to U.S. forces and partners.

2-12. Additionally, to attain a political end, insurgents use violence to delegitimize the perceived capacity of governments and security forces to protect the population. Ungoverned or unpoliced spaces in urban areas provide urban cover for irregular forces to assemble and project combat power. Conventional and irregular threat forces may use preclusion, deception, disguise, and complex attacks to disrupt the security setting (for more information on threat methods, see FM 3-0). Conventional forces will use linked defenses of major or multiple cities defended in depth to create layered standoff in a positional defense and from which they may launch attacks from sanctuary. For example, peer threats may use a border, coastal, or maritime layered integrated air defense and antiaccess (A2) and area denial (AD) systems using networked C2 nodes, radars, sensors, satellites and myriad multiple domain weapons systems. Increased population density in coastal cities results in increased reliance on sea LOCs. Defending forces protect interior lines by implementing integrated air defenses and promoting A2AD postures. U.S. or partnered forces that seek to gain access to key terrain provide the joint force with the greatest positional advantage to the operation.

2-13. A peer threat is an adversary or enemy able to effectively oppose U.S. forces worldwide while enjoying a position of relative advantage in a specific region (see ADP 3-0). These threats can generate equal or temporarily superior combat power in geographical proximity to a conflict area with U.S. forces. A peer threat may also have a cultural affinity to specific regions, providing them relative advantages in terms of time, space, and sanctuary. They generate tactical, operational, and strategic challenges an order of magnitude more challenging militarily than other adversaries. Peer threats can employ resources across multiple domains and dimensions to create lethal and nonlethal effects with operational significance throughout an operational environment. They seek to delay deployment of U.S. forces and inflict significant damage across multiple domains and dimensions in a short period to achieve their goals before culminating. A peer threat uses various methods to employ their instruments of power to render U.S. military power irrelevant. Five broad methods, used in combination by peer threats, include information warfare, preclusion, isolation, sanctuary, and systems warfare (see ADP 3-0).

2-14. In large-scale combat operations, access may involve penetrating in or around integrated air defenses or A2AD systems or isolating and bypassing threat-occupied urban areas for rear or support area forces to secure later. It is contemporarily impossible to completely isolate a modern urban area of significant size in multiple domains and dimensions due to the prevalence of digital connectivity. However, cyber and electromagnetic warfare specialists aid in monitoring and reporting information of value to commanders and intelligence staff. Additionally, the fundamentals of militarily seizing and securing urban center key terrain in large-scale combat have not changed from history, although methods vary. Populations and property must be protected to the greatest extent possible in order to consolidate gains and return an area to a desired state of relative peace favorable to U.S. interests.

Proxy Forces

2-15. Proxy forces provide adversarial nation states, in addition to the United States and its North Atlantic Treaty Organization (NATO) allies and partners, a mechanism within the competition continuum to achieve political goals and strategic objectives through indirect means to gain an advantage. U.S. forces should anticipate and plan for conducting operations against proxy forces within both urban and rural limited contingency operations and during large-scale combat operations. A proxy force may be local and organic, consisting of personnel from within a specific urban environment or region, or proxy forces may come from external sources. Financial and military sponsorship could include local resources, those provided by an external nation state, or a combination of the two. The level of capabilities of a proxy force can range broadly, reflecting training received, weapons available, and levels of commitment. Proxy forces can include—

- Loosely organized militias.
- Insurgent groups.
- Terrorist cells/organizations.
- Private military companies.
- SOF without insignia of an external nation state.
- Regular forces without insignia of an external nation state.

2-16. Proxy forces may be commissioned directly or indirectly by a supporting adversary nation state or an ideological group and provided with training or external national or military grade support. This support could include intelligence, surveillance, and reconnaissance (ISR), fires, integrated air defense, special weapons and munitions, or other technical means. In addition, an external nation state could employ SOF or regular forces, without insignia, to support an existing proxy force, assist in creating a new one, or even function as one. Very often and from the perspective of a supporting nation state, the use of a proxy force can assist the nation state in achieving its foreign policy goals. It can also provide a means for non-attributional coercion, such as political influence, interference, or electoral manipulation, or achieve specific objectives within a limited war, without undue risk of interference or direct intervention by other nation states.

2-17. Proxy forces enable a nation state to support or conduct limited contingency operations, avoiding or at least limiting the risk of a large-scale transition to armed conflict or, during the latter, as a significant subversive enemy factor. Countering proxy forces requires that U.S. forces begin their planning and intelligence processes well in advance to fully understand the proxy force itself and its capabilities within the operational environment. For example, when a unit is part of a larger joint urban operation, maintaining the joint operational area common operating picture around a proxy force operating in a city enables establishing and maintaining exterior lines, facilitating isolation from external support, and eventually disrupting or destroying the proxy force.

2-18. When confronting proxy forces during urban operations, the capabilities, competence, and reliability of the proxy force will often reflect the state of the relationship between the nation state and the proxy force itself. This relationship, often referred to as the principal-agent relationship remains dependent on the alignment of political and military goals of both entities, and risks failure when they diverge, and in some instances, could lead to the abandonment of the proxy force by the nation state. The status of this relationship will likely impact the level and type of engagement U.S. forces can anticipate, often reflected in the local conditions of a specific urban environment. Understanding the dynamics between the proxy force and the nation state will greatly assist U.S. forces in conducting an urban operation against a proxy force. Other considerations include recognizing actual or potential methodologies that a proxy force has or could employ. For example, proxy forces can—

- Leverage crisis events, which could include political disturbances and riots.
  - Local proxy forces themselves often instigate crisis events, but such crisis events can easily deteriorate into irregular warfare conditions.
  - Crisis events facilitated by proxy forces allow non-attributed, supporting regional near-peer or peer-threat nation state militaries to exploit or deceive. Proxy forces either conduct exploitation or support uniformed or conventional military conducting exploitation.

- Enable nation states to project power, maintain a covert presence within a region, limit risks by providing an alternative to the deployment of conventional forces, and maintain plausible deniability of involvement.
- Conduct illicit financial activities through legitimate sources or front organizations to support their operations, sometimes in coordination with an adversarial nation state (refer to MCTP 3-02A).
- Prove difficult to identify, thereby preventing an appropriate level of response, whether through diplomacy, intelligence operations, military actions, or economic activities.
- Create opportunities to discredit the United States, its allies, and partners through disinformation campaigns or by underscoring their inability to influence events or intervene.
- Conduct rapid actions, presenting a fait accompli with little time for an adequate military response by the United States and its NATO allies and partners, while simultaneously, and often, complicating the political response.
- Quickly create battlefield/battlespace conditions through offensive and defensive operations that assist an adversarial nation state in achieving its short- and long-term objectives. This can include attacking political entities to prevent regime change.
- Demonstrate, by default, the capabilities of current weapons and tactics supplied and taught by adversarial nation states or other support groups and networks.
- Provide additional time to mobilize adversary conventional forces for potential deployment.

2-19. General considerations for U.S. forces to defeat, deny, degrade, or disrupt proxy forces when conducting urban operations include—

- Understand the operational environment. Operational success requires a thorough understanding of the urban environment and proxy force capabilities that can range from ISR to weapons, to external logistic and financial support networks.
- Conduct IO/OIE.
  - Proxy forces goals are to deny, degrade, or disrupt the use of the various mechanisms within the information dimension (such as cell phones and cell phone videos, social media, television, the internet, print media).
  - Conducting effective OIE, however, requires a thorough understanding of the operational environment. For example, during urban operations, U.S. forces will likely need to counter immediately any false narratives propagated by a proxy force that seeks to discredit the actions of U.S. forces or their NATO allies and partners.

2-20. In addition, opportunities are likely to present themselves where U.S. forces could leverage the misalignment of both political and military goals between the proxy force and the nation state. U.S. forces should—

- Establish plans for conducting IO/OIE well in advance of actual urban operations.
- Understand the level of local, indigenous support to any proxy force(s). This will directly impact preparatory activities for interaction with the population.
- Conduct a thorough IPB.
  - This will assist U.S. forces in understanding the type of proxy force they are currently or are likely to encounter within the urban environment.
  - The IPB should also identify the key players to include leadership elements within the proxy force(s), the local, regional, and national governments, and local, national, and in some instances, international businesses.
  - This information will assist in denying, degrading, or disrupting the financial and logistic networks that support the proxy force(s).
- Conduct operations within the established rules of engagement (ROE). U.S. forces will generally have to work very hard to achieve success within established ROE, to include caring for any civilians, against a proxy force less constrained by the ROE, while potentially indifferent to civilians needs.
- Disrupt logistic support networks.

- Once identified, interrupting the supply networks and classes of supply that enable military operations could severely limit end strength and capabilities of proxy forces.
- Disrupting supply networks also possibly creates opportunities to exploit within the principal-agent relationships or even destroy proxy forces outright.

Multiple Domains and Dimensions and Multinational Forces

2-21. Space operations, cyberspace operations, and the electromagnetic spectrum offer new challenges to operations across multiple domains and dimensions to the urban military problem, but converging joint or combined arms capabilities can leverage capabilities against those challenges if given proper planning, time, and resource allocation (see figure 1-2 on page 1-6). Operations in cities typically require at least three to five times the number of forces, echelons, and equipment to physically secure urban areas than are used for operations in open terrain or rural military operational settings. The amounts required are multiples of the recommended force numbers in FM 6-0. Similarly, proportionally increased and prioritized allocation of capabilities across multiple domains and dimensions in cities is required to meet condensed or more capable threats. The increased capabilities of a military intelligence brigade-theater assigned to echelons above brigade (EAB) can help collect, process, exploit, and disseminate the increased amount of useful urban area intelligence. All subordinate echelons' integrative processes of IPB, information collection, targeting, risk management, and knowledge management use this intelligence (see ADP 3-0 for more information). Singapore's social media denial of certain Islamic State in Iraq and al-Sham (ISIS) member groups during the 2018 Philippine Army engagement of the Islamic State in Marawi, Philippines is an example of effective intelligence supporting implementation of trans-regional cyberspace measures.

2-22. As peer adversaries reemerge and global economic interests remain, a JIIM and whole-of-government approach is usually required for operational solidarity and efficiency. Multilateral, interoperable forces are able to better seize and exploit positions of relative advantage in large-scale combat operations. As the JTF projects power, the U.S. Air Force and U.S. Navy are critical in controlling their respective domains and effecting dimensions, thereby providing access for U.S. Army and U.S. Marine Corps forces on land. For example, joint forces and U.S. allies set conditions in WWII first over the Atlantic and Pacific oceans and skies, which allowed Army and Marine forces to project land power onto their objectives. Theater and global conditions determine the amount and type of U.S. forces needed for commitment with unified action partners. Commanders should not neglect a need or hesitate to request partnered, joint, specialty, combined arms, or armored forces to address varying threats and populations in UO, as required.

2-23. Homogeneity within urban sub-areas decreases drastically as the size of the urban area increases. Commanders take into account the characteristics of a population whose beliefs, culture, and interests vary. Analysis and understanding of these societal factors is critical to a successful information operations campaign and, thus, the entire operation. Civilian populations continually influence, to varying degrees, operations conducted in an urban area because their societal or cultural norms guide their behaviors. Soldiers/Marines must understand these behaviors and avoid using their own behaviors and values to anticipate civilian actions and responses. Understanding the ethnic and cultural breakdown and composition along specific geographic sectors of population areas (such as enclaves) helps commanders and their forces more accurately understand the influences, sanctuary, and power projection implications that may impact operations in a given area of the urban environment (such as slums in Sao Paulo or Rio De Janeiro, Brazil or Sadr City of Baghdad, Iraq). Of course, understanding cultural differences differs from adopting them or behaving in a similar manner.

Operational and Tactical Implications

2-24. UO are conducted as an integral part of operations in support of the joint force. The Army and Marine Corps predominately plan, prepare, execute, and assess operations as part of, and with support from, the joint force to gain and exploit positions of relative advantage (see FM 3-0 for more information). UO implications in the contemporary environment demand that Army and Marine ground forces defeat a peer or near-peer threat while deterring others. They set security conditions for a rapid consolidation of gains to return areas and populations to states of relative peace, in other words, a return to competition. Army and Marine ground operations are an expeditionary effort requiring force projection and extended lines and are usually conducted as part of a campaign or larger operation Operations are conducted as part of a whole-of-government

approach in a multi-domain extended battlefield/battlespace across the range of military operations. Reducing interference in the economic and personal lives of a populace, coupled with a desired return to relative normalcy, demonstrates competence in a force, builds trust with the people, and enables a transition to governance in favor of U.S. interests. See FM 3-0 for additional information on the transition of large-scale combat operations to consolidation of gains activities.

2-25. When developing an operational approach, commanders consider how to employ a combination of defeat mechanisms and stability mechanisms. Defeat mechanisms are dominated by offensive and defensive tasks, while stability mechanisms are dominated by stability tasks that establish and maintain security and facilitate consolidation of gains in an AO. See FM 3-0 and ADP 3-0 for additional descriptions on the use of defeat and stability mechanisms.

2-26. Tactical UO in limited contingency operations or large-scale combat operations typically have high resource costs in personnel, time, and equipment. While some urban combat operations are infantry centric and intensive, successful operations in an urban environment require a mutually supportive combined arms approach augmented with sufficient fires. Commanders and staffs should consider alternate feasible, suitable, and complete courses of action that offer acceptable indirect approach solutions for achieving objectives. For example, a unit may isolate a city in whole or by key terrain (in part), so the unit may bypass the city or isolated area and move on to more important objectives. As LOCs extend, an additionally allocated rear or support area force may then consolidate gains in that area at another time, also deterring enemy raids on friendly force supply lines or C2 nodes. Planners must account for these additional forces early in planning. Consolidation of gains occurs with different means from the original, organic force to allow a more rapid, deliberate, stability transition to legitimate authorities. However, a direct engagement approach is more often initially required. Army and Marine forces use characteristics of the offense in direct engagement to achieve surprise, mass combat power, and achieve cumulative and complementary effects of combined arms.

Tactical Urban Operation Sequencing

2-27. As shown in figure 2-2 on page 2-10, U.S. forces can expect UO to generally occur in six settings from either the attacking or defending perspective. In conjunction with this phasing model, a useful training, planning, and execution consideration model used in chapters 4 through 7 is an understand, shape, engage, consolidate, and transition framework.

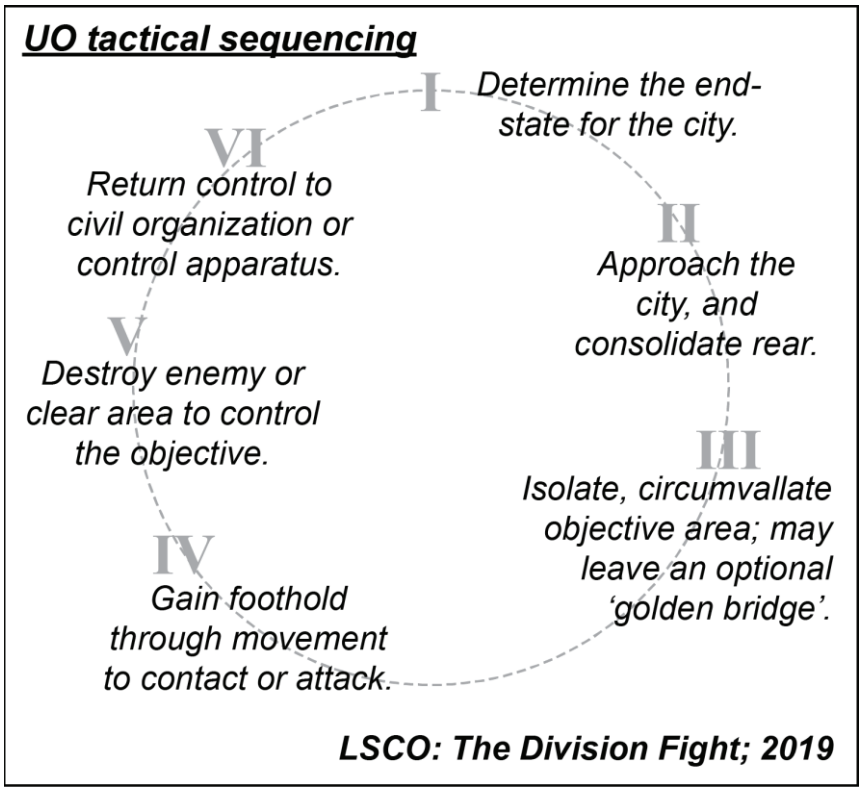


Figure 2-2. General settings of urban operation tactical sequencing

2-28. In setting one, commanders understand higher headquarters' end states, assess, and determine their desired end state for the urban area when the operations are complete. The desired end state for the urban area dictates the level of force used. For example if the desired end state is to retain the city as a viable commercial entity (terrain control focus), the sufficient level of force used must be limited and collateral damage must not destroy the population, commercial infrastructure, or essential processes of the city. Urban operations normally benefit from a balance between extremes of force levels used in this example. Conversely, and with respect to laws of armed conflict in necessity, distinction, and proportionality, if the end state is to destroy all enemies who remain in the city (enemy destruction focus), the sufficient level of force used is nearly limitless and the resulting collateral damage will be much greater. Commanders must continually assess their operational environments, learn and adapt to a thinking enemy, and reassess their assumptions. Commanders and staffs use the Army design methodology, operational variables, and mission variables to analyze an operational environment to support the operations process (see ADP 3-0 for more information). The generally accepted rule of engagement for the U.S. Army in a conflict that does not present an existential threat to the United States is to use precision force and avoid collateral damage where practical. Therefore, in the following example, the assumption is that the attacking force wants the urban area to be capable of restoration to conditions enabling that area to thrive or return to competition after the conflict.

2-29. In setting two, advancing forces proceed to the urban area and halt in order to consolidate the region, or rear area behind the advancing force in a manner that enables the populace to be secure and survive in a relatively safe manner. Attacking a deliberately prepared urban defense is the least preferred operational approach. An undefended urban area deemed a key objective is more effectively secured via information operations with rapid ground approach, amphibious operation, vertical envelopment (airborne or air assault), or other such means of rapidly economizing forces to leverage city strengths in favor of the defender. Initially, SOF may approach the city to identify high-value or high-payoff targets for further joint observation and strike determination. SOF may also gather information on the civilian populace to determine what civilian groups may support a city seizure. This also helps later consolidation of gains activities and stability operations during governance, transition of authority, or reconstruction efforts. Differing from consolidation of gains, *consolidation* is organizing and strengthening a newly captured position so that it can be used against

the enemy (FM 3-90-1). *Consolidate gains* are activities to make enduring any temporary operational success and to set the conditions for a sustainable security environment, allowing for a transition of control to other legitimate authorities (ADP 3-0). Consolidation provides security for the unit, facilitates reorganization of the unit if necessary, redistributes supplies and ammunition while evacuating casualties, and enables the unit to prepare for the enemy's counterattack. Rapid consolidation after an engagement is extremely important in an urban environment, because the enemy is in close proximity and has numerous mobility corridors through which to counterattack. During setting two, every offensive task, defensive task, enabling task, form of maneuver, and form of defense can—and probably will—be used by the advancing force. When the area and population behind the lines of the advancing force are secure, the advancing force can resume the advance.

2-30. Setting three isolates the urban area from outside support as much as possible while optionally leaving a small "golden bridge" by which combatants or civilians could choose to leave the urban area. In this approach forces controlling exterior lines may permit or restrict flows of enemy resources through resource control methods or outright targeting for destruction. Additionally, the bridge can be used as part of a deception operation to facilitate threat destruction. Another option is to create a "golden wall" for sections of a city. Like the bridge, the wall can serve to protect key populations, further isolate an enemy, or facilitate their destruction through targeting. See vignette examples below and chapter 4 for more details on offensive uses. In any case that the golden bridge or wall approach is used or made available, enemy combatants must decide whether to fight to the death or flee the urban area when the situation declines for them.

'Golden Bridge' Shaping Operations

In the early stages of the first Chechen War of 1994–1996, Russian forces left a "golden bridge" in their encirclement of Grozny. Noncombatants could escape the encirclement through this open, southeastern corridor. The Chechen combatants were quick to take advantage of this corridor for reinforcement, troop rest, and supply. Later, the Russians closed the corridor and established "filtration" points through which noncombatants could slowly exit the area after close inspection and interrogation. However, separatist forces were able to infiltrate around security points to continue attacks against Russian forces in Grozny and conduct cross-border, brutal terror attacks in Russia. Along with poor use of tanks not covered by infantry, these effects led to Russian withdrawal and concessions through the Khasavyurt Accord. After separatist attacks continued because of weak governance during the inter-war relative peace, in 1999 Russia would not utilize such a corridor, and learned to use a combined arms approach. In the second Chechen war, they effectively targeted prepared defenses and destroyed breakout Chechen forces through use of minefields, armor, artillery, attack aviation, and air interdiction.

'Golden Wall' Shaping Operations

In the 2008 battle for Sadr City, U.S. forces changed the terms of the battlefield by erecting a 12-foot concrete barrier along a key route, thus denying the Jaish al-Mahdi forces firing positions that could range the Green Zone locations of the Iraqi and U.S. government agencies [in Baghdad] and provide access to the population. In response, Jaish al-Mahdi forces left their hiding places and engaged U.S. forces on ground of their choosing and using methods that favored them, especially the highly integrated combined operations. In the end, Jaish al-Mahdi forces lost their advantages and, eventually, the battle.

2-31. In an example that follows—UO in Mosul in 2017—commanders initially chose to control the terrain over destroying the enemy in the city. Iraqi forces left lines of communication open to offer westward evacuation of civilians or defeated ISIS members fleeing toward Raqqa, Syria. This had the complicating effect of allowing some reinforcement and resupply of ISIS defensive positions, but was a risk chosen by

commanders given they largely isolated the rest of the city and coalition forces seized it after much destruction. If commanders choose enemy destruction, no bridge should be made available. A reasonable and prudent defender often decides to leave a hopeless position in order to fight again. However, a reasonable and prudent defender, when allowed no viable alternative, often decides to fight to the death. A fight to the death typically is extremely costly for attackers and defenders. The opportunity and risk of using a golden bridge works both ways: fighters, materiel, and supplies can come into the urban area as well as leave the urban area, but allowing a small resupply channel to remain open for the defender is a risk that the attacker may decide is well worth taking. Again, during setting three, every offensive, defensive, or enabling task or operation and every form of maneuver and defense can, and probably will, be used by the advancing force. Once isolation is achieved, forces may constrict the exterior lines surrounding the objective to place more pressure on the enemy, but commanders consider unintended effects, such as not triggering unintended early commitment of forces or break-in or breakout attempt(s) by the enemy.

2-32. In setting four, advancing forces gain a foothold or lodgment in the urban area. A *lodgment* is a designated area in a hostile or potentially hostile operational area that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations (JP 3-18). Examples include use of either a large combined arms armored penetration followed by search and attack as in Fallujah 2004, or with more time, a multiple strongpoint establishment technique could be used as in Ramadi 2006–2007. The lodgment should be large enough for maneuver space for subsequent operations. As more time or resources are available, forces may more deliberately establish control, deny enemy access, and facilitate their destruction through establishing mutually supportive strongpoint defenses. This example includes establishing bases, camps, or combat outposts through an urban area, and gaining understanding of and building trust with the population. As in setting three, every form of offense and defense will likely be used, but now the character of combat changes dramatically. In settings one to three, the technologically superior force has a tremendous, maybe even insurmountable, advantage. Trained armored mobility and firepower reign supreme in open combat. In the urban area, technological advantages may be largely negated, and combat often may devolve to one Soldier/Marine against individual enemies. In such a situation, the numerically inferior force with no technological advantage can almost completely stymy a technologically and numerically superior force. Once gaining a foothold in the urban area, the advancing force again consolidates the area behind it, enabling the urban area and the populace to survive and even begin to restore some pre-conflict activities.

2-33. In setting five, advancing forces destroy the enemy or clear the urban area of enemy resistance through movement to contact or attack. The advancing force repeats the activities of setting four as many times as necessary, attaining objectives or decisive points in order to eliminate combatants from contested areas. The attacking force advances as far as prudent so the area gained can be consolidated. No standards or approved solutions exist. In every situation, the cycles and distances will be different. Units may conduct exploitation or pursuit, but the last cycle of advance and consolidate results in the consolidation of the urban area, which enables setting six.

2-34. Setting six transitions the urban area to an appropriate urban control organization or apparatus. Ironically, the advancing force transitions from being the main effort and the supported force to being the shaping effort and a supporting force. The organization assuming control of the urban area may be—

- The previous urban government from the host nation.
- Another subordinate unit of the same parent higher headquarters echelon.
- A higher echelon headquarters or unit.
- A reintegrated military or civilian control organization of the host nation country.
- An intergovernmental organization such as the United Nations.
- A military or civilian organization from countries other than the U.S. forces or the host nation.

2-35. The organization assuming control of the urban area will be a legitimately elected/appointed apparatus and, preferably, if at all possible, not the unit that just completed the fighting. The U.S. Army is currently neither trained nor resourced to transition to a unilateral legitimate urban control authority. However, in coordination with the host nation, joint, interagency, and other governmental agencies, the U.S. Army provides security and conducts stability tasks that facilitate a transition. During setting six, the advancing force also continues to implement all offensive tasks, defensive tasks, enabling tasks, forms of maneuver,

and forms of defense as in the previous five settings, but the emphasis is now on security operations, passages of lines, and relief of unit responsibilities.

Strategic, Operational, and Tactical Frameworks

2-36. Cities are generally resilient, but regardless of their varying levels of fragility or resilience, the results of UO in competition, crisis limited contingency operations, or in large-scale conflict must be managed. Strategic, operational, and tactical spaces intersect and overlap in the urban environment. Thus, leaders at all levels must be cognizant of the end states and constraints that exist at all levels as they make decisions. Additionally, strategic assets such as SOF, Air Force, Space Force, cyberspace, and other governmental agencies must ensure that their activities are coordinated with those of operational and tactical commanders. Without coordination, there is greater opportunity for fratricide and other problems of integration between assets of various levels of command. The internal components of systems and resources within cities can provide bases of power and sustainment to civilian, threat, and friendly forces alike. Weaker or attrited forces can use positional defense strongpoints found in one or more cities to offset opposing force strength or technological advantage. This will result in making limited contingency or large-scale combat in an urban environment a more complex endeavor. Interconnectivity increases vulnerabilities, for example, hacking a supervisory control and data acquisition system of a power plant. Urban operational approach lines of effort and lines of operation can generally be framed in the strategic, operational, and tactical levels of warfare (see figure 2-3 on page 2-14) and have commonalities with the following outcomes:

- **Strategic.** UO conducted within cities that are a primary threat COG can have strategic impact. The city may be a friendly force critical capability or COG. A *center of gravity* is the source of power that provides moral or physical strength, freedom of action, or will to act (JP 5-0). The operation tied to national or policy objectives may be the decisive operation or main effort of a corps, theater or field army, land component, or joint force command's plan. Contingency or large-scale combat operations may be partnered or unilateral, although UO across multiple domains and dimensions will likely be increasingly JIIM. Critical variable analysis may point to multiple capabilities or vulnerabilities that become objectives in the in competition, crisis, or conflict to shape theater or subordinate campaign plans (ADP 3-0).
- **Operational.** UO can achieve operational objectives either through direct effect on enemy forces or by eroding their base of support. Consolidating gains enables forces to achieve long-term success. While operational objectives are not tied to specific echelons, some EAB may consolidate gains by assigning deliberately allocated combined arms forces to use tailored stability or defeat mechanisms to achieve operational objectives. This may include securing rear or support areas upon relative conclusion of large-scale combat operations and defeat of bypassed enemy forces, conducting subordinate direct engagements in key urban areas, and beginning to set governance and stability operations conditions in and around cities to prevent unrest and insurgency. Planning for these consolidation forces occurs early. Consolidation forces should not be engaged in their supported EAB close or deep battle areas. Consolidation of gains forces also are not a reserve. These forces may aid security along LOCs in the EAB support areas and should be tactical combat force III capable (see FM 3-0 for more information).
- **Tactical.** Units should conduct operations in the urban environment at the tactical level. This is fundamental to achieving EAB operational objectives. Security, support, and assault formations and functions set conditions at each echelon for direct engagements. Operations can be short duration stability operations involving smaller portions of offense and defense. BCTs, regiments, or groups are the first echelon of combined arms forces that may conduct UO independently, due to their ability to control airspace and their ability to leverage joint assets.

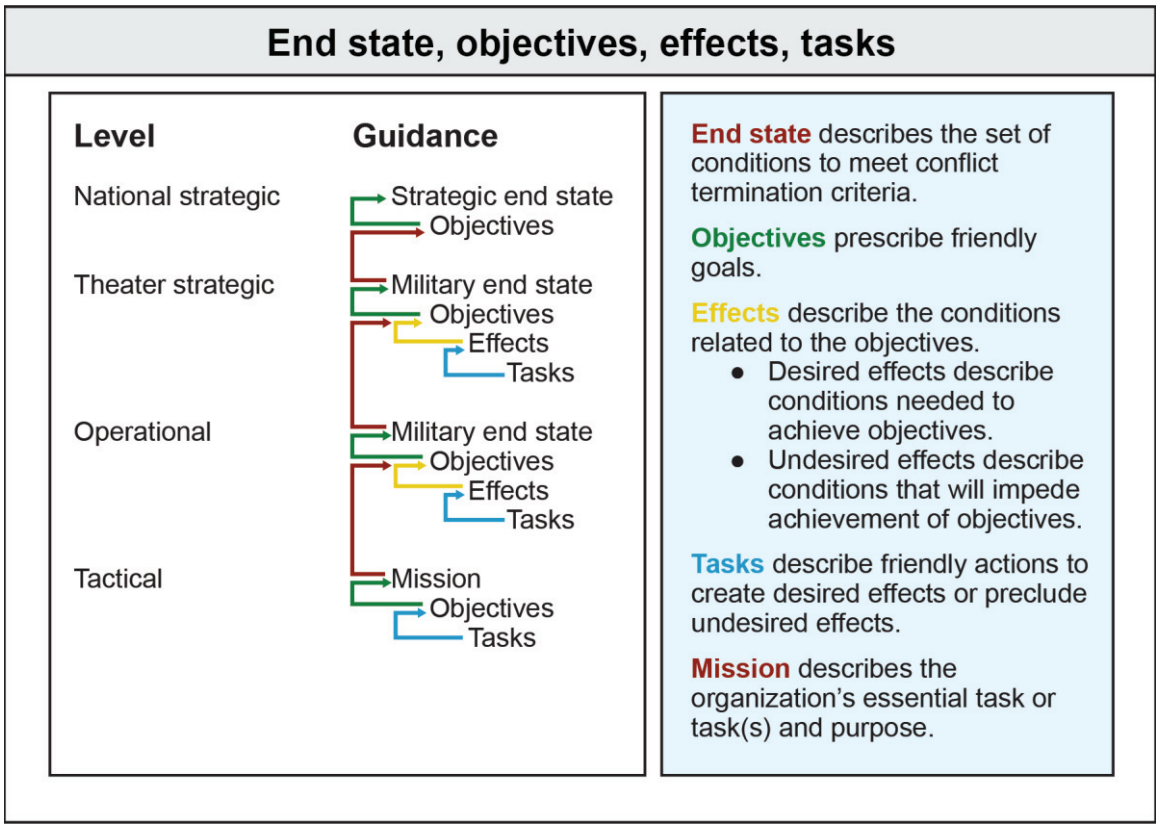


Figure 2-3. Levels of warfare, end state, objectives, effects, tasks (JP 5-0)

Note. There are no finite limits or boundaries between these levels of warfare, but they help commanders design and synchronize operations, allocate resources, and assign tasks to appropriate commands (JP 1).

2-37. Commanders should attempt to set as many favorable conditions as possible for subordinate echelons, considering multiple domains and dimensions outside of and within the city. Preparations occur prior to conducting any direct approach or decisive action urban operation inside of a city. These conditions must use all available elements of combat power and warfighting functions for friendly success. COAs should present the enemy with multiple dilemmas across domains and dimensions to deny them any positive means of managing competing multiple negative outcomes. These multiple dilemmas provide friendly forces with windows of relative positional advantage to exploit (see FM 3-0). The sheer number of urban areas around the world make operations across the competition continuum highly likely, even in areas where governance or infrastructure are not the underlying causes of conflict. While large-scale combat operations frequency may increase, recent trends show a relatively low intensity in the global setting in settings of competition or crisis. The duration and intensity of operations will increase dramatically as a refocus on deterrence and defeat of a near-peer adversary in large-scale combat operations reemerges. In addition to the principles of joint operations (see JP 5-0), JP 3-06 offers operational level of warfare implications that should be understood and implemented as part of any operation involving urban areas. (See table 2-1 for UO implications.)

Table 2-1. Urban operational implications (JP 3-06)

Urban Operational Implications
Cities may reduce the advantages of a technologically superior force.
Ground operations can become manpower intensive.
Ground operations can become decentralized and time consuming.
Combat operations in urban areas may result in large ratios of civilian to military casualties.
UO may have more limitations or constraints than operations elsewhere.
Urban terrain and infrastructure impact C2, weapons employment, and munitions effectiveness.
Urban areas provide advantages to defenders.
Urban areas generally have a concentration of media of all format types with a variety of allegiances.
Despite disadvantages, ground combat may be the only way to accomplish operational objectives.
Requirements to protect civilians and preserve or restore infrastructure compete with defeating the adversary.
External organizations from USG agencies, NGOs, IGOs, and the private sector impact military operations.
Intelligence and sustainment/logistics support requirements are more demanding in urban areas.
Cities are heterogeneous; solutions in disparate areas of one or more cities may vary greatly.
UO consider the city's surroundings. They are not separate from larger battles or major operations.
Needed quantity of effort among offense, defense, and stability operations may vary unpredictably.
The ability to detect deviations from “normal” urban patterns is an invaluable capability.
Forces conducting UO may face increased exposure to disease, TIMs, or WMDs.
Forces in UO face increased probability of exposed flanks, breaks in LOCs, isolation, or capture.

C2	command and control	IGO	intergovernmental organization
LOC	lines of communication	NGO	nongovernmental organization
TIM	toxic industrial material	USG	U.S. Government
WMD	weapon of mass destruction		

2-38. Opportunistic individuals, criminal networks, and other threat actors often seek to exploit the discontent inherent in a crisis for political or economic advantage contrary to U.S. national interests. A *threat* is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland (ADP 3-0). Threats may consist of conventional military forces, unconventional militias or guerilla forces, terrorists, criminal organizations or gangs, or opposing political groups. Catastrophic or disruptive events such as natural disasters, hunger, or epidemics can also necessitate urban stability operations. These threats and challenges can complicate UO at the strategic, operational, and tactical levels of warfare (see ADP 5-0). Urban operations can at times be viewed as a microcosm of the competition continuum in that forces may have competition objectives in one area, crisis and limited contingency low-intensity conflict in another, and yet conflict or high-intensity combat in another. It is increasingly typical to have multiple threats and challenges appearing simultaneously in urban operational areas, for example, in fighting a three-block war. In the first block, Soldiers/Marines may be conducting foreign humanitarian assistance; in the second block, Soldiers/Marines must use measured negotiation and security operations to keep belligerents separate; and, in the third block, Soldiers/Marines may be conducting a combined arms attack against a conventional force. See on page 2-16 the vignette example of Operation AL FAJR.

2-39. *Large-scale combat operations* are extensive joint combat operations in terms of scope and size of forces committed, conducted as a campaign aimed at achieving operational and strategic objectives (ADP 3-0). In contrast, while large-scale ground combat operations uses sustained combined arms operations involving multiple corps and divisions, large-scale combat operations may not.

Joint and Combined Urban Operations: Operation AL FAJR ('New Dawn', Falluja, Iraq, 2004)

In November 2004, Iraqi, U.S. Army, and Marine Corps coalition forces conducted a rapid, violent penetration and search and attack urban operation led by the 1st Marine Division to regain Fallujah from anti-Iraqi forces. Fallujah was a key city 43 miles west of Baghdad approximately 65 km^2 (5 mi^2) in size with a population of 250,000. The operation's purpose was to consolidate gains, deny enemy sanctuary, establish bases of support, and secure capital approaches to stabilize the region prior to upcoming Iraqi elections in January 2005. See figure 2-4.

Popular support for coalition forces in the city dwindled in April 2003 when U.S. forces killed and injured an undetermined number of protesters in a failed stability operation. Fallujah deteriorated under the control of the Iraqi Army's Fallujah Brigade and limited assisting U.S. forces. In March 2004, multiple attacks, and the brutal murder of four U.S. security contractors, led to the coalition provisional authority's approval of the 1st Marine's Expeditionary Force's initiation of Operation VIGILANT RESOLVE. This force entered the city from south of the city on 7 April 2004, and although initially tactically successful, urban destruction and resultant political pressure from the Iraqi Governing Council halted the operation in two days. By mid-2004, insurgent strength had grown to some 4,500 fighters with over 300 defensive strongpoints. Anti-coalition sentiment among the populace was prevalent, despite the insurgent force's coercion of the Fallujah Brigade and their harsh implementation of Sharia law on Fallujah's citizens.

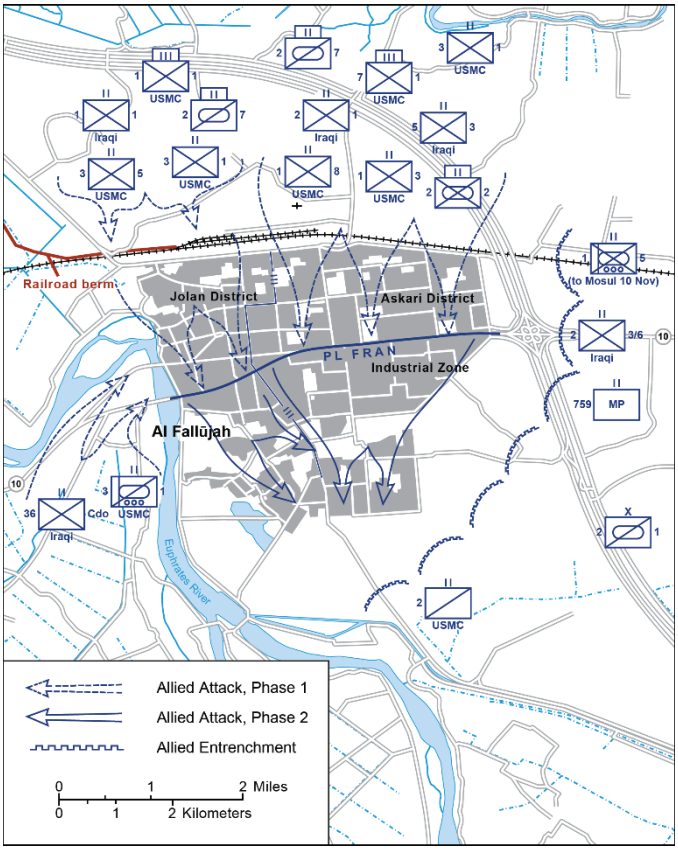


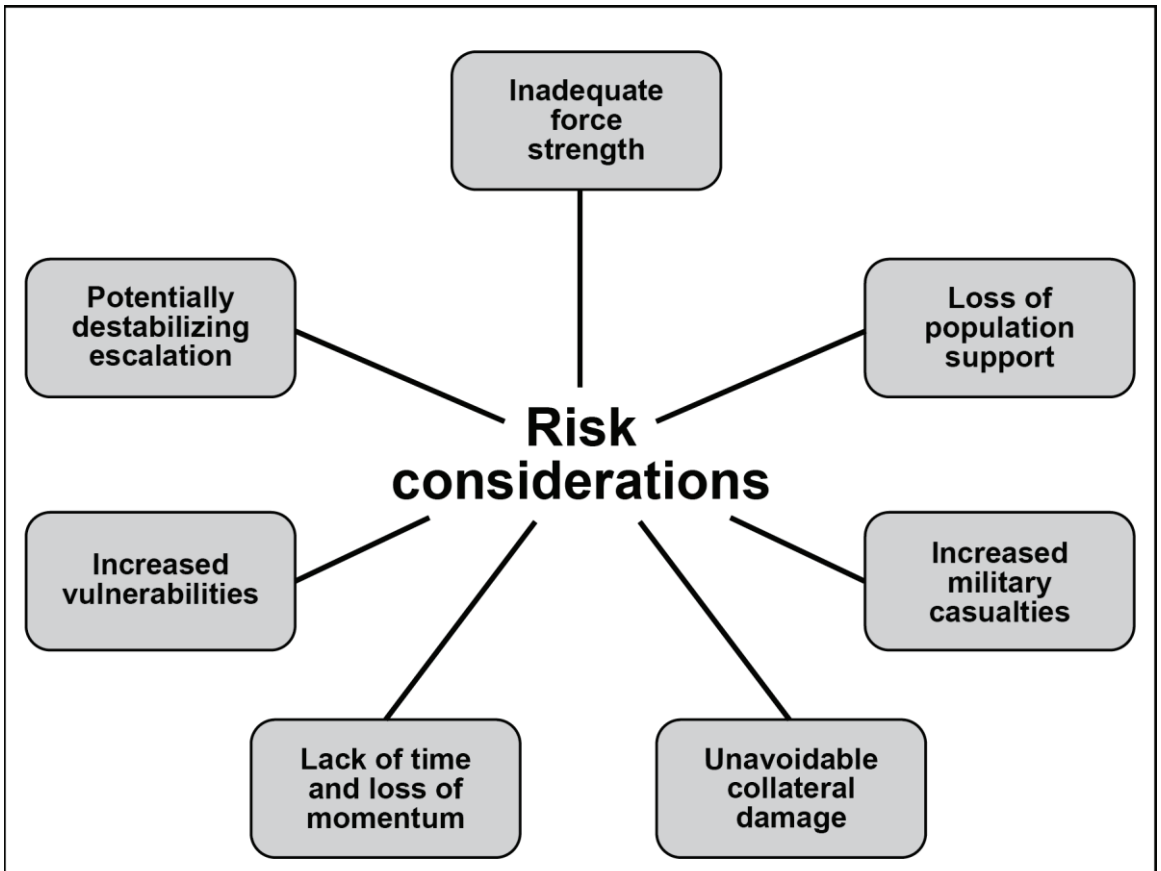
Figure 2-4. Operation AL FAJR: Second Battle of Al Fallujah, November 2004

A phase 1 shaping operation to AL FAJR began in September 2004, when forces established Camp Fallujah southeast of the city. This base built up sustainment/logistics stocks, facilitated military information support operations, special operations raids and feints, enabled targeting and fire support, and integrated Iraqi Army battalion training and preparation. Most importantly, it enabled coalition messaging, so that 80 percent of the populace departed Fallujah prior to large-scale combat direct engagements. Emboldened attacks in Iraq and Fallujah led Iraqi Prime Minister Ayad Allawi to declare a state of emergency in the country, and he approved the city's attack on 7 November 2004.

The 1st Marine Division commanded and controlled two U.S. Marine Corps regimental combat teams reinforced with two U.S. Army combined battalions and six Iraqi Army infantry battalions (approximately 12,000 coalition forces). Ample organic and joint air and ground fires also supported the effort. The task force seized the city's key southern hospital, deceiving insurgents to believe it was the main effort. The coalition force isolated the city on all sides before the attack began from the north. Combined arms teams of infantry, armor, and engineers supported by fires rapidly penetrated complex obstacles, destroying any resistance. After initial clearance, city blocks were cleared two additional times in search and attack operations to consolidate gains before the operation concluded. Planners expected the operation to take five days, but the well-integrated unit effectively used all joint and combined functions to complete the penetration phase in two days. The unit completed the search and attack phase in two weeks. With strict controls, citizens returned after six weeks of additional consolidation of gains and concurrent stability operations.

RISK CONSIDERATIONS

2-40. *Risk* is the probability and severity driven chance of loss, caused by threat or other hazards (ATP 5-19). Risk level is expressed in terms of hazard probability or severity. UO have high inherent risk and should not be conducted without a thorough risk assessment, and analysis of alternatives. However, winning matters and involves commanders accepting appropriate risk. Winning is the achievement of the purpose of an operation and the fulfillment of its objectives. Commanders consider operational risk, compare risks with mission benefits, and focus on creating opportunities to win, while balancing risk controls, as they determine if or how they operate in an urban environment. Commanders gain initiative by avoiding overburdening units as situation complexity, unit proficiency and capability, task organization and interoperability, and increasing levels of risk controls become required to win. Units apply risk management through all phases of operations, planning, and integrative processes but remove unnecessary or redundant controls to promote freedom of action. The factors shown in figure 2-5 on page 2-18 display some risks to evaluate that are specific to UO. Commanders and staffs should consult the additional risk considerations found in FM 3-0.



Risk management steps	*Operations process activities*	
Step 1–Identify the hazards	Planning	Assessing
Step 2–Assess the hazards	Planning	
Step 3–Develop controls and make risk decisions	Planning and preparing	
Step 4–Implement controls	Planning, preparing, and executing	
Step 5–Supervise and evaluate	Planning and executing	

Figure 2-5. Risks associated with urban operations

INADEQUATE FORCE STRENGTH

2-41. When facing UO, commanders consider if they have adequate troops and equipment of adequate type and size to conduct the operation properly and within acceptable risk. Urban areas of increased size and density will require increased force strength, generally at a minimum of three to five times operations in non-urban environments. Units at home station train to the full extent of available resources, while maintaining appropriate, realistic force ratios in offense, defense, and stability scenarios. Large urban areas require more forces to establish or maintain control. As an example of security forces in UO, the New York City Police Department has over 36,000 officers and 19,000 civilian staff to conduct peacetime law enforcement in a dense metropolis core of over 8.6 million and periphery of nearly 20 million people. In addition to the city limit periphery, its area and density makes New York City a megacity, often understood as an urban area with over 10 million people within its boundaries. Its police department serves and protects five boroughs with approximately 77 patrol precincts, 12 transit districts (subways), nine public service areas housing over 400,000 public housing residents, and over 1 million students.

2-42. Major combat UO require a significant number of infantry but also must integrate adequate armored vehicles, fire support, air defense, aviation, and combat engineers to leverage the strengths of those assets. They must also synchronize with operations conducted at higher echelons to achieve synergy. History suggests urban offensive missions require a ratio of three to five time's greater unit density than for similar missions in open terrain. When facing a peer threat, peer-enabled hybrid threat, or if U.S. forces are partnered with or enabling other forces inferior in quantity or capability, this ratio may be higher. If commanders lack sufficient force to conduct effective operations, they may delay, contain, isolate, bypass, or not initiate operations at all until they have the necessary strength. Additionally, commanders consider the allocation quantity and type of follow-on rear or support area forces needed. Finally, commanders provide resources for multi-echelon units to conduct quality integrated UO training and rehearsals prior to the mission and provide leader development at home-station and partnered abroad to ensure a ready, effective fighting force.

Loss of Population Support

2-43. Population support can greatly affect the outcome of urban operations. Effective engagement with the population, its licit or illicit leadership structures, and effective information operations can facilitate population sentiment. Information operations are critical to shaping the urban battlefield. Commanders consider use of information-related capabilities and risk controls to enable friendly information operations and degrade or deny enemy information operations efforts. Proactive control of the UO narrative is essential to prevent the risk of losing positive population sentiment or allowing enemy deception or propaganda to influence the urban operation or the larger major operation. In the Army role of shape the operational environment or prevent conflict, information operations around focused urban areas may reassure a coalition or allies, deter enemy action, and provide key information to the U.S. population. A thoughtful information operations LOE must accompany any joint and combined arms maneuver and can aid in isolating an urban area. In large-scale combat operations, additional Army and joint offensive information-related capabilities such as space control operations, cyberspace operations, and electromagnetic spectrum operations (known as EMSO) are available to commanders to help set conditions for maneuver forces inside and outside of cities. Additionally, civil affairs and military government units and operations are planned, and necessary, to consolidate gains, prevent insurgency, and enable transition (see FM 3-07, FM 3-13 and FM 3-57).

Increased Military Casualties

> *Americans in 1950 rediscovered something that since Hiroshima they had forgotten: you may fly over a land forever; you may bomb it, atomize it, pulverize it and wipe it clean of life—but if you desire to defend it, protect it, and keep it for civilization, you must do this on the ground, the way the Roman legions did, by putting your young men into the mud.*
>
> T.R. Fehrenbach

2-44. Casualties in UO are likely to be greater than in operations in other complex environments due to compressed proximity of forces. For example, during the battle for Hue, Vietnam in 1968, many company-sized units suffered more than 60 percent casualties in only a few days of offensive operations because leadership underestimated the need for increased personnel in response to the strength of the enemy. The times of day or night that urban operations are conducted may affect outcomes as shown in the vignette example on Operation AL FAJR. Urban terrain provides numerous advantages to the urban defender. In troop leading procedures, IPB, and the MDMP/MCPP unit personnel, staff, and medical specialists carefully estimate and implement plans for all types of decisive action tasks. They consider proximity of aid, casualty evacuation (CASEVAC) or medical evacuation (MEDEVAC) transport options, exchange point locations, and replacement operations during the MDMP/MCPP. To estimate casualties at division level and above staffs use the benchmark rate structure (see FM 1-0 and ATP 5-0.2-1). The Medical Analysis Tool, used at senior commands, and required for service and joint scenario casualty planning, is not an estimation tool. It requires that planners define their own rates. (The link to the Medical Analysis Tool can be found in the references section.)

Operation AL FAJR

During Operation AL FAJR in November 2004, commanders decided to attack during the day, reducing risk by resting at night and using fires and air power to prepare the next day's objectives. However, this meant that there was a greater propensity for more casualties, both killed and wounded in action, occurring in the morning and early afternoon when ground combat began. There were proportionally more casualties inside and around buildings, rather than armored combat vehicles. Additionally, Marine regimental combat teams with Army combined arms battalions attached moved south toward the middle of the city by day three of the operation. Here they encountered more fanatical, experienced, and better-equipped foreign fighters who were better at using interior superstructure to relocate and attack U.S. forces. Thus, they experienced greater casualties than in the beginning days.

2-45. Commanders plan for adequate sustainment, rest, recovery, maintenance, and rotation or replacement plans to enable maneuver, the decisive operation, or the main effort. Concurrently, staffs provide estimates and plans for mitigating mass casualties, civilian casualties, and for generating options for aid or evacuation. Personnel care, morale, and sustainment are essential to enabling performance during high-stress UO. While a lower risk normally exists in stability operations than in offensive or defensive operations, just one casualty may adversely impact the success of the stability mission. A realistic understanding of the risk and the nature of casualties resulting from UO critically affects the decision-making process. If commanders assess the casualty risk as high, they must ensure that their higher headquarters understands their assessment and that the value of objectives within the urban area are greater than or equal to the anticipated risk.

Lack of Time and Loss of Momentum

2-46. Commanders analyze the time required to conduct UO successfully, as long as they positively contribute to the major operation. UO can be time consuming and require larger quantities of resources. In competition below armed conflict, crisis, and conflict forces set the tempo of operations through controlling the narrative; building partnered consensus, capabilities, and forces; and by eliminating root causes of resistance. Factors that impact the operating tempo include the—

- Density of the environment.
- Additional time needed for thorough reconnaissance due to added urban density.
- Additional stress and physical exertion imposed on Army/Marine Corps forces operating in urban areas.
- Requirements to care for the needs of the urban population and gain or maintain its support.
- Increased requirements for shaping UO that draws time and resources from a decisive operation/decisive action.
- Changing policy, strategic, or operational interests or objectives.
- Shifting of resources. Once major combat objectives are met within, resources may shift away from urban areas changing the combat force and momentum available around the city.

Increased Vulnerabilities

2-47. Commanders weigh the potential for increased vulnerabilities when executing UO as shown in table 2-2. The complexity of the urban environment makes protection/force protection (safety, field discipline, protection, and fratricide avoidance) difficult.

Table 2-2. Risk vulnerabilities and mitigation measures

Vulnerability	*Example Mitigation Control*
Threat warfighting function overmatch or parity expected or encountered in the extended battlefield/battlespace.	Empower units and leaders with asymmetric, or additional time, tools, resources (authorities, OA TTP, weapons/ammunition).
Large urban area increases risk of isolation and defeat in detail from breaks in contact or LOCs.	Planning and rehearsals emphasize adjacent unit communication and controls.
Rotary and fixed wing superiority attack, assault, or close air support options are constrained.	Shaping operations and targeting enable aircraft freedom of action and SEAD
Responding to unexpected situations or augmenting disadvantageous force ratios by applying joint capabilities is more difficult.	Friendly, host-nation, and reaction forces are increased. Preparation time for the operation is increased.
U.S. forces vulnerable to WMD when massed in UO.	Protection/force protection, security, AMD, CBRN, and survivability measures increased.
Battlefield/battlespace effects (smoke, dust, fires) and weather effects (fog, snow, rain, clouds) increase the potential for fratricide.	Recon and rehearsal of TRPs, TAIs, ACMs, FSCMs and other control measures. Training and use of identification devices.
Location errors involving either the target or enemy forces due to poor situational understanding.	Combined arms, fire support rehearsals. Commander ground clearance.
Imprecise weapons and munitions effects such as an antitank round that penetrates several walls before exploding near friendly forces.	Use of NEOs and comprehensive information operations to reduce civilian casualty risk. CDE calls, ROE/RUF training and rehearsals.
Interoperability and integration concerns are exacerbated when operating with SOF, multinational forces, or indigenous security forces.	Clear roles, responsibilities, and task organization assigned to JIIM forces. Close coordination, planning, and rehearsals are key.

ACM	airspace coordinating measure	ROE/RUF	rules of engagement/rules for use of force
AMD	air and missile defense	SEAD	suppression of enemy air defense
CBRN	chemical, biological, radiological, and nuclear	SOF	special operations forces
CDE	collateral damage estimation	TAI	target area of interest
FSCM	fire support coordination measure	TRP	target reference point
JIIM	joint, interagency, intergovernmental, multinational	TTP	tactics, techniques, and procedures
LOC	lines of communication	UO	urban operations
NEO	noncombatant evacuation operation	WMD	weapons of mass destruction
OA	operational area		

DESTABILIZING ESCALATION

2-48. In the urban environment, U.S. forces cannot avoid close contact with enemy forces and civilians who may potentially become hostile or alienated. In stability operations, commanders consider escalating into confrontation and violence with the caution that such escalation may be destabilizing in the longer term. This consideration may delay, limit, or altogether preclude UO using U.S. forces. Large-scale combat operations requirements will likely limit or constrain the joint force commander's (JFC's) operational approaches, for example, to avoid a nuclear war. (See ADP 3-0 for more information).

ADDITIONAL RISK REDUCTION MEASURES

2-49. Since UO are often high risk, commanders maximize creativity and resources that provide alternatives. Some examples include conducting a different type of operation such as isolation, siege, bypassing enemy forces, or conducting a turning movement to draw an enemy out of an urban area. Facility objectives like airfields or ports may be replicated in other locations or newly constructed, mitigating the need to secure certain air or sea ports of debarkation. Joint logistics over-the-shore operations may be preferable to seizing a port facility. A government or its population may be relocated and still function.

2-50. Additionally, commanders consider risk mitigation techniques such as—

- Detailed planning to include thorough IPB and appropriate branches and sequels.
- Integrated information collection.
- Sufficient allocation of main, reserve, security area, and consolidation of gains forces with appropriate evacuation, recovery and rotation, rest, and replacement plans.
- Mission orders and a clear end state that enable decentralized operations.
- Physical security measures to provide time, space, and weapons range standoff.
- C2 systems that effectively influence the populace and aid resource control measures.
- Clear ROE that enable security and freedom of action.
- Streamlined targeting and clearance of fire standard operating procedures (SOPs) that enable rapid lethal and nonlethal effects on pre-planned, time-sensitive targets and targets of opportunity.
- Synchronized information-related capabilities that begin before introducing Army/Marine Corps forces into the urban environment and continue through transition. Commanders emphasize operations security when working with JIIM forces and civilians.
- Allowing for adequate planning and rehearsal time for JIIM forces and subordinates (one-thirds, two-thirds rule and concurrent/parallel planning). Enabling subordinate staffs with counterpart higher staff resources, information, and coordination speeds planning.
- Responsive, sustainable, and flexible urban sustainment/logistics.
- After action reviews conducted during operations and training.
- Sufficient control measures such as standard marking and identification techniques (including common urban gridded reference graphics) address limited visibility concerns for air and ground forces. Commanders approve and ensure dissemination of any nonstandard reference systems.

FUNDAMENTAL CONSIDERATIONS OF URBAN OPERATIONS

2-51. Planning considerations generate tasks, which produce effects that bring about a desired end state. The Army's operational concept and UO contain combinations of decisive action tasks of offense, defense, and enabling operations (see ADP 3-0 for more information). Effects produced from tasks can be desirable or undesirable—they may help achieve or impede attainment of an objective. In addition to decisive action tasks, commanders engaged in UO understand fundamentals that apply to any urban environment. Because all cities are different, UO often differ from one operation to the next. Plans use these fundamentals in LOOs or LOEs to create cumulative, complementary effects greater than a single task effect observed in isolation. A positive correlation, or synergy, exists between conducting a greater number of tasks well and the probability of UO success; however, no fundamental is essentially more important than another if isolated. Commanders develop measures of performance and effectiveness metrics to assess progression, digression, or regression. Some of these fundamentals are not exclusive to urban environments, and they are not necessarily conducted in sequential order. Yet, they are particularly relevant to an environment dominated by manmade structures and a dense noncombatant population (see table 2-3).

Table 2-3. Fundamentals of urban operations

Perform aggressive information operations	Separate noncombatants from combatants
Maintain a close combat capability	Preserve critical infrastructure and restore essential services
Avoid the attrition approach	Understand the human dimension
Control the essential	Leverage a collaborative information dimension
Minimize collateral damage	Transition control

PERFORM AGGRESSIVE INFORMATION OPERATIONS

2-52. As previously mentioned, information operations can reduce urban operation risk, create critical effects in the information dimension, and leverage the information element of combat power. This is especially important in echelons above brigade, where division, MAGTF, corps, or higher joint force commanders can better see, understand, and implement information lines of effort to synchronize operations and shape and

influence urban populations' sentiment and action. Information operations seek to positively influence hostile, neutral, or friendly civilians toward favor of friendly force actions, mitigate interference with UO, and mitigate civilian casualties. Rapidly and aggressively influencing information can aid in the Army strategic roles of shaping the OE, preventing conflict, prevailing in large-scale ground combat operations, and consolidating gains. Commander-led planning helps information operations in UO preserve friendly decision making, disrupt or degrade enemy decision making, and influence the attitudes and behaviors of relevant audiences in the operational area (FM 3-13). Units realize they are under constant observation. Mass proliferation of cell phones, video cameras, internet capability, and media outlets enable neutral or hostile entities to report and influence JIIM UO faster than the military system or authorities can process. Commanders must synchronize information capabilities into operational planning prior to execution to avoid or mitigate undesirable effects. Under media scrutiny, the action of one Soldier/Marine may have significant strategic implications. Information collection aids commanders in conveying to populations how they fit within the desired security end state (FM 3-55).

MAINTAIN CLOSE COMBAT CAPABILITY

> *There is still a tendency in each separate unit … to be a one-handed puncher. By that I mean that the rifleman wants to shoot, the tanker to charge, the artilleryman to fire … that is not the way to win battles. If the band played a piece first with the piccolo, then with the brass horn, then with the clarinet, and then with the trumpet there would be a hell of a lot of noise but no music. To get harmony in music, each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars must not wait for the band leader to signal you. You must, each of your own volition, see to it that you come into this into the concert at the proper place at the proper time.*
>
> Major General George S. Patton Jr.

2-53. Intensive combat at close ranges across a broad front is a characteristic of large-scale combat operations during UO. U.S. forces require the ability to locate, close distance with, and destroy the enemy, or repel the enemy's assault in an urban environment. Army or Marine forces contribute combined arms teams that deliver combat power capabilities utilizing unique capabilities towards the JFC's requirements and mission (see ATTP 3-06.11). Regardless of technological advances, U.S. combat forces on the ground accomplish many of the joint force commander's objectives using well-planned, rapid, violent action along with surprise, audacity, concentration, and tempo. The need to use and leverage well-trained, integrated, and rehearsed combined arms teams cannot be overstated. Those forces must have the training, organization, weapons systems, and skills to rapidly and violently isolate an urban objective, gain a foothold through shock action, and secure it against a determined enemy, maximizing maneuver, fire support, and effective small-unit leadership to overcome that enemy. In limited contingency operations, effective tools and broad latitude must be given to small units, ensuring overwhelming, rapid lethality on contact that can destroy enemies within a city and, secondly, minimize collateral damage. Developing a partner nation's security force close combat capabilities can shape the OE and prevent conflict.

AVOID THE ATTRITION APPROACH AND ISOLATE THREATS

2-54. Necessity drives the operational approach. Previous Army/Marine Corps doctrine was inclined toward a systematic linear or attritional approach to urban combat that relied on contiguous areas of operation. An attritional approach results in the friendly force committing to the urban operation, or securing the urban area for longer than is feasible or suitable given force losses or resource constraints. This approach emphasized standoff weapons and firepower, in other words the commonly understood siege approach found in history, which will result in eventual costly success given enough time and resources and if focused on complete enemy destruction. Army/Marine Corps force structure does not currently support this approach toward UO, except in the rarest of cases. A linear approach could be feasible if shared interest forces within the UO are unified under a common goal or toward securing a limited objective (dam, port, power plant, or other such key terrain) that is required for current or follow-on operations. History has demonstrated that attrition warfare is often the goal of the defender against a stronger foe and time favors adversary interests in foreign lands, especially when defending an urban area. However, on the other hand in a large-scale combat

operations situation with much greater forces, successful UO may require linear methods during select phases of an operation. Linear approaches can result in significant collateral damage, lengthy operations, and inconsistency with the political situation or strategic objectives. Enemy forces that defend urban areas want Army/Marine Corps forces to adopt this approach because of the likely high costs in resources, thus potentially targeting a U.S. force critical capability. They often are willing to reinforce or commit reserves to their defended positions as is feasible.

2-55. It is very easy for commanders to err in sole focus on quantitative aspects of UO such as the number of buildings cleared or the number of enemies killed over a given time as the primary indicator of success. An attritional approach is especially problematic for UO as the consequences of destructive acts can be exponentially greater than any benefit. Threat forces, especially irregular and insurgent, use the populace for cover, concealment, sustainment, or recruitment. Destroying part of an enemy force can be counterproductive if the action increases enemy popular support and thus increases a potential recruiting pool for the remaining populace. Leaders should always look for other means to attack enemy COGs through decisive points that do not rely on direct attacks against enemy forces in prepared positions.

2-56. Commanders consider a linear or attritional approach to urban combat usually as an exception, justifying its use only under the most unique and demanding of circumstances. For example, a linear approach may be appropriate when the entire city has been lost or is predominantly seized or occupied by an enemy force. Instead, and as is more often the case under the contemporary competition continuum, in either competition or crisis settings, commanders work to shape the OE or prevent conflict situations prior to limited contingency operations, thereby achieving precisely the intended effects that prevent large-scale combat. These shaping efforts gain synergy when used against multiple decisive points, potentially from multiple directions to overwhelm a threat's ability to react effectively. In other words, commanders seek to fight the urban battle from positions of advantage before the enemy is ready to fight. This requires anticipation at operational and strategic levels to set conditions for the success of tactical forces.

2-57. While UO are no longer necessarily linear clearing or search and attack operations, commanders are cautious to not allow threat forces to exploit interior or exterior gaps between operating separated or decentralized forces. Isolation gap risk can be mitigated through ISR, aggressive patrolling, fires, C2, information operations, or mobility or countermobility measures. Advanced warning systems, proper adjacent unit coordination, and placement of observation posts also help prevent gap exploitation and mitigate enemy gaining the element of surprise.

CONTROL THE ESSENTIAL

2-58. Many modern urban areas are too large for U.S. forces to completely occupy or effectively control without enormous forces and sustainment/logistics. Therefore, U.S. forces focus their efforts on controlling only the essentials to mission accomplishment. Essentials are determined during IPB and MDMP/MCPP. At a minimum, control of key terrain is essential. *Key terrain* is any locality, or area, the seizure or retention of which affords a marked advantage to either combatant (JP 2-01.3). Physical control may not be possible in many urban environments where U.S. forces are employed. Forces can achieve presence before, during, and after conflict to shape an operational environment. Echelons above brigade, such as divisions, Marine expeditionary forces, corps, or higher joint force commanders have the ability to shape larger operational constructs and focus tactical forces on essential areas to economize forces. See ATTP 3-06.11 for more on brigade and below forces controlling the essential. A proactive virtual presence via social media, engagement with local communities, remote observation, partnering, and collection and analysis of relevant operational data may aid target or objective prioritization.

2-59. Based on the situation, echelons above brigade may use operational art to reprioritize the pneumonic SWEAT-MSO to visualize a city's essential needs through a more life-sustaining ecological (versus sickly pathological) lens for LOOs and LOEs to aid in planning or sequencing UO. This depends on the intent and desired end state of the commander. For example, ordering security, air (chemical, biological, radiological, and nuclear [CBRN] and associated protection), water, electricity (for assured power and life support), economic assistance and food, medical, sewage, trash, academic, and other considerations (such as transportation) provides an operationalized and prioritized acronym, SAWEE-MSTAO. See ATP 3-34.81 for additional information.

MINIMIZE COLLATERAL DAMAGE

2-60. *Collateral damage* is a form of collateral effect that causes unintentional or incidental injury or damage to persons or objects that would not be lawful military targets in the circumstances ruling at the time (JP 3-60). U.S. forces coordinate and integrate fires, information operations, and nonlethal tactical systems to decrease the potential for collateral damage. Causing excessive collateral damage is illegal under the law of armed conflict as it violates the principle of proportionality (see FM 6-27/MCTP11-10C) for additional discussion of actions prohibited under the law of armed conflict). Commanders must minimize collateral damage to the extent possible in order to avoid its negative short-term and long-term effects. Adversaries or enemies may not attempt to limit collateral damage, and may further attempt to use it as a deceptive or negative means to sway population sentiment against U.S. forces, allies, or partners. Early engagement and proactive information operations with a populace can mitigate these kinds of enemy efforts. Commanders implement established ROE for each urban operation and provide necessary firepower constraints. Commanders continually assess lethal or nonlethal, short or long term, or desired and undesired effects of operations and firepower on the population, infrastructure, subsequent missions, and national and strategic objectives. They also address potential collateral damage as they consolidate gains. Overall, commanders balance restraint and precision with speed and overwhelming combat power. By avoiding unnecessary harm, commanders retain the moral high ground and help sustain legitimacy for their operations. Minimization of collateral damage allows civilians to continue to provide for their own needs or the rapid return of the urban area to civilian self-sufficiency.

SEPARATE NONCOMBATANTS FROM COMBATANTS

2-61. Separating noncombatants from combatants (psychologically and physically) makes an operation more efficient and diminishes some of the threat's potential advantages. Tactical units below division typically do not have the resources to conduct these operations unilaterally. Divisions, MAGTF, corps, and higher JFCs with functional or multifunctional unit capability support will usually be required not only to move noncombatants physically, but also to coordinate internally displaced person measures that allow country or transregional transport or relocation over hundreds or even thousands of kilometers as they facilitate humanitarian assistance. This separation also reduces restrictions on the use of firepower, enhances protection/force protection, and reduces the threat support base. This important task becomes more difficult when the threat is an unconventional force that can mix with civilians. In recent operations, threats have sought to integrate their military capabilities as closely as possible into the civilian population and infrastructure. In these conditions, commanders increase their efforts to discriminate between the two. U.S. forces managing violence in this setting require the highest level of individual and organizational discipline and judgment. Soldiers/Marines require the mental maturity to separate their aggression toward threats from the noncombatant civilian population. The training, effort, and command emphasis in this area is as important as fully successful results. Such efforts strongly impact national and international perceptions of the operation.

PRESERVE CRITICAL INFRASTRUCTURE AND RESTORE ESSENTIAL SERVICES

2-62. Essential services include power, food, water, sewage, medical care, security, and law enforcement. UO can occur in disenfranchised areas or involve destruction of essential structures and capabilities that require restoration to sustain basic life. Despite causes for the failure, commanders ensure that civilians perceive restoration activities as assistance rather than an obligation. Otherwise, civilians may be slow to accept or resume responsibility for their urban area. In IPB, PMESII-PT, ASCOPE, SWEAT-MSO, and the MDMP/MCPP, Army/Marine Corps forces develop an understanding of what essential services may require restoration as they shape the OE, prevent conflict, or consolidate gains. Restoration of essential service systems will also support interdependent systems, for example the second-order effect of electricity systems powering water or sewage distribution pumps, or elevator systems for disabled persons and medical personnel in dense urban areas with multi-story buildings.

2-63. Commanders analyze the urban area to identify critical infrastructure along with the need to secure it. They preserve and protect the critical elements for post-combat sustainment/logistics operations, stability, or defense support of civil authorities (DSCA) tasks, or the overall health and well-being of the indigenous population. Post-combat urban operations are unavoidable. Different from simply avoiding collateral damage

or conducting estimation, U.S. forces plan for and initiate stability operations and actions to prevent an enemy or a hostile civilian group from removing or destroying critical infrastructure and assets. Cultural infrastructure may include religious and historical places. Some objectives in UO include preserving the infrastructure and the society's sources of economic and cultural wealth. When conducting large-scale ground combat operations around urban areas, units attempt to use nonlethal, precision, or less destructive munitions and capabilities to keep vital infrastructure intact.

2-64. These services depend upon systems that break down during periods of conflict. A city's infrastructure supports these systems. Preserving infrastructure helps to maintain the population in the short-term and reduces the long-term costs of reconstruction. The purposeful or accidental destruction of critical sites can also have an immediate negative impact on population attitudes. Preventing this may require allocating combat forces to secure them. Threat forces can also use city infrastructure to increase their combat and sustainment capabilities. Leaders should look for ways to deny them using temporary or easily repairable methods.

2-65. Initially, U.S. forces may be the only organization able to restore or provide essential services. This helps return a population to normalcy, promotes relative peace, and prevents disease, starvation, suffering, and insurgency. Secondarily, restoring services may help a population regain economic independence. Forces restore services predominantly in stability tasks by primarily providing security and working with host-nation or JIIM experts. Civil-military operations and MGO may be necessary to aid this task. Army/Marine Corps forces transfer responsibility for providing essential services to other agencies, nongovernmental organizations (NGOs), or the local government as quickly and effectively as possible.

Understand the Human Dimension

2-66. Commanders carefully consider aspects of the human dimension such as population sentiment, allegiance, morale, and governance power hubs or nodes. This is especially important in echelons above brigade, where commander or staff ability to personally see, feel, and understand a certain urban population group's sentiment becomes more limited and difficult. Commander's assessment of an environment identifies the attitudes of the people toward Army/Marine Corps forces and can shape guidance to subordinates at the lowest levels—including ROE, protection/force protection, sustainment/logistics, and fraternization. Commanders expect and consider demographic variance in the attitudes of an urban population. For example, forces should not apply Western cultural norms to a non-Western urban population. Sound policies, proper discipline, adequate consideration for local culture, and rapid engagement of local urban leaders positively affects the attitudes of the population toward Army/Marine Corps forces. Additionally, well-conceived and executed information operations enhance the position of U.S. forces relative to the urban population. Even during high-intensity urban combat, heightened awareness of, and sensitivity toward, civilians leads to a better post-combat situation than if commanders ignored or diminished considerations for civilians. An improved post-combat situation enhances consolidation of gains and transition to civilian control. As an environment of conflict becomes more complex, the human dimension (and associated moral behavior implications) takes on greater importance and has the greatest potential for affecting the successful outcome of UO.

Leverage a Collaborative Information Dimension

The complexity of the urban environment, particularly the information dimension used by humans, requires rapid information sharing—both in providing and receiving—from the national level to the tactical level among Army/Marine Corps headquarters at each echelon, with other Services and multinational partners, and with participating governmental and (at appropriate times) nongovernmental agencies. Commanders establish streamlined SOPs, develop commonality among databases, and use existing information systems to disseminate and receive the necessary intelligence. This intelligence, and other relevant information, enables subordinates, partner organizations, and agencies to exercise effective leadership, make decisions, and establish a unity of effort in this multifaceted environment. Rapid information sharing—providing and receiving—from the national level to the tactical level and laterally provides access to additional data as well as specialized knowledge and skills that would have otherwise been unavailable.

2-67. Higher Army echelon headquarters above brigade request and leverage foundational information and intelligence capabilities through intelligence community requests for information, support. In addition to

technical means, lower echelons below division service information requests that tie information requirements up to and including JFC, GCC, or even Secretary of Defense or President requirements for sensitive target approval and review targeting. Incorporation of urban information analyses into the timely, relevant, accurate, and predictive intelligence necessary to refine and deepen a commander's understanding of the urban environment and its infrastructure of systems demands collaboration among the various information sources and consumers.

TRANSITION CONTROL

2-68. Commanders transition tactical offensive, defensive, and stability operations in an urban environment deliberately to relieving, replacement, or assuming units using battle handover and passage of lines techniques (see ADP 3-90). Early planning and deliberate control measures such as rehearsals and partner operations between transitioning units can mitigate risk. As conditions arise in some AOs that enable a shift to stability operations in urban areas, Army forces facilitate security for a potentially lengthy transition to consolidate gains (see FM 3-0). Because UO are resource intensive, echelon above brigade commanders transition them as quickly and as successfully as possible. Division, MAGTF, and corps, or higher JFCs have the scope and scale of resources to transition operations effectively to other mechanisms of security or control. As seen in the Brittany Ports vignette in chapter 4, large-scale combat operations tempo and transition to consolidate gains may require forces to simply isolate initial objective urban areas, so that forces may be used to greater effect elsewhere. Depending on the mission variables of METT-TC/METT-T and operational variables of PMESII-PT, successful transition may take a few days or many years. The desired end state of all UO is transferring control of the urban area to another agency or returning it to legitimate civilian control and responsibility. Rapid transition releases Army/Marine Corps forces and resources for use elsewhere and improves civilian morale and disposition toward Army/Marine Corps forces. This end state requires successful completion of the U.S. forces mission and a thorough transition plan. The transition plan includes returning control of the urban area to another agency or governance structure a portion at a time, as security and other conditions permit. A successful transition plan (ends) considers early alignment of military capabilities (ways) with existing urban governmental and administrative organizations, agencies, structures, and districts (means). Army/Marine Corps forces conduct transition planning before the onset of operations and continually adjust planning as the situation develops.

This page intentionally left blank.

Chapter 3
Urban Operations Effects on Warfighting Functions and Tactics

This chapter describes the effects of warfighting functions in an urban environment. It details each warfighting function and its particular key tactical considerations for UO.

War plans cover every aspect of a war, and weave them all into a single operation that must have a single, ultimate objective in which all particular aims are reconciled. No one starts a war-or rather, no one in his sense ought to do so-without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it. The former is its political purpose; the latter its operational objective.

Carl von Clausewitz

WARFIGHTING FUNCTIONS

3-1. A *warfighting function* is a group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives (ADP 3-0). They compose the elements of combat power. *Combat power* is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time (ADP 3-0). Understanding the effects of the urban environment on warfighting functions helps commanders visualize their operational environment. *Tactics* is the employment, ordered arrangement, and directed actions of forces in relation to each other (ADP 3-90). Tactics are not used in purely tactical-level operations or echelons of forces such as battalions or brigades. For instance, a division or corps may act as a tactical headquarters during an urban operation around a large city, and may have operational or even strategic impacts for the joint force. All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. Understanding this, commanders assess and determine the most efficient and effective means of commanding Army/Marine Corps forces and controlling operations (C2). Staffs are intimately familiar with effects in their areas of expertise and use that knowledge to understand problems and develop creative and innovative solutions to achieve their commander's intent (see table 3-1 for warfighting functions).

Table 3-1. Warfighting functions by Service

Army	***Marine Corps***
Command and control	Command and control
Movement and maneuver	Maneuver
Intelligence	Intelligence
Fires	Fires
Sustainment	Logistics
Protection	Force protection
	Information

COMMAND AND CONTROL WARFIGHTING FUNCTION

3-2. *Mission command* is the Army's approach to C2 that empowers subordinate decision making and decentralized execution appropriate to the situation (ADP 6-0). *Command and control* is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission (JP 1). The Marine Corps adds that C2 is the means by which a commander

recognizes what needs to be done and sees to it that appropriate actions are taken. Command and control is one of the seven warfighting functions (USMC Dictionary). The *command and control warfighting function* is the related tasks and system that enable commanders to synchronize and converge all elements of combat power (ADP 3-0). (See figure 3-1 and ADP 3-0 for more information). It is the leader's ability to visualize the battlefield/battlespace, interact with the human dimension of the environment, and remain intellectually flexible in the face of change that impacts the mission. The *command and control system* is the arrangement of people, processes, networks, and command posts that enable commanders to conduct operations (ADP 6-0). The C2 system enables commanders to overcome challenges placed on the tactical internet and system hardware by the urban environment, the increased volume of information, and requirements to support the dynamic decision making necessary to execute successful UO. C2 also allows unity of command in large-scale combat operations, which is essential for military forces in UO, and extremely important to unifying urban operations efforts, which are almost always joint, combined, and interagency. In combat U.S. ground forces may often offer the only initial JIIM link between many U.S. government agencies and interests.



Figure 3-1. Combat power model

UNITY OF COMMAND

3-3. Although complex urban terrain challenges the principle of unity of command, this principle remains highly desirable during any military operation. The nature of the operation, the number of tasks, and the size of the urban area may require that Army/Marine Corps forces operate noncontiguously, with less C2 system certainty, thus gaining the advantages of surprise and economy of force. Staff elements such as signal section use tools such as the Systems Planning Engineering and Evaluation Device (known as SPEED) to mitigate urban terrain's adverse C2 system effects. Based on careful analysis and system capability, units properly place the command post and re-transmit signal equipment, which enables C2 contingency plans (known as PACE—primary, alternate, contingency, emergency). Regardless of the battlefield/battlespace framework, within their areas of operation, commanders are responsible for terrain management, intelligence collection, civil affairs activities, air and ground movement control, clearance of fires, security, personnel recovery, and environmental considerations (FM 3-90-1).

3-4. D3SOE or communication environments also challenge effective C2. Noncontiguous operations or degraded C2 systems limit a commander's ability to unify the actions of subordinates directly, apply the full force of combat power, and achieve success. Unity of command mitigates this limitation through centralized planning, mission orders, and decentralized execution among all JIIM entities. *Mission orders* are directives that emphasize to subordinates the results to be attained, not how they are to achieve them (ADP 6-0). The Army approach of mission command allows subordinates to innovate and operate independently according to clear orders, commander's intent, and clearly articulated ROE. Mission orders, military values (loyalty, duty, respect, selfless service, honor, integrity, personal courage, candor, commitment), and ROE guide subordinates to make the right decision when facing—

- A determined, resolute, and adaptive threat battlefield/battlespace across multiple domains and dimensions.
- Intermittent or complete loss of extended or disrupted lines of communication.
- Numerous potentially hostile civilians or threats close to military operations.
- Constant scrutiny and influence of the media or military pundits.

3-5. Decentralized execution allows commanders to focus on the overall urban situation and economize forces—which requires constant assessment and coordination with other forces and agencies—instead of the numerous details of lower-level tactical situations. Fundamentally, well-trained, lethal small unit forces require use of mission command principles of mutual trust, competence, shared understanding, intent, mission orders, disciplined initiative, and risk acceptance in an urban setting. Commanders accept risk and trust in the initiative, judgment, and tactical and technical competence of their subordinate leaders, and non-contiguously employed formations rely on decentralized execution in an often-disruptive urban setting. Many times, mission command requires commanders to exercise patience as subordinate commanders and leaders develop the situation through action. Positive encouragement, coaching, and mentoring of subordinates often helps develop competence and mutual trust between leaders during difficult city fighting.

PEOPLE, PROCESSES, NETWORKS, AND COMMAND POSTS

3-6. Commanders ensure people in their organization are trained to integrate numerous processes and activities through the C2 warfighting function in an urban setting and to converge effects from all domains (land, air, maritime, space, and cyberspace), dimensions (human, information, physical), and the electromagnetic spectrum to accomplish missions. Staffs use the 1/3, 2/3 rule in planning UO so that each subordinate echelon or unit has sufficient time to work through the operations process, the MDMP/MCPP, and other integrative processes (targeting, IPB, information collection, risk, and knowledge management). SOPs can improve training and standardization to gain efficiency in UO. Commanders maintain a heightened awareness of the political situation that affects how they exercise mission command. Commanders avoid politically influenced undesirable effects of micromanaging leaders so leaders act decisively, with initiative, speed, and determination, to deny enemy exploitation of hesitation.

3-7. Networks enable passing information, facilitating all elements of combat power through end-user applications, information services and data, and network transport and management. Commanders use mission orders to exercise command and control from command posts, which contain the other three elements of the C2 system. Command posts are arranged in a way that is best suited to the operational environment, and their employment around urban areas requires consideration of the external environment, security, and availability of assured power or networks within the C2 concept. In urban operations, Command posts may entail using existing infrastructure augmented with other C2 people, processes, and networks such as civilian telephone systems use or monitoring. Overarching objectives and impacts of trust built from appropriate actions, combined with training and trust, decrease the need for detailed command.

COMMANDERS' VISUALIZATION

3-8. Leaders at all levels observe their areas of interest in the battlefield/battlespace to better lead Soldiers/Marines, make effective decisions, and give direction. Using personal observations and input from others (to include running estimates from staffs), commanders improve their understanding of an operational environment to facilitate mission command/command and control and visualize an operational approach to achieve their objectives. Maps include friendly and enemy locations, other appropriate warfighting function overlays, and the latest imagery that accurately depicts the urban environment, to establish a COP. Some examples include demographic, obstacle, infrastructure, fires, or gridded reference graphics. The commander of the major operation ensures that subordinate, tactical-level commanders have the necessary products to achieve accurate situational understanding and to dominate the urban environment. This enables essential partnered and JIIM planning, rehearsals, and coordination during execution. Commanders use caution, because incorrect maps or translations, natural disasters, acts of terrorism, other manmade disasters, or rubbling during UO can change depicted terrain frequently and drastically.

INFORMATION SYSTEMS

3-9. Commanders need support to exercise C2 effectively. Many data sources in an urban environment are valuable to friendly or adversary forces, and data sources are unique to each city. Some examples include maps and imagery; police, medical, and tax records; and traffic and security footage. At every echelon of command, each commander establishes a C2 system. In many instances, the information systems available to a commander directly affect the speed and accuracy of all components of C2—commanders can leverage information systems and bring them to bear on emerging situations and critical issues. An urban environment in particular, challenges information systems that support a commander, especially communications. Urban structures, materials, densities, and configurations (such as urban canyons) and power constraints associated with man-portable radios degrade frequency modulation (known as FM) communications. Degraded communications cause problems at brigade level and below, where commanders rely heavily on constant radio contact with subordinates. Problems with tactical communications impede maintaining a COP, giving orders and guidance, requesting support, or coordinating and synchronizing elements of the combined arms team. Communications problems in urban areas hinder achieving information superiority and contribute directly to mission failure. In UO, allocating critical or high-value communications assets are significant and essential to the main effort.

3-10. The gridded reference graphic is the supported ground force commander's product. The commander is responsible for disseminating it to supporting units, appropriate joint agencies, and commands. Specifically, the commander should ensure gridded reference graphics are included in the joint force air component commander's special instructions in addition to nesting with the air tasking order and airspace control order. Graphics should include version numbers, a point of contact, phone numbers, and email addresses so the issuing organization can ensure it controls the versions and ensures operators use the latest update. To reduce the possibility of a fratricide incident, everyone (from convoy truck drivers to tactical aircraft operators) should use a common reference system. As time and mission objectives allow, add basic named areas of interest (such as cloverleaves, bridges, and other choke points) to the template graphics. Upon arrival in the objective area, aircrews should transition to the system in use by the ground element.

3-11. Units and staffs prepare for, and mitigate, communications problems in urban areas (see figure 3-2). Adequate communication, in most cases, are ensured by—

- Training in, and use of, re-transmission and relay sites and equipment, which include UASs.
- Airborne command posts, satellite communications, high-frequency radios, and other redundant communications platforms and systems.
- Careful use of mission command and mission orders, along with careful positioning of commanders, command posts, and antennas to take advantage of urban terrain characteristics.
- Detailed communications analysis for movement from one AO to another due to the likely density of units operating in the urban environment.

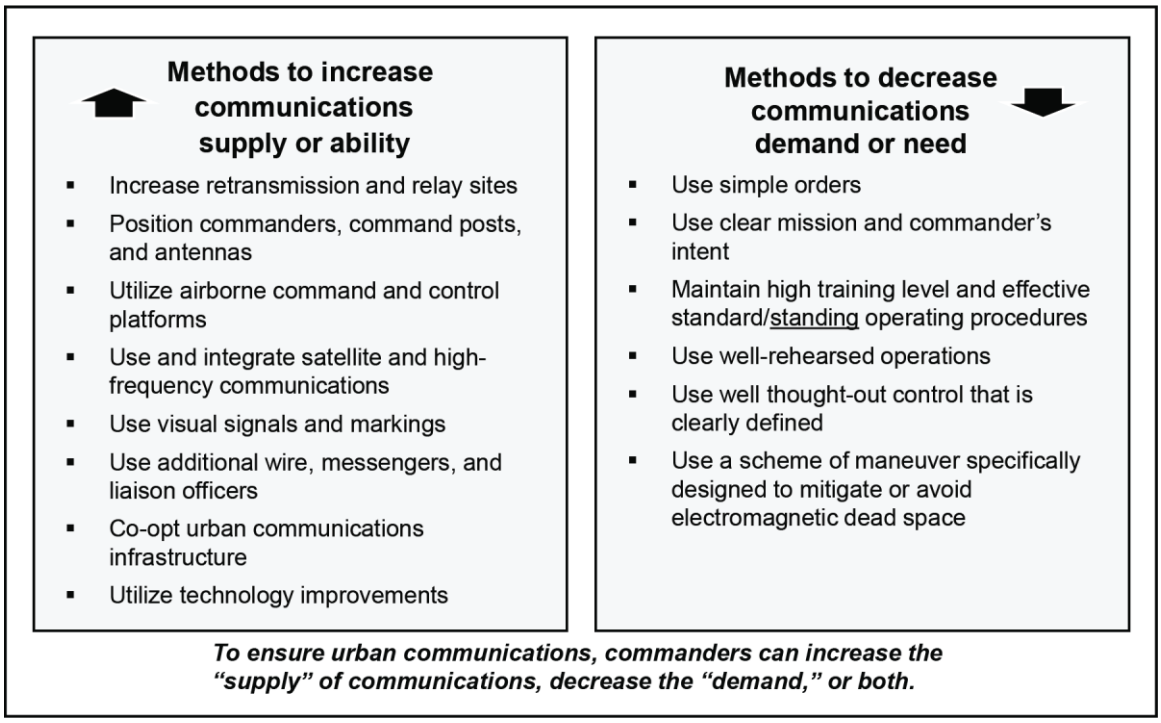


Figure 3-2. Methods to increase communications effectiveness during urban operations

3-12. SOPs for visual markings, both day and night, assist in C2. These SOPs indicate unit locations and other essential information, and coordinate units across common boundaries. Given adequate consideration to limitations on multinational capabilities, SOPs preclude fratricide incidents resulting from loss of radio communications. However, visual signals, including pyrotechnics, are less effective in buildings and enclosed spaces.

3-13. In defensive or stability operations, positions do not change as frequently as in offensive operations. Urban commanders rely more on military wire (properly camouflaged among the civilian communications infrastructure), commercial communications, and messengers. Even in combat, some if not all of the urban area's organic communications structure remains intact for Army/Marine Corps use. Every building has at least one telephone distribution box that controls hundreds of individual telephone lines. Setting up wire communications using these points is relatively simple but susceptible to wire-tapping. Cellular telephones can usually work well in urban areas, but locating and destroying the repeater stations or other land-based elements of a cellular telephone system or the effects of natural disasters easily disable them. Cellular telephones may be a critical and singular means to rapidly communicate with key civilian organizations and important community leaders. Consequently, the communications system uses these alternatives to radio communications but with proper operations and physical security SOPs in place.

3-14. Units use multiple means to communicate throughout an urban area. Commanders emphasize proper operations security SOPs despite the level of security provided by the communications system. This emphasis lessens the probability that Soldiers/Marines inadvertently compromise essential information as they switch from one mode of communications to another (for example, from a secure frequency modulation radio to an unsecured cellular telephone or from classified to unclassified internet domains).

3-15. In stability operations, immediate and reliable communications between tactical and strategic levels are necessary. Higher commanders anticipate that although the urban area does not significantly challenge their information systems, the area severely challenges systems at the lower tactical levels. For this reason, information flow from lower to higher takes longer. If the situation is unacceptable, higher headquarters increases the number of liaison officers operating with units engaged in decisive operations/decisive actions. In some instances, the scheme of maneuver accounts for communications interference, propagation

characteristics, and electromagnetic dead space, but accounting for these requires more time, resources, and a detailed urban communications IPB.

3-16. Finally, urban areas overload the information systems with information. UO in all types of conflict generate large volumes of information when crises threaten. The sheer volume easily overwhelms UO commanders and command posts along with the information conduit connecting the two. Training prepares command posts to handle this volume of information and to filter the critical from the merely informative. Rather than merely presenting information, staffs create visual or textual products to help commanders understand the urban environment. Additionally, units and staffs can reach out to organizations that have interest in supporting operations such as higher echelon units with diverse intelligence capabilities, or home-station organizations that can support analysis and planning.

MOVEMENT AND MANEUVER/MANEUVER WARFIGHTING FUNCTION

3-17. The *movement and maneuver warfighting function* is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats (ADP 3-0). *Maneuver* is employment of forces in the operational area, through movement in combination with fires and information, to achieve a position of advantage in respect to the enemy (JP 3-0). The Marine Corps' amplification to the joint definition is that maneuver is the movement of forces for the purpose of gaining an advantage over the enemy. Maneuver is one of the seven warfighting functions. (USMC Dictionary). Effects of the urban environment on movement and maneuver/maneuver are a significant consideration in UO because they can limit standoff, security, and interior lines. Higher echelon units, such as corps and divisions shape the urban operational environment by setting movement and maneuver conditions for lower echelons. Adaptive and creative leadership thoroughly assesses effects of the urban environment in this regard and determines the most efficient and effective means of employing forces. Staff understand effects of the urban environment to create innovative solutions to achieve the commander's intent.

3-18. In offensive and defensive operations in an urban environment, forces use mobility operations to access objectives, move through them, allow the movement of reserves, and facilitate resupply or evacuation. Units also consider noncombatant evacuation operations and securing, protecting, or creating a civilian evacuation mobility corridor or golden bridge. A golden bridge corridor or LOC is used by civilians to escape and prevent interference with military operations. Although rare, similar tactics, techniques, and procedures (TTP) can be used in UO or with military deception operations (known as MILDEC) when the objective is displacing enemy or threat forces rather than destroying them. Commanders carefully use these TTP in a large-scale ground combat situation, because Army/Marine forces attempting to consolidate gains may face escaped or bypassed adversary forces again, and those forces may reinforce or reconstitute other enemy main body forces. In stability operations, mobility operations allow civilian traffic and commerce to resume, allowing the urban area to return to equilibrium. Mobility keeps LOCs open and reduces the threat of explosive hazards to Soldiers/Marines and civilians. In disaster relief, mobility removes storm debris or reduces obstacles caused by destroyed property.

CANALIZATION AND COMPARTMENTALIZATION

3-19. Urban terrain can canalize and compartmentalize forces, restricting their fires and movement. Vertical canalization impacts are a consideration as well if forces are required to clear above or below multi-level story buildings. Elevated structures provide enemy observation and fields of fire, and reduce the effectiveness of cover and concealment available to ground level forces. For example, tall buildings can provide sniper, anti-armor, or indirect fires observation or firing points. Buildings pose obstacles to mounted and dismounted movement, restricting unit movement along streets and disrupting C2. Fires are canalized except in limited open and unmasked areas that provide Soldiers/Marines unobstructed vision, but this produces concentrated fire zones in areas such as road intersections and in front of defended positions. Units mitigate this limitation by controlling intersecting points of domination, establishing complete, mutually supporting security with sectors of fire that cover dead space or exposed flanks to create standoff. Attack aviation maneuver and precision indirect fires can defeat enemy vehicle or armor threats with adequate attack angle, standoff, and urban terrain masking considerations. Well-positioned, but maneuver-protected indirect fire systems can

provide needed direct-lay mode direct fire when armored vehicle platform direct fire is unsuitable or unavailable.

Note. In addition to understanding terrain from the MDMP/MCPP and troop leading procedures (known as TLP), units can generally expect approximately 15 percent of a city to contain open spaces such as parks or sports fields that may be used for landing zones, pickup zones, forward arming and refueling points, position areas for artillery, or mortar firing points. These open spaces accommodate desired systems, formations, or echelon-type requirements. However, vertical obstructions such as light or power poles or lines, statues, trees, unstable buildings, trash or rubble, or uneven terrain may limit access; create foreign objects and debris; affect approach, take-off, and minimum firing angles; and require clearance or position improvement. These areas are observable, providing limited to no cover or concealment, and may be developed as ambush sites or engagement areas by either enemy or friendly forces. Therefore, careful mission planning, reconnaissance, clearance, and perimeter or far-side security establishment is essential to controlling these areas before occupation. See ATP 3-06.1/MCRP 3-20.4/NTTP 3-01.04/AFTTP 3-2.29 for more information.

3-20. An urban environment impedes movement and maneuver/maneuver considerably. Canalized and compartmented effects funnel Army/Marine Corps forces through streets bordered by buildings. Soldier/Marine tasks required in an urban environment also slow movement. Soldiers/Marines operate dismounted across rubble and hard surfaces. Operating in three dimensions, they constantly move up the supersurface areas of building interiors, down into basements and sewers, and across other subsurface areas. They breach many obstacles using upper body strength, ropes, and ladders to scale heights. Stress from the inability to see into the next room, floor, or building magnifies the physical demands of movement. The resulting fatigue slows the overall rate of Army/Marine Corps forces movement and maneuver/maneuver.

INCREASED VULNERABILITY

3-21. The urban environment increases the vulnerability of Army/Marine Corps forces executing movement and maneuver/maneuver in offensive, defensive, and stability tasks. Leaders consider the increased risks to subordinates due to their need to personally C2 operations and lead by example. In addition to main forces, UO have historically resulted in higher leader casualties, thus affecting synchronization. C2 challenges force leaders to move closer to the forward line of troops to maintain awareness and control. The complexity of the urban terrain also allows enemy forces to remain hidden and protected, only exposing themselves when a high-value target presents itself. Leaders also consider impacts to mobility and morale and from fatigue due to increased Soldier/Marine combat loads; UO increase ammunition and equipment burdens. Mitigation measures such as appropriate weapons control status, redundant communications, manned or unmanned vehicle use, pre-positioning, aerial resupply, or caching items may reduce burden and risk. For example, to prevent fratricide or civilian casualties, a platoon leader or commander may issue a temporary weapons hold status if conducting close maneuver or passage of lines among friendly forces in a reduced visibility, complex urban environment. See ATP 3-21.8 for additional information.

3-22. Physical terrain and the urban population complicate and obscure operations and may provide threat cover and concealment. In offensive or defensive operations, enemy forces can use internal or subsurface means to move undetected or hidden in buildings until prepared to ambush Army/Marine Corps forces. Consistent with METT-TC/METT-T, Army/Marine Corps forces attempt to clear buildings along maneuver routes prior to mounted movement along those axes. Urban infrastructure can mask counter radio-controlled improvised explosive devise electronic warfare (known as CREW), and communications systems and peer threats may be able to jam, spoof, or otherwise disrupt protective signals. See ATP 4-01.45/MCRP 3-40F.7/NTTP 4-01.6/AFTTP 3-2.58 for additional information on tactical convoy operations. Failure to clear routes (and mark the cleared portions) exposes mounted movement to ambush at close range. Moreover, clearing alone is insufficient to protect mounted movement since the urban environment provides multiple avenues of approach for enemy infiltration and ambush behind clearing operations. Army/Marine Corps forces secure or observe cleared routes to prevent these enemy operations. Movement back across streets and obstacles is difficult if the element of surprise is essential in the initial crossing or breach.

3-23. Buildings also provide cover and concealment to enemy air defense capabilities—particularly man-portable air defense systems fired from multiple positions hidden among the clutter of fires, lights, smoke, and dust. The enemy can easily conceal and transport air defense systems in civilian vehicles in an urban area. In all operations, but especially stability operations, civilians can conceal threat elements. The threat may initiate offensive operations against Army/Marine Corps forces from close range and where ROE hamper applying combat power. Maneuver through a dense population is a high-risk operation.

COMBINED ARMS TASK ORGANIZATION

3-24. Effective UO require effective combined arms task organization that is purpose built, trained, interoperable, and rehearsed. Maintaining close combat capability is a fundamental of urban operations. Infantry is the essential building block for all organizations conducting UO. Infantry protects and receives direct fire support from mounted elements as the combined arms unit moves and maneuvers through the urban area. In some urban situations, mechanized infantry may not be able to provide dismounted support beyond its own vehicles or tanks; thus additional light infantry may be required. The infantry destroys the enemy in buildings, bunkers, and subsurface areas where mounted forces cannot defeat them and prevents infiltration of enemy forces back into hard won urban terrain. Field artillery aids in dismounted and mounted (to include air) maneuver by suppressing known and suspected enemy positions with precision fires. Field artillery is used to reduce structures or obstacles. Attack aviation elements make best use of standoff capabilities and aircraft speed to conduct running and diving fires. In UO, hovering fire is generally avoided because it exposes aircraft to many possible elevated or concealed enemy positions. Armored elements protect Soldiers/Marines from small arms fire and destroy or suppress enemy positions with precise, direct fire. Carefully protected artillery may also be used in this direct fire role. Armored forces and attack helicopters facilitate maneuver through shock action that has a psychological effect, particularly against less well-trained threats and, in discrete instances, hostile crowds. Successful commanders understand that the intimidation value of any method erodes quickly with repetitive use.

3-25. Armored vehicles using combined arms sections with independent sights and viewers can provide the protection needed for crews to overwhelm the enemy with firepower, absorbing unseen enemy attacks such as dismounted hunter/killer teams or IEDs. Infantry covers friendly armor high point, rear, and flank dead spaces from covered or concealed positions. Changing directions, repositioning committed forces, reinforcing forces in contact, bypassing threats, and maneuvering to threat flanks become difficult. Units breach obstacles and maintain verbal, visual, or radio contact to help solve these problems. Using assault and attack aviation, or airborne or littoral assault, to quickly move forces can aid in overcoming terrain constraints. However, defense of aviation assets must be considered because they are extremely vulnerable to enemy air defense threats in urban terrain. See ATP 3-06.1/MCRP 3-20.4/NTTP 3-01.04/AFTTP 3-2.29 for further details on using aircraft in urban areas.

3-26. Combat engineers should be trained and equipped for UO. Combined arms ensures that combat engineers support dismounted maneuver by assisting in covered and concealed maneuver through buildings and off exposed streets. In addition to combat engineers, others with essential expertise to conduct mobility operations include explosive ordnance disposal teams, military police, and chemical personnel. These personnel significantly reduce mobility and maneuver challenges. See ATP 3-90.4/MCTP 3-34A (MCWP 3-17.8) for more on combined arms mobility.

3-27. Urban buildings are often obstacles to movement and mobility because they restrict mounted movement to compartmented and canalized streets. Threats block streets with roadblocks ranging from sophisticated log and concrete cribs reinforced with antitank and antipersonnel mines to the expedient use of cars, buses, and trucks to create obstacles. Combat engineers reduce these obstacles by breaching them with explosives, sledgehammers, bulldozers, armored vehicles, or high-strength (diamond or carbide-tipped) cutting devices. These breaches permit dismounted movement through buildings under both cover and concealment. Combat engineers breach these obstacles to maintain the coherence of the combined arms team (mounted and dismounted).

3-28. Combat engineers are forward, often task-organized to platoon level, and can rapidly reduce point obstacles during breaching. Ideally, there should be one engineer vehicle and squad for each section of two armored vehicles in the offense, and one of the two armored vehicles should ideally have a plow to enable movement. Due to increased density and hardness of many urban building and construction materials, units

require heavy engineer equipment (such as the D9 bulldozer) to accomplish mobility, countermobility, and survivability functions in an urban environment. When planning, commanders consider increased protection/force protection requirements and the availability of equipment transport to move these slower moving engineer assets around the urban battlefield/battlespace.

3-29. Proportion and organization of combined arms in UO differs from operations in other environments. Although based on an accurate METT-TC/METT-T assessment, UO require an increased proportion of dismounted infantry and engineer capabilities and fewer armor capabilities than other environments. Units use more civil affairs units, military intelligence units, and combat engineers than those habitually attached for combat in more open or less restrictive terrain.

3-30. Commanders consider a suitable span of control for subordinate commanders to determine the appropriate task organization. They also consider the potential of dissipating a unit's combat power, capabilities, and synergy by dividing a unit into smaller units to ensure subordinate maneuver units have complete combined arms capability. For example, an additional engineer battalion is task-organized to a brigade combat team; for Marine regimental landing teams an additional combat engineer company is a more likely formation that may be assigned. In turn, the BCT/Marine regimental landing team may task-organize this battalion or company into engineer companies or platoons under the control of their subordinate maneuver battalions. If this type of organization continues, maneuver companies may have an engineer platoon with maneuver platoons each having an engineer squad. Ultimately, a combined arms capability may be established at lower levels, but the parent maneuver unit (in this example, the BCT/Marine regimental landing team) may have lost the ability to conduct larger engineer operations without having to re-task-organize and potentially disrupt current operations and established relationships. As a guide, commanders of urban operations consider task-organizing to create effective combined arms organizations to conduct offensive or defensive tasks. This includes considering request for forces such as military police, SOF, or civil affairs. Combined arms assets are brought back under their own control when the operation transitions to predominately stability or DSCA tasks.

CONTINUOUS OPERATIONS AND TECHNOLOGY ENHANCEMENTS

3-31. Continuous operations and technology—such as Army/Marine Corps night operations capability—improves Army/Marine Corps forces' ability to move and maneuver in urban terrain. Historically, forces fought urban battles mostly during daylight because of technological limitations and fatigue. Night vision and thermal technologies, accurate situational understanding, a COP, training, and rotating units enable Army/Marine Corps forces to defeat enemy forces with greater success. While U.S. forces have recently enjoyed advantages against some less equipped, less adept adversaries, commanders and staffs are careful to realize that peer and hybrid forces may have parity or overmatch in some capabilities and plan UO accordingly. Night operations are also a means of mitigating the air defense threat against air maneuver. Continuous operations via night maneuver with fresh forces are challenging but can overcome many advantages that a stationary force has against maneuver in the urban environment. Commanders, however, should also consider that streetlights, fires, background illumination (as well as dark building interiors without ambient light), increased heat absorption of many urban structures, and skillful use of searchlights by threat forces may limit the effectiveness of night vision devices and make thermal imagery identification difficult.

COUNTERMOBILITY

3-32. Commanders use countermobility capabilities to help create standoff, security, and interior lines of control where the enemy moves in the urban area, thus limiting their freedom of action. Repositioning defensive forces in an urban area is difficult; obstacles are essential to limiting an enemy's maneuver options. During offensive operations, countermobility protects exposed flanks and air assault forces from counterattack. In stability tasks, countermobility operations take the form of constructing barriers to assist in populace and resources control at critical urban locations. Refer to ATP 3-90.8/MCTP 3-34B (MCWP 3-17.5) for more information on combined arms countermobility operations

INTELLIGENCE WARFIGHTING FUNCTION

3-33. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment (ADP 3-0). Other significant aspects of an operational environment include threats, adversaries, and operational variables, which vary with the nature of operations. The intelligence warfighting function synchronizes information collection with primary tactical tasks of reconnaissance, surveillance, security, and intelligence operations. Commanders drive intelligence requirements, and it involves analyzing information from all sources and conducting operations to develop the situation. The Army executes intelligence, surveillance, and reconnaissance through operations and intelligence processes, with an emphasis on intelligence analysis and information collection. The intelligence warfighting function includes these tasks:

- Provide intelligence support to force generation.
- Provide support to situational understanding.
- Conduct information collection.
- Provide intelligence support to targeting and information capabilities.

3-34. The intelligence warfighting function executes the tasks needed to prepare intelligence support to all echelons deployed within a theater of operation. The staff establishes and builds an intelligence architecture. A knowledge base is built to understand an operational environment through coordination and collaboration with regionally aligned forces using the theater military intelligence brigade. Building the knowledge to understand an operational environment includes connecting the intelligence architecture to theater information systems. The staff supports engagement, develops context, and builds relationships through the successful conduct of intelligence operations; intelligence analysis; and intelligence processing, exploitation, and dissemination. See ADP 2-0 for a discussion of the intelligence warfighting function and setting the theater.

3-35. The intelligence warfighting function encompasses more than the military intelligence branch:

- The commander drives the operations process and focuses the intelligence effort that supports it.
- Intelligence is commander-centric. The commander performs the central role within intelligence and enables the intelligence warfighting function.
- The entire staff is important to the intelligence warfighting function and each staff member contributes to the intelligence staff in a different way.
- During combat operations, the intelligence, operations and signal sections and fire support coordinator for the staff core that is essential to synchronize and integrate intelligence.
- Every Soldier/Marine contributes to information collection.

3-36. *Intelligence* is the product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations (JP 2-0). The Marine Corps amplification is that intelligence is knowledge about the enemy or the surrounding environment needed to support decision-making. Intelligence is one of the seven warfighting functions (USMC Dictionary).

3-37. Intelligence in UO develops commander's critical information requirements (CCIRs) in the form of priority intelligence requirements and friendly force information requirements. Commanders focus the staff and the operations process on the priority intelligence requirements that most effectively solve the UO problem, while keeping friendly force information requirements in mind to maintain self-awareness. Intelligence core competencies of intelligence synchronization, operations, processing and exploitation, and analysis help apply the intelligence process (ADP 2-0). Additionally, understanding regional or urban threat tendencies in the context of near-peer adversaries can help frame UO as a part of major operations (see the TC 7-100 threat series for more information).

3-38. With the assistance of intelligence sections, staffs and commanders monitor situations and anticipate cascading effects to assist in planning shaping operations that may protect the population and defeat the enemy. In UO information collection, staffs and intelligence section cells collect, exploit, and disseminate prioritized and synchronized decision-making information throughout the operations process. For example, among myriad hybrid or conventional threat C2 nodes in a UO competition or conflict situation, commanders decide what, how, and when decision points, high-value target, or high-payoff target engagement can best

gain advantage, preempt branches or sequels, and enable consolidation of gains. In UO intelligence support to targeting and IO, the resultant lethal or nonlethal effects are applied across the range of military operations and assessed for effectiveness and re-engagement.

DEGRADED INFORMATION COLLECTION CAPABILITY

3-39. Urban environment infrastructure creates challenges and opportunities for information collection. Sensor capabilities are limited in subsurface and some supersurface areas. Buildings affect wave propagation, thus degrading friendly communications systems and some information collection efforts. Urban patterns and compositions can shield objectives from various angles of aerial observation. Urban threats may depend less on technology or use existing civilian urban C2 structure. They may also limit signals intelligence efforts by turning off their radios and using messengers. While the urban environment limits some typical collection methods, all enemy electronic and human activity creates some form of observable signature, but a dense urban environment in the twenty-first century allows for other means that are not organic to tactical military intelligence organizations to gain information advantage. The analysis and exploitation of data from increasingly common smart surveillance systems placed at critical population chokepoints, combined with data from other existing systems, public records, communications and public utility infrastructure, can enable friendly forces to gain information that allows geolocation of threat forces or systems. Due to limitations on other collection means, HUMINT may become the primary collection method in urban environments.

INTELLIGENCE PREPARATION OF THE BATTLEFIELD PROCESS

3-40. The intelligence staff leads the rest of the staff through the IPB process in accordance with Army/Marine Corps doctrine. With more data points for the IPB process to identify, evaluate, and monitor, this becomes more demanding. The human and societal aspects of the environment and the physical complexity primarily increase the difficulty. Compounding the challenges is the relative incongruity of all urban environments. No two urban areas are alike physically, in population, or in infrastructure. Commanders and their staffs cannot assume that patterns of behavior and the relationships in one urban area mirror another urban area. The opposite is as likely to be true. Civilian populations react to, interact with, and influence Army/Marine Corps forces in differing ways based on their interests. Commanders adjust operations and seek to influence populations for mutual benefit, where possible. Units monitor changes to interests, relationships, and patterns and apply common sense to basic physical, social, cultural, economic, and communal security changes. Accurate predictive analysis of a large population requires specific training, use of data science, and analysis of available population and infrastructure information, as well as extensive cultural and regional expertise. (For more information on the IPB process in urban operations, see ATP 2-01.3 or MCRP 2-10B.1.)

INCREASED IMPORTANCE OF HUMAN INTELLIGENCE

3-41. The intelligence warfighting function can adjust to the degradation of its organic technical collection systems by increasing emphasis on HUMINT in UO. *Human intelligence* is the collection by a trained HUMINT collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities (ADP 2-0 and AR 381-100). The Marine Corps defines human intelligence operations as operations that cover a wide range of activities encompassing reconnaissance patrols, aircrew reports and debriefs, debriefing of refugees, interrogations of prisoners of war, and the conduct of counterintelligence force protection source operations (USMC Dictionary). HUMINT operations may be the primary and most productive intelligence source in UO. While conducting urban offensive and defensive operations, HUMINT gathers information from neutral, friendly, and threat personnel. Categories of HUMINT sources include, but are not limited to, detainees, displaced persons, local inhabitants, friendly forces, and members of foreign governmental organizations. Credible intelligence of this type helps meet requirements, provide detail, and alleviate some of the need to penetrate the urban area with reconnaissance forces. In many UO where HUMINT is the primary source of intelligence, acting on single-source reporting is not recommended. Yet, situations may arise where commanders weigh the consequences of inaction against any potential negative consequences resulting from acting on uncorroborated, single-source information.

Note: Units coordinate carefully with HUMINT or intelligence sources when seeking to develop links with members of the population in general. Common practices as seen in Iraq and Afghanistan resulted in civilians being killed by threat forces when contact cards with coalition telephone numbers, soccer balls with contact information, or other links to coalition forces were found in homes. Careful intelligence practices can mitigate such mistakes, help protect noncombatant lives, and aid maintenance of neutral to positive population sentiment. Additionally, common police practices as sometimes exercised in the United States may be creatively used. An example includes a shaping operation, which enables forces to visit an informant's house only after entire surrounding blocks or areas are visited. This technique may provide cover for the source and forces making contact with helpful individual(s) in question.

3-42. During urban stability operations, HUMINT identifies threats and monitors the intentions and attitudes of the population. A chief source of information contributing to the development of accurate intelligence, particularly at the tactical level, is through the employment of reconnaissance forces, especially small-unit dismounted patrols. HUMINT collectors thoroughly and routinely debrief urban reconnaissance forces and patrols to obtain information for developing a clearer picture of threats and the urban environment. Reliable and trustworthy information is particularly important in foreign internal defense, counterterrorism, and support to counterdrug operations. Leaders organize intelligence resources appropriately as well as learn and apply valuable techniques, such as pattern and link analysis. In some cases, various echelons may have to focus on information collected that is pertinent to their subordinate formations. Intelligence sections may have to increase in size or be given additional outside resources or equipment to process, exploit, and disseminate the greater amount of human intelligence in a large city. This may enable commanders to more rapidly respond to actionable, timely intelligence. Additionally, units train Soldiers/Marines—as part of reconnaissance and patrolling training—to safeguard and maintain a chain of custody for captured documents, weapons, material, and equipment as legal evidence, much like military and civilian police. Proper evidence handling is a critical concern in counterterrorism and counterinsurgency operations.

Other Sources of Information on the Urban Environment

3-43. Whenever Soldiers/Marines encounter the urban populace, resulting interactions can be important sources of information a commander uses to answer questions about the threat and the urban environment. Commanders are unlikely to have enough trained HUMINT Soldiers/Marines to satisfy their requirements, particularly in a larger urban environment and during long-term stability operations. Therefore, commanders need to cultivate and establish local civilian associations, especially with HNSF, to provide relevant information for decision making and to support the overall information collection effort. Soldiers/Marines sense, and are vigilant to the absence of normal settings and attuned to the presence of abnormal in executing UO. For example, the absence of an urban feature, item, or person may indicate a change in conditions, such as a vendor cart that is normally present, seven days a week. This could indicate an impending attack, a holiday, or simply a change in economic patterns. On the other hand, an example of sensing the presence of the abnormal could be observation of a new vehicle, person, construction, or other change in terrain or environment that may indicate an attack, such as an IED, or that requires change to the execution of the UO. Finally, commanders ensure all personnel receive basic tactical questioning training to answer CCIRs. See ATP 3-55.4 for additional information on techniques for information collection during operations among populations.

Biometrics and Identity Intelligence

3-44. Army/Marine Corps forces use biometrics to help establish or verify the identity of an individual with certitude. Collections can include facial images, fingerprints, iris images, deoxyribonucleic acid (known as DNA) samples, palm prints, voice samples, and associated contextual data from individuals encountered in UO. Due to the large concentration of people found in urban areas, biometrics techniques and identity intelligence is especially important to commanders as a powerful tool for enhancing their ability to understand and influence the populace. Faced with indistinguishable enemies who seek to mitigate our military superiority by operating and hiding among the populace in urban environments, biometrics and identity helps remove their anonymity. Additionally, biometrics can link the individual to past aliases, locations, and events.

In more modern, technologically developed cities, forces may be able to leverage smart city infrastructure, databases, and data science to use information from automated or smart security and identity systems. Table 3-2 covers areas where biometrics can positively impact operations.

Table 3-2: Urban operations biometric impacts

Intelligence process	*Forensics*	*Time-sensitive targeting*	*Base access*
Local hire and foreign security force screening	Checkpoints	Site exploitation	Border control and enforcement
Population control and management	Census operations	Civil-military operations	Detainee operations
Mounted and dismounted patrol	Cordon and search	Information operations	Medical civil action programs

3-45. Military police and intelligence assets primarily use biometrics, but Soldiers/Marines across all military occupational specialties use, and are trained on, biometrics-collection capabilities. See the following for additional information: ATP 2-22.82, ATP 2-22.85/MCRP 10-10F.1/NTTP 3-07.16/AFTTP 3-285, ATP 3-39.20, ATP 3-90.15, and FM 3-63.

3-46. While biometrics is a powerful tool, its major drawbacks include difficulties with large-scale collection and database management. Biometrics are most often collected during offensive operations such as cordon and searches. In large-scale combat operations, units will likely be unable to collect and exploit biometrics' various modalities until transition to a security focus and stability UO. Commanders also consider cultural implications, such as females in Muslim societies. For example, although infrequent, past terrorist and insurgent activities increasingly used females for suicide bombings. If biometrics collection is limited to military age males, then insurgents will likely use females. For Soldiers/Marines to effectively collect on female targets, however, such collection requires that only female Soldiers/Marines search potential targets. This must be planned by commanders who train Soldiers/Marines in the use of biometrics equipment.

POLICE INTELLIGENCE

3-47. In complex urban environments, the distinction between criminal, terrorist, and other irregular threats, known as the crime-terror nexus, is often blurred due to the interaction among threat networks, employment of similar illicit methods, and overlapping interests between criminal and other threat actors or networks. Military police conduct police intelligence operations to addresses challenges associated with the crime-terror nexus by providing commanders with technical police capabilities, knowledge, and experience to analyze and understand criminal behavior and activities and the factors within their operating environments that promote crime opportunities and impact operations. As members of armed groups, insurgents and other belligerents use or mimic organizational structures, activities, and practices that are often associated with criminal networks that move contraband, raise funds, or further their goals and objectives through indirect means. Police intelligence operations focus on identifying the linkages between criminals and other irregular threats to enable commanders and staffs to better understand and act in complex environments.

3-48. Police intelligence operations support commanders at all levels through the integration of police intelligence activities within military police operations. It enables military police, criminal investigation division staff, and police intelligence analysts to identify connections and correlations between people, places, events, times, and things, allowing for the identification of trends, patterns, problems, and associations pertinent to crime and disorder. Police intelligence operations also support the operations process and protection supporting tasks by providing police information and police intelligence to enhance situational understanding, protect the force, enable the rule of law, and assist homeland security.

3-49. During decisive action, military police rely heavily on traditional military intelligence processes to drive combat operations against enemy regular forces. The integration and fusion of police intelligence with traditional military intelligence allows staffs to build a clear common operational picture about enemy unconventional forces and irregular threats operating throughout the operational environment. As military operations transition from large-scale offensive and defensive ground combat operations to stability operations, police intelligence operations rise in importance to understand criminal threats destabilizing

society and police effectiveness, controlling crime to enable governance according to the rule of law. See ATP 3-39.20 for additional information on police intelligence operations.

3-50. Military police conduct police engagement throughout all operational environments where police interact with elements external to their organization. The goal of police engagement is to develop routine and reliable networks and relationships through which police information and police intelligence can flow to military police and U.S. Army Criminal Investigation Division (USACIDC) personnel and into the operations process. Police engagement is an information-related capability that occurs between police personnel, organizations, and populations for the purpose of maintaining social order and is key during UO. Military police and USACIDC personnel engage local, host-nation, and coalition police partners; police agencies; civil leaders; and local populations for critical police information that can influence military operations or destabilize an area of operations. The ultimate goal of police engagement is to develop a routine and reliable interpersonal network through which police information can flow to military police. Based on the tactical situation, police engagement can be formal or informal. Police engagement may be a proactive activity as part of deliberate information gathering, targeting, or collection efforts or can be conducted as a reactive response to an episodic event.

FIRES WARFIGHTING FUNCTION

In combat there is an overriding requirement to keep unrelenting pressure on the enemy to punish him and rob him of opportunities to take the initiative. But men tire, machines break down and the terrain and weather at times seem to be as much as an opponent as is the enemy. Yet, even under the worst circumstances, the artillery can continue to maintain the momentum.

Colonel John G. Pappageorge (Infantry)

3-51. Fires support the commander's intent, scheme of maneuver, and concept of operations. Historically, most fire support has been used in UO to isolate objectives, destroy besieged stronghold fortifications, and harass and degrade city adversary morale and combat power. The *fires warfighting function* is the related tasks and systems that create and converge effects in all domains and dimensions against the adversary or enemy to enable operations across the range of military operations (ADP 3-0). *Fires* is the use of weapon systems or other actions to create specific lethal or nonlethal effects on a target (JP 3-09). The Marine Corps amplification is that fires is those means used to delay, disrupt, degrade, or destroy enemy capabilities, forces, or facilities as well as affect the enemy's will to fight. Fires is one of the seven warfighting functions (USMC Dictionary). *Fire support* is fires that directly support land, maritime, amphibious, space, cyberspace, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives (JP 3-09). Fire support assets include target acquisition systems; indirect fire weapons; fixed-wing, rotary-wing, and tiltrotor aircraft; electromagnetic attack; and other lethal and nonlethal means. In the urban environment, both the physical terrain and the density of civilians significantly affect the employment of fire support systems. Authorities for employment of fires during conflict should be delegated as low as possible to allow for responsive fires. Tasks of the fires warfighting function are shown in table 3-3.

Table 3-3. Fires warfighting function tasks (ADP 3-19)

Integrate Army/Marine Corps, joint, and multinational fires	***Execute fires in multiple domains and in the information dimension***
Targeting (D3A)	Surface-to-surface fires
Operations process (PPEA)	Air-to-surface fires
Fire support	Surface-to-air fires
Airspace planning and management	Cyberspace operations and EW
Electromagnetic spectrum management	Space operations
Multinational integration	Multinational fires
Rehearsals	Special operations
AMD planning and integration	Information operations
AMD air and missile defense	EW electromagnetic warfare
D3A decide, detect, deliver, assess	PPEA plan, prepare, execute, assess

INTEGRATE ARMY, MULTINATIONAL, AND JOINT FIRES

3-52. *Cross-domain fires* are fires executed in one domain to create effects in a different domain (ADP 3-19). *Multi-domain fires* are fires that converge effects from two or more domains against a target (ADP 3-19). As with all operations, fires capabilities when fighting in cities must be task-organized into appropriate types and quantities, based on the situation. Methods of converging and integrating fires give commanders flexibility, redundancy, and synergistic effects greater than the sum of individual effects. As with other operations, commanders weight the main effort in urban operations with general support or reinforcing fires; however, use of precision guided weapons is preferred. As an example, in an offensive large-scale combat operations UO situation, attacks across multiple domains and dimensions or multidirectional attacks may include a U.S. Navy asset employing fires that enable ground force penetration of areas around an urban littoral. Attacks also may include an electromagnetic warfare that suppresses enemy air defenses to accomplish a U.S. Air Force targeted data collection effort. These multiple lines of convergence result in additive challenges of massed combinations or permutations of army, multinational, and joint fires assets with the other elements of combat power creating multiple dilemmas to overwhelm enemy forces.

3-53. Commanders will need to complete advanced planning to deconflict surface fires and available aviation assets. This will include determining where to hold aircraft, overhead versus spread-out, deconflicting gun-target lines, in addition to the incorporation of UASs. (For additional information on deconflicting fires within an urban environment, refer to ATP 3-09.32/MCRP 3-31.6/NTTP 3-09.2/AFTTP 3-2.6, MCTP 3-10F, or ADP 3-19.)

TARGET ACQUISITION

3-54. Target acquisition sensors and collectors in an urban environment face the challenge of penetrating urban cover and concealment in depth. Observers include conventional and SOF, unmanned aerial systems, fixed or rotary-wing observers, and standard reconnaissance assets. Staffs carefully plan for the placement and security of primary and alternate forward observers, joint fires observers, and joint terminal attack controllers to extend effects reach during UO. Units fight to observe to facilitate a fires advantage. Tracking targets, short exposure, rapid displacement or masked employment of surface-based fires in urban areas present similar difficulties for battle damage assessment. However, setting conditions outside of an urban area through exterior effects can give commanders many options for employing effect methods. Like additional maneuver assets, urban operations benefit from additional allocation of three to five times the fire support assets, precision systems, and munitions. Concurrently, increased sustainment may be needed for those systems in munitions-intensive urban operations. For example, in a UO situation in which an enemy is physically enveloped or encircled, available exterior lines give commanders freedom of action to establish multiple effect sensing and projection points. They may even be able to isolate with ISR or fires without the presence of ground forces, if needed. If target analysis determines one effect sensing angle will be disrupted or degraded by urban terrain—for instance, tall building masking—then a fire support element or joint air-ground integration cell may task a perpendicularly angled asset to rapidly exploit acquisition or targeting data. The opposite technique may be used in defense, but commanders should ensure adequate internal lines are available for asset survivability moves that will prevent counterfire on forces, civilians, or critical infrastructure. Redundant sensing, assessment, and reengagement can drastically enable defense or offense and provide effects more quickly and completely to aid stability in securing a population.

THE TARGETING PROCESS

3-55. *Targeting* is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities (JP 3-0). Targeting is a continuous, integrative process in the competition continuum in either competition, crisis, or conflict settings by which commanders decide, detect, deliver, and assess effects on targets to aid in mission accomplishment using deliberate or dynamic processes. Commanders pay particular attention to their targeting process to set conditions for maneuver and avoid collateral damage. This process, often tied to the air tasking order cycle, ensures that commanders integrate and synchronize all available combat power. The process employs and assesses both lethal and nonlethal means and includes offensive information, cyber, or electromagnetic warfare operations across multiple domains and dimensions to accomplish the mission. Whether in contiguous large-scale

combat operations or noncontiguous stability UO, portions of the area of responsibility (AOR) may return to a consolidation of gains or stability focus before major combat operations conclude.

3-56. Commanders and staffs anticipate resultant higher order secondary and tertiary effects of target engagement. They also consider necessary lethal or nonlethal effects in rear, support, close areas, and deep areas and how effects in one area may affect another. For example, an indirect or direct fire engagement in a close urban area may result in building fires that cause a secondary effect of displacing persons, potentially requiring a noncombatant evacuation. Fires also may cause the tertiary effect of destroying critical essential services infrastructure, thus exacerbating problems for stability UO. In a competition environment, EAB fire support elements, commands, and units consider shaping UO by planning and preparing potential targets and maximizing use of reachback intelligence capabilities. Commanders ensure that techniques and procedures are in place, rehearsed, and understood by all members of their staffs. Additionally, the C2 system must be responsive and agile to quickly share information and facilitate execution of effects on planned targets and fleeting targets of opportunity. In an urban area, even 10-digit grid coordinates may fail to identify targets accurately if buildings connect to each other or have subterranean features—often throughout the entire block. Target locations, in addition to grid coordinates, routinely include the street address, number of stories, shape, color, or any other distinguishing characteristics essential for ground and air forces to achieve targeting precision. In addition to plain language indirect call for fire, rotary wing close combat attack (5-line) and fixed wing close air support (9-line) requests, a common urban reference system with graphics, reference points, and other control measures adequate for both ground and air forces helps identify targets and rapidly clear fires. See ATP 3-09.32 MCRP 3-31.6/NTTP 3-09.2/AFTTP 3-2.6 for additional joint fires information.

3-57. Concerns exist for the safety and health of the urban populace and the protection of critical infrastructure and cultural structures. Often, commanders rely on civil affairs personnel and judge advocates for expert advice regarding these elements of the urban environment. While Soldiers/Marines ensure that operations minimize collateral damage, their ultimate goal is successful mission accomplishment. The commander's intent guides staffs who work to develop COAs that incorporate collateral damage concerns (both short- and long-term) yet accomplish the mission. Effective commanders understand the legal issues and both friendly and enemy weapon systems' effects in an urban environment. For additional information on the targeting process, refer to JP 3-60, ADP 3-19, MCWP 3-31, and MCTP 3-10F.

AIR AND MISSILE DEFENSE

3-58. Air and missile defense protects the force from air surveillance and air and missile attack. This system—

- Uses careful massing of air and missile defense combat power at points critical to the urban operation.
- Uses the proper mix of air defense weapon and sensor systems.
- Matches (or provides greater) mobility to the supported force.
- Integrates the air defense plan into the overall urban operation.
- Integrates Army/Marine Corps systems with those of joint and multinational forces.

3-59. Properly planned and executed air and missile defense prevents air threats from interdicting friendly forces and frees the commander to synchronize maneuver and other elements of firepower. Even in a major combat operation or campaign, the enemy likely has limited air and missile capabilities and therefore seeks the greatest payoff for the use of those systems. Attacking Army/Marine Corps forces and facilities promises the greatest likelihood of achieving results, making urban areas the most likely targets for air and missile attack. Air and missile defense plans in UO seek to establish protection of ground maneuver units beyond enemy aviation weapons release points. With maneuver units, TTP uses conventional or unconventional lethal or nonlethal means of local air defense to defeat UASs, ISR, or swarm attacks.

INFORMATION OPERATIONS

3-60. As a fundamental of urban operations, integrating the nonkinetic effects of IO/OIE during planning, IPB, MDMP/MCPP, targeting, and risk management are often essential to successful operations. *Information operations* is the integrated employment, during military operations, of information related capabilities in

concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own (JP 3-13).

3-61. The information function encompasses the management and application of information and its deliberate integration with other joint functions to influence relevant-actor perceptions, behavior, action or inaction, and human and automated decision-making. The information function helps commanders and staffs understand and leverage the pervasive nature of information, its military uses, and its application during all military operations. This function provides JFCs the ability to integrate the generation and preservation of friendly information while leveraging the inherent informational aspects of all military activities to achieve the commander's objectives and attain the end state (see JP 1).

3-62. Information operations, as an integration and synchronization staff function, plans and oversees the coordinated delivery of information-related capabilities to achieve cognitive effects against adversary and enemy decision-makers across the conflict continuum while simultaneously establishing the conditions that allow for more timely and better-informed friendly decision making. Intrinsic information-related capabilities include (FM 3-13)—

- Military deception.
- Cyberspace electromagnetic activities (to include cyberspace operations, electromagnetic warfare, and spectrum management operations).
- Military information support operations.
- Special technical operations.
- Space operations.
- Public affairs.
- Combat camera.
- Civil affairs.
- Operations security.
- Soldier and leader engagements, to include police engagement.

3-63. Commanders can also designate other enabling information-related capabilities (both lethal and nonlethal) to control the flow of information to adversary/enemy decision makers and protect friendly command and control means. These activities and capabilities include—

- Physical attack (to include lethal fires and maneuver).
- Presence, posture, and profile.
- Communication synchronization.
- Cybersecurity.
- Foreign disclosure.
- Physical security.
- Special access programs.
- Civil-military operations.
- Intelligence.

URBAN LIMITATIONS ON FIRE SUPPORT

3-64. Both the physical domain and human dimension of an urban area affect how units use fires. The physical aspects, such as the numbers, concentrations, and locations of civilians and heights and densities of buildings affect how Army/Marine Corps forces use fire support. An urban environment affects the following:

- Masking and deadspace.
- Collateral damage limitations.
- Acquisition and arming ranges.
- Type and number of indirect fire systems.
- Positioning.
- Mix of munitions.

Masking and Deadspace

3-65. The physical aspects of the urban environment, such as the heights and concentration of buildings, may cause significant masking and deadspace. Masking in an urban environment refers to using the terrain or buildings to avoid radar detection. Some aspects of masking can aid the UO fundamental of minimizing collateral damage. For example depending on the target and building composition and proximity to desired mean point of impact, weapons effects can be mitigated for occupants inside of buildings and enable precise engagement. These weapon variables are reconfigurable in order to find an acceptable solution through the target development process. Use of precision strike suite-special operations forces, when available, can also assist commanders in limiting collateral damage by ensuring for the use of the most accurate coordinates within a dense urban environment. Tall buildings can mask several blocks of area along the gun-target line. Deadspace (or defilade) is an area that artillery fires cannot hit directly. Intervening buildings that stand three or more stories tall hinder close indirect fire support. Target attack deadspace behind a building is about five times the height of the building for low-angle fire. The trajectory of high-angle fire reduces the deadspace to about half the height of the building.

Collateral Damage Limitations

3-66. The potential for collateral damage to adjacent buildings may prevent engagement with artillery, mortars, air interdiction, or close air support. Commanders balance the need to retain target approval or strike release authority for only the most sensitive or protected targets with the need to empower subordinate action through mission command to enable a permissive fires atmosphere. This is especially true in large-scale combat. Collateral damage might cause noncombatant and friendly troop casualties and unintentional destruction of buildings. Commanders offset these effects by employing munitions such as Excalibur, guided multiple launch rocket system (known as GMLRS) projectiles, or munitions with near-precision guidance kit (known as PGK) fuzes. As ROE to prevent collateral damage is conditional on the actions of the adversary, units use consistently calibrated and registered weapons to improve accuracy. They carefully echelon fires and thoughtfully place artillery positions, repositioning artillery as target needs change, and use mortars effectively. Mortars are often more responsive to tactical commanders and have an advantage of a steep angle of fall with short minimum arming range. Mortars provide high-angle alternatives to field artillery fire that can help overcome urban terrain feature masking, such as tall buildings or urban canyons. Fixed-wing, rotary-wing, and tiltrotor aircraft may fire guided precision munitions and weapons with low-explosive yields. Near-vertical impact angles resulting in aircraft bomb burial significantly reduces collateral damage as can delayed detonations (fuse delay), confining blast effects to building interiors. Collateral damage concerns cause commanders to—

- Restrict attacks to certain times of day in a counterinsurgency environment; give warning prior to an attack, allowing evacuation; and abort an attack unless the asset can achieve the required level of precision effects.
- Preserve the element of surprise in large-scale combat fires, which is key to massing fires and preventing an enemy time to displace. In an air parity or inferiority situation, the air-based ISR-strike complex may be compromised and necessitate additional indirect fires to destroy enemy forces. This may potentially cause further collateral damage, however.
- Rehearse detailed staff battle drills for rapid clearance of fires and incorporate indigenous forces.
- Prepare branches and sequels to IO/OIE plans to justify the collateral damage to the populace. These plans may include filming or otherwise documenting the operation to thwart threat propaganda and claims of excessive collateral damage.

Acquisition and Arming Ranges

3-67. Aviation UO and maneuver typically support ground commanders from the air domain. Shortened acquisition and engagement ranges for supporting fires from attack helicopters affect engagement techniques and delivery options in UO. Vertical structures limit acquisition and arming ranges since they interrupt the line of sight. Pilots maintain a line of sight long enough to acquire targets, achieve weapons delivery solutions, and fly to those parameters. Pilots repeat this process for each subsequent re-engagement of targets selected by ground forces until the ground force commander is satisfied with the resulting effects. Attack helicopters firing from longer ranges improve the probability of a hit by allowing greater maneuver space to

perform diving and running fires. Based on the munitions available, urban terrain, location of friendly forces, target type, and desired effects of the ground force commander, the attack helicopter crew selects appropriate ranges to begin and terminate each engagement.

3-68. Poor weather, heavy smoke, and rising dust from urban fires and explosions hinder target identification, laser designation, and guidance for fixed-wing, rotary-wing, and tiltrotor aircraft. Poor air-to-ground communications also hinder effective use of airpower. The proximity of friendly units and noncombatants requires units to agree on, thoroughly disseminate, and rehearse clear techniques and procedures for marking target and friendly locations. The ability for ground units to describe targets to aircraft using a common urban reference system expedites aerial target acquisition and mitigates potential fratricide. Commanders must decide if urban terrain features located between themselves and the target will provide enough protection for friendly forces to prevent collateral damage or fratricide. Micro-terrain features such as power, telecommunication, or supersurface water lines can degrade older wire-guided munitions systems. The false reflections of laser designators off the many shiny or reflective surfaces in an urban environment can mislead target acquisition or munitions-seeking sensors, posing greater risk for munitions ineffectiveness and an increased risk of collateral damage or fratricide. Superstructure features potentially degrade target destruction depending on the munition used, weapon system range, angle of munition fall or angle of attack, and the material and condition of the building. For example, some munitions may not be able to penetrate multiple levels of roofs or floors to effectively engage targets in floors below them. See ATP 3-06.1/MCRP 3-20.4 /NTTP 3-01.04/AFTTP 3-2.29 for additional information on aviation UO and ATP 3-09.32/MCRP 3-31.6/NTTP 3-09.2/AFTTP 3-2.6 for additional joint fires minimum safe or risk estimate distances.

Type and Number of Fires Systems

3-69. The urban environment affects the type and number of indirect fire systems Army/Marine Corps forces employ. Commanders prefer a high-angle fire system because of its ability to fire near friendly occupied buildings. Tactically, commanders consider reinforcing units in UO with platoons from reserve units. This increases the number of systems available to support maneuver units. The artillery has two precision munitions: the guided multiple launch rocket system and the 155-mm Excalibur projectile, which are suitable for operations with high potential for collateral damage. In addition to maintaining accurate weapon and ammunition data, units may use calibrated systems or precision guidance fuze kits to achieve near-precision effects. In specific situations or restrictive terrain, commanders use an individual section to engage precision or direct fire targets. Before using this tactic, tactical commanders consider the probable loss of the section's ability to mass fires with the rest of the battery and exposure of the crew to enemy direct fire. Self-propelled artillery has limited small arms crew protection and towed artillery has no protection.

Positioning

3-70. Maneuver force assistance may be required to achieve a position of advantage in an urban area to enable fires effects in limited contingency or large-scale combat operations. Artillery exists in one of three states in combat: moving, shooting, or hiding to avoid detection or counterfire. Urban terrain affects the positioning of artillery and other fires system assets. Sufficient space may not exist to place battery or platoon positions with the proper unmasked gun line that facilitates angle of fall or munition arming distance, especially for illumination or obscuration munitions. Operations officers ensure terrain management enables fires and protects the remainder of the force. While fires units attempt to maintain relative unit proximity in support of security, urban exposure to enemy forces may mandate frequent, rapid survivability moves while still massing fires on specific targets. Commanders protect artillery systems particularly if organized into small sections. Due to its semifixed nature, threats to artillery include aircraft, counterfire, raids, patrols, snipers, and threat enemy special purpose forces. Therefore, maneuver and firing units place increased emphasis on securing their positions and other appropriate protection/force protection measures.

3-71. Finally, when used in the very effective direct fire mode for urban destruction or breaching missions, field artillery assets are protected with additional maneuver formations when possible, unless the preferred technique of acceptable standoff can be achieved to establish the battery or platoon defense and provide optimal, generally perpendicular, firing angles to the forward line of troops. Direct fire units use conventional occupation techniques, but in unique circumstances, can improvise to the most advantageous positions, including nonstandard positions, in a sense using existing structures as found with historical ramparts.

Examples may include placing firing systems within or around protected or elevated structures or features that allow a line of retrograde when needed to achieve desired sight picture, quadrant, elevation, and munitions arming distances within a given field of fire supporting maneuver forces.

Mix of Munitions

3-72. The mix of munitions used by indirect fire systems may change in urban areas. Units request more GPS-guided and precision munitions to limit collateral damage. Field artillery 155-mm Excalibur projectiles, guided multiple launch rocket system rounds, and air-delivered joint direct attack munitions use GPS to strike target coordinates. Munitions relying on laser designation have limited abilities in urban environments due to short-range targets and obstructed or reflective surfaces. However, during planning units understand the risk implications for operating in a GPS denied, degraded, or disrupted environment. In this case, there may be increased importance and need for use of training and use of degraded methods, need for alternate C2 methods, need for alternate methods to obtain the five requirements for accurate fires, and the potential need for registration of weapons platforms to increase accuracy. See FM 3-09 for additional information.

3-73. The urban environment greatly affects the use of some munitions. An intervening crest that is a building in dense urban terrain located along the downward trajectory of an indirect fire munition may cause its affixed variable time fuze to detonate prematurely, although these fuses may be used in high angle fire to effectively engage enemy forces on rooftops. Tall buildings also mask the effects of illumination rounds. Wind gusts in the space between tall buildings sometimes disperse effects of smoke rounds. Units may choose not to use dual-purpose conventional munitions if these considerations include the following:

- The enemy has several building floors for overhead protection.
- Dismounted friendly units need rapid access to the area fired on.
- Large numbers of civilians operate in target areas soon after combat operations have ceased.

Similar considerations apply to air-delivered cluster bombs.

3-74. Depending on building construction, commanders prohibit or limit illumination, smoke, and other munitions because of fire hazards. Occasionally, commanders use those munitions specifically to start fires. Structure fires in an urban area are difficult to control and may affect friendly units. Conventional high-explosive munitions work best against concrete, steel, stone, and other reinforced structures. When howitzers are not used in the direct-fire role, forces require a greater mass of indirect fire to achieve desired effects.

Note. Additionally, forces cautiously consider munition sabot, projectile, or beaten zone fallout areas from cyclic or large caliber direct fire, indirect fire, or air defense weapons; these zones should be planned for use in areas that will not cause excessive damage, cause civilian casualty risk, or add risk to friendly forces. Units also consider cluster munitions use dud rates and potential to cause unexploded ordnance. For example, during the Gulf War in 1991, unexploded ordnance was a particular problem in Safwan, Iraq as cluster bomblets failed to explode in soft soil and sand, but caused noncombatant casualties when children were attracted to their ball size and shape.

Commanders balance increasing firepower with the potential of collateral damage. The damage caused by massive indirect fires can affect a unit's future ability to maneuver and maintain adequate cover and concealment.

3-75. Nonlethal weapons, munitions, and devices help commanders maintain the desired balance of protection/force protection, mission accomplishment, and safety of noncombatants. More options using nonlethal force enable commanders to find a better balance. As additional nonlethal capabilities are developed, commanders consider them for their applicability to UO. When determining whether to use each option, commanders first review their previous experience using these weapons, munitions, and devices. Then commanders consider—

- **Risk**. Using nonlethal weapons in situations where lethal force is more appropriate may drastically increase the risk to ground forces.
- **Threat perspective**. A threat interprets the use of nonlethal weapons as a reluctance to use force and is emboldened to adopt COAs not otherwise used.

- **Legal concerns**. Laws or international agreements restrict or prohibit use of nonlethal weapons.
- **Environmental concerns**. Nonlethal weapons can endanger wildlife, pollute water, or damage cultural structures.
- **Public opinion**. The apparent suffering caused by nonlethal weapons, especially when no combat casualties exist for contrast, arouses adverse public opinion.

SUSTAINMENT/LOGISTICS WARFIGHTING FUNCTION

3-76. The sustainment/logistics warfighting function incorporates support activities and technical service specialties, to include maximizing available urban infrastructure and contracted logistics support. It provides the physical means with which forces operate. The *sustainment warfighting function* is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADP 3-0). *Logistics* is planning and executing the movement and support of forces (JP 4-0). The Marine Corps amplification is that logistics is all activities required to move and sustain military forces. Logistics is one of the seven warfighting functions (USMC Dictionary). Commanders conducting sustainment/logistics to support decisive action understand the diverse logistics requirements of units conducting UO in the context of Army support to other Services (known as ASOS). These requirements range from minimal to extensive, requiring Army/Marine Corps forces to potentially provide or coordinate all life support essentials to a large urban population. Commanders also understand how the environment and the population impact sustainment/logistics support.

3-77. In large-scale combat operations, UO may require special attention from theater sustainment commands, sustainment brigades, brigade logistics teams, support battalions, and forward support companies supporting tasked urban units. With an expected 20–30 percent expenditure increase in personnel, fuel, ammunition, barrier or obstacle material, and end item recovery or reconstitution, divisional sustainment elements position themselves where they are most responsive. Units use the most effective request or delivery methods, for example, single or dual loop or point or area sustainment, and plan several main, alternate, or supplementary supply routes because rubble, enemy obstacles, or civilian traffic may hinder responsive sustainment. Additionally, and particularly in large-scale combat in urban operations, commanders become legally liable and responsible for the needs of the civilian population. Units accordingly anticipate and plan for increased sustainment requirements of urban operations based on the populations they will encounter. Supporting the urban operations fundamental of restoring essential services, units consider what existing civil infrastructure systems can reduce the burden on responsible units. Examples include power, water, food, medical services, and waste disposal systems inclusion into the sustainment plan.

3-78. Increased demand for supplies requires careful supply rate issue and replenishment timing and triggers. As with other operations, this requires a continual and detailed reporting, tracking, and understanding of unit sustainment capacity and current status. Considerations include—

- Increased class I MREs (meals, ready to eat), water in five-gallon containers, as bulk water and prepared food are harder to deliver in dense urban areas with more restrictive terrain.
- Class II considerations include greater need for breaching, CBRN, and specialized equipment.
- Class III petroleum, oils, and lubricants product needs may generally decrease during UO inside of the city due to less vehicle movement, but headquarters should ensure adequate fuel for assured power generation because city power systems may fail or be destroyed. Class III petroleum, oil, and lubricants requirements will generally increase in phases of the operation requiring greater mobility (such as use of tanks or infantry fighting vehicles) on the exterior of an urban area, for example, when used for an envelopment or encirclement.
- Class IV use generally greatly increases when preparing barriers for the defense, isolating an enemy, or hardening fighting positions.
- Class V quantity factors increase significantly, especially light, medium, and heavy mortar, medium precision artillery. Unless facing an armored threat, tank or anti-tank munitions use decreases. Light and medium artillery and tank rounds along with heavy machine gun ammunition, however, are effective, as needed, in ballistic surface or superstructure breaching and blast effect or smoke round obscuration, and in reducing obstacles or enemy emplacement, IEDs, or mine, wire, or booby traps. Nonlethal munition use will dramatically increase especially for flash-bang grenades, smoke grenades, or nonlethal chemical agent use.

- Class VIII supplies and increased medical unit support will be needed to increase health service support capacity at unit close, support, and rear areas for both military and civilian casualties, especially if civilian casualties are caused by U.S. forces. Additional evacuation litters and means of transport to higher care will be needed.
- Class IX repair or replacement usage items may shift from vehicles to small arms and Soldier/Marine equipment based on the phase or type of operation. Units may modify the assets available or the task organization of units to facilitate shifts from larger vehicles to smaller vehicles with smaller cargoes, as roads narrow and bridge load capacities decrease. In this case some supplies may have to be hand carried, air dropped, or air landed, as feasible, into or near buildings.

3-79. Commanders and staffs consider and plan for friendly force sustainment/logistics operations in urban areas with unique requirements. Supporting the fundamental of maintaining a close combat capability, in pre-operation equipping and training, commanders may choose to increase commodities that support UO specifically such as procurement of special weapons, equipment, vehicles, and protection, along with command, control, communication, computer, intelligence, surveillance, and reconnaissance systems. Increasing close combat capabilities can be as simple as providing supplementary weapons, ammunition, and equipment (such as pistols, shotguns, grenades, shoulder-launched munitions, ballistic shields, thermal imagers, and unmanned ground systems), along with training, to the lowest level. Increasing close combat capabilities also can include unique, non-standard items such as specialty breach equipment, respirators, flamethrowers, nonlethal munitions, and commercial off the shelf networked technologies that enable leader C2 of UO tasked units. Drones or UASs may add specific capabilities that enhance unit ability to conduct UO by increasing situational awareness and enhancing C2. Due to city fighting's unique nature, any materiel item that may enable safety and success of operations in a city can and should be considered. Subterranean UO offer advantages to friendly or enemy forces with regard to cover and concealment of sustainment/logistics LOCs, caches, and movement of personnel or equipment. Sustainment operations in urban areas exploit aerial ports and seaports, maintenance and storage facilities, transportation networks, theater support contracting opportunities, and labor support.

3-80. Wound types during urban operations tend to differ from those in other environments. Crush, thoracic, and injuries to limbs tend to be a greater percentage due to hard surfaces, structure collapse, and thermobaric weapons use. Some evidence indicates that head injuries and combat stress-related injuries may be higher as well. Firing large caliber weapons in enclosed spaces may result in internal organ damage. As these injuries demand skills that may not be readily available or addressed in medical personnel training, for example detection of internal injury to organs. Therefore, considering the threat environment, it is imperative to reduce casualty evacuation time by expediting the lines of communication used or utilizing higher-level care closer to potential points of injury.

3-81. Sustainment/logistics operations are also UO. The principles of sustainment apply to UO as shown in table 3-4.

Table 3-4. Sustainment principles and urban operations

Sustainment Principles (ADP 4-0)	*Urban Operations (UO) Considerations*
Integration is combining all of the sustainment elements within operations assuring unity of command and effort.	Command and control and unified action partners help set friendly, yet limit enemy sustainment/logistics conditions outside the urban area before, during, and after the operation.
Anticipation is the ability to foresee operational requirements and initiate necessary actions that most appropriately satisfy a response without waiting for operations orders or fragmentary orders.	Sustainment/logistics common operational picture anticipates amplified needs proactively over a dispersed terrain for increased UO prioritization distribution, resupply trigger, movement times, and to prevent gaps.
Responsiveness is the ability to react to changing requirements and respond to meet the needs to maintain support.	UO sustainment/logistics chains delivers personnel, materiel, facilities, or services at precisely the right time and place. Accurate reporting required.
Simplicity relates to processes and procedures to minimize the complexity of sustainment.	Enables UO freedom of action by providing correct personnel, supplies, or services without overloading combat Soldiers or Marines.
Economy is providing sustainment resources in an efficient manner that enables the commander to employ all assets to the greatest effect possible.	UO economy allows resources to be focused on primary efforts, meeting all demands while prioritizing main efforts or decisive operations.
Survivability is all aspects of protecting personnel, weapons, and supplies while simultaneously deceiving the enemy.	UO survivability enables preemptive offensive mass of combat power, along with materiel resilience to enemy attacks enabling defensive endurance.
Continuity is the uninterrupted provision of sustainment across all levels of warfare.	Army support to other Services sets theater conditions for unified action partner sustainment/logistics operations and campaigns.
Improvisation is the ability to adapt sustainment operations to unexpected situations or circumstances affecting a mission.	With approval, units may use resource control (destroy, confiscate, seize, requisition, or control) of materiel or property as needed (See ATP 3-57.10).

PROTECTION/FORCE PROTECTION WARFIGHTING FUNCTION

3-82. The *protection warfighting function* is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADP 3-0). *Force protection* is preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information (JP 3-0). The Marine Corps adds that *force protection* is actions or efforts used to safeguard own centers of gravity while protecting, concealing, reducing, or eliminating friendly critical vulnerabilities. Force protection is one of the six warfighting functions (USMC Dictionary). Protection is a continuous and enduring effort across all operations. It helps commanders eliminate threats and mitigate risks by reducing hazards inherent in UO. Protection is used to gain and exploit positions of relative advantage in concert with mobility and firepower. Protection helps forces conducting stability operations in cities and aids consolidation of gains. Preserving the force includes enhancing survivability, implementing air and missile defense as well as conducting defensive IO/OIE in the urban environment. Protection principles consist of activities that are comprehensive, integrated, layered, redundant, and enduring. Commanders enable protection in urban operations by seeking actions that create security, standoff, and interior lines. Examples include implementing measures that create offensive, defensive, or stability operational advantages outside of, and within, the city leveraging existing protective organizations, materiel, and systems in the city. Of special importance is the need to integrate counter-UAS in urban environments at appropriate categories and in coordination with aviation forces. See ATP 3-01.81 for additional tactics and techniques.

PRIMARY PROTECTION TASKS

3-83. In addition to the non-warfighting Army protection program, the 16 primary protection tasks shown in table 3-5 (on page 3-24) pertain to UO (see ADP 3-37 for additional information). Establishing prioritized

protection measures early in UO facilitates mobility for U.S. forces, denies movement or control by enemy forces, and helps maintain or reestablish city core functions.

Table 3-5: Protection tasks in urban operations

Task	*Example*	*Task*	*Example*
Survivability	Position improvement and route clearance	Physical security	Deter, detect, assess, delay, respond
Force health protection	Sanitation, combat stress control, and preventive medicine	Antiterrorism	Reduce vulnerabilities, conduct incident response
CBRN operations	Hazard awareness, defense, and response	Police operations	Perform law enforcement, police engagement, train host-nation police, traffic management
EOD Support	Identify, render-safe, and investigate post-blast explosive hazards	Populace and resource control	Support dislocated civilians, NEO, protect critical infrastructure
Air and missile defense	Ballistic missile, fixed-wing, rotary-wing threat defense	Area security	Base, supply route, critical facility security, TCF I-III response
Personnel recovery	Recover isolated persons or units	Cyberspace security and defense	DCO, internal defense measures
Detention operations	Detainee operations, confine U.S. military prisoners, train host-nation corrections	Electromagnetic protection	EMS management, defend spectrum
Risk management	Aid security, standoff, interior lines	Operations security	Analyze threat, implement measures and countermeasures

AT antiterrorism
CBRN chemical, biological, radiological, nuclear
DCO defensive cyberspace operations
EMS electromagnetic spectrum
EOD explosive ordnance disposal
NEO noncombatant evacuation operations
TCF tactical combat force

3-84. Skillfully integrating strongpoints into an urban defensive scheme greatly increases the overall protection and effectiveness of the defense disproportionately to the number of forces actually occupying the strongpoint. Varying threat levels determine the level of expected protection needed and the concurrent need for prepared defenses. Threat levels are assessed based on mission impact, as described in table 3-6.

Table 3-6. Level of threat

Threat Level – Impact	*Examples*
Level I – routine response	Squad size unit of enemy forces, agents, saboteurs, sympathizers, terrorists, civil disturbances, criminals
Level II – significant disruption	Small tactical units, enemy special operations teams, long-range reconnaissance units, mounted or dismounted combat reconnaissance teams, and partially attrite small combat units; irregular forces may include significant standoff weapons threats
Level III – catastrophic impact	Large tactical force operations, including airborne, heliborne, amphibious, infiltration, and major air operations

WARNING

Lower threat levels can still have catastrophic impacts. For example, the 2000 U.S.S. *Cole* attack by two suicide bombers catastrophically killed 17 service members and disabled the ship. Another unfortunate example is the suicide truck bombings of the multinational peacekeeping force barracks (tall buildings) in Beirut, Lebanon, in 1983, which killed 307 people.

3-85. UO compress and amplify the dangers inherent in combat, and are therefore also an assault on Soldier/Marine senses. Commanders increase survivability by ensuring all Soldiers/Marines have the necessary protective equipment and are trained to use it. Short engagement ranges and the use of high explosives in urban terrain compounds shrapnel effects. Sound or blast effects in confined or subterranean spaces can degrade or destroy sight or hearing. Commanders ensure that Soldiers/Marines have standard equipment: helmets, gloves, body armor, hearing protection, and chemical protective over-garments. Commanders ensure availability of other protective equipment and materials such as—

- Ballistic eye protection, goggles, active hearing protection compatible with optics to detect the enemy.
- Knee and elbow protectors and additional ballistic protective material like ballistic blankets or shields.
- Riot control equipment, including batons, facemasks, and shields, and direct fire finding sensors.
- Barrier materiel, including pre-formed concrete barriers, wire, lumber, and sandbags.
- Firefighting equipment, alarms, detectors, and breathing apparatuses for subterranean operations.
- Immunizations, Class VIII supplies, clean water, and nutrition.

3-86. Army/Marine Corps urban operations become more challenging when supporting survivability operations for civilians. In keeping with the fundamental of preserving critical infrastructure, such operations range from arranging mass transit for evacuation, constructing civil defense shelters, or assisting the population in preparing for or reacting to the use of weapons of mass destruction. However, Army/Marine Corps forces are not organized or equipped to support a major urban area's requirements in addition to their own mission needs. Normally, Army/Marine Corps forces render this type of support only as a focused mission using a unique, specially equipped task organization.

KEY TACTICAL CONSIDERATIONS

3-87. The complexity of an urban environment changes and often compresses many tactical factors typically considered in the planning process. Commanders and staffs often consider the following when planning for tactical UO:

- Time.
- Distances and density.
- Combat power.
- Legal support to operations.
- Support units.

TIME

3-88. Urban combat operations compress the time available to think and act at the tactical level. The 1/3, 2/3 rule for planning at echelon still applies; however, UO may benefit from additional time available if operational necessity does not demand rapid action. Operationally, more limited objectives in cities may benefit from the luxury of time to build a larger partnered force. Although not a causal relationship, time and forces dedicated to shaping conditions outside of a city are generally positively correlated to the probability of success and inversely correlated with costs in terms of casualties and materiel. Additional time, especially in limited contingency operations, aids staffs by providing time to achieve the desired end state, whether that

is enemy destruction, control of terrain, regime change, or reconstruction and reestablishment of a functional governance system favorable to U.S. interests. Due to a dynamic battlefield/battlespace in large-scale combat operations, higher level commanders require the ability to exercise command on the move so that decision making can happen quickly. The impact of decisions and the outcome of all operations and can occur in mere minutes. Often the amount of information and the number of execution or adjustment decisions overwhelm the overall ability of information systems to respond (see ADP 5-0 for more information). Commanders have little time to influence tactical actions with resources kept in reserve. Reserves are close to the point of decision so they can respond in time to make a difference. Distributed rapid, mobile C2, ISR, and fire support systems layer the response options available to commanders for shaping UO. Terrain causes C2 challenges that further inhibit commanders from responding quickly to changes in the situation. Small-unit leaders must understand the commander's intent so that they can recognize tactical opportunities and act quickly to take advantage of them (see figure 3-3). Adequate training, education, battle drills, SOPs, use of mission orders, and well-rehearsed actions also provide benefits for gaining UO time efficiency.

3-89. Commanders exercise caution in regard to their own and their staffs' biases when using intuitive decision making for the sake of time. Such human nature risks may include cognitive biases such as enemy force projection or mirroring ("they are like us") or security fallacies ("my defense is strong," "they are weak," or vice versa). Also, unintended time delays or bias in large-scale combat operations may occur from combinations of environmental, operational, or morale issues such as those found in Bastogne and the Battle of the Bulge (Ardennes Counteroffensive) in WWII resulting in a ghost front in and around urban areas. In this example perceived strengths of urban defenses caused operating tempo delays. Commanders in these situations should be cautious to avoid factors that may cause combat complacency. Prior to battles around Bastogne a lack of offensive drive and complacency on both sides occurred after encountering heavy casualties, military and civilian. In addition to the 15,000 men captured by the enemy, the Battle of the Bulge cost the Army 470 Soldiers per day, for a total loss of 19,270 killed and 62,489 wounded over forty-one days of sustained combat. The German Army suffered too, with at least 100,000 soldiers killed, wounded, and captured over the course of the battle. In this case, movement and maneuver ceased for a time, but heavy reliance on fires, intelligence, and sustainment continued to enable consolidation of Allied gains. Commanders blend objective intuitive and analytic decision making using quality staff products and processes, as time allows, to help validate suitable, feasible, or acceptable decisions that are timely and effective. See figure 3-3 and ADP 5-0, ADP 6-0, MCDP 1, and MCDP 6 for more on decision making.

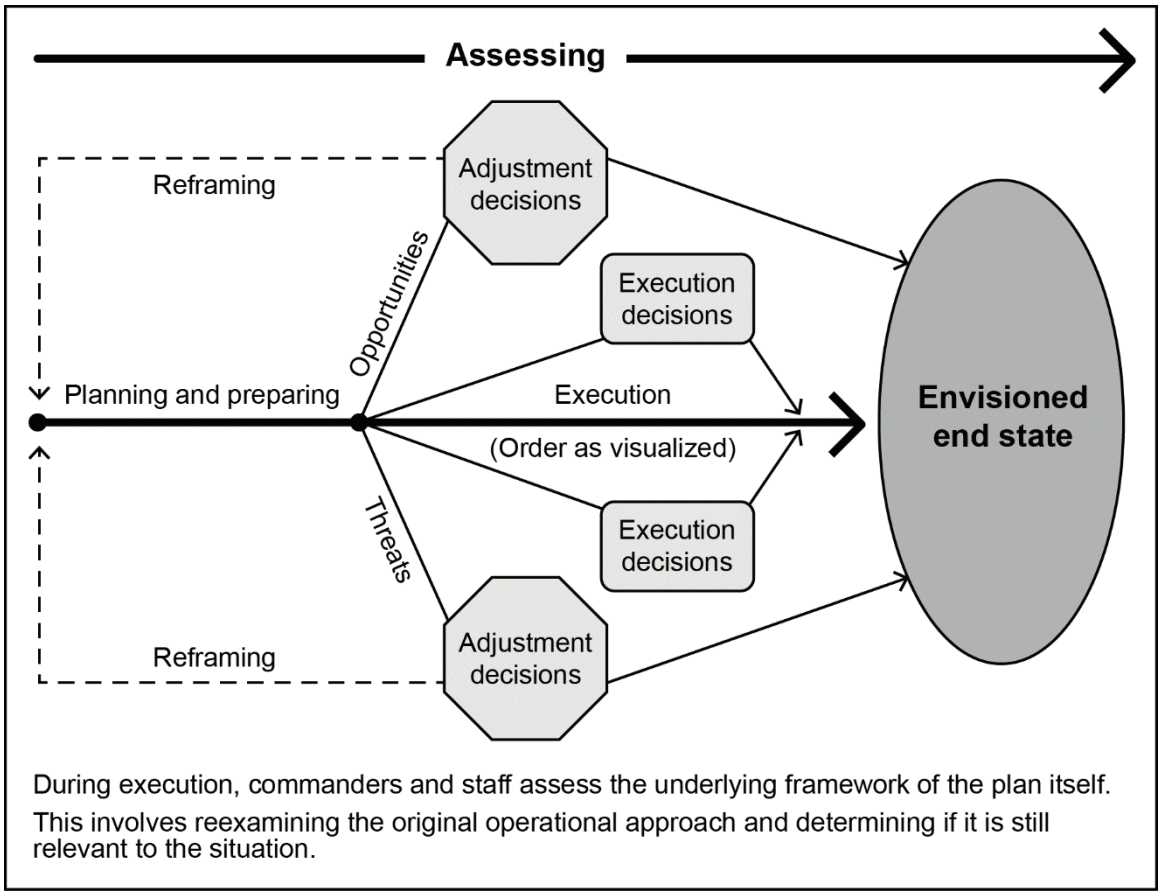


Figure 3-3. Decision making during execution (ADP 5-0)

DISTANCES AND DENSITY

3-90. Commanders and staffs understand the telescoping nature of the battlefield/battlespace, the density of threat forces, and the density of cities and noncombatants. Staffs use operational frameworks to aid UO conceptual visualization by geographically describing AOs in terms of deep, close, support, and rear or support areas. Distances in urban battles correspond to the density of threat forces and noncombatants. Planning also broadly conceives purpose-based urban area frameworks that describe decisive, shaping, and sustaining operations. Finally, in UO understanding the possibility of a more rapid shift between main and supporting effort units helps commanders prioritize resources over time as battles and engagements progress through varying densities (see ADP 3-0 for more information). In large-scale combat operations, increased threat density inside and outside of urban areas means that larger quantities of units may be required to control smaller frontages (see table 1-2 on page 1-16). In open terrain, companies and battalions may control or influence thousands of meters of space, but in UO, large buildings can absorb the efforts of several companies or battalions due to greater structural density. Crowds of thousands can assemble in areas of a few hundred square meters, requiring correspondingly large forces for control. Maximum engagement ranges, as influenced by the urban terrain, are usually closer. Urban areas provide greater density of observation posts and firing positions. Units may require field artillery for direct fire at targets ranging fewer than a hundred meters. In addition to the actual conduct of urban tactical operations, these factors directly affect changes to an urban focus in training, planning, force deployment, and strength.

3-91. Time-distance considerations are important throughout planning cycles and are adjusted throughout UO execution. Although distances are relatively short, the physical nature of the environment drastically changes planning factors for unit movements. For high-intensity urban battles, division and corps higher headquarters may measure unit progress as the advance of a combined arms battalion in mere tens to hundreds

of meters per day, rather than assessing progress in kilometers as in more rural combat. Some UO will require secondary or tertiary clearance for control of internal urban areas bypassed or areas reoccupied by threat forces. Thus, all time and distance calculations that relate to sequencing of forces, synchronizing combat power and other capacities, and making decisions require reevaluation and adjustment based on urban conditions.

3-92. Airspace above the urban area may also be severely congested as large numbers of aircraft (manned and unmanned) and indirect fires compete for the same space. Due to the potential for a high volume of air traffic, commanders and planners pay close attention to the integration and deconfliction of airspace over urban areas. Commanders consider specific techniques and procedures which may include—

- Defining airspace coordinating measures.
- Regulating flight times.
- Creating altitude restrictions.
- Including UASs on the air tasking order.

COMBAT POWER

3-93. The density of ground combat power in a given area increases because of the effect of terrain on ranges. Complex terrain precludes standoff engagement from extended ranges by dispersed forces. Commanders position mobile, protected weapon systems closer together and at shorter ranges to mass effects on the same target. Commanders position armored vehicles, which typically position themselves hundreds of meters from friendly troops and other vehicles, within a few meters of each other to provide mutual support. Targets, which engage in open terrain at thousands of meters, are engaged in tens of meters on the urban battlefield/battlespace. Urban terrain increases the utility and effects of snipers and anti-armor teams, increasing overall combat power. In UO, snipers or hunter/killer teams—well concealed, positioned, and protected—take on significance disproportionate to their combat capability in other situations. See TC 3-22.10 for sniper operations. In open terrain, snipers and anti-tank missile teams influence operations to lesser degrees. The dense clutter of the urban environment also affects target acquisition. Systems, such as those radar-optimized for open terrain, cannot acquire targets as effectively. Decreased acquisition capability equates to diminished combat power. It also requires increasing the density of acquisition systems to compensate for reduced capability. Finally, the density of combat power also increases the vulnerability of Army/Marine Corps forces. Many systems are protected from enemy systems at longer ranges. The number of enemy systems that can threaten U.S. forces at a short range increases dramatically. Lack of dispersal makes it likely that a single enemy can target multiple systems. Some additional TTP, equipment adaptation, or technological augmentations to UO lethal combat power include—

- Reduced caliber direct or indirect fire munitions to limit collateral damage.
- High-energy lasers for lethal engagement; nonlethal lasers for temporary visual incapacitation.
- Nonlethal directed energy millimeter wave, acoustic, or persistent malodorant (a chemical compound with an extreme, temporary, incapacitating stench, that can induce immediate nausea); devices for building clearance, crowd deterrence, warning, control, or reoccupation.
- Active low velocity, projectile-sensing devices, or automated anti-sniper shot detection devices.
- Unmanned aerial or robotic vehicles down to platoon or even squad level.
- Multispectral sensors with optical, radar, infrared, acoustic, or CBRN detection to determine enemy or civilian presence in buildings or subterranean features.

LEGAL SUPPORT TO OPERATIONS

3-94. Commanders consider the legal implications of their actions in a tactical urban environment. They consider legal guidance, the personnel who give legal guidance, international laws, and host-nation laws, and their implications. Lastly, commanders consider the impact of contractors authorized to accompany the force (CAAF).

Legal Guidance

3-95. Legal instruction and training helps commanders and Soldiers/Marines better understand the ROE and make the rapid decisions often required in a complex urban environment. Judge advocates advise, assist, and educate commanders on their understanding of international, domestic, and host-nation legal, political, and cultural laws, regulations, and authorities to empower commanders at the point of decision.

3-96. International, host-nation, and U.S. law and other regulatory guidelines have different jurisdictional restrictions. Often these laws and guidelines vary with regard to applicability in aspects such as time, place, manner, method, and actor. Actions permissible in one jurisdiction may be prohibited in another. Such exceptions and complexities increase requirements for staff judge advocate support and working with civil affairs personnel to identify and resolve technical legal issues. The staff judge advocate actively advises and participates in all aspects of UO from pre-deployment training and initial planning through transition and redeployment. The *Department of Defense Law of War Manual* contains detailed legal guidelines affecting operations.

International and Host-Nation Law

3-97. International law affects operational issues and consists primarily of agreements, treaties, and customary law to include the law of war. Host-nation laws affect local legal issues. The law of war consists of four general principles applicable when conducting any operation but requiring particular attention during UO. Table 3-7 lists and describes the four principles of the law of war: necessity, distinction, unnecessary suffering (or humanity), and proportionality.

Table 3-7. General principles of the law of war

Principle	***Description***
Necessity	The principle that justifies the use of measures needed to defeat the enemy as quickly and efficiently as possible to rapidly achieve military objectives, and which are not forbidden by the law of armed conflict or the law of war.
Distinction	The principle of distinguishing between combatants, weapons, and capabilities as valid military targets (which may be attacked) and noncombatants (who may not be attacked).
Unnecessary suffering	The principle that prohibits the use of weapons, projectiles, or other materials in a manner calculated to cause superfluous injury and unnecessary suffering.
Proportionality	The principle that injury to persons and damage to property incidental to military action, in the circumstances ruling at the time, must not be excessive in relation to the concrete and direct military advantage anticipated.

3-98. International law affects urban operational issues, such as the right of entry, base operations, use of urban infrastructure, and overflight and landing rights. Status-of-forces agreements (known as SOFAs) exist or are negotiated to resolve legal issues concerning Soldiers/Marines (and as necessary, contractors) operating in foreign areas. These issues can include criminal and civil jurisdictions, taxation concerns, and claims for damages and injuries. Unless a status-of-forces agreement or other convention exists, Soldiers/Marines operating in foreign urban areas are subject to the Uniform Code of Military Justice (10 USC 147) and the laws and judicial process of the host nation. During armed conflict, they have the rights afforded to them by the Geneva Convention. Commanders are responsible for understanding the international and host-nation agreements and laws that influence foreign UO. If local law hinders an operation, commanders work through the country team and the senior in-country U.S. coordinating and supervising body (headed by the U.S. chief of mission) to develop a solution.

3-99. Commanders may encounter civilian resistance groups whose actions range from providing enemies with sustainment/logistics support to actively fighting Army/Marine Corps or multinational forces. Friendly forces must defeat such resistance groups in accordance with applicable provisions of the law of war. Effective commanders seek legal guidance from their designated judge advocate concerning targeting, detention, and disposition of persons participating in acts harmful to friendly forces and detrimental to the mission.

Contractors Authorized to Accompany the Force

3-100. CAAF provide various sustainment/logistics functions for the Army/Marine Corps. These functions may range from providing unskilled labor, transportation support, and health care to technical support of sophisticated equipment and weapons systems. Commanders ensure that the CAAF providing support in their AO are not placed in positions of jeopardy and distinguish CAAF as noncombatants to prohibit any intentional attacks. CAAF must understand the risks they assume, however, when they engage in activities that might be misconstrued as direct or active participation in hostilities.

SUPPORT UNITS

3-101. Commanders and planners of UO consider the support units need when conducting tactical UO. Units that may prosecute UO, such as tactical corps and divisions, may have many attached, operational control, direct support, or general supporting organizations that can help set conditions outside of urban areas. With concomitant subordinate units, some support examples include sustainment commands, medical commands, and signal or sustainment battalions. Additional support to task organization can come from multifunctional brigades, including maneuver enhancement, sustainment, field artillery, expeditionary or combat aviation brigades, and functional brigades that include field support, contract support, medical, civil affairs, expeditionary military intelligence, engineer, air defense artillery, theater tactical signal, CBRN, and military police brigades (FM 3-0). Commanders and staffs understand the effects of the environment on Soldiers, equipment, and systems. Using civilian resources and investing U.S. resources requires careful consideration by commanders and staff planners.

General Engineering Support

3-102. General engineering support is essential during UO. This support helps assess, construct, maintain, and restore essential LOCs and urban facilities to sustain U.S. forces, the urban population, or both. Commanders and staff planners carefully consider whether to use civilian resources and invest in Army/Marine Corps general engineering resources. Since all elements of the urban infrastructure interconnect, general engineering support touches each category to some degree. Table 3-8 illustrates how urban-specific, general engineering tasks align primarily with the transportation, distribution, and energy components of the urban infrastructure. These engineering tasks are significant and readily apply to UO. Firefighting, administration and human services, and waste management also provide support units.

Table 3-8. General engineering support tasks

Component	*Construct, Maintain, or Restore*	
Transportation and distribution	• Roads and highways • Over-the-shore facilities • Ports • Railroad facilities	• Airports and heliports • Fixed bridges • Electric power facilities
Energy	• Petroleum pipelines and storage facilities • Water facilities	

3-103. During urban offensive and defensive operations, Army/Marine Corps engineer units perform tasks to sustain or improve movement and maneuver/maneuver, protection/force protection, and sustainment/logistics of U.S. and allied forces. These units maximize the existing urban facilities, host-nation support, civilian contractors, and joint engineer assets. Commanders consider the risks of using urban facilities to support military forces. Using these facilities may negatively affect the population. On the other hand, construction and repair may benefit both Army/Marine Corps units and the urban inhabitants. Restoring the urban transportation network not only improves military LOCs but may also allow commerce to resume. Repairing urban airfields or ports increases throughput capabilities for military supplies, facilitates medical evacuation operations to the support base, accelerates needed relief efforts, and allows international commerce to proceed. Commanders first invest resources and conduct general engineering tasks to restore facilities for civilian use. Such actions stem future drains on operational resources or facilitate a later transition of control back to civilian authorities. For example, repairing police stations, detention facilities,

and marksmanship ranges may help urban governments reestablish law and order after friendly forces complete urban offensive or defensive operations. During stability or DSCA tasks, general engineering often focuses on supporting and assisting the urban population rather than Army/Marine Corps forces.

Firefighting Support

3-104. Fire protection and prevention, as well as firefighting, take on added significance during UO, particularly offensive and defensive operations. Most ordnance produces heat and flames. This, coupled with an abundance of combustible material (buildings, furniture, gasoline, oil, and propane), poses a serious risk to Soldiers/Marines, civilians, and the urban operation. Large shantytowns exacerbate this problem. In highly combustible areas, commanders limit or preclude the use of small-arms tracer ammunition. Fire threats to urban areas can be categorized as—

- **Isolated fires**. Fires restricted to a single structure or a specific area within a structure.
- **Area fires**. Fires that consume two or more structures and may extend to encompass an entire block. Generally, streets serve as firebreaks and help contain the fire within a single block.
- **Firestorms**. The most violent and dangerous fires, capable of rapidly consuming large areas by creating windstorms and intense heat. They are often inextinguishable until they have consumed all available combustible materials.
- **Explosive hazards**. Materials present in areas containing fuels, chemicals, and military explosive hazards.

Administration and Human Services

3-105. When analyzing the administration and human services component of the infrastructure, commanders determine the adequacy of existing general engineering and civilian firefighting supports. A deteriorated or nonexistent infrastructure that cannot support the urban area will likely fail to handle an increased risk from military operations. Commanders provide engineering and firefighting teams to support their own forces and civilians.

3-106. Units will generally not be organized or equipped to fight fires in large-scale combat operations, but should be aware of fires effects to friendly force operations, terrain, civilians, and the enemy. Immobile urban defensive positions, wounded Soldiers/Marines, or prone infantry are vulnerable to fires in surrounding dry, high vegetation or combustible urban construction material. Jungles, forests, grasslands, and some agricultural areas provide ample fuel for fires. Soldiers/Marines can be maimed or killed by fast moving fires escalated by seasonal winds or air-canalizing urban corridors. They may be targeted by the enemy using this insidious, but lethal technique. Fires can have the secondary economic and social effects of destroying a populace's ability to harvest crops for consumption or sell the crops for economic recovery.

3-107. In limited contingency operations a military force may be task-organized with multiple firefighting teams. Even with maximum use of available civilian firefighting assets, only units fight fires in unit assembly or support areas to protect U.S. force equipment, infrastructure, or personnel. Water distribution systems damaged from UO, chemicals and other toxic industrial materials, and hostile activities further complicate and limit firefighting capabilities. Commanders prioritize equipment, facility, and infrastructure protection. They ensure that all Soldiers/Marines receive training in fire prevention and initial or immediate response firefighting. This training includes planning covered and concealed movement, withdrawal, and evacuation routes. Training also includes the ability to identify and remove ignition and fuel sources. Units provide additional firefighting material, such as extinguishers, sand, and blankets. See TM 3-34.30 and the U.S. Department of Transportation's current version of the Emergency Response Guidebook for detailed discussions on firefighting.

Waste Management

3-108. Management of all forms of waste—particularly human, food, and medical or biohazard waste—can become a critical planning consideration for Army/Marine Corps forces. This applies particularly if the urban waste management infrastructure was previously inadequate or damaged during natural disasters or UO. Forces operate in an urban area for an extended period, and a significant number of the urban population remains. Failure to consider waste management adequately may create unacceptable sanitary and hygiene

conditions and, subsequently, increase disease non-battle injury as well as civilian casualties. Conditions become especially hazardous when coupled with decaying remains of humans and animals and an inadequate or tainted water supply.

Chapter 4
Urban Offensive Operations

This chapter outlines the purpose and characteristics of urban offensive operations. Additionally, it provides details of offensive battlefield/battlespace organization, the forms of urban offensive maneuver, types of offensive tasks, and urban offensive considerations.

In war, the only sure defense is offense, and the efficiency of offense depends on the warlike souls of those conducting it.

General George S. Patton Jr.

PURPOSE OF URBAN OFFENSIVE OPERATIONS

4-1. Commanders impose their will on the enemy. At times, a diminished or desperate enemy may retrograde to urban defensive positions to mitigate the effects of a superior force. The offense is the decisive form of war (see ADP 3-90). The offense is the ultimate means commanders have of imposing their will on enemy forces. Army/Marine Corps forces conduct the offense in large-scale combat to either: (1) defeat or destroy enemy forces, (2) gain control of terrain, resources, or population centers, or (3) both. Commanders may also conduct offensive operations to deceive or divert an enemy force, develop intelligence, or hold an enemy force in position by isolating them.

4-2. The necessity of urban offense often aims to destroy, defeat, or neutralize an enemy force where it is found in the city if it cannot be drawn out and defeated in more advantageous terrain. Additionally, achieving large-scale urban offensive success in exceptionally large, dense, or influential cities with populations over 750,000 people can produce positions of advantage with provincial, state, national, regional, or even global reach effects and have significant implications to winning major operations or campaigns. Offensive large-scale combat operations in large parts or entireties of cities may be unilateral or partnered, but involve massive amounts of regional- or national-scale security and military forces. As in the example vignette in the seizure of Aachen below, these forces use multiple divisions or corps and even field armies with functional or multifunctional brigade and joint service support. However, UO offensive purposes may be to achieve a more limited effect related to the population or infrastructure of the urban area.

4-3. Offensive urban operation success greatly depends upon identifying and correctly executing the right defeat mechanism or combination of defeat mechanisms during design methodology planning phases. A *defeat mechanism* is a method through which friendly forces accomplish their mission against enemy opposition (ADP 3-0). Commanders describe a defeat mechanism as the physical, temporal, or psychological effects it produces. Operational art formulates the most effective, efficient way to defeat enemy aims. Physically defeating an enemy deprives enemy forces of the ability to achieve those aims. Temporally defeating an enemy anticipates enemy reactions and counters them before they can become effective. Psychologically defeating an enemy deprives the enemy of the will to continue the conflict. The defeat mechanisms are destroy, dislocate, disintegrate, and isolate. See ADP 3-0 or FM 3-0 for additional information on use of defeat mechanisms.

4-4. U.S. forces may conduct offensive operations in a more limited role to secure a port or a communications center, eliminate a threat to a friendly government or the population, or deny the threat use of urban infrastructure for a time. This mode of urban operation usually occurs when the aided partner host nation still retains its authority and requests assistance to its own capabilities. Due to its compressed nature, urban offensive combat imposes two unique demands different from other operational environments: internal superstructure spaces and engagements among the population. Like combat in other confined environments, offensive UO still require shaping operations; close joint combined arms integration at battalion, company,

and platoon levels; precise fires; maneuver; use of special equipment; and provision of enhanced sustainment/logistics to win. In limited contingency operations, UO commanders should use a combined arms and whole-of-government approach for successful urban offensive operations that allow consolidations of gains and transition to stability.

Aachen, WWII, 1994: 'Knock Em' All Down

After the breakout of First Army from Normandy via Operation COBRA VII Corps (1st Infantry and 3rd Armor divisions) penetrated the German Westwall after efforts to bypass Aachen were limited by First Army's logistic constraints and operational pause to resupply. Later the 30th Infantry Division would penetrate north of the Westwall to form an incomplete encirclement of Aachen and First Army had set the stage to defeat Axis forces in the area-sized city of 250,000 former residents. Aachen had been ordered evacuated twice before major combat in the city commenced, first by German forces, but around 1,000 residents remained upon combat commencement. The city contained remnant German regular and nonregular forces and held key lines of communication objectives that would facilitate Allied pursuit east toward Cologne and Berlin. Although not originally an objective for seizure, the control of Aachen was facilitated by multiple divisions' encirclement, a German Army in retrograde, and further facilitated by eleven battalions of artillery. See figure 4-1 for the operation's progression and figure 4-2 (on page 4-4) for a detailed portrayal of the search and attack. Although limited infantry forces were available, large-scale ground combat forces and use of combined arms teams planning and execution enabled success over a superior defending German force of approximately 5,000 soldiers.

Tactical success in the battle occurred even with limited infantry resources (26th Infantry Regiment was at reduced strength) which faced a fortified area city (see table 1-2 on page 1-16) and enemy relief actions. Success was enabled by detailed ground and air reconnaissance to map German positions, use of concentration, surprise, copious available artillery that covered combined arms teams. Over two days prior to the assault 12 battalions of artillery delivered over 10,000 rounds, and over 300 air sorties delivered over 120 tons of ordnance on Aachen targets. Engineers assured mobility in reducing obstacles, and careful planning eliminated resistance without excessive losses. Allied forces also anticipated and prepared for the civilian presence, prisoner of war handling, and the movement of supply vehicles amid rubble at an early stage.

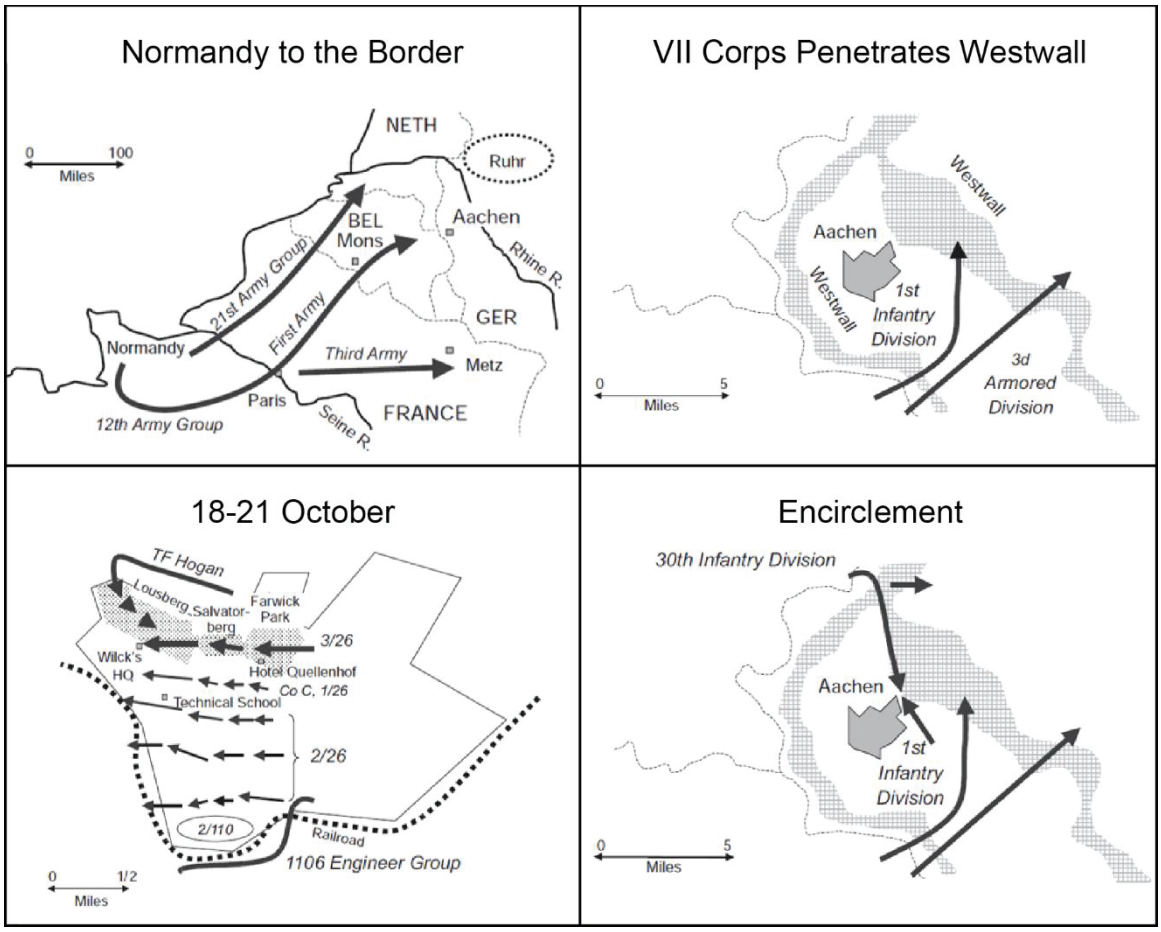


Figure 4-1. Clockwise from top-left. 1. Operation COBRA breakout, approach to Aachen; 2. VII Corps Westwall penetration; 3. First Army completed encirclement; 4. Search and attack of Aachen

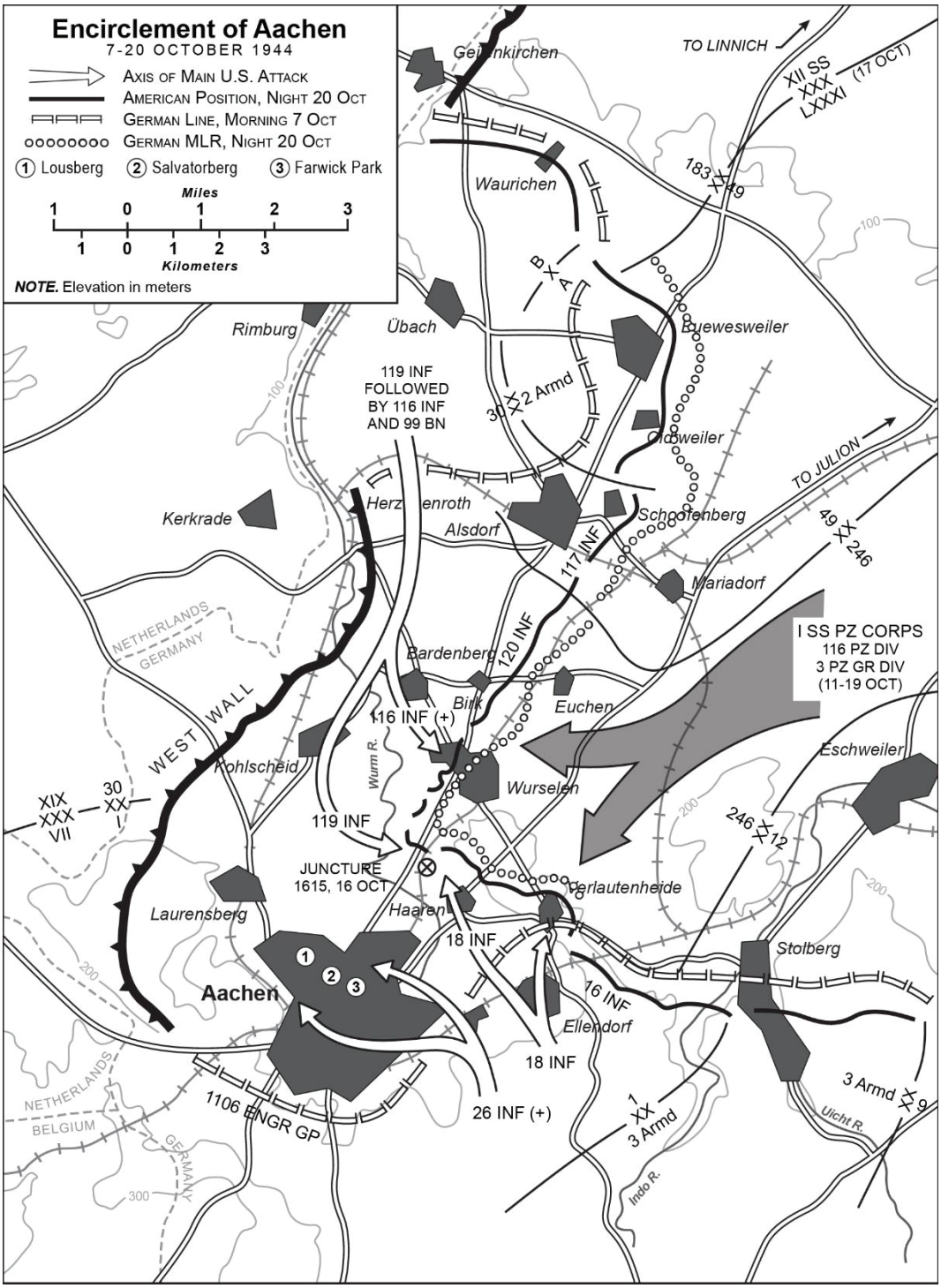


Figure 4-2. Encirclement of Aachen

4-5. As an element of decisive action, commanders plan and execute offensive UO that acknowledge concurrent, but varying, levels of defense and a return to stability. In abiding by the law of armed conflict, they set conditions and design operations or campaigns that prosecute UO in a manner that will not disable a return to relative peace. They use effective task organization as conditions change to enable civil host-nation or military governance as they consolidate gains. History shows that virtually all urban areas that have been the objective of military operations will be returned to and rebuilt by a civil populace. For example, to

facilitate recovery in 1950, United Nations Civil Assistance Corps Korea and U.S. Army health and welfare detachments helped consolidate gains by securing rear areas, preventing disease and starvation after major offensive operations in the Korean War. Therefore, early shaping and prevention activities require plans that enable follow-through of return to security, restoration of services, and competent military or civil governance apparatuses, whether by U.S. force or host-nation means (see FM 3-57 for civil affairs operations). Offensive UO in and around cities enable the security necessary in these governance centers after major combat operations to facilitate a transition to consolidation of gains.

CHARACTERISTICS OF OFFENSE

4-6. The military structure in large-scale combat operations is the main U.S. apparatus for following through with martial force and supervision of reconstruction, should the need arise. All offensive tasks, including those in urban areas, contain the characteristics of surprise, concentration, tempo, and audacity. See ADP 3-90 for details on offensive tasks. Commanders incorporate these characteristics in their plans for offensive UO to achieve their mission while also considering minimalizing collateral damage.

SURPRISE

4-7. Commanders surprise enemy forces by attacking at a time or place or in a manner in which enemy forces did not prepare or expect. Commanders achieve surprise by showing enemy forces what they expect to see while actually doing something different. Correctly assessing an enemy commander's intent and having a clear sense of timing are necessary to achieve surprise. In offensive UO, surprise greatly aids decisive action, but units should be prepared for a more rapid transition between supporting offense, defense, and stability actions. Mission orders, timely, relevant, accurate, and predictive intelligence, well-trained and rehearsed units, and flexible branch or sequel plans enable momentum in these transitions. The subterranean features of most urban areas enables surprise and sustainment possibilities to friendly and enemy forces alike, which are not possible in most other environments. Examples that are more recent include North Korean military subterranean preparations, as well as Palestinian forces use of vast tunnels against Israeli Defense Forces. Urban operations seek to set operational conditions outside of subsurface spaces. Challenges include limited or blocked freedom of maneuver. See ATP 3-21.51 for more information on subterranean operations.

4-8. Attacking before the enemy expects it, from unexpected directions, or in an unexpected manner against areas that the enemy believes will provide sanctuary gives positional advantage. Usually, urban areas that meet this criterion are not easily accessible. Army/Marine Corps forces launch attacks against these urban areas differently. These attacks occur through vertical assault using airborne, air landed, or air assault forces; amphibious assault; or penetration followed by a rapid and deep advance. Other UO offensive forms that retain surprise include infiltration and civil uprising. Respective examples include large-scale urban infiltration actions by Viet Cong in Vietnam's Hue City in 1968 and limited contingency operations by the Islamic State in Marawi, Philippines in 2017. All five types of joint entry attacks into or around a city aim to achieve surprise and deny the enemy time to prepare and establish a defense. Surprise in a major urban operation can prevent the enemy from falling back to occupy prepared positions in and around an urban area.

4-9. At tactical levels, forces achieve surprise by attacking using creative methods. They achieve surprise by using a range of echeloned combined arms and joint conventional forces and SOF and by leveraging U.S. forces' extensive information-related capabilities. Primarily using IO/OIE of deception, electromagnetic warfare, and operations security, offensive IO/OIE help achieve surprise at all levels. Attacking at night or in unexpected weather conditions surprises the threat and maximizes the Army/Marine Corps forces' training, C2, and technological advantages.

CONCENTRATION

4-10. Concentration is massing the effects of combat power in time and space at the decision point to achieve a single purpose (see ADP 3-90 for more information). Dispersed forces can converge and concentrate combat power effects in nonlinear and noncontiguous AOs without being co-located. In UO, the attacking force concentrates the effects of combat power at the point and time of its choosing. The compartmented effects of urban terrain can rapidly disperse and dissipate combat power. Commanders position follow and support and follow and assume forces to consolidate tactical gains, taking into account that the environment

typically hinders rapid repositioning of those forces. Such effects work equally against defending and attacking forces. However, in a well-prepared defense, the defender often has the advantage of interior lines. The defender may reinforce or reposition forces more quickly using covered and concealed routes such as sewers, tunnels, or prepared holes made in walls. UO attacks seek to gain and maintain security, standoff, and interior lines to prevent disintegration of units, concentrate combat power, and prevent meeting engagements or spoiling attacks. Successful UO synchronize air and ground maneuver at decisive points on the ground. To achieve proper synchronization and precise effects, commanders consider the unique time and distance relationships impacts of the operational environment.

AUDACITY

4-11. Audacity is a willingness to take calculated, yet bold risks in order to gain advantage. Commanders display audacity by accepting risks commensurate with the value of their objectives, but use of bold maneuvers does not necessarily imply absence of a plan. UO challenge this by significantly increasing the risks of every action, making bold decisions more difficult in a complex environment. In an urban attack, commanders mitigate risk by thoroughly understanding the physical terrain and its effects on friendly forces, enemy forces, and civil populations. A large-scale combat example of audacity includes the shift of the entire direction of the axis of advance of Third Army during WWII as in the Brittany Ports vignette below. In this way large-scale forces can rapidly change the timing, direction, or task organization of forces via flexible branch and sequel plans to boldly achieve objectives. Commanders and staffs study the terrain's complexity to reveal its advantages. Well-trained Soldiers/Marines—confident in their ability to execute urban offensive operations—foster audacity.

TEMPO

4-12. *Tempo* is the relative speed and rhythm of military operations over time with respect to the enemy (ADP 3-0/USMC Dictionary). Controlling tempo is necessary to retain the initiative. Tempo in UO differs from those operations in more open terrain. Merely conducting operations more rapidly without achieving desired effects on the enemy wastes resources. A UO may be executed more slowly or with shaping, sustaining, or economy of force actions to create conditions and resources outside of the city that are necessary to secure objectives within or the city itself. For example, conditions include achieving the proper force ratios or facilities to deal with noncombatants or detainees. Enemy urban defense aims to take advantage of capability differences to disrupt the rate of execution and overall tempo of the major operation. Complexity and increased risk in an urban environment require a deliberate plan by commanders, unless they see an absolute value in trading the time required for planning for the initiative gained by a hasty attack. Commanders conducting major operations that include urban areas strive to maintain an active tempo in offensive operations by synchronizing combat power and anticipating enemy reactions. The Brittany Ports example in FM 3-06, 2006, page 7-2 demonstrates changing directions and quantities of forces to maintain tempo. The urban operations environment requires fully using synchronized staff sections and processes to continue transition of operations between current, future, and plans sections in division and higher formations. A high tempo allows forces to achieve surprise and quickly gain positions of advantage. High tempo also denies the enemy rest or the ability to synchronize their combat power. Commanders of major operations face the challenge of controlling operational tempo and not allowing the different tempo of UO to impede other operations.

4-13. Once Army/Marine Corps forces initiate tactical offensive operations, they cannot allow enemy forces to set the tempo. Maintaining the desired tempo requires a deliberate balance of preparation, speed, and security. In terms of unit fatigue, resource consumption, and contact with the threat, the tempo of most urban offensive operations may be rated as very high. A high tactical tempo in urban offensive operations challenges logisticians to provide for the increased consumption of munitions and rapidly exhausts Soldiers'/Marines' physical capabilities. In terms of distances traveled and time consumed to achieve objectives, the tempo of many urban offensive operations may be relatively slow. The urban battlefield's/battlespace's density concentrates activity and consumes resources in a relatively small area. Although the tempo may seem excruciatingly slow at higher levels of command and exceeding fast at lower tactical levels, in reality, the natural tempo of UO is not faster or slower than other types of operations, merely different. Creating and operating at a tempo faster than an opponent can maintain, however, favors forces better led, trained, prepared, and resourced.

The Operational Context of Urban Operations Brittany Ports, August to September 1944

Commanders cannot allow urban operations to disrupt the tempo of an overall campaign. The plan for the invasion of Normandy, France in June 1944 was meticulously developed. The plan not only addressed the invasion itself but also contained detailed planning for the campaign to follow. A major concern of the detailed campaign planning was logistics. To address this critical concern, and specifically the problem of ports to supply the Allied armies once ashore, pre-invasion planning called for major ports—Brest, Lorient, and Saint Nazaire—of the French province of Brittany to be objectives of General Patton's Third Army, once it was activated.

In August 1944, two months after the successful Normandy invasion, the operational situation significantly differed from that envisioned by the D-Day planners. General Montgomery's 21st Army Group was still fighting in the Bocage of Normandy. In contrast, General Bradley's 12th Army Group had just achieved a major breakthrough at Saint Lo, secured the Cotentin Peninsula, and reached the city of Avranches. Here, Generals Bradley and Eisenhower encountered a decision point—whether to adhere to the original plan and turn west with Patton's forces and secure the peninsula or exploit the breakout at Saint Lo and turn east to disrupt German defenses.

Ultimately, they compromised. General Middleton's VIII Corps was tasked to secure the peninsula and the bulk of Patton's Army—three Army corps—turned northeast to exploit the operational collapse of the main German defenses (see figure 4-3).

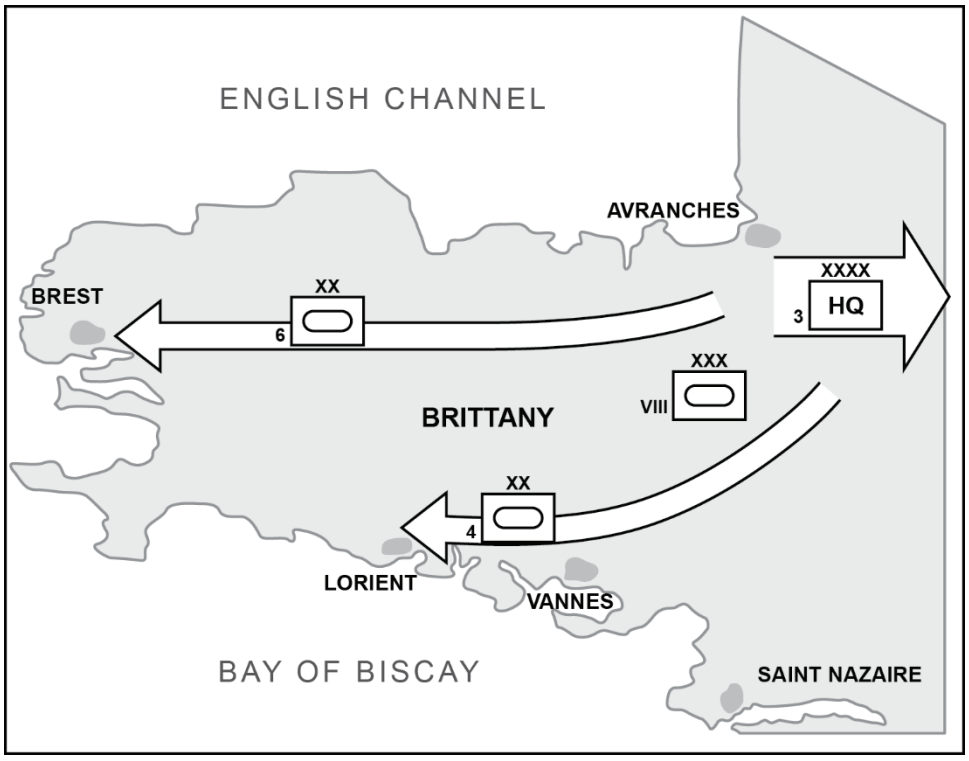


Figure 4-3. Initial attack in Brittany

Middleton's corps sprinted into the peninsula with the 4th and 6th Armored Divisions leading the way. However, poor communication, disagreements between commands, and contradictory orders caused the corps to hesitate before pushing the two divisions to continue to exploit toward the ports. As a result, the 6th Armored Division missed an opportunity to seize Brest against light resistance by one day, making the operation much more costly. The 4th Armored Division, after capturing the smaller port of Vannes, was also frustrated on its approaches to Lorient. The VIII Corps' understanding and reaction to 4th Armored Division's failure to seize the ports helped them maintain their tempo. On the other hand, the Americans' lack of seizure of all four ports may have later contributed to Patton's 3rd Army Lorraine offensive running out of fuel. Eventually the Red Ball Express was established because the Allies could not move enough fuel to 3rd Army's rapid eastern advance, as fuel from Brittany Ports was diverted to General Montgomery who had yet to secure the northern axis Scheldt River estuary in Antwerp.

The 6th Armored Division turned over the attack at Brest to the 8th Infantry Division and then relieved the 4th Armored Division at Lorient. The 4th Armored Division moved to rejoin the rest of the 3rd Army exploiting to the east and north. Ultimately, Brest fell to the 8th Corps on 19 September after a 43-day siege by three infantry divisions. The victory yielded 36,000 German prisoners of war. However, the German defense and demolitions of the port left the port without an impact on the logistics situation of the Allies. Brest cost the U.S. Army almost 10,000 casualties and significant supplies. The experience convinced commanders to surround and bypass the other Brittany ports. Lorient and Saint-Nazaire remained under German control, in Allied territory, until the war ended 10 months later (see figure 4-4).

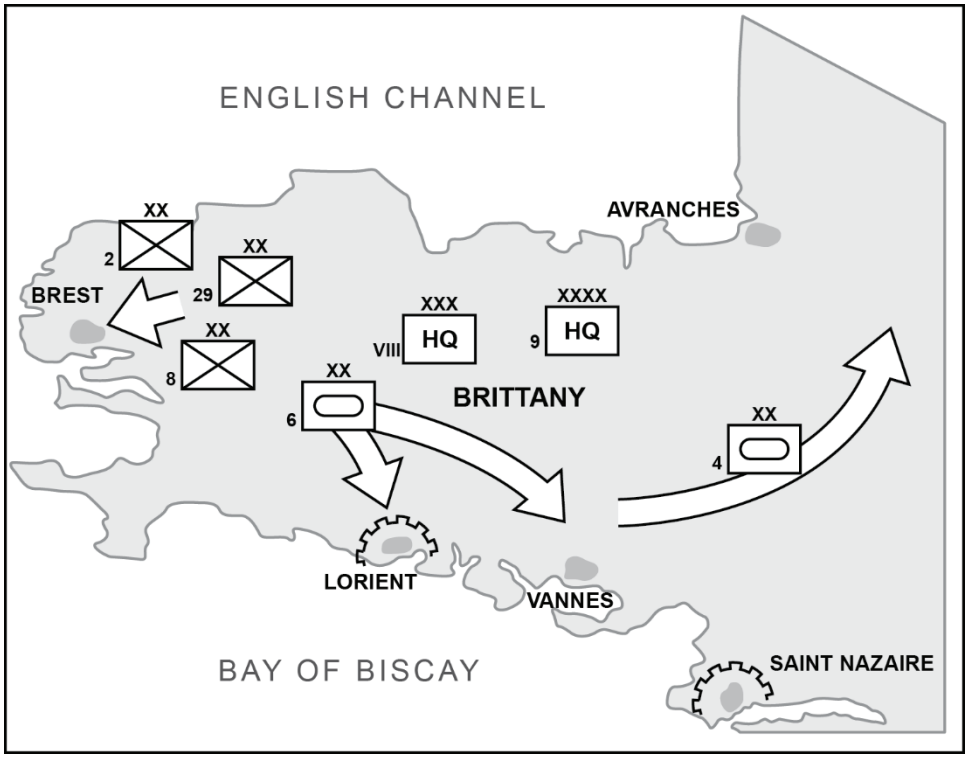


Figure 4-4. Subsequent disposition of forces in Brittany.

4-14. Offensive UO can continue even during darkness, but the quality of transitions and battle handover actions is critical. Past environments influenced the tempo of historical operations and forced commanders to conduct urban offensives cyclically. They used night and other periods of limited visibility to resupply, rest, and refit forces. This battle rhythm resulted in forces attacking a rested enemy in well-prepared positions. While this method is an option to commanders, as seen in periods of the battle for Fallujah in October 2004 during Operation IRAQI FREEDOM, deliberate and continuous operations have greater potential for more rapid success. Army/Marine Corps forces can continue operations at night to leverage limited visibility capabilities, increase situational understanding, and continuously exploit and consolidate gains. To overcome the physical impact of the environment on Soldiers/Marines, commanders rotate fresh forces forward, continuing offensive operations at night. In this case, the force that fights in daylight becomes the reserve, rests, and conducts sustaining operations to prepare for future operations. Morale and health issues such as hot meals with adequate nutrition, hygiene, and rest away from the front lines are key to improve human performance in the high stress environment of offensive UO.

4-15. Tempo is not the same as speed. Offensive operations balance speed, security, standoff, interior lines, and firepower. Commanders continually plan to secure flanks, lines of supply and communication, and airspace as the operation progresses. Mission orders allow subordinate units to make the most of tactical advantages and fleeting opportunities.

MINIMIZE COLLATERAL DAMAGE

4-16. Urban offensive operations require an expanded view of risk assessment for collateral damage. When considering risk to joint and multinational forces, commanders also analyze risk to the area's population and infrastructure. This comprehensive analysis includes the second- and third-order effects of significant civilian casualties and infrastructure damage. Collateral damage influences world and domestic opinion of military operations and thus directly affects ongoing operations requiring greater restraint and precision of effects. Excessive collateral damage hinders consolidation of gains and transition to stability operations. Collateral damage can create generational resentment and fuel subversion or insurgency. The density of civilian populations in urban areas and the multidimensional nature of the environment make it more likely that even accurate attacks with precision weapons will injure noncombatants. While preparatory military information support operations and nonlethal measures such as curfews, martial law, or evacuations can greatly reduce civilian casualty risks, some degree of collateral damage may be unavoidable. Risk can also be mitigated prior to combat throughout units' training cycles by consistently emphasizing precision, accuracy, proportionality, and necessity in direct engagement UO training. Collateral damage can be mitigated through follow-on operations to rebuild, repair, or replace what was damaged post combat as part of consolidating gains. That said, the long-term negative impacts of collateral damage in a populated area can overshadow any short-term positive effects on the enemy. Leaders must constantly assess the impacts of their actions and weigh the risks against the potential gains.

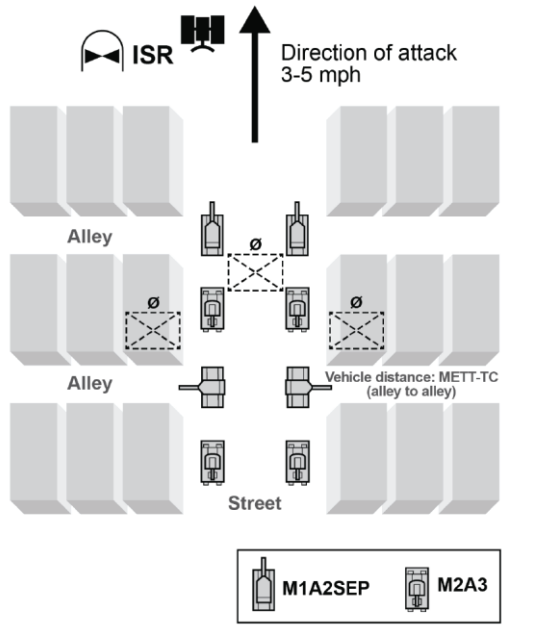
OFFENSIVE BATTLEFIELD/BATTLESPACE ORGANIZATION

4-17. Urban offensive operations, like all operations, are arranged using the overall battlefield/battlespace organization of decisive, shaping, and sustaining operations. UO require combined arms teams, and often demand joint service cooperation and joint combined arms approaches to most effectively bring all assets to bear when securing a city. Additionally, as less tanks or heavy armor capabilities are available in the Marine Corps, their urban operations will rely more heavily on U.S. Army tank or armored formations paired supported by covering infantry. For instance, due to the high likelihood of enemy anti-armor forces or adversary tanks use in cities, U.S. platforms such as Strikers, Light Amphibious Vehicles and even Bradley Fighting Vehicles cannot effectively substitute for tanks such as the M1 Abrams. Use of poor substitutes for tanks will result in increased losses and no gain in combat power. An example includes the catastrophic losses Russian tank forces encountered from anti-armor ambushes during their first attempt to seize Grozny from Chechen separatists in 1995.

4-18. Commanders may use additional frameworks of main and supporting efforts, and the geographic rear, support, close, deep area frameworks to help describe and visualize an UO OE. Figures 4-5 through 4-8 demonstrate some ways that main and supporting combined arms strength approaches can multiply combat power. The Marine Corps employs both spatial and purposed-based battlespace frameworks of deep, close,

rear and decisive, shaping, and sustaining, respectively. Each operation is important to the success of an urban offense, and usually two or more of these operations occur simultaneously. However, a *decisive operation* is the operation that directly accomplishes the mission (ADP 3-0). The Marine Corps uses *decisive action*—any action the commander deems fundamental to achieving mission success (USMC Dictionary). Decisive operations/decisive actions in urban offensive operations are attacks that conclusively determine the outcome of an urban engagement. Decisive operations/decisive actions in urban battles may shift between echelons, units, lines of effort, or lines of operation at varying times during the larger engagement, battle, or campaign.

4-19. Effective urban attacks strike at a series of decisive points and lead to neutralizing the enemy's COG or rendering their force combat ineffective through their destruction. The COG may be control or security of the city, a key part of the city, its surroundings, destruction of the enemy therein, or both. Shaping operations in urban offensive operations create the conditions for decisive operations/decisive actions. Divisions and corps conduct much of the shaping effort to coordinate urban area isolation, facilitate critical elements for protection of the force, and synchronize fixing the enemy, depending on the size of the AO or city. These echelons determine the types of combat, service or support functions needed throughout the phases of the UO—including engineer, military police, electromagnetic warfare, sustainment—and draw support from other theater-level commands. Sustaining operations in urban offensive operations ensure freedom of action and help maintain tempo by providing adequate logistics, personnel services, and health service support. They occur responsively forward near the forward line of troops to prevent culmination, and throughout the AO for the duration of urban offensive operations.



TF 2-5 CAV, 1BCT, 1CD unit used this technique in Al Tharwa during OIF as a refined movement-to-contact formation resulting in a 'rolling battleship' of armored vehicles in a box formation. They were supported by infantry inside of M2A3 Bradley Fighting Vehicles, behind, and to the flanks of the formation. They initally moved buttoned up in a pure mechanized/armor formation, and would short-halt in rectangular formations of at least six armored vehicles.

Moving vehicles parallel to each other created a set of interior lines to protect the exposed flank of the opposite vehicle and allow a full three-dimensional, 360-degree coverage of the constantly shifting OE. The commander's independent sight systems offset limited visibility of the protective qualities of the vehicles moving with hatches fully closed. The second sight afforded another field of view, allowing the gunner to primarily observe enemy alleys or engage targets.

Additional keys to success:

- ❑ **Plan for vehicle recovery**
- ❑ **Plan for CASEVAC**
- ❑ **Plan for sustainment**

BCT	brigade combat team	METT-TC	mission, enemy, time, troops available, terrain, civil considerations
CASEVAC	casualty evacuation	Mph	miles per hour
CAV	cavalry	OE	operational environment
CD	cavalry division	OIF	Operation IRAQI FREEDOM
ISR	intelligence, surveillance, and reconnaissance	TF	task force

Figure 4-5. Rolling battleship

4-20. Armor, isolated or unsupported by infantry, is vulnerable to enemy infantry anti-armor from an abundance of covered and concealed positions in urban terrain. In armor pure formations, unnecessary equipment is removed from the bustle rack and vehicles move with vulnerable hatches or openings in a closed position to allow infantry or follow-on vehicles to service targets via coaxial machine gun or small-arms fire against threats that have climbed on top of tanks or within their dead space. Vehicle commanders use sights, optics, ISR, UAS, and acquisition or vehicle protection systems independent from vehicle gunners to

maximize protected observation and communication with supporting infantry to engage targets. Standard engagements are typically 200 meters or less—proximity to targets allows for successful coaxial machine gun engagements.

4-21. Additionally, two or more vehicles should be used in order to cover flanks and above-grade sectors of fire for which partner vehicles next to buildings cannot elevate their weapons high enough to cover higher portions of buildings. Vehicle commander and gunner independent viewers scan opposite rooftops, or forward and to the flanks of the gunner's primary sector, to allow immediate target handoff. Drivers determine positioning and speed off the front left vehicle and work as integral members of the team to identify targets, maintain proper dispersion, and move to predetermined locations. At short halts, drivers establish a point of domination by immediately moving to over watch the closest alley or side street or the most likely enemy avenue of approach. Crews and commanders are cautious of main gun sabot or petal fallout areas and risk to ground forces or civilians, recommending positioning of infantry away from a direction of fire fans out to 1000 meters.

4-22. In various stages of battle, as the preponderance of threats shift between infantry/antiarmor and IED/enemy armor, units may shift the lead elements between U.S. force infantry or armor to prevent catastrophic kills from enemy rocket propelled grenades, IEDs, or mortars. They also plan for and use engineers, route clearance, scouts, snipers, fires, IO/OIE, electromagnetic warfare, and counter radio-controlled improvised explosive device electronic warfare to the maximum extent available to enable protection and maximize freedom of action and maneuver to defeat the enemy. Adopting a heavier stance in lead elements encouraging the use of tanks to lead combat patrols allows units to take the brunt of the blast and fragmentation effects of IEDs laid throughout the route. Surviving first contact is essential in UO. Crews may identify, through GPS and the commander's independent thermal viewer, most IED detonation wires running from hidden IEDs; however, mine plows or rollers are beneficial for lead elements and should be considered to counter non-command detonated enemy emplaced munitions. Once identified in advance, crews may disable the IEDs by destroying the detonation wires with direct fire or by directly firing at an IED's points of placement. See ATP 3-21.8 and ATP 3-20.15 for more information on infantry and armor movement techniques.

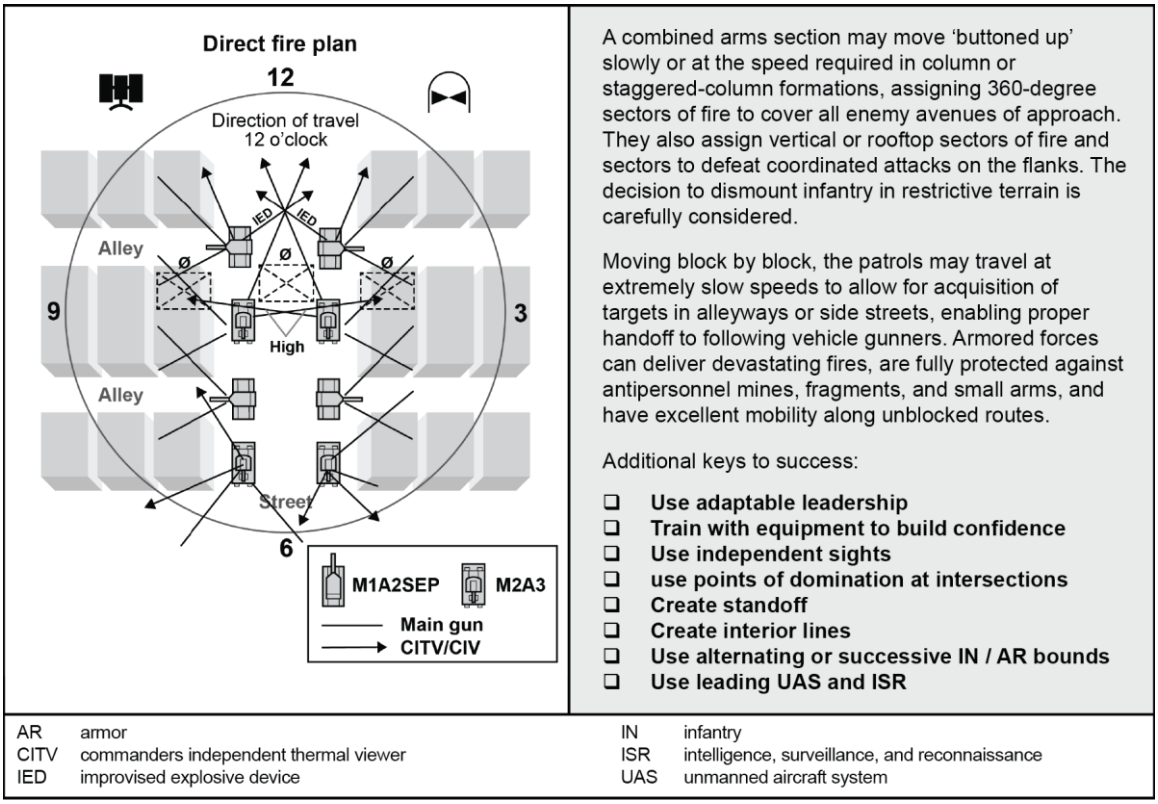
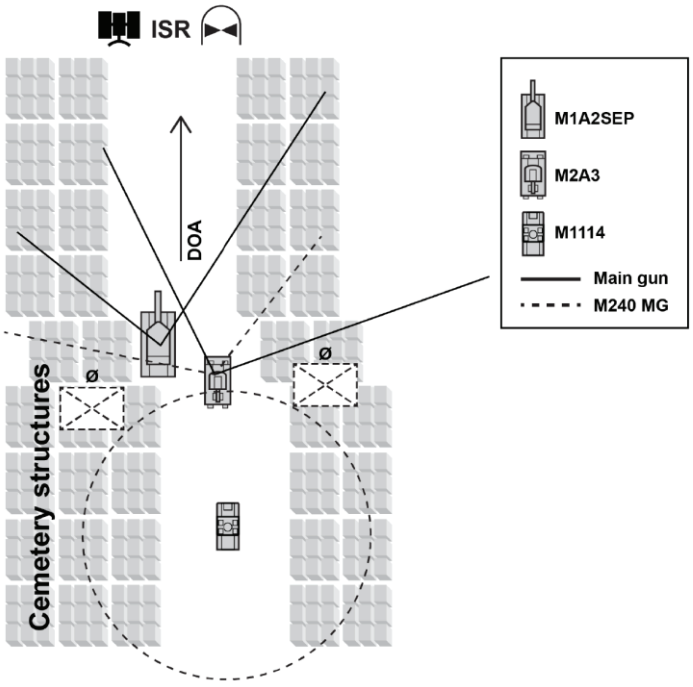


Figure 4-6. Combined arms section 360 teaming

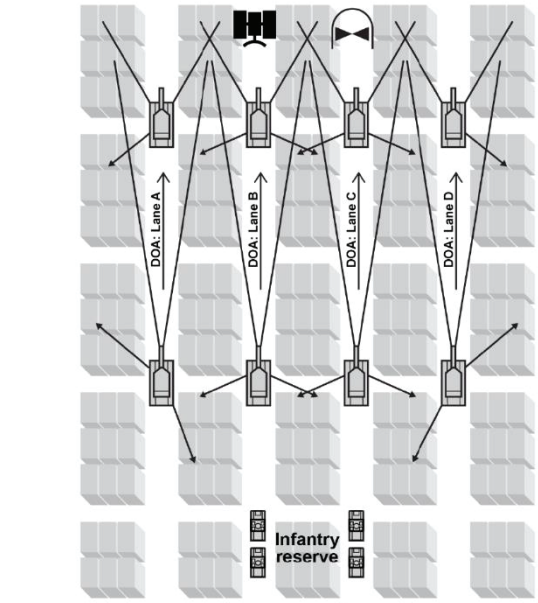


A combined arms section can be a preferred maneuver element. The section normally includes a tank and Bradley attacking abreast, trailed by an M1114 with small arms crew served weapon capability. The tank may advance slightly ahead of the Bradley to absorb the initial energy of enemy ambushes. Ambushes and enemy engagements range from IEDs, mines, and RPGs, to mortars and snipers or other combined arms or armored forces. The Bradleys can protect flank and elevated threats, and an M1114 or other similar vehicle can provide local and rear security for lead vehicles using its M240 machine gun.

Dismounted Soldiers/Marines from the Bradley and M1114 can disperse to the flanks of the section to eliminate enemy attempting to get into blind spots of the armored systems. Restrictive, complex terrain can prevent visual contact with friendly forces and crews may be required to maintain voice contact to keep vehicles and dismounted movement synchronized. Situational awareness and unit FLOT reporting is critical in the clearance of indirect, rotary, and fixed wing fires as well as 81/120mm mortars and 155mm artillery.

DOA	direction of attack	ISR	intelligence, surveillance and reconnaissance
FLOT	forward line of troops	MG	machine gun
IED	improvised explosive device	RPG	rocket propelled grenade

Figure 4-7. Combined arms section



Application of armor in urban environments adapt to the unit's AO. To maximize the capabilities of the armor packages and the independent sights, section level lanes or directions of attack can be used to move to "points of domination" (intersections) to maximize the ability to traverse the turret and use the CITV. The first tank orients low, forward, and to an unprotected flank. The second tank two blocks back, clears forward and high over the lead tank.

The CITV would cover an unprotected flank and rear. In an adjacent, parallel t block over, a second section-level direction of attack is occupied by a wing tank section. Lateral dispersion of forces in extremely canalized terrain creates a set of interior lines that affords lateral security. Up to two platoons or more can be put on line, along four lanes, with infantry (in M1114s or M2/M3s) in a reserve role behind the center echelon tank sections.

AO	area of operation	CIV	commanders independent viewer	UO	urban operations
CITV	commanders independent thermal viewer	DOA	direction of attack		

Figure 4-8. Lane attack approach

DECISIVE OPERATIONS/DECISIVE ACTIONS

4-23. A tactical commander fights decisive urban combat, whereas commanders conducting a larger major operation influence urban combat by setting the conditions for tactical success outside and inside of the city. Planning efforts address the large-scale combat requirement for corps and divisions to conduct operations in their deep areas to create conditions that allow subordinate BCTs to conduct successful combat operations in the close area. Often, while still complying with the law of war and law of armed conflict, this may still unfortunately entail destroying much of the city in order to save it from enemy use. Large-scale urban operations can result in the need for significant or total destruction of a city, particularly when aligned to the achievement of higher operational goals, and when within the authorized ROE. Higher commanders directly influence urban offensive operations by identifying what is essential and conducting shaping operations to control or otherwise gain influence over it. This can be done through operational maneuver; coordinating joint fires; integrating conventional, multinational, or SOF; and provisioning for sufficient sustainment/logistics to prevent culmination. Using large-scale combat conventional military capabilities against threats in urban areas will normally destroy significant portions of the city that the threat occupies. In counterinsurgency or limited contingency operations, forces apply combat power in precise and decisive ways to destroy the enemy, degrade their influence, and protect the population. These methods often preserve more of the city, but may not always be feasible given the situation.

4-24. Tactical urban offensive operations are composed of many small-unit actions and tactics of squads, platoons, and companies seizing their objectives concurrently, in sequence or simultaneously. Single clearances of urban areas may not defeat the enemy. For example, in Fallujah, Iraq in 2004, search and attack units consolidated gains by clearing major areas of the city at least three times in an approximately two week period. Continuous pressure degrades an enemy's ability to secure itself. Units are most successful when they are task-organized, equipped with maximum available combat power at the lowest levels, and given sufficient

guidance and controls to prevent fratricide or civilian casualties along with mission orders and sufficient authority to quickly and decisively defeat the enemy. Restrictive, compartmented terrain and urban obstacles to C2 of small units often restricts the higher commander's ability to influence operations. Commanders influence the actions of subordinates by—

- Clearly identifying the decisive points leading to the mission achievement, objective, or COG.
- Using mission orders with sufficient authority and freedom of action enhancing controls.
- Developing effective task organizations with units that are trained, integrated, and rehearsed.
- Synchronizing decisive, shaping, and sustaining operations.
- Managing transitions.

4-25. Like all operations, successful decisive operations/decisive actions in UO depend on identifying decisive points so forces can destroy or neutralize the enemy's centers of gravity. For example, the infrastructure that protects a lesser isolated enemy force may be the infrastructure they are using for defensive positions. The infrastructure may have to be destroyed to destroy the enemy force or deny them the terrain. In irregular warfare, decisive operations may often include competition with the enemy to gain favor and influence of the same urban population (see JP 5-0). Seizing a key structure or system that makes the enemy's defense untenable, interdicting a key resupply route that effectively isolates the enemy force from the primary source of support, or isolating the enemy so that its force can no longer influence friendly activity may be more effective than the enemy's outright destruction.

4-26. Divisions conducting urban operations require additional resources. These resources include support in the form of linguists, HUMINT personnel, and UASs. Engineering assets will be at a premium—the task organization of a force executing a decisive operation/decisive action may require a one-to-one ratio of engineer units to combat units. Recently, Operations EAGLE STRIKE (Mosul, Iraq) and ECLIPSE (Raqqa, Syria) in 2016/2017, demonstrated the need for integrated ISR, assured power for command posts, and close coordination as the U.S. enabled host-nation forces via SOF, fires, and sustainment to isolate ISIS and use significant air power to liberate, but unfortunately destroy, most of those cities. As designed by host-nation agreements, there was little in the way of a follow-on stability urban operation. In large-scale combat operations, corps and higher engineering support may be necessary to meet agreement requirements and repair vital and specialized infrastructure. Sometimes a tailored and dedicated support battalion or group provides anticipated support to a displaced and stressed civilian population. Finally, divisional civil affairs units may require significant augmentation to manage MGO, NGOs, and civilian government issues, if planning to consolidate gains through large-scale stability operations or activities after a successful offense.

4-27. Successfully conducting decisive operations/decisive actions in the urban environment requires properly synchronizing the application of all available combat power and may even require national authorities. For example, in the 2017 battle for Marawi, Philippines, Filipino SOF and Army forces requested and received political declaration of martial law around the city and obtained internet restriction authorities, denying Facebook accounts for ISIS fighters from Indonesia. In large-scale combat operations, UO conditions may consist of requirements for basing, support, overflight, or transport authorities and agreements from other nations. Army/Marine Corps forces have a major advantage in C2 of operations. Commanders use this advantage to attack numerous decisive points simultaneously or in rapid succession. They also use it to attack each individual decision point from as many directions and with as many different complementary capabilities as possible. Commanders must completely understand urban environmental effects on themselves, the terrain, the enemy and warfighting functions to execute the bold operations required. Synchronized information-related capabilities and multiple maneuver actions overwhelm the enemy's decision-making capacity. Units that do not react effectively are more easily isolated and destroyed.

SHAPING OPERATIONS

4-28. A *shaping operation* is an operation at any echelon that creates and preserves conditions for success of the decisive operation through effects on the enemy, other actors, and the terrain (ADP 3-0). Shaping operations that support the urban attack separate into those focused on isolating the enemy and all others. Army/Marine Corps forces isolate the enemy to ensure successful urban offensive operations. Depending on the enemy reaction to isolation efforts and the nature of the enemy COG, this task may become decisive. Other shaping operations include those common to all offensive operations and others unique to UO. See FM 3-90-1 for details on shaping operations.

4-29. IO/OIE in the offense is particularly important to shaping operations in cities. Divisions and corps help set conditions for the unique urban shaping operations BCTs may encounter, which include securing a foothold in a well-fortified defensive sector, securing exterior lines and key infrastructure, or protecting and facilitating evacuation of noncombatants. Because of the nature of operations in urban areas, shaping operations may consume a larger proportion of the force than during other operations and may occur both inside and outside the urban area. By successfully isolating an enemy force, the friendly force needed to conduct the type of offensive operation (movement to contact, attack, exploitation, or pursuit) within that cordon may be comparatively smaller.

SUSTAINING OPERATIONS

4-30. A *sustaining operation* is an operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power (ADP 3-0). Commanders conducting urban offensive operations ensure security of the sustaining operation and bases. In many situations, LOCs and sustaining operations may be the greatest vulnerability of the attacking force. Forces supporting an urban offensive are tailored to the urban environment and are well forward. Ideally, the supporting forces closely follow the combat forces and move within or just outside the urban area as soon as they secure an area. Operating in the urban area during offensive operations allows the sustaining operation to take advantage of the defensive attributes of the environment for security purposes.

4-31. Counterattacks against sustaining operations may take the form of enemy special operations activities aimed at the LOCs leading to or within the urban area. Choke points such as intersections, bridges, tunnels, and mountain passes can be lucrative targets and may require combat forces to protect them. Enemy forces attack LOCs to blunt the Army's/Marine Corps' combat power advantage in the urban area.

4-32. Attacks against LOCs into the urban area may also attempt to isolate offensive attacking forces from their sustainment/logistics base. Isolated forces in an urban area are greatly disadvantaged. Usually, sustainment/logistics forces will need to maximize planning and combat power to defend themselves as they conduct UO sustaining operations. However, as in the example of Major General Scott's 1847 port seizure of Veracruz, after establishing a foothold and seizing Mexico City, his division was forced to commit over 25 percent of his force to securing supply lines as he moved inland in response to regular and irregular threat attacks. Commanders plan and aggressively execute strong measures to protect their LOCs as they consolidate gains, even if this requires additional allocated combat power to execute their offensive operation.

4-33. Sustaining operations anticipate the volume and unique logistics requirements of UO. Specialized individual equipment, such as protective gear, grappling hooks, ladders, pads, and breaching equipment, is identified and provided to troops in quantity before needed, ideally as they train before operations. Forces stockpile and distribute their attacking units' special munitions requirements including small arms, explosives, and grenades of all types and illumination, obscuration, and precision artillery or mortar munitions. Forces supply transport to move the resources rapidly forward, both to and through the urban environment. Sustaining operations cannot rely on operational pauses to execute their tasks. Commanders continuously supply resources and capabilities to the most forward combatants as offensive operations advance.

4-34. Sustaining operations also anticipate the growth of sustainment/logistics requirements as Army/Marine Corps forces secure and take responsibility for large portions of an urban area. A successful Army/Marine Corps urban offensive operation must take this growth into account. These operations reveal the civilian population in formerly enemy occupied areas. A successful offensive operation may attract the civilian population from sections of the urban area where the Army/Marine Corps is not operating to areas occupied by Army/Marine Corps forces. Rural populations may migrate to the urban area as the result of successful offensive operations outside of the city. Increased casualties will require additional forward-placed health service support units, hospitals, and equipment to facilitate U.S. force MEDEVAC and CASEVAC, secondarily care for civilian casualties as cessation of major urban combat allows, and care for enemy prisoners of war as required.

4-35. Army/Marine Corps forces may be required to take initial responsibility to provide for the urban population. Commanders integrate this concern in their sustainment/logistics planning and organization from the start of the planning process. To be successful and efficient in such a situation, sustainment/logistics

planning includes Army/Marine Corps civil affairs specialists and local government representatives. Commanders also integrate and consult with the international community and NGOs that might augment or supplement Army/Marine Corps sustainment/logistics capabilities.

FORMS OF URBAN OFFENSIVE MANEUVER

4-36. Like other environments, forms of offensive maneuver in urban areas include envelopment, turning movement, frontal attack, penetration, and infiltration. U.S. Marine Corps forces add flank attack as an additional form of maneuver. Traditional types of offensive operations are movement to contact, attack, exploitation, and pursuit (see ADP 3-90 and MCWP 3-01). Multiple forms of maneuver can be used in a single offensive urban operation. Offensive operations are followed by other types of operations. These can be planned as branches for contingency options to change unit mission, orientation, or direction of movement based on anticipated events, opportunities, or enemy disruptive actions or reactions. Offensive UO can also be planned as a sequel to a base plan as units experience success, stalemate, or defeat (see JP 5-0). These traditional forms and offensive operation types apply to urban combat. Some have greater application to an urban environment than others do. Moreover, success belongs to commanders who imaginatively combine and sequence these forms and types throughout the depth, breadth, and height of the urban battlefield/battlespace. This is true at the lowest tactical level in battles and engagements and at the operational level (division or corps operations) during major operations or campaigns.

ENVELOPMENT

4-37. Envelopment is the ideal maneuver for isolating enemy elements in the urban area or isolating the area itself (see figure 4-9). Units that can achieve a double envelopment or complete encirclement gain significant advantage in exterior line freedom of movement, time and place of subsequent attacks, and restricting options for defending forces. See chapter seven for additional discussion of the tactical enabling task of encirclement operations. However, encircling forces anticipate shifts in enemy positions and the intent to conduct a breakout. In an urban area, friendly forces use buildings as obstacles to aid in isolating the enemy, but also control surface and subsurface avenues of approach. A deep envelopment effectively isolates defending forces and sets the conditions for attacking the urban area from the flank or rear. Enveloping an objective or enemy force in an urban area is more challenging since buildings impede achieving speed of maneuver in the environment. Vertical envelopment or amphibious operations, however, work effectively when fires effectively suppress or neutralize antiaccess or area denial capabilities. Additional considerations include—

- Urban areas provide opportunities for potential subterranean envelopment.
- Terrain complexity slows movement and makes enveloping forces more vulnerable to interdiction and isolation, increasing risk of defeat in detail.
- Terrain can mask enemy positions and make it more difficult to determine if a potential vertical envelopment landing zone is safe before committing aircraft.

TURNING MOVEMENT

4-38. Turning movements can be the most effective form of maneuver in major UO to defeat an enemy force while minimizing damage to the urban area (see figure 4-10). By controlling essential sites and resources that influence the urban area, Army/Marine Corps forces can force the enemy to abandon the urban area entirely. These movements may also force the enemy to fight in the open to regain control of LOCs. Divisions or corps help set conditions for BCTs in UO by identifying what is essential to the population, the enemy, and friendly forces that may be leveraged to facilitate a turning movement and gain position of advantage for force enemy retrograde. Enemy forces can then typically be defeated to greater effect in rural areas, and units may branch or sequel to a pursuit.

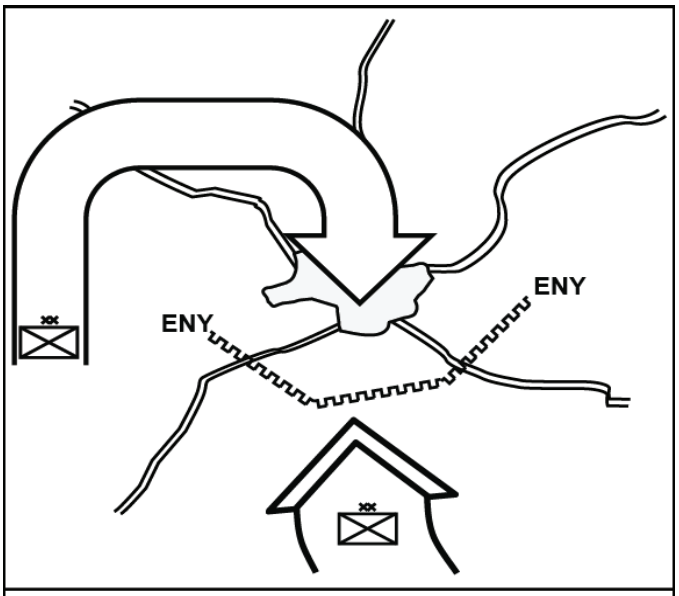


Figure 4-9. Envelopment isolates a city

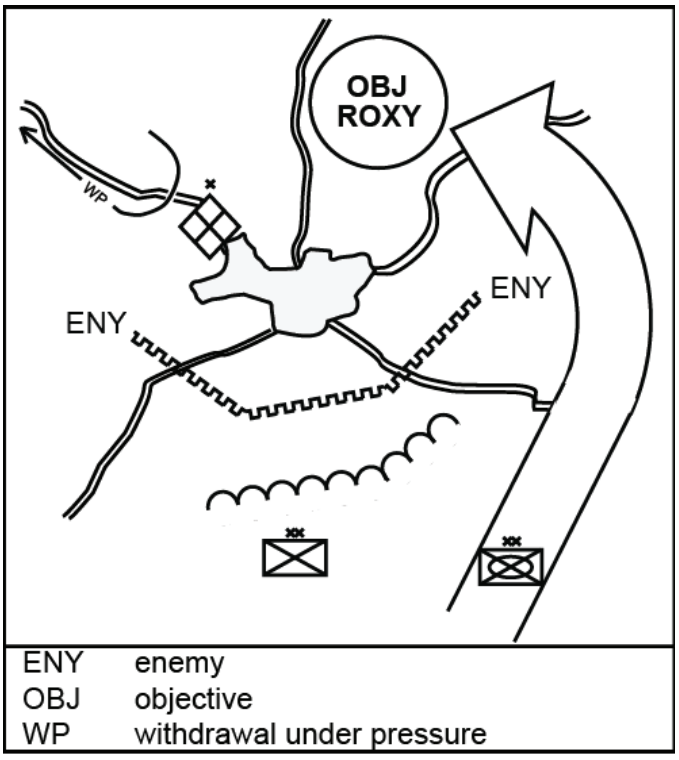


Figure 4-10. Turning movement

INFILTRATION

4-39. Infiltration secures key objectives in the urban area while avoiding unnecessary combat with enemy defensive forces in conditions favorable to them (see figure 4-11 on page 4-18). This technique seeks to avoid

the enemy's defense using stealthy clandestine movement through all spaces of an urban area to occupy positions of advantage in the enemy's rear or elsewhere. It depends on the careful selection of objectives that threaten the integrity of the enemy's defense and a superior COP. Well-planned and resourced deception operations may potentially play a critical role in masking the movement of infiltrating forces. The difficulty of infiltration attacks increases with the size and number of units involved. When Army/Marine Corps forces face a hostile civilian population, successful infiltration becomes more challenging. Under such circumstances, infiltration by conventional forces may be impossible. Armored forces are generally inappropriate for infiltration operations. However, they may infiltrate large urban areas if the enemy lacks established strength and time to prepare defenses. Additionally, urban terrain affects infiltration with the following considerations:

- Buildings and other structures reduce general line-of-sight from defensive positions.
- Buildings and subterranean infrastructure provide for covered and concealed movement.
- Higher population densities can help conceal movement, but this is more often used against friendly forces when limited forces, such as SOF, are capable of blending into the population.
- The prevalence of lights and density of the population limits the advantages of night movement.

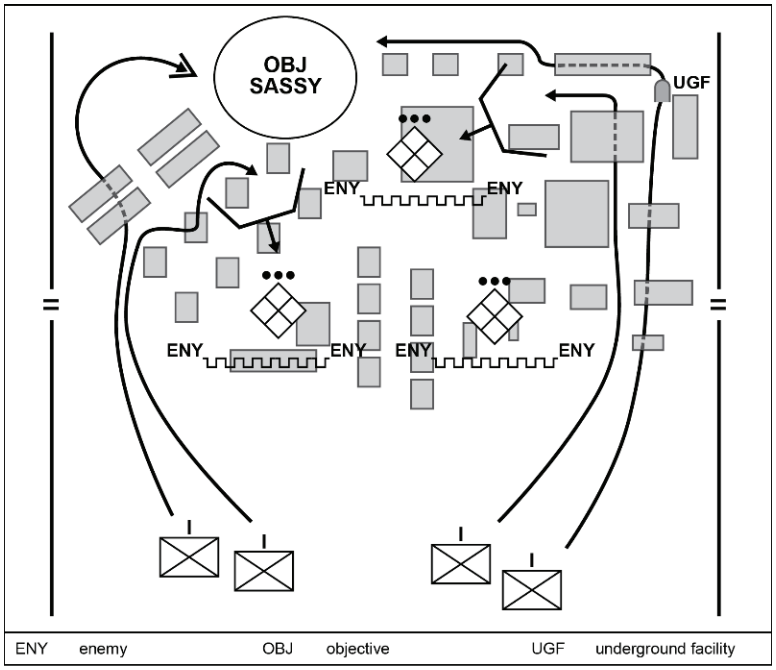


Figure 4-11. Infiltration.

PENETRATION

4-40. Penetration can be a useful form of attack against a prepared and comprehensive urban defense (see figure 4-12), but is often more costly to friendly forces if conducted against a prepared enemy defense and requires more preparation or shaping operations than other forms. Penetration focuses on successfully attacking a decision point or on segmenting or fragmenting the defense, thereby weakening it and allowing for piecemeal destruction. The decision point may be a relatively weak or undefended area that allows Army/Marine Corps forces to establish a foothold for attacks on the remainder of an urban area. Ideally, in urban combat, multiple penetrations in all dimensions focus on the same decision point or on several decisive points simultaneously. In urban combat, units secure the flanks of a penetration attack and position resources to exploit the penetration once achieved. Although penetration always uses a combined arms team, the potential speed enhances armor and mechanized forces rapid penetrations, firepower, and shock action.

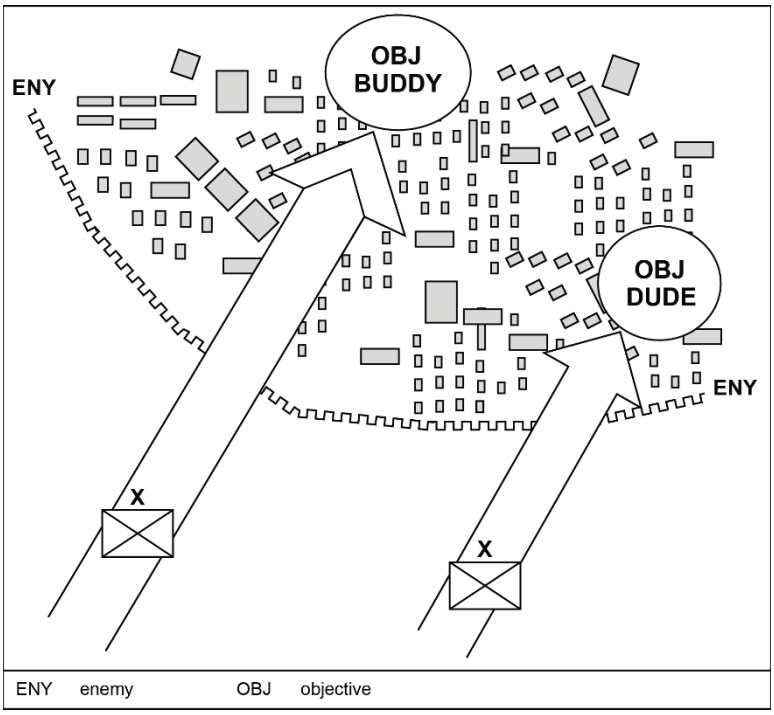


Figure 4-12. Penetration

4-41. Effective commanders consider required actions and resources that apply following a penetration. A successful penetration can result in the rapid collapse and defeat of the enemy defense and complete capitulation. A secondary effect of success may cause enemy forces to withdraw but leave significant stay-behind forces or to disperse into the urban population as an insurgent-type force. If the enemy disperses, then Army/Marine Corps forces may transition to a hasty defense to secure the area or continue search and attack or pursuit options. Securing portions or all of an urban area requires occupation by Army/Marine Corps forces, which control the area to prevent re-infiltration of enemy forces. Securing an area increases manpower requirements. In some situations, commanders may determine that conducting methodical clearance operations from the outset is less costly for Army/Marine Corps forces. Such a course of action frontloads time and resource requirements.

FRONTAL ASSAULT/FRONTAL ATTACK

4-42. For the commander of a major urban operation, the frontal assault/ frontal attack is generally the least favorable form of maneuver unless the enemy is at an obvious disadvantage in organization, numbers, training, weapons capabilities, and overall combat power (see figure 4-13 on page 4-20). Frontal assaults in Army terms differs as a form of maneuver as units may conduct forms of maneuver in either offense or defensive settings. Frontal attacks require many resources to execute properly. These attacks risk dispersing combat power into nonessential portions of the area and exposing more of the force than necessary to enemy fires. In urban offensive combat, forces most effectively use the frontal attack at the lowest tactical level once they set conditions to ensure they have achieved overwhelming combat power. The force of the frontal attack overwhelms an enemy with speed and coordinated and synchronized combat power at the point of attack. The assigned frontage for units conducting an attack on an urban area depends upon the size and type of the buildings and the anticipated enemy disposition. Generally, a company attacks on a one- to two-block front and a battalion on a two- to four-block front based on city blocks averaging 191 yards (175 meters) wide. Translated to a BCT, this would result in an approximate 6 to 12 block frontage, and for a division approximately 18 to 36 block frontages depending on the enemy situation and urban density.

FLANK ATTACK

4-43. For the commander of a major urban operation, the flank attack is a U.S. Marine Corps movement of an armed force around a flank to achieve an advantageous position over an enemy (see figure 4-14). Flanking is useful because a force's offensive power is most often concentrated in its front. Therefore, to circumvent a force's front and attack a flank is to concentrate offense in the area when the enemy is least able to concentrate offense. A flank may be created by using fires or by a successful penetration. Usually, a supporting effort engages the enemy's front by fire and maneuver while the main effort maneuvers to attack the enemy's flank. This supporting effort diverts the enemy's attention from the threatened flank. While it may be used at higher echelons, usually flank attacks are used in echelons at the battalion level and below in situations where an envelopment is not feasible.



Figure 4-13. Frontal assault/Frontal attack

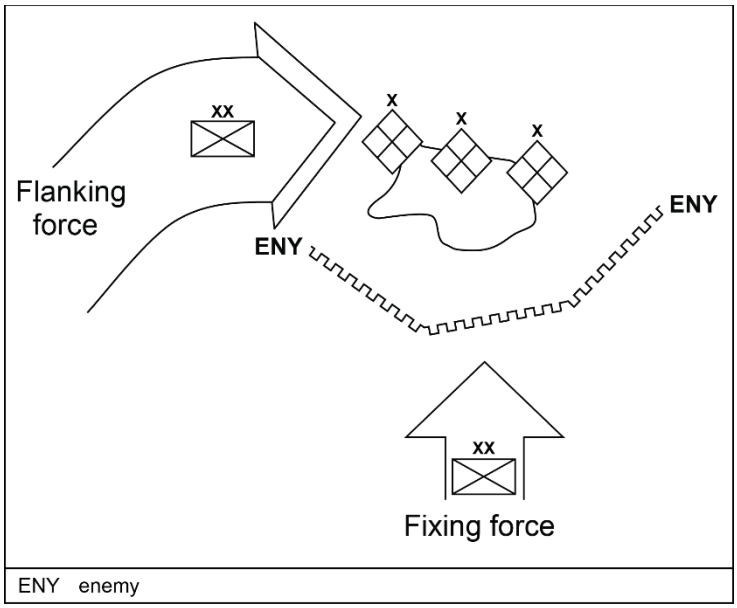


Figure 4-14. Flank attack

TYPES OF OFFENSIVE OPERATIONS

4-44. Commanders consider types of offensive operations in an urban environment. These tasks include movement to contact, attack, exploitation, and pursuit for offensive operations. See FM 3-90-1 and MCWP 3-01 for detailed tactics on the types of offensive operations.

MOVEMENT TO CONTACT

4-45. In an urban area where the enemy situation is vague, Army/Marine Corps forces conduct a movement to contact to establish or regain enemy contact and develop the situation. A movement to contact in an urban area occurs as both sides establish their influence or control over a contested urban area. There are two subordinate Army variations of movement to contact—cordon and search and search and attack. The Marine Corps does not recognize cordon and search as a type of movement to contact, but as a variation of an encirclement. The Marine Corps recognizes the approach march and search and attack as the types of movement to contact, per MCWP 3-01. The situation determines which movement to contact is appropriate. A conventional force-oriented movement to contact often occurs when both friendly and enemy conventional forces attempt to establish control simultaneously. Initially, neither side is defensive. The friendly force aims to quickly locate and fix the enemy while establishing control of the urban area and its key infrastructure. Once an enemy force makes contact, the commander has five options—attack, defend, bypass, delay, or withdraw. The search and attack technique works well when a smaller enemy has established a noncontiguous defense in an urban area. This operation is characterized by the friendly point defense of key infrastructure, robust reconnaissance, and rapidly concentrated combat power to fix and defeat or to destroy enemy resistance once located. Commanders may choose to use the cordon and search method of movement to contact when more time or resources are available, or greater control of the urban area is required. Both forms of movement to contact benefit from a detailed reconnaissance effort, real-time or very recent intelligence, and from better surety of assessment of where the enemy is located.

4-46. A meeting engagement results from the movement to contact. It occurs when a moving force that partially deployed for battle collides with and engages an enemy at an unexpected time and place. Meeting engagements are more likely in urban areas due to shortened lines of visibility or engagement, and the many covered or concealed routes available to enemy forces. In a meeting engagement in an urban area, the unit that reacts most quickly and decisively will likely win. Units set conditions for this by establishing and maintaining adequate reconnaissance, security, and advanced guard and flank forces to provide early warning. Rapid and accurate decision making depends heavily on understanding the nature of the urban area

and its impact on operations. Thus, in a meeting engagement, commanders quickly assess the impact and role of all components of the urban environment (terrain, infrastructure, and population) on the operation. To this end, responsive reconnaissance is important. Reconnaissance facilitates accurate decision making regarding where to attack, where to defend, and how to allocate resources.

ATTACK

4-47. The attack is the most common and likely offensive operation that Army/Marine Corps forces conduct in an urban environment. Variations of the attack are ambush, counterattack, demonstration, feint, raid, and spoiling attack. The commander's intent, mission, and operational variables guide which of these variations of attack to employ. Commanders conducting major operations and commanders of large tactical units execute deliberate attacks. In the urban environment, units larger than a battalion rarely conduct hasty attacks. Hasty attacks are common below company level as units use their initiative to take advantage of tactical opportunities. However, larger units conduct hasty attacks when enemy defenses are disrupted or unprepared, when taking advantage of an unexpected situation, and when preventing the enemy from establishing or reestablishing a coherent defense.

EXPLOITATION

4-48. Exploitation follows a successful attack to disrupt the enemy in depth. Commanders of major operations consider focusing exploitation attacks on urban areas. An enemy defeated in an attack attempts to rally units, reinforce with reserves, and reorganize defense. With established communications and information capabilities, a transportation network, and defensive attributes, the urban area becomes the natural focal point to reestablish a disrupted defense. By establishing urban centers as the objectives of the exploitation, commanders deny the enemy the sanctuary it needs to reorganize and reestablish its defense. The exploitation focuses on the urban area and the remnants of the enemy. A successful exploitation to seize an urban area preempts the defense and denies the enemy the full advantages of urban terrain.

4-49. Commanders conducting exploitation acknowledge the vulnerability of their forces to counterattack and ambush in urban areas. An urban area provides ideal cover and concealment to hide enemy reserves, reinforcements, or reorganized forces. Constricted routes into and through the urban area potentially make an exploitation force a dense target and limit its maneuver options. Robust and well-coordinated reconnaissance, tactical dispersal, and use of advance guard security forces protect against this enemy tactic.

PURSUIT

4-50. The pursuit destroys enemy forces attempting to escape. It focuses on the enemy and not on urban areas. When conducting a pursuit, Army/Marine Corps forces move through undefended urban areas and, if possible, bypass those in which enemy forces successfully take refuge. The enemy attempts to use urban areas to disrupt the pursuit and permit its main body to escape. Commanders prevent escape by denying the enemy the time to establish forces in urban areas that cannot be bypassed. Employing aviation forces for attack, reconnaissance, and transportation is essential to execute a successful pursuit around and through urban areas. See ATP 3-06.1/MCRP 3-20.4/NTTP 3-01.04/AFTTP 3-2.29 and ATP 3-04.1 for further considerations.

CONSIDERATIONS OF URBAN OFFENSE

4-51. Urban offensive considerations vary depending on the situation and scale of the operation. Some considerations applicable to major operations that include an urban area apply to the tactical level. Commanders use operational art and the operations process to lead their staffs in the MDMP/MCPP and troop leading procedures to develop and execute unique UO courses of action supported with appropriate branches and sequels. All UO are unique because each city is different. Issues addressed at the operational level in one situation may be addressed in a new situation only at the tactical level. Under the right circumstances, a UO consideration becomes an operational issue, a tactical issue, or a combination of the two. A useful planning and execution consideration model discussed in the next section and in subsequent chapters is understand, shape, engage, consolidate, and transition frameworks. (See Appendix A for a detailed example of an urban offensive operation.)

UNDERSTAND

4-52. The first consideration—and a continuing requirement throughout the conduct of UO—is understanding the situation. Units, staff, and commanders consider implications of operations deeply through space and time as UO COAs are developed. For example, destruction of parts of the infrastructure by necessity earlier in phasing of operations may cause problematic second- or third-order effects later in the urban operations, such as destroying a key bridge or pipeline. Commanders base this understanding on detailed information on the operational and mission variables surrounding the particular urban area. Since the enemy often dominates or controls most of the urban area during the planning phase of offensive operations, achieving an accurate understanding of the urban environment will be difficult. An early, deep, comprehensive, and continuous information collection effort in support of a rigorous IPB process overcomes this obstacle and helps commanders visualize, describe, and direct courses of action continually throughout UO. Due to the changing environment as offensive UO execution occurs, and in addition to adequate branch and sequel plans, leaders use mission orders and subordinate trust gained through operations and training to allow maximum freedom of action to achieve offensive UO initiatives and consolidate gains.

Information Collection and the Intelligence Process

4-53. Commanders of a major operation in an urban area target reconnaissance deep into the AO and area of interest through the multi-domain extended battlefield. They apply information collection resources against the urban area, often leading to decisive ground operations (see figure 4-15 on page 4-25). The information collection effort and the understanding it supports continue as long as the urban area remains in the AO. Commanders prioritize and staffs act on prioritized information requirements through appropriate sequencing in space and time based on need. Commanders of major operations initially direct information collection assets on those CCIRs that support countering enemy reconnaissance and determining whether to conduct urban offensive operations. Once decided, information collection resources shift, especially to ground unit or human based assets in a D3SOE or communication environment.

4-54. Commanders build an initial database for information collection. Senior commanders use national and strategic sensors, requested through the appropriate joint force commander. With the full use of these systems, commanders build and use the database for analyzing significant aspects of the terrain; key infrastructure considerations; the status and disposition of the population; and the size, type, disposition, and intentions of threat forces in the area.

4-55. Simultaneously, multiple information sources contribute to the database. Intelligence personnel collect, process, vet, store, display, exploit, and disseminate relevant information on large urban areas through open and classified resources. Only when trained intelligence personnel complete this process is the data or information collected considered intelligence. These information sources include—

- Historical research.
- Travel brochures that include cultural information and recent maps.
- Classified debriefings of diplomats, businesses, Department of Defense personnel, and allies.
- Military maps and special geospatial products of the urban area.
- Previous intelligence assessments of the country, government, and population.
- Reachback to appropriate economic, political, cultural, and infrastructure subject matter experts outside the commander's AO.

4-56. The collection and analysis of operational and mission variable information pertaining to civil considerations (ASCOPE, SWEAT-MS, Interagency Conflict Assessment Framework [see FM 3-07]) plays a critical part of building the database. Such information assembled in the database helps commanders understand ethnic, cultural, religious, economic, political, and other societal and infrastructural facets of the environment.

4-57. The commander's staff uses all sources of information to understand the urban environment. Digitally linking subordinate commanders with information sources helps to develop a COP essential to their situational understanding of the urban environment. The IPB process guides this assessment. As operations progress, additional reconnaissance and surveillance assets become available. These may include UASs, long-range reconnaissance and surveillance units, counterfire radar, and air and ground cavalry. As a unit

employs these additional reconnaissance and surveillance assets, it links these assets into the network of sources sharing information and further refines the commander's common situational understanding of the environment.

Focused Assessment Efforts

4-58. In urban offensive operations, the tactical commander considers focused assessment efforts. The commander's assessment focuses on defeating the enemy in the urban area within the constraints of the environment. Toward this end, identifying and assessing decisive points to attack is a commander's priority assessment task. Some unique aspects of the urban environment require the focus of the commander's assessment efforts. These aspects include the character of the urban defense, collateral damage considerations, and the effects of the environment on friendly and enemy COAs.

Decisive Points for the Urban Offense

4-59. To be efficient and effective, offensive UO focus on essential decisive points. A *decisive point* is a key terrain, key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an enemy or contribute materially to achieving success (JP 5-0). Decisive points can change based on enemy action, civilian action, or physical environment change. Decisive points directly contribute to material success but may vary widely in composition and size. Since commanders focus only on the essential, they may determine the decisive point to be a single building or a limited sector of an urban area. It could be an entire system within the urban infrastructure such as communications and information, or a limited subsystem of the transportation and distribution infrastructure such as a single airfield. Sometimes what is decisive in the urban area is a specific enemy military capability, but a large objective, carefully analyzed, may not require destruction of all enemy forces or control of the entire urban area. Decisive points relate to enemy COGs and to mission success. Some decisive points related to the urban enemy's COG may be physically located outside the urban area.

4-60. To determine the decisive points, commanders need specifics on enemy dispositions within the urban area. They use their information collection capabilities to see into the depths of the area and to determine the enemy's likely defensive COA. With this information, commanders determine decisive points and apply combat power discretely against them. As it affects UO, effective offensive action leading to securing decisive points requires a detailed situational understanding in space (deep, close, rear) and time (short, mid-range, long-term horizons) for an area of interest that may extend beyond the perimeter of the unit AO or urban area.

4-61. Commanders observe and assess decisive points throughout the depth of the urban area using several actions (see figure 4-15). First, they evaluate sensor data and imagery. This guides targeting of special reconnaissance. Simultaneously, HUMINT is conducted using any persons who might know the urban area and enemy. This includes civilians (allies, aides, neutrals, objects, and hostiles) and prisoners of war. Finally, tactical conventional reconnaissance assets—including reconnaissance forces, aviation, artillery radar, signals intelligence, and UASs—are directed at the urban area. Staffs link all these sources and data through digital information systems to provide commanders and their subordinates with improved situational understanding and a COP.

Collateral Damage Considerations

4-62. In urban offensive operations, tactical commanders consider collateral damage in their focused assessment efforts. Ground force commanders retain the inherent right of self-defense and to determine if the military advantage to be gained outweighs potential collateral damage concerns. Staffs conduct the collateral damage estimation process during target development. Commanders assess the collateral damage risks that their operations may include. This assessment helps determine the viability of a COA. However, commanders reassess their COAs at frequent intervals in urban offensive operations based on known information to determine if the original evaluations remain valid. This reassessment minimizes potential collateral damage from a change in mission or a change in a COA. Many aspects of the environment can change during mission execution.

The Environment's Effects on Courses of Action

4-63. In urban offensive operations, tactical commanders consider the environment's effects on COAs in their focused assessment efforts. The urban environment's unique aspects impact the COA chosen by Army/Marine Corps forces and the enemy. Commanders assess these effects in planning, but they also verify and monitor these effects as forces accomplish offensive missions. In particular, commanders confirm the civilian population's locations, beliefs, and actions and monitor any changes. They validate terrain considerations and monitor the effects of any changes due to rubble and other damage to structures. In urban terrain, deadspace, cover, and concealment can only be identified physically and may change considerably as operations are executed.

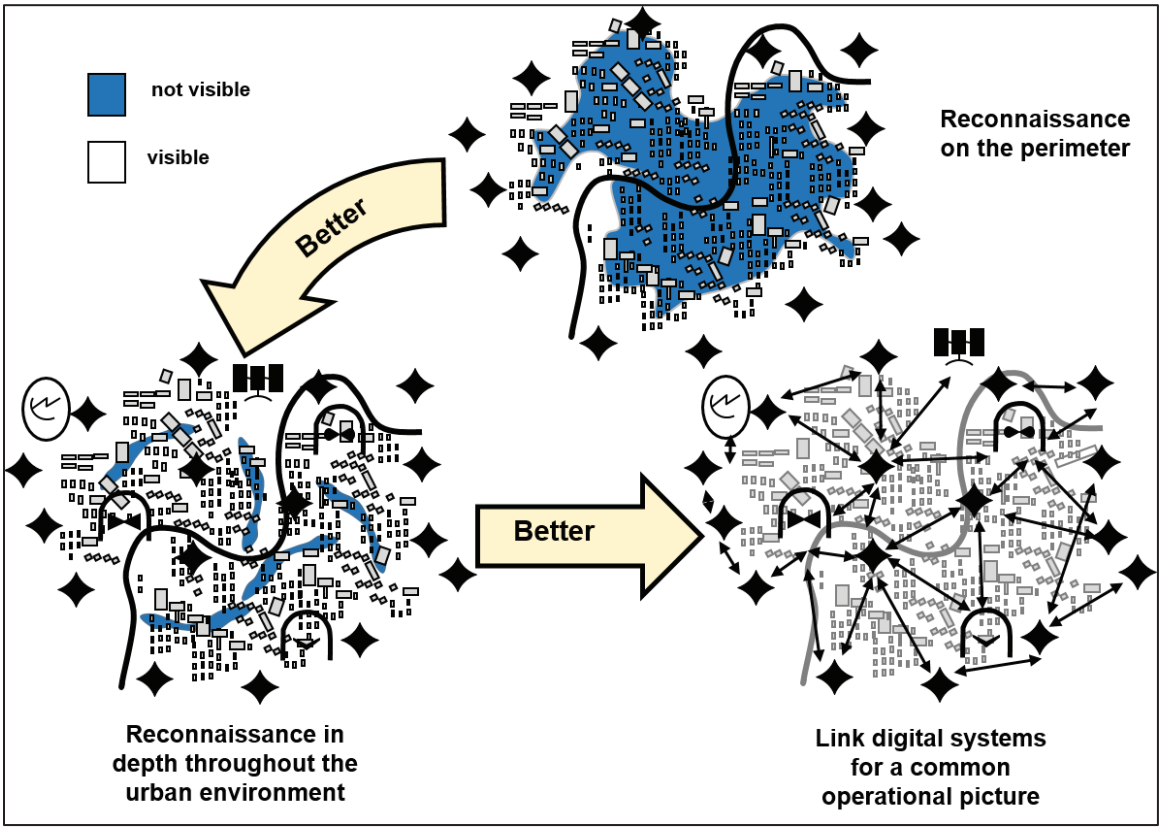


Figure 4-15. Required urban reconnaissance actions

SHAPE

4-64. Commanders of major UO consider the impact of shaping operations. Shaping operations, such as effective IO/OIE, are often critical to UO. Commanders contribute to UO when planning and executing effective shaping operations that set the conditions for subordinate tactical success. In UO, isolation is a critical condition (see details beginning in paragraph 4-62). Effective isolation requires persistent, continuous surveillance and reconnaissance; innovative use of fires and maneuver, including effective force allocation decisions; and well-established sensor-to-shooter links. These efforts combined and synchronized with SOF direct actions, IO/OIE that minimize noncombatant influences, and necessary shaping attacks (particularly the seizure of a foothold) set the conditions necessary for the subsequent offensive domination of the area.

4-65. Shaping operations also take the form of attacks against vulnerable positions. The complexity of the urban environment vastly increases the number, types, and resources required for shaping operations. In a large urban area, the defending enemy cannot be strong everywhere. Shaping operations in the form of attacks force the enemy to maneuver and redeploy in the urban area. These attacks prevent the enemy from merely defending from prepared positions. Forcing the enemy to move negates many of the defensive advantages of

urban terrain, confirms dispositions, exposes vulnerable flanks, and permits target acquisition and engagement with precision standoff fires.

4-66. While isolation is important, shaping includes deception, IO/OIE, maneuver, and other means to influence both near-term and more distant time and space to include post-combat operations. Shaping can also encompass IO/OIE to influence international or local perceptions beyond the AO. Shaping operations in urban offensive operations can take the form of an initial attack to seize a foothold. Once Army/Marine Corps forces establish this foothold, they accrue some of the defensive advantages of urban terrain. From this protected location, Army/Marine Corps forces continue offensive operations and have a position of advantage against neighboring enemy defensive positions.

Isolation is Essential

4-67. Commanders of major UO must consider the importance of isolation. In the history of UO, a key to success has been the effective isolation of the enemy force (see figure 4-16). This applies today and equally well to major offensive UO as it does to battles and engagements. Indeed, in offensive UO during large-scale combat operations or more limited contingency offensive UO situations in a large or megacity, isolating pieces of the city may be the only way to achieve greater goals. For example in OIF 2004, after losing control of the 2.4 million person Sadr City in northeast Baghdad (a metropolis of approximately 6.5 million), Operation GOLDEN WALL in 2008 effectively cut off the Jaysh Al Mahdi forces from its sources of sustainment in the Jamila market. Units conducting the offensive UO emplaced thousands of large concrete barriers while under fire. This wall attracted Jaysh Al Mahdi forces as the object of their operations, segregated Jaysh Al Mahdi's basis of support from surrounding Baghdad, and exposed them as targets when they attempted to attack the wall or the coalition forces proximate to it. This action allowed coalition and burgeoning Iraqi security force combined arms teams to regain control of the area, diminished insurgent force coercion of the populace, and significantly reduced attacks into the capital's Green Zone.

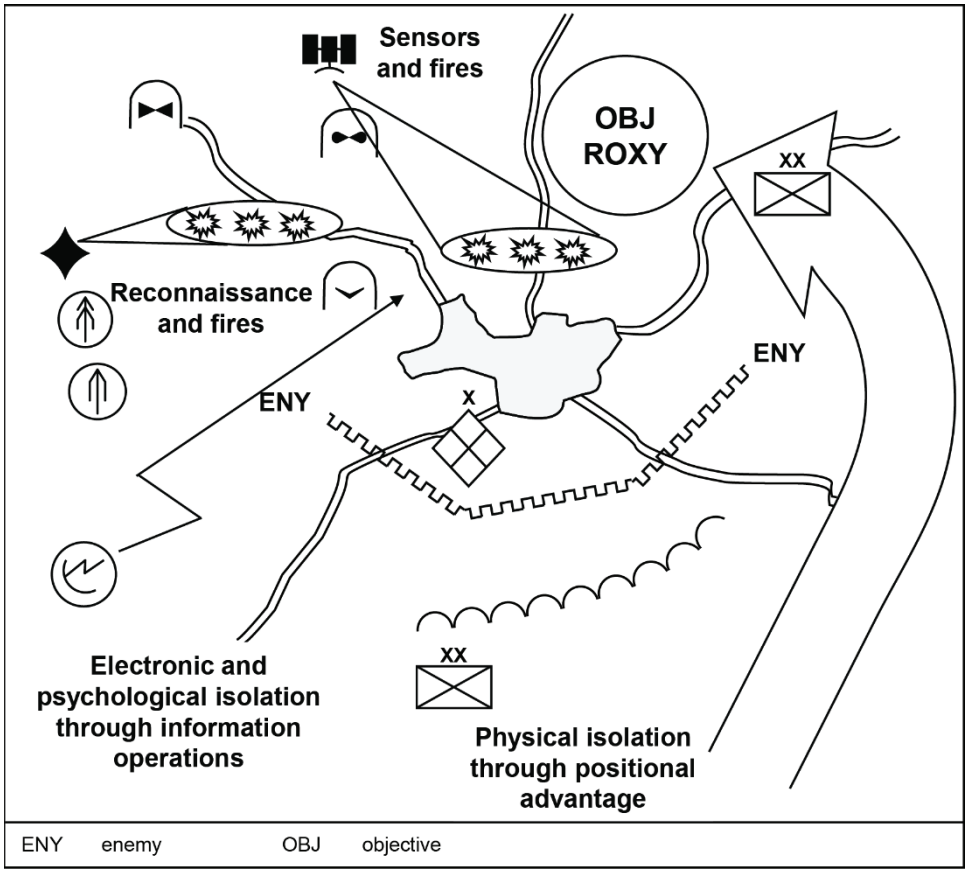


Figure 4-16. Shaping through isolation

4-68. Isolation not only denies access to the urban area from outside but also contains enemy forces within. In a modern metropolis or megacity, this is a daunting task. Isolation requires a unit to seal off—physically, electronically, and psychologically—an enemy from sources of support, deny the enemy freedom of movement, and prevent the isolated enemy force from having contact with other enemy forces outside the urban area. This does not necessarily require physically encircling the urban area, but it does require that Army/Marine Corps forces exert control over the area's entire perimeter, as well as decisive points within. Isolation should also include cutting enemy access to critical infrastructure and services (such as power, water, sewer) which may require expertise not resident in the formation. Control may consist simply of observation, with an ability to deliver maneuver forces or fires on short notice. However, for a sprawling urban area, successful isolation may require the commitment of numerous resources. Given the force ratio demands of an urban area, commanders may be constrained to the control of key terrain that isolates an adversary logistically or separates the adversary from the populace.

4-69. Successful isolation of the urban area depends as much on the nature of the enemy as it does on any other factor. Isolating a conventional enemy in a large urban area is easier than isolating an insurgent in a much smaller urban area. The forces needed in the former situation are less than those needed in the latter. Generally, the more conventional the enemy, the easier to isolate using standard combat methods and equipment. Isolating a more unconventional force requires a much greater ability to simultaneously conduct offensive IO/OIE, integrate civil affairs operations and civil-military operations, and work with allies, NGOs, and local authorities. Lastly, commanders consider that isolating a less conventional enemy emphasizes separating combatants from noncombatants.

Offensive Isolation Objectives

4-70. Isolation seeks to achieve two primary objectives with respect to defeating an enemy's urban defense:

- Weaken the overall coherence of the defense.
- Limit or manipulate maneuver options.

4-71. Isolating the enemy in an urban area separates them from external sources of support and weakens their overall defense. The defense is weakened through a combination of attrition (the enemy cannot replace losses) and diversion of combat power from the defense to operations to counter the isolation effort. Isolation prevents the enemy from shifting forces to reinforce decisive points in the urban area or to conduct counterattacks.

4-72. Commanders may choose not to isolate the urban area completely or at least make this appear so to enemy forces. Instead, they may afford the enemy an apparent means of escape, and create the conditions for its use through effective fire and maneuver against the defenders. The attackers can then destroy the enemy through various ambush methods or allow them to leave the urban area in order to destroy them on more favorable terrain away from the civilian population and critical infrastructure. While friendly forces may be able to move undetected to appropriate ambush sites, this technique more likely will necessitate rapidly mobile air and ground forces moving along carefully chosen routes through the urban area. Commanders consider maintaining the ability to complete the isolation of the urban area to prevent reinforcement and escape of urban enemy forces, particularly if the ambush attack does not achieve desired effects.

Persistent Surveillance

4-73. Persistent surveillance of the urban area is essential to all types of actions used to isolate an urban area. Surveillance of the urban area relies on either reconnaissance forces or sensors continuously observing or monitoring urban avenues of approach. This network of joint ISR assets updates the commander's situational understanding and provides the means to quickly identify and, if necessary, attack enemy elements as they move. Particularly with sensors, however, commanders consider that each detection is not necessarily an enemy to be attacked. Additionally, in large-scale combat, peer threats have the capacity to disrupt, deceive, degrade, monitor, or destroy ISR assets. Units plan and practice prudent signals security techniques, establish redundant reconnaissance, surveillance, and communications plans, and practice good operational security. Noncombatant activity clutters the environment, making it easier for enemy forces to disguise themselves, and increases the burden (and the number of resources required) on Army/Marine Corps forces to distinguish friend from foe.

Fires and Maneuver

4-74. Fires and maneuver achieve isolation, either alone or together. As always, effective obstacles, monitored by sensors or observation, are integral to any isolation technique. First, attacking forces pre-position themselves along avenues of approach to deny entry and exit through positional advantage. Relying primarily on this method of isolation, particularly around a large urban area with multiple avenues of approach, can be overly resource intensive. Instead, the pairing of fires and maneuver provides attacking commanders more flexibility and allows them to isolate several avenues of approach with fewer resources. Highly mobile attack helicopters, operating outside enemy-controlled portions of the urban area work well for this purpose when air superiority is achievable. However, more likely in large-scale combat, significant portions of a peer-threat's airspace will be covered by layered, integrated air defense and pose greater risk to creating air parity or denial to U.S. forces. Inside enemy-controlled areas, units have more difficulty identifying, eliminating, or effectively suppressing the air defense enemy. In limited contingency operations against hybrid or irregular threats, the enemy likely has numerous man-portable air defense weapons and enhanced effects of small arms used for air defense, often provided by a peer threat or adversary. Therefore, the risk in using this equipment outweighs the potential benefits. However, mobile ground units—such as air assault (subject to the same air defense enemy considerations as attack aviation), armor, or mechanized forces—rapidly move to attack and destroy an enemy moving in or out of an urban area. Potential disadvantages from combining fires and maneuver are that—

- Critical assets, on standby and dedicated to isolation efforts, may be unavailable for other missions.
- The attacking force may not locate the enemy in time to complete its mission (an inherent risk in any attack).

4-75. Another alternative relies on indirect or joint fires alone to destroy the enemy force. Its disadvantage is that fires alone cannot completely destroy or stop a determined force from moving into or out of an urban area. It may also not be effective for isolating within the urban area as forces can move undetected through buildings or subterranean infrastructure. Also, isolating a portion of an urban area with fires would mean assessing and accepting the associated collateral damage such a strike would cause. Although targets and avenues of approach require continual surveillance, supporting isolation through use of fires is usually a less resource-intensive option than those options that include maneuver. Employing indirect or joint fires alone requires fires assets to respond reliably and quickly. Field artillery, mortar, and naval gunfire units must also be in range, which requires careful positioning. A skilled enemy can avoid interdiction fires by using the geometry of the area to identify gaps due to obstructing terrain or the firing unit's range limitations. The enemy can also use concealment and weather to avoid observation. However, effective sensor-to-shooter links throughout the urban battlefield/battlespace reduce the enemy's ability to hide (see figure 4-17). A resolute enemy risks significant losses to fires in attempting to prevent isolation or use noncombatants as a shield. Ultimately, commanders use innovative combinations of all techniques detailed. Some units physically block key avenues of approach. Surveillance monitors less important routes and avenues.

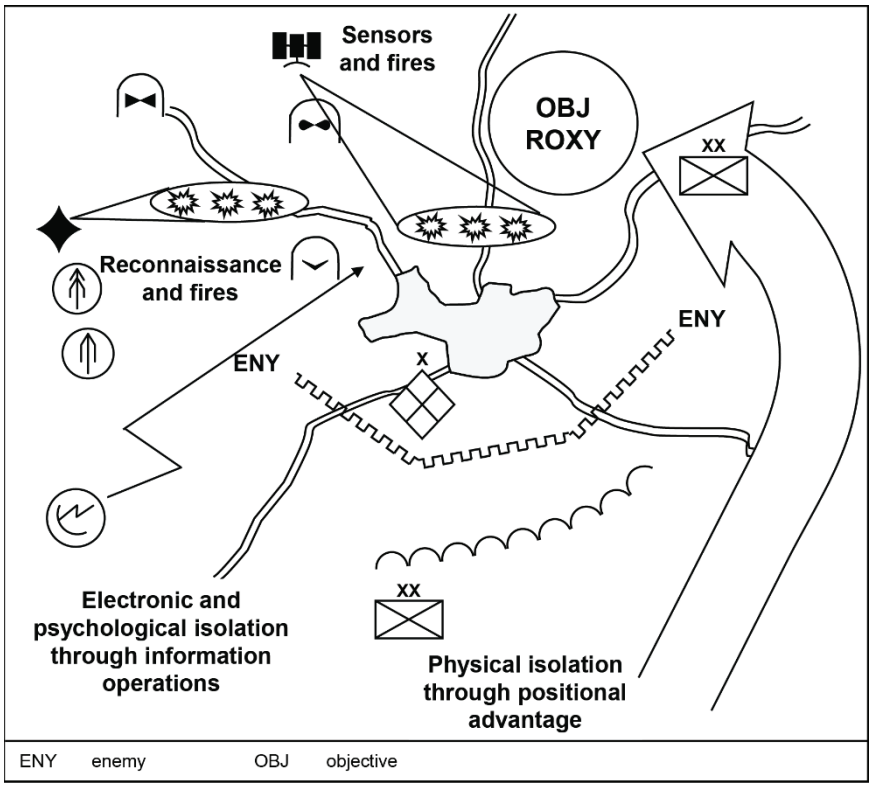


Figure 4-17. Critical sensor-to-shooter links

Enemy Reactions

4-76. The reaction of the enemy to the effects of isolation depends on the enemy's mission, morale, force structure, and overall campaign plan. The enemy can recognize isolation actions early and withdraw from the urban area before isolation is complete instead of risking destruction. On the other hand, the enemy, based on a different or flawed assessment (perhaps a perception shaped by the Army/Marine Corps forces commander), can choose to—

- Continue to defend (or hide) and conduct local ambushes and counterattacks.
- Attack to break into the urban area or infiltrate forces and supplies in.
- Attack to break out of the urban area or exfiltrate forces.
- Execute any combination of the above (see figure 4-18 on page 4-30).

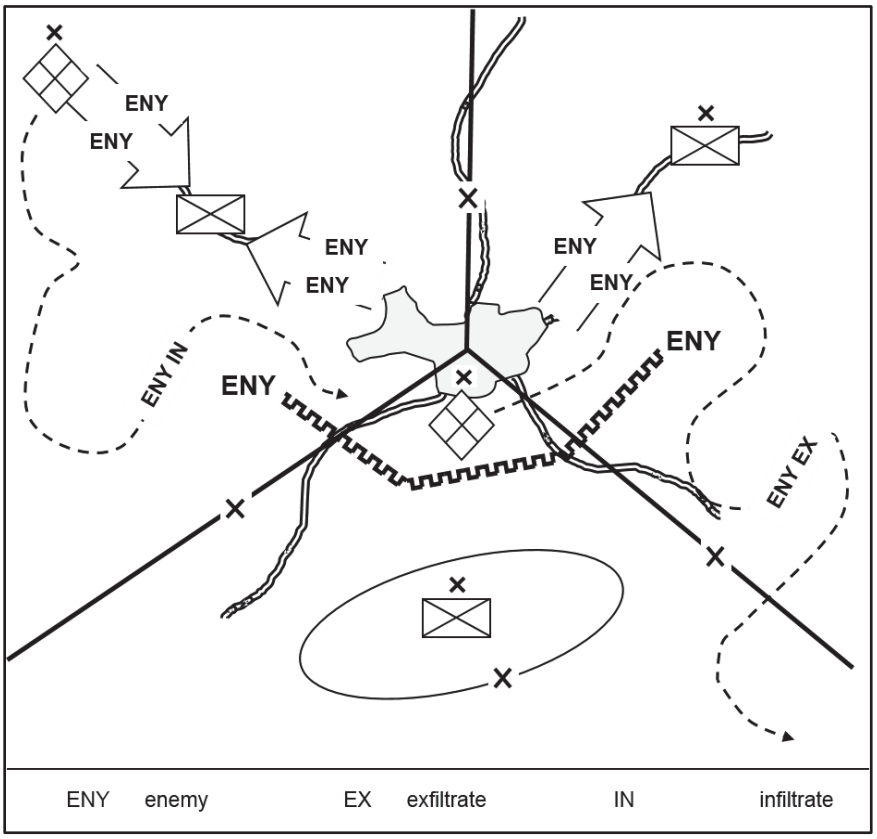


Figure 4-18. Reactions to isolation

4-77. Attacking commanders consider how the enemy leadership's subsequent actions affect the continuance of overall offensive operations. Commanders deliberate many considerations, including—

- Allocating more forces to shaping operations to isolate the urban area.
- Allocating more combat power to achieve rapid penetration and seizure of objectives, taking advantage of developing enemy dispositions in the urban area.

Civilian Reactions and Sentiment

4-78. Commanders consider the potential effects, reactions, and perceptions of populations subject to UO. Quickly returning an urban area to capable civil control may cause them to view U.S. forces positively and lend cooperation. For example, French towns in WWII were returned to the French populace after U.S. forces drove out German forces. If returning secured urban areas to peer-threat nation citizens, however, they will potentially view U.S. forces negatively, as hostiles, and limit cooperation or actively resist stability operation efforts with subversion or open violence. For example, in WWII, after U.S. forces controlled approximately the western half of Germany, German towns, although not broadly violent or retaining a capacity and will to resist after surrender, viewed U.S. forces negatively and limited their cooperation with stability efforts.

4-79. Peer-threat nation populations live in the urban areas that friendly forces isolate and bypass, either as a direct effect or as a response of isolating the enemy force. Isolation to reduce the enemy's ability to sustain itself will have similar (and worse) detrimental effects on civilians remaining in the isolated area. If food and water are in short supply, enemy forces often take from noncombatants to satisfy their needs, leaving civilians to starve. Isolation of a peer threat also creates a collapse of civil authority within an urban area as it becomes apparent that the military arm of their government suffers defeat or none exists. Due to their isolation, elements of the population may usurp governmental and administrative functions of the former regime and establish their own local control or the population may lapse into lawlessness. Returning later, Army/Marine Corps commanders find that these self-governing residents are proud of their accomplishments. In some

instances, these civilians are less willing to allow Army/Marine Corps forces to assume control because they perceive the forces did nothing to earn that privilege. Alternatively, while populations may view U.S. forces as liberators initially, as witnessed in some urban areas during Operation IRAQI FREEDOM in 2003, a power vacuum may lead to intra-urban conflicts among rival factions coupled with general public disorder, looting, and destruction of the infrastructure.

Isolation and Transition

4-80. This publication does not recommend divergence from historically proven methods of isolating an urban area or objectives. However, as described in the Brittany Ports vignette in chapter 4 (page x-x), large-scale combat operations tempo and transition to consolidate gains may require an approach to operational maneuver UO that simply uses an economy of force means to isolate initial urban area objectives so that other forces may be used to greater effect elsewhere. Whether in large-scale combat or limited contingency operations, a primary goal and end state of U.S. forces is the relative rapid transition of the urban areas to control by rear or support area forces to achieve stability end states. This achievement economizes lead large-scale combat operations forces to focus on subsequent offensive or defensive combat objectives. Another primary transition goal is to enable control of the urban area by a capable and credible HNSF or governance entity. This achievement facilitates a return to normalcy or redeployment operations favorable to U.S. interests.

4-81. + Isolating part of or the entire population enables forces to prevent civilian casualties, civilian intentional or unintentional interference, and civilian co-option or coercion to support enemy forces. During high-intensity combat, civilians are searched, segregated, safeguarded, silenced (for operations security concerns), and sped to rear or support areas using the most humane ethically and culturally appropriate methods possible. For example, female evacuees may require female forces to respectfully search and deal with cultural sex sensitivities adequately. Recently, successful large-scale combat UO typically involved repeated, deliberate notification and evacuation of a majority of noncombatant populations prior to offensive or defensive combat operations. Commanders understand risks to UO, in that often complete and total civilian evacuation may not always be possible, and balance mitigation efforts with mission necessities. Stability UO and MGO solidify consolidation of gains and set security conditions for such transitions. See FM 3-57 for additional information on civil affairs operations and MGO.

Direct Action by Special Operations Forces

4-82. In urban offensive operations, commanders consider direct action by SOF. Although SOF in urban offensive operations conduct special reconnaissance to support SOF operations, they also have a direct action capability to shape the offensive operation (see figure 4-19 on page 4-32). SOF can use direct action capabilities to attack targets to help isolate the urban area or to directly support decisive operations/decisive actions activities subsequently or simultaneously executed by conventional forces. Successful attacks against urban infrastructure, such as transportation or communications centers, further the area's physical and electromagnetic isolation. Raids against command centers, logistics bases, and air defense assets contribute to the success of offensive operations by destroying or disrupting key enemy capabilities.

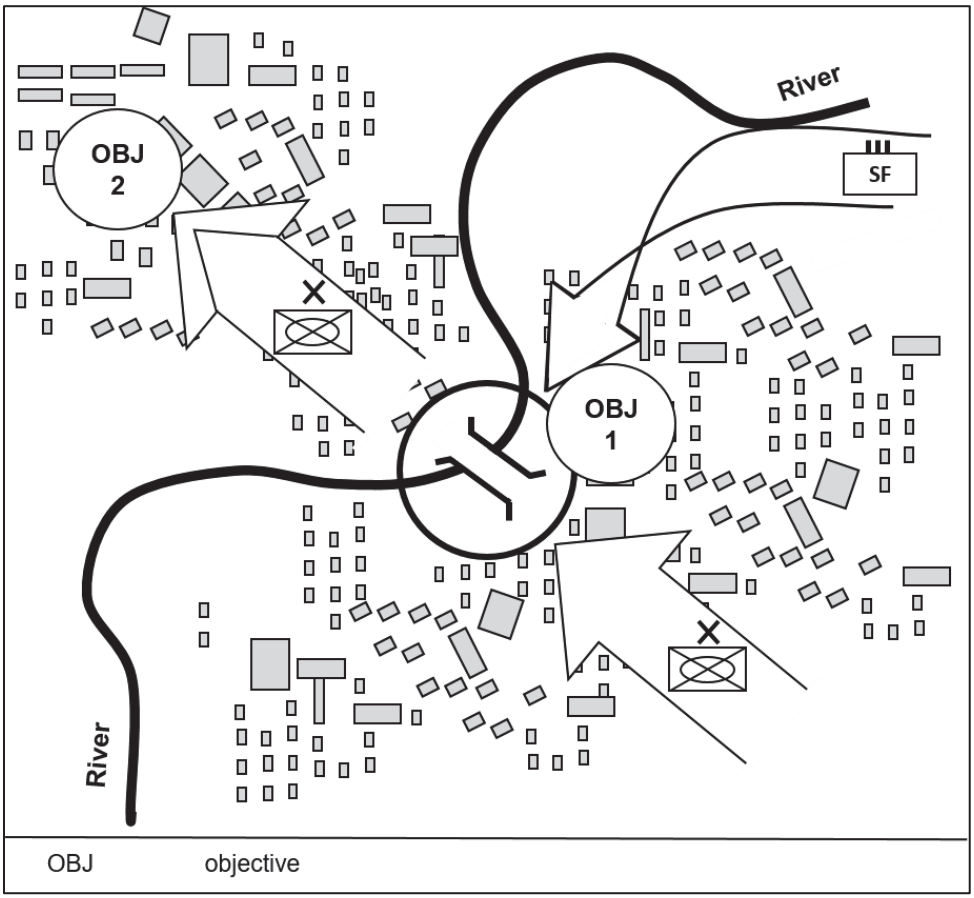


Figure 4-19. Coordination of special operations forces and conventional capabilities

Information Operations

4-83. In urban offensive operations, conducting IO/OIE early is critical to shape the environment and conditions for the operation. Regardless of how Army/Marine Corps forces physically isolate the urban area, they combine physical isolation with IO/OIE to isolate the enemy further and undermine the enemy's morale. For example, electromagnetic isolation cuts off communications between forces in the urban area and their higher command to deny both from knowing the other's status. IO/OIE with isolation persuade the enemy's higher command or leadership that its forces located in the urban area are likely defeated, affecting the higher command or leadership's intentions to break through to the besieged enemy. IO/OIE also serves to reduce any loyalty the civilian population has to the enemy. IO/OIE ensure that civilians have the information that minimizes their exposure to combat to reduce overall noncombatant casualties and can assure them of the security of their property if they choose to vacate. For example, learning from Napoleon's mistakes in Spain in 1812, effective IO/OIE was used in the Mexican-American War by General Winfield Scott to assure the population and build trust in the foothold port city of Veracruz. Here he communicated to the population in word and deed via disciplined troops, military justice, governance, and reassurance to the population of their property and economic security before continuing inland to seize Mexico City. Effective IO/OIE helped him consolidate stability UO gains and shape the larger operation before proceeding inland. Finally, IO/OIE may aim to deceive the enemy regarding the time and place of Army/Marine Corps forces operations and intentions.

Evacuation

4-84. Robust and proactive IO/OIE are conducted before, during, and after combat actions. IO/OIE seek to persuade civilians of the illegitimacy of the attacking or occupying force and encourage civilians to depart,

by emphasizing their safety. For example, in the second battle for Fallujah in 2004, for two months prior to battle, Marines and Soldiers successfully messaged the city, region, nation, and international communities to evacuate. Forces benefited from the Iraqi Prime Minister's political legitimacy and backing of the operation prior to attack.

4-85. However, total evacuation of an urban area is rarely possible due to time constraints, capability limitations, or a civilian's choice to remain. This should factor in commander and staff course of action development. A host nation may have no plans or no option to evacuate urban areas and may plan to defend in place. As an example of a contemporary limited contingency operation in an urban environment, recent joint and multinational forces demonstrated robust IO/OIE efforts that shaped tailored offensive and defensive operations in Marawi, Philippines. There, as in twenty-first century Levant areas of operation, Islamic radical insurgents' operational approach and objectives included attempts to delegitimize coalition forces by broadcasting physical damage and civilian casualties in Marawi. Regardless, after a declaration of martial law and intense fighting, the Philippine Army defeated and ejected Islamic religious extremists from southern Filipino islands and urban areas to acceptable levels.

4-86. Second to security of the force and denying aid to enemy forces, plans and allocated friendly forces should include means to temporarily relocate and care for displaced civilians as much as possible throughout combat operations. Actions may include providing essential transportation, food, housing, or medical care behind the forward line of troops. If encountering civilians in disparate, immobile, or noncontiguous AOs, existing services, transportation, and infrastructure present in urban areas may be obtained with host-nation assistance and other population and resource control methods found in ATP 3-57.10.

Detailed Leader Reconnaissance

4-87. The commander conducting urban offensive operations considers detailed leader reconnaissance. Effective Army/Marine Corps commanders conduct detailed leader reconnaissance of an AO. These leaders clearly recon the urban environment to understand the challenges facing their brigades, battalions, companies, platoons, and squads. Urban terrain is deceptive until viewed from the Soldier's/Marine's perspective. Commanders have a responsibility to know the conditions intimately so they can allocate resources effectively to subordinate units. Higher echelon division or corps commanders may use information collection or many forms of transportation to conduct reconnaissance. Often, particularly at battalion level and above, commanders will be unable to command dispersed forces from positions forward but be forced by the terrain to rely on semi-fixed command posts. Detailed leader reconnaissance of the AO by commanders, their staff, and their subordinates before the mission compensates for this challenge. This reconnaissance gives commanders a personal feel for the challenges of the terrain and facilitates more accurate planning and better decision making during operations.

Mission Orders

4-88. Before contact, and even in training, commanders consider mitigating some terrain challenges to effective command and control using mission orders. Subordinates receive mission orders that allow them to take advantage of opportunities. To see the operation and provide effective and timely direction, tactical leaders follow closely behind units as they assault buildings, floors, and rooms. Thus, only the most mobile information systems accompany tactical leaders into combat and suffer the degrading effects of the environment. Mission orders permit rapid and decisive execution without commanders intervening at battalion level and above. Higher level commanders facilitate mission orders through their subordinates by articulating their desired end state, clearly stating their intent, and building flexibility into the overall plan.

Effective Task Organization

4-89. Commanders consider shaping urban offensive operations through effective and innovative task organization. Corps and divisions provide the right sequence and mix of forces to set conditions around a city, and achieve conditions within, to include clarifying roles and responsibilities with allies and partners. They also set conditions for effective IO/OIE and communication with host-nation governments as needed prior to commencement of combat, and in conjunction with shaping operation lines of effort. Examples of EAB task organization includes provision of adequate air defense or LOC protection units to be able to build and project combat power. Synchronized fire support assets by division or corps echelons also enable

countering enemy reconnaissance and gaining a foothold in an objective city. Combined arms, often starting with an infantry base, is essential to success and may be the Army's/Marine Corps' means of defeating an urban enemy. Urban attacks quickly break down into noncontiguous firefights between small units. To achieve the tactical advantage for mission success in this nonlinear environment, many Army/Marine Corps capabilities are task-organized down to the company, platoon, and squad levels. Infantry provides the decisive capability to enter buildings and other structures to ensure enemy destruction. Tanks, gun systems, and fighting vehicles provide additional speed and mobility, direct firepower, and protection/force protection. Marine Corps forces may be increasingly reliant on request for Army mobile protected firepower systems and tank units. Division and corps echelons communicate these changes to force composition and task organization as operations progress. Combat engineers provide route clearance, reconnaissance, and specialized breaching capabilities in support of UO. Field artillery provides the indirect (and if necessary, direct) firepower and suppression of air defenses. Aviation maneuver provides manned or unmanned/teaming standoff precision strikes, rooftop clearance, rapid repositioning of forces, rapid resupply and sustainment, and CASEVAC.

4-90. Such mobility and firepower create the conditions necessary for dismounted infantry to close with and destroy a covered enemy in an urban defense. When an enemy skillfully uses the urban area to limit ground maneuver, vertical envelopment, or aerial attack, using precision-guided munitions from Army/Marine Corps aviation circumvents defenses and achieves necessary effects. Generally, ground systems used within the urban area will not be able to operate independently from dismounted infantry. The infantry protects armor and mechanized systems from close antiarmor weapons, particularly when those weapons are in well-prepared positions in the urban area—especially on rooftops and in basements.

4-91. In urban offensive operations, direct fire support is critical. Armored vehicle munitions types do not always achieve decisive effects against some urban structures. In some cases, field artillery high-explosive munitions work better than armor for direct fire support of infantry. Large caliber (105- or 155-mm) high explosives directly fired at a structure often produce a more severe shock effect than tank and fighting vehicle cannon and machine guns firing at the same structure. Artillery is also able to achieve higher elevation than armor and engage enemies located at greater heights.

4-92. Commanders, however, must view artillery as not just a weapon but also a weapon system. Commanders conduct collateral damage estimates before employing direct and indirect fires in an urban environment. Commanders also have a different COA in the event that weather prevents employing lift, attack, and reconnaissance capabilities. As such, commanders place artillery under tactical control of maneuver commanders, such as a platoon of two guns under tactical control to a company or a battery to a battalion, not one gun only to a company or other maneuver unit. Self-propelled artillery has some of the mobility characteristics of armor, but it provides minimal ballistic protection from fragmentation for the crew. Although these systems seem formidable, they provide less crew protection than a Bradley fighting vehicle, for example, and contain large amounts of onboard ammunition and propellant. They are susceptible to catastrophic destruction by heavy automatic weapons, light cannon, and antitank fire. Therefore, infantry units carefully secure and protect these systems even more so than armored vehicles when employed in urban offensive operations, particularly when forward in the direct fire role.

4-93. Aviation supports UO with lift, attack, and reconnaissance capabilities. Tactical commanders down to company level use these capabilities to positively influence ground close combat. Attack and reconnaissance aircraft provide flank security for attacking ground forces. Attack aircraft also provide direct fire support to individual platoons or squads. Lift may move entire battalions as part of brigade operations, or it may move single squads to a position of advantage such as a roof as part of a small-unit assault. Army/Marine Corps aviation assists with C2 by providing airborne retransmission capability, airborne CPs, and the confirmed status and position of friendly forces. However, aviation is a limited and high-value asset. Commanders review its use in innovative task organizations. It is particularly vulnerable to urban air defense enemies unless used over terrain secured by ground forces. From secured positions, aircraft can use enhanced sensors to conduct reconnaissance and use precision weapons with standoff capability. See ATP 3-06.1/MCRP 3-20.4/NTTP 3 01.04/AFTTP 3-2.29 and ATP 3-04.1 for employing aviation assets during UO.

ENGAGE

4-94. Commanders decisively engage elements of the urban area during offensive operations. They employ several methods to include—

- Rapid maneuver.
- Appropriate use of SOF.
- Precise application of fires and effects.
- Proper balance of speed and security.

4-95. These methods are not unique to UO. Their effective execution, however, allows Army/Marine Corps commanders to dominate in the urban environment by effectively using resources with the least amount of collateral damage. Overall, decisive engagement results from urban offensive operations when forces achieve the objective of the assigned mission and establish preeminent control over the necessary terrain, population, and infrastructure. Largely, a commander's ability to engage is based on superior situational understanding and correct application of unit strengths to the challenges found in an urban environment.

Rapid and Bold Maneuver

4-96. Commanders of major UO may have or create the opportunity to seize an urban area with rapid and bold maneuver. Such maneuver requires striking while the area remains relatively undefended, essentially preempting an effective defense. This opportunity occurs when the urban area is well to the rear of defending enemy forces or before the onset of hostilities. Under such conditions, an attack requires striking deep behind enemy forces or striking quickly with little time for the enemy to make deliberate preparations. Attacks under such conditions entail significant risk, but the potential benefit of audacious offensive operations may be worth possible losses. Three potential ways to accomplish such attacks include—

- Airborne or air assault.
- Amphibious assault.
- Rapid penetration followed by an exceptionally aggressive exploitation (for example, a heavy force using shock, armor protection, and mobility).

4-97. Commanders analyze all potential UO to seek an opportunity or advantage to apply rapid and bold operational maneuver to the task. Using operational maneuver to avoid urban combat against an established enemy defense potentially marks a significant operational achievement and can have decisive strategic consequences. Simply influencing the enemy's morale can positively affect all future operations. However, commanders must evaluate the challenges of such a COA. These challenges may include the following:

- Sustaining the operation.
- Avoiding isolation and piecemeal destruction.
- Successfully conducting shaping attacks.
- Achieving the necessary tactical, operational, and strategic surprise.

4-98. Commanders also build on the shaping effects of isolating the urban area internally and externally by attacking urban decisive points from multiple directions. They attack multiple decisive points either simultaneously or in a systematic, synchronized manner. This complicates the enemy's situational understanding of the urban environment, further impedes decision making, and allows commanders to dictate the tempo.

Appropriate Use of Special Operations Forces

4-99. Army/Marine Corps forces may employ SOF direct action to assist shaping the urban area. C2 of SOF should be executed within the SOF chain of command. Successful execution of special operations requires clear, responsive C2 by an appropriate SOF element. In all cases, commanders exercising command authority over SOF—

- Provide for a clear and unambiguous chain of command.
- Avoid frequent transfer of SOF between commanders.
- Provide for sufficient staff experience and expertise to plan, execute, and support the operations.
- Integrate SOF in the planning process.

- Match unit capabilities with mission requirements.
- Maximize the use of liaison officers between the conventional and SOF.

4-100. Commanders, by synchronizing conventional and SOF effects, may actively control offensive operations to dominate the area. Importantly, however, conventional ground forces must be available to assume the mission because SOF units acting as the primary striking force have limited logistic capability to sustain long-term operations.

Precise Application of Fires and Effects

4-101. Precisely applied fires and the massed effects of combat power characterize successful urban attacks. The fires are direct fire from—

- Combined heavy or light ground teams.
- Direct or indirect fires from supporting Army/Marine Corps aviation standing off from the target and any possible air defense enemy.
- Precision indirect fires from cannon and rocket artillery employing guided or area munitions; or
- Direct and indirect fires from supporting joint assets including Air Force and Naval assets.

All efforts with fires strive to reduce collateral damage around the point of attack, consistent with mission success. Forces use fires to deny the enemy the ability to maneuver in the urban area and to destroy an enemy attempting to maneuver. When the enemy is exposed by moving and the environment no longer provides protection, then Army/Marine Corps forces can effectively engage fires. Overall, precise fires and effects demonstrate the power of Army/Marine Corps forces and help the urban population understand that only legitimate military targets are the focus of attacks, potentially building public support of UO.

Proper Balance of Speed and Security

4-102. Attacking units balance speed and security. Forces secure flanks as units advance, control dominating terrain (buildings), evacuate civilians, and keep the integrity and synchronization of the combined arms team. Attacking units anticipate and rapidly breach obstacles. Commanders choose avenues of approach to—

- Provide cover and concealment for following aviation and support units.
- Permit travel by all classes of vehicles.
- Easily defend from counterattack.
- Avoid nonessential centers of enemy resistance.
- Avoid population concentrations.

4-103. Several resources aid Army/Marine Corps forces. Army/Marine Corps aviation is a critical resource to protect flanks. Another important resource is engineers who seal off surface entries, subsurface entries, and avenues along the flanks of attack. Finally, as in all offensive operations, ground and air cavalry are ideal mobile forces to perform security in an economy of force role along flanks allowing decisive forces more freedom of maneuver. See ATP 3-06.1/MCRP 3-20.4/NTTP 3-01.04/AFTTP 3 2.29 for employing aviation assets during UO.

CONSOLIDATE

4-104. Commanders at all levels consolidate forces following offensive operations to strengthen their position without loss of momentum. Consolidation of forces requires a purposefully task-organized, combined arms unit to perform area security and stability tasks and employ and clear fires. Differing from consolidating forces, c*onsolidate gains* are activities to make enduring any temporary operational success and to set the conditions for a sustainable security environment, allowing for a transition of control to other legitimate authorities (ADP 3-0). Commanders take the steps necessary to make any temporary battlefield/battlespace successes permanent while maintaining relentless pressure on enemy forces, often in rear or support areas. Consolidation of forces repositions forces, allows forces to prepare for counterattack, eliminates pockets of resistance, and facilitates reorganization.

Repositioning of Forces

4-105. Following seizure of the objective, commanders normally consolidate by adjusting and repositioning forces. While UO are likely to be noncontiguous, commanders reposition joint ISR assets, including observation posts and reconnaissance patrols. This repositioning enables units to maintain contact with the enemy, establish contact with nearby friendly units, ensure that no exploitable gaps or seams exist, and help maintain freedom of action. Physical occupation of the terrain as well as continued reconnaissance provides commanders with a fuller understanding of the urban environment. With this enhanced understanding, commanders adjust boundaries and other control measures to better adapt to the effects of urban terrain features such as canals, subway tunnels, raised roadways, and tall buildings. As necessary, commanders reposition communications assets and C2 facilities for subsequent operations.

Preparing for Counterattack

4-106. Immediately after the conduct of successful UO, units remain alert to the potential for rapid and violent counterattacks. Defenders may launch a quick counterattack to regain terrain before offensive forces have consolidated and fully assumed the defensive advantages of the urban terrain. Delaying a counterattack in UO, even for a few minutes, permits the environment's advantages to shift to the successful attacker. Thus, attacking units anticipate this reaction and reposition forces such that they are prepared to defeat enemy counterattacks.

4-107. As necessary, commanders reposition armor and artillery (and other fire support assets) to account for the changing situation and battlefield/battlespace geometry. Commanders consider consolidating and repositioning armored and artillery forces in positions either inside or outside the urban area, to add significant combat power to a hasty defense, to defeat enemy counterattacks, or to allow quick resumption of the attack. If integrated into a hasty defense inside the urban area, these forces require continued infantry protection. As a mobile counterattack force positioned inside the urban area, armored forces require careful selection of attack positions and counterattack routes. Damage to buildings and infrastructure limits maneuver and the use of direct and indirect weapon systems. Repositioning forces outside an urban area may contribute to strengthening or reestablishing isolation of the urban area. Repositioning makes better use of range and standoff capability, enables friendly forces to take full advantage of their speed and mobility, and decreases their need for additional protective support.

Eliminating Pockets of Resistance

4-108. Commanders consolidate forces to strengthen their position during urban offensive operations by eliminating pockets of resistance. In large-scale combat operations and in rapid maneuver, when forces focus on controlling the essential and attacking decisive points, attacking units often bypass some elements of the enemy's defense. Within the bounds of the initial plan and current situation, commanders consider whether to devote the time and resources to immediately clear and eliminate remaining enemy forces and pockets of resistance with all or parts of the attacking force or to leave the task to follow-on rear or support area forces. However, as in Operation AL FAJR in 2004, the initial and follow-on clearance search and attack units tasked may be the same force when consolidated as part of the branch or sequel plan. Clearance may require multiple attempts based on conditions and desired degree of control as the enemy may use both open or unoccupied buildings and terrain along with superstructure cover to shift positions when under decisive attack. For example, enemy forces may create improvised doors, openings, tunnels, or other avenues of approach, through demolition or construction, to facilitate their mobility. They may also conduct direct attacks and acts of sabotage to occupy forces, consume resources, and slow military buildup.

4-109. Units expect and keenly plan to eliminate these pockets with the consideration that many, if not most, bypassed urban areas the enemy occupied will likely have a potential high density or combination of mines, IEDs, or other booby-traps that mobility forces such as engineers or explosive ordnance disposal must clear to control the area. Large-scale combat operations or peer-threat forces are more likely to use designed peer-threat devices such as mines that complicate breaching and access, while hybrid threats also may use more improvised means such as IEDs using remnant or available munitions and material. As time is available, attacking forces either report and bypass, confiscate, destroy, or secure adversary munitions caches to prevent their subsequent use by peer-threat forces and prevent them from falling into hands of hybrid threat or insurgent forces, thus also reducing risk to civilians. To expedite maneuver in the absence of mobility support,

units may use blades, rollers, and ballistic or blast effects from weapons to shoot and destroy or disable suspected mines, booby traps, or other obstacle enemy munitions, thus reducing risk to friendly forces. As time allows, counter-IED techniques and robotics can offer more risk mitigation to units. In their deliberations, commanders determine if remaining enemy forces are capable of consolidating and mounting effective counterattacks or encirclement breakouts before follow-on units can engage the remaining enemy forces and take advantage of their dispersion and disunity. As another part of their deliberations, commanders consider if remaining enemy forces will likely (and immediately) endanger—

- Ground, air, sea, space, or cyber friendly forces.
- Urban inhabitants.
- LOCs or sustaining efforts.
- Critical resources necessary to support the inhabitants or subsequent operations.

Facilitating Reorganization

4-110. During urban offensive operations, commanders consolidate to strengthen their position by facilitating reorganization. Reorganization includes all measures taken by the commander to maintain combat effectiveness or return to a specified level of combat capability. As necessary, these actions include—

- Redistributing or cross-leveling supplies and equipment until resupply can be accomplished.
- Replacing key personnel and combining units or crews to form mission-capable ones.
- Integrating replacement Soldiers/Marines and systems into the unit and matching operational systems with available crews.
- Recovering, treating, and evacuating casualties, detainees, and damaged equipment.
- Conducting training and disseminating critical lessons learned.
- Conducting other actions to reestablish unit cohesion.

TRANSITION

4-111. In urban offensive operations, commanders consider transition. Effective transitioning allows commanders to continue operations in the urban area and elsewhere in the AO without unnecessary delays. Commanders transition effectively with thorough planning including appropriate branches and sequels (revised as the situation changes) that give adequate consideration to post-offensive organizational, training, psychological, and civilian requirements. If properly prepared, commanders can anticipate, rather than react to, potential mission changes.

Early and Concurrent Transition Planning

4-112. Commanders ensure smooth transitions of urban offensive operations by planning for post-offensive operations early. Units also understand enemy actions, the fluid and rapidly dynamic nature of urban operations in that areas may transition between varying forms of maneuver and types of offensive operations or an operation may transition into defensive or stability operations due to the compressed nature of the city. As these conditions change, units may plan transition triggers, recognizing decision points that may indicate a need for change in resources between offensive, defensive, or stability operations in varying parts of a city. Based on the mission envisioned, they determine which subordinates and what type of force structure to use. Offensive operations can transition to defensive or stability operations, and commanders must plan for either contingency. At the successful conclusion of offensive operations, Army/Marine Corps forces transition to some type of stability or DSCA operation. Commanders leave the subordinate unit in place to accomplish the new mission, reorganize the subordinate unit for the mission, or relieve the unit that just completed offensive operations with a new unit.

Changes to Task Organization

4-113. Commanders consider the organization of forces following offensive operations. Hostile civilians require significant combat forces or military police forces to maintain stability. On the other hand, friendly civilians require a minimum of military police or combat forces but significant logistics support.

Commanders carefully consider the urban situation before deciding how to use combat forces that recently participated in a high-intensity offensive operation.

Training and Psychological Considerations

4-114. Many Army/Marine Corps combat tasks may not support follow-on stability or DSCA tasks without considerable modification. Often, noncombat skills—not normally part of a unit's mission-essential task list, such as negotiating or mediating skills—are required. The greatest modification required, however, applies to each Soldier's/Marine's mental outlook. Forces that transition directly from combat to stability tasks may not be prepared psychologically for a rapid and drastic change of mission. Commanders cannot expect troops who have just completed high-intensity offensive operations to rapidly adjust and exercise the sensitivity and judgment required in most stability operations. This applies particularly if the population is hostile to Army/Marine Corps forces. If possible, combat forces assisting in stability operations, especially in hostile civilian situations, should not have had recent experience in high-intensity UO, and they should have trained for the mission. Likewise, commanders require their troops to conduct specific training when their Soldiers/Marines may likely conduct DSCA within the homeland and among their own people.

Return to Civilian Agencies

4-115. Commanders of major operations also have the critical role of transitioning aspects of the urban offensive operation to civilian agencies, multinational organizations, NGOs, and other agencies as appropriate. Transition planning is detailed and aims to return as much civilian control of the area as feasible after the attack. Beyond local civilian control, outside civilian agencies and NGOs assume tasks as completely and as rapidly as possible. Units consult and integrate these organizations into the planning process as early as possible. Commanders begin planning for transition simultaneously with planning for offensive operations. They consider the feasibility of relinquishing control of urban areas to civil government, law enforcement, or NGOs even before completing offensive operations. During the conduct of UO, commanders closely synchronize these transition operations with the execution of the attack.

Transition to a New Mission

4-116. In urban offensive operations, like other offensive missions, the change in mission after a successful urban attack may be to a hasty defense or a continuation of offensive operations outside the area. However, in urban offensive operations, the mission will just as likely rapidly change to a DSCA or stability mission. This is particularly true if the unit has had special training and is task-organized for UO. Transition to stability or DSCA tasks is often accompanied by a transition in roles from supported to supporting.

4-117. Even more challenging than transition at the end of the mission is transition during the conduct of the mission. Soldiers/Marines have difficulty transitioning from stability or DSCA to offense and defense and back again multiple times during an urban offensive operation. Soldiers/Marines may be tempted to apply the tactics, techniques, and procedures of urban offensive operations directly to the stability mission with potentially disastrous results. Commanders segregate missions in time and space. If sufficient forces exist, commanders segregate missions by unit. To this end, commanders permanently designate specific units to conduct civil-military and humanitarian support tasks. They avoid rapid mission changes that rotate units (particularly at company level and below) between violent and nonviolent tasks. However, commanders may not have that luxury and may need to rely heavily on preparatory training to include the inculcation of service values and strong unit leadership to mitigate potential difficulties.

4-118. High potential casualty rates in offensive UO necessitate deliberate planning of added, and well forward-positioned, protected health service support to finish an attack, prevent culmination, or enable a transition to defense, thus limiting loss of gains if unable to retrograde. Assets include medical units, vehicles, aircraft, casualty collection points, transfer points, decontamination points, aid stations, and field and combat support hospitals in addition to leveraging available, feasible civilian medical care assets. Units prioritize healthcare based on medical need, regardless of military combatant, civilian, or noncombatant status. This means planning and preparing positions, routes, and assets and rehearsing contingencies using both standard and nonstandard means. Combat casualty care is essential at the lowest level and all Soldiers/Marines should understand how, when, and where to get wounded to higher level treatment. This also, unfortunately, means

that mortuary affairs plans and team plans should be well planned and rehearsed to honor the fallen, preserve fighting force morale, and prevent operation culmination.

Chapter 5
Urban Defensive Operations

This chapter provides details on the purpose and characteristics of urban defensive operations. It also details the defensive battlefield/battlespace organization, types of urban defense, and considerations of urban defense.

If we do not learn to regard a war, and the separate campaigns of which it is composed, as a chain of linked engagements each leading to the next, but instead succumb to the idea that the capture of certain geographical points or the seizure of undefended provinces are of value in themselves, we are liable to regard them as windfall profits. In so doing, and in ignoring the fact that they are links in a continuous chain of events, we also ignore the possibility that their possession may later lead to definite disadvantages. This mistake is illustrated again and again in military history.

Carl von Clausewitz

PURPOSE OF URBAN DEFENSIVE OPERATIONS

5-1. Army/Marine Corps forces defend urban areas for various reasons: defeating an enemy attack; buying time; economizing forces; protecting an ally's political institutions and economic infrastructure; protecting an urban population; shaping subsequent conditions for decisive offensive operations; or shaping conditions for stability operations. Usually two or more of these purposes apply to urban defense. Large-scale combat operations units may start from positions of disadvantage during force projection and deployment operations, implying that units need to defeat threat A2AD systems to provide urban areas time for initial lodgments until sufficient combat power builds to continue the offense.

5-2. While offense is the more decisive form of war (see ADP 3-90), defense is strongest because defense harnesses the protective nature of urban infrastructure on adjacent terrain, multiplying a force's combat power resilience. However, because of the lack of broader freedom of action stemming from fixed prepared urban defenses, it is usually less decisive. Offensive limitations also exist if an attacking force exhausts itself on a large-scale because it is unable to secure urban area(s) or attackers succumb to attrition. A prime example is the aggregate loss of German forces destroyed in attempting to besiege Stalingrad in WWII. This siege eventually caused German force culmination and Russian (and Allied) success, although Russian forces incurred terribly heavy casualties. Key to this German loss was that Stalingrad, a city that stretched for 30 miles along the banks of the Volga River, was never fully operationally or strategically isolated, and so it could be reinforced and continue to resist German attacks.

5-3. Urban defensive operations provide commanders great opportunities to turn a complex environment's characteristics to their advantage. Urban areas may favor forces during defensive operations and enhance the combat power of defending units, using cities or networks of cities as strongpoints in mobile or area defenses or retrogrades. Area defenses are typically used when insufficient maneuver space exists to conduct a mobile defense. The purpose of the defense is to create conditions for the offense that allows U.S. forces to regain the initiative. Other reasons for conducting the defense include—

- Retaining decisive terrain or denying a vital area to an enemy.
- Attrite or fix an enemy as a prelude to the offense.
- Countering enemy action.
- Increasing an enemy's vulnerability by forcing an enemy commander to concentrate subordinate forces (see ADP 3-90).

5-4. Commanders view urban area defensive operations in two ways: (1) as conducting a major defensive operation with an urban area in their AO or (2) as defending entirely within an urban area. The types of urban defense are described in greater detail in paragraphs 5-39 to 5-49. These types are—

- Area defense—focus on retention of terrain.
- Mobile defense—focus on the movement, destruction, or disruption of enemy forces.
- Retrograde—focus on the movement of friendly forces.

CHARACTERISTICS OF DEFENSE

5-5. Commanders consider the seven general characteristics of a successful defense to regain the initiative from attacking enemy forces: preparation, security, disruption, mass and concentration, maneuver, operations in depth, and flexibility. All apply to a successful urban defense and to a higher commander supporting a subordinate defense of the urban area.

PREPARATION

5-6. Successful defending units prepare their AOs before attacking enemy forces arrive, or they establish the defense behind a force performing a security operation. Urban defense will likely occur amongst the people, around networks in cities, and may be more decisive in later stages of major operations as is demonstrated in the defense of Bastogne vignette. UO defense may use deliberate, layered preparation, such as construction of obstacles, mutually supporting fighting positions, and reinforced urban defensive positions—these become strongpoints. For example, since WWII, many NATO partner nations integrate regional city or capital region defense considerations into their civil engineering and infrastructure. As part of urban shaping and conflict prevention positional defense considerations, European underground spaces such as shopping centers, parking garages, mass transit, sports venues, and reinforced government or infrastructure buildings provide shelter for civilians and more resilient defensive positions for inbound-assisting U.S. forces. Urban defense and strong-point characteristics include protection/force protection, survivability, countermobility, and enhanced mobility through concealment. Additionally, units perform aggressive IO/OIE to build civil population support, prevent urban operation interference, and mitigate risk of civilian casualties.

Defense of Bastogne

During the December 1944 German Ardennes counteroffensive known as the Battle of the Bulge, General Dwight Eisenhower released the theater reserve of the 82nd and 101st Airborne Divisions at the request of the 12th Army Group Commander, Lieutenant General Courtney Hodges. The 101st Airborne Division was assigned to VIII Corps under Major General Troy Middleton. The Corps had taken the brunt of the 5th Panzer Army's attack on 17 December 1944. With the division and deputy commander out of theater, command fell to Brigadier Anthony McAuliffe, the former divisional artillery commander. The division retained and reinforced a layered defense in depth surrounding the central town of Bastogne, Belgium in the main axis of advance of German forces. Although both sides had taken heavy casualties, as part of this larger defense, the urban operation used reinforcing light infantry divisions and small unit combined arms teams to defend in and around the town's complex terrain against German combined arms forces until more significant Allied airpower and armor could reinforce and counterattack from the south (see figure 5-1).

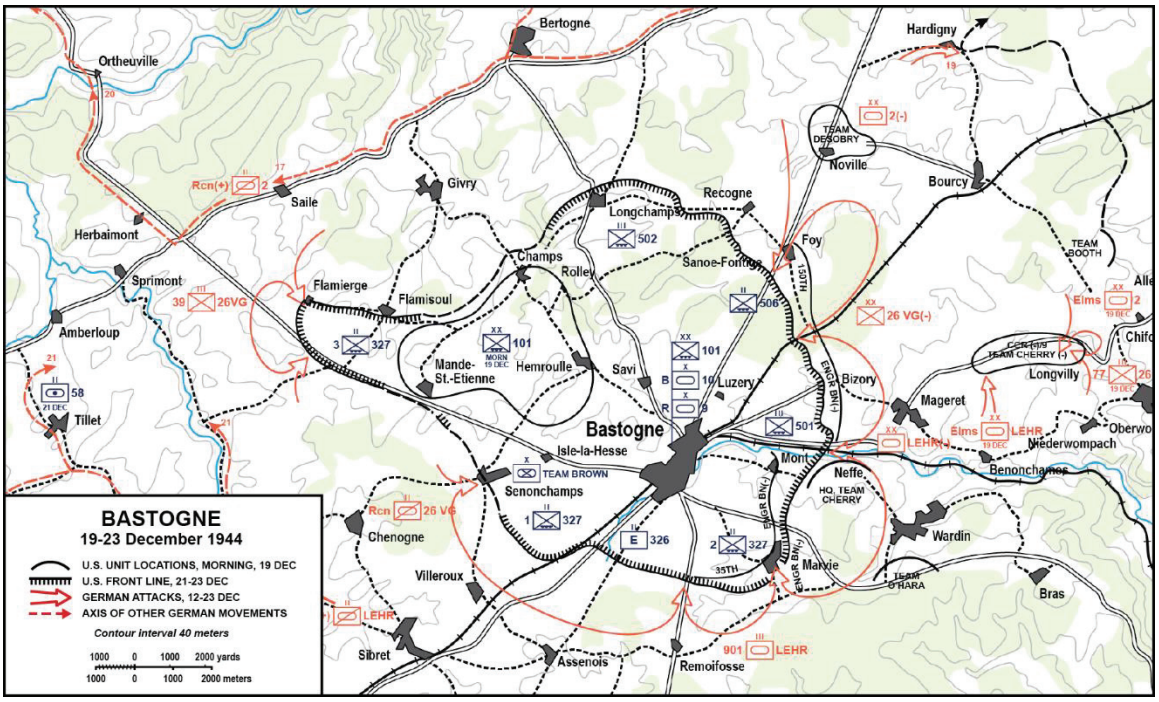


Figure 5-1. Defense of Bastogne

Defense of Bastogne (*continued*)

In addition to the 805 officers and 11,305 enlisted men of the 101st Airborne, McAuliffe also commanded forty tanks of Combat Command B, 10th Armored Division; a tank destroyer battalion; two battalions of 155-mm artillery; and a collection of Soldiers from many units available as replacements. None of the German divisions attacking Bastogne was at full strength, and some were considerably depleted. Panzer Lehr had only 40 percent of its tanks, 60 percent of its guns, and 60 percent of its authorized strength. Because of previous battle losses, the 26th Volksgrenadier Division was lacking one regiment. The 2nd Panzer Division was at 80 percent strength, but one of its regiments of grenadiers was on bicycles and therefore unfit for offensive operations; that regiment was used only for replacements. Units that later reinforced XLVII Panzer Corps ranged in strength from 50 to 70 percent.

General Middleton dispatched Combat Command B to defend villages to the southeast, east, and northeast of Bastogne. All promptly came under heavy pressure. McAuliffe organized the 101st Airborne into regimental task forces and distributed them to the perimeter of Bastogne. By 20 December 1944, German attacks constricted the perimeter around Bastogne and encircled the town the next day. Lacking enough strength to overwhelm the defenders, the 157th Panzer Corps commander sent a note to McAuliffe on 22 December 1944 demanding his surrender. On hearing the demand, McAuliffe's immediate reply was "Nuts!" German attacks continued throughout the day, although not well coordinated and only in company strength against various parts of the perimeter.

On 23 December 1944, the weather cleared and American airpower began to play a

part in the battle, parachuting vital supplies—including artillery ammunition—to the defenders while fighter-bombers attacked German armor. Thus strengthened, American morale stiffened, and the defenders repulsed renewed attacks by additional units of XLVII Panzerkorps on 24 and 25 December 1944. On 26 December, the Germans attacked again with battalion-sized infantry and armor teams but were held off by American defenses arrayed in depth and by heavy artillery concentrations. At 1600 that afternoon, American tanks of the 4th Armored Division broke through to relieve the town. Fighting continued over the next two days as the Germans unsuccessfully attempted to crush the corridor that General George S. Patton's troops had opened to Bastogne. In the end, the 101st Airborne Division, Combat Command B of the 10th Armored Division, and their attached units suffered just over 2,000 casualties in the defense of Bastogne, while attacking German forces suffered 7,000 casualties and lost more than 200 armored vehicles.

Most of the fighting in defense of Bastogne was, like elsewhere in the Battle of the Bulge, a series of small unit actions. The 101st Airborne had the advantage of fighting on interior lines of communication, so that it could rush reinforcements to any threatened part of its perimeter. The Germans, on the other hand, were operating on inadequate roads that made it difficult to concentrate force and more difficult to keep the forward units supplied. Tactical organization played its part as well. Organizing the defenses as teams of infantry, armor, and artillery gave the 101st great flexibility. More important was the greater firepower that the defenders enjoyed. When alerted for movement to Belgium, the divisional artillery took much more ammunition than it normally would have planned. Once in Bastogne, the divisional artillery was reinforced by a number of other battalions so that McAuliffe could usually plan on using up to ten artillery battalions, although the need to conserve ammunition remained acute throughout the siege. Artillery was principally used against armor. For example, on 20 December 1944, seven battalions fired 2,600 rounds solely at German armor, and artillery fired both indirect and direct fire missions against tanks throughout the battle. Aggressive infantry patrolling gave good early warning of German attacks, and Americans destroyed any tanks that penetrated the defenses, after separating them from their supporting infantry. By comparison, the Germans had very little artillery to support the attack and never seriously attempted to silence American artillery through counterbattery fire.

Fortunately for the defenders, German attacks throughout the siege were piecemeal and conducted without great vigor. In part, this reflected that few senior German commanders believed in the plan they were attempting to carry out. The piecemeal nature and lack of vigor also reflected the inadequate road network, which slowed the German advance—making concentrating forces at the decisive moment and resupplying forward units when needed, difficult. A third reason for German lack of success was the secrecy with which Hitler carried out his plans; German tactical commanders knew their missions only a couple of days before the attack. Thus, they had inadequate time to conduct reconnaissance and consider what might go wrong and how they would respond to those failures. Finally, German forces failed partly because of a generally lower state of training and morale at that point in the war.

For the Americans, the successful defense of Bastogne and the linkup with elements of the Third Army attacking from the south spelled the end of the German offensive effort in the Ardennes. German commanders were denied the road network—of which Bastogne was the center—and were delayed so long that their overall plan for a dash

across the Meuse River and continuing on toward Antwerp became impossible to execute. German commanders finally persuaded Hitler to allow them to withdraw toward the Siegfried Line, salvaging what they could of forces they had thrown into battle.

5-7. Prepared UO defenses enhance protection/force protection through cover and concealment. With little or no advance preparation, buildings, subsurface structures, and walls protect Soldiers/Marines from direct and indirect fire. They also mask indirect fire projectile trajectories; limit observation; counter enemy mobility; and limit engagement ranges (requiring skill/training at combat in close quarters battle, such as quick-fire techniques). Nearly all buildings provide some ballistic protection from direct and indirect fire. Mason and stone buildings with basements and cellars protect Soldiers/Marines from most fires except the largest caliber or tonnage munitions. Tall buildings forming urban canyons limit ISR and communications. Masking protects defending forces' movement and maneuver from observation along routes and within the superstructure of buildings. Units may also use these protected routes as interior lines for sustainment/logistics, counterattacks, and subsequent maneuver. On the flip side, units in a UO defense in subterranean environments develop contingency plans, acknowledging and mitigating the risk to forces of an enemy possessing or using a heavier-than-air or persistent CBRN capability, because those agents may settle in lower geographic or gravitational areas.

5-8. Prepared UO defenses around large buildings support countermobility of enemy forces. By design and without additional defender effort, these obstacles funnel and canalize forces into streets and areas transformed into engagement areas. Well-positioned defensive forces in mutually supporting battle positions observe and cover obstacles by fire, developing engagement areas to prevent enemy infiltration. Defenders enjoy minimal obstacle construction efforts, using point obstacles in streets to restrict movement and maneuver options of the attacking force. Intentionally creating structure rubble can block routes.

5-9. Prepared UO defenses around buildings conceal location, disposition, and intent of the defense. Buildings limit visual observation to the external perimeter of the urban area. They degrade radar and electronic position identifiers and decrease the utility of overhead imagery. Physical aspects of the urban environment enhance defense by degrading the opposition's ISR capabilities. Buildings conceal static defensive positions within their superstructure and aid the maneuver of defensive forces in an urban area.

5-10. The urban environment constrains defensive mobility in much the same manner as it constrains offensive mobility. A defender with time, however, has the opportunity to conduct careful reconnaissance, select routes, and prepare routes. This gives a defender the ability to move reserves, maneuver counterattack forces, and plan sustainment/logistics without observation. Careful preparation provides the defender a mobility advantage over attacking forces. Units continually improve the defense, seeking to transition to offense as soon as possible, because an attacker with enough time and resources will eventually find a gap, seam, or weakness in the defense to penetrate and exploit.

SECURITY

5-11. Commanders secure their forces through security, protection, IO/OIE, and cyberspace and electromagnetic warfare tasks. *Security operations* are those operations performed by commanders to provide early and accurate warning of enemy operations, to provide the forces being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow commanders to effectively use their protected forces (ADP 3-90). The urban environment can be an advantage or a disadvantage to the security of defending forces, depending upon the attitude of the population and physical considerations.

5-12. Physical aspects of an urban environment, uninfluenced by the human aspect, help defend forces. Easily concealed observation posts in structures enhance the combat power of smaller tactical units as they monitor restricted avenues of approach for enemy reconnaissance. Forces gain numerous hide positions for small reconnaissance units in complex terrain. Additionally, complex terrain can mask electronic signatures of those hidden units, especially in subterranean environments, where directional and depth differences affect signatures of line of sight communications.

5-13. On the other hand, physical aspects of the urban environment can present security challenges, primarily with observation. Compartmented terrain limits the field of observation from any one point. Defense requires more security forces to observe the mounted and dismounted avenues to prevent infiltration. Enemy forces that successfully infiltrate will prove more difficult to locate. Employing remote air, ground, and UAS sensors can help mitigate these risks.

DISRUPTION

5-14. An urban environment's attributes assist defending forces in disrupting the attacker. *Disrupt* is a tactical mission task in which a commander integrates direct and indirect fires, terrain, and obstacles to upset an enemy's formation or tempo, interrupt the enemy's timetable, or cause enemy forces to commit prematurely or attack in piecemeal fashion (FM 3-90-1). UO defensive disruption actions include deceiving or destroying enemy reconnaissance forces, breaking up combat formations, separating echelons, and impeding an enemy force's ability to synchronize its combined arms. Defending forces conduct spoiling attacks to deny an enemy force's ability to focus combat power. Disruption attributes in UO primarily compartmentalize enemy forces, break up the cohesion of attacker efforts to maneuver, and facilitate counterattacks.

5-15. Physical aspects of an urban area force the attacking enemy into compartmented urban canyons that make mutual support between attacking enemy columns difficult. Shifting resources from one portion of the enemy attack to another is also more difficult in urban terrain. Physically, an urban area disrupts tactical communications, making synchronization of combat power difficult. For the defense, units consider the disruptive effects of civilians in the battlefield/battlespace, seeking to mitigate this risk while adequately performing their mission.

5-16. Urban terrain poses risk to attacking forces because it facilitates counterattacks, however compartmented terrain hinders mobility capabilities of the defense. Careful planning, preparation, and rehearsals facilitate more rapid movement of larger forces if the defending force can maintain interior lines. For example, units may use subterranean features, or create concealed internal or superstructure avenues of approach (such as mouse holes in walls, floors, or ceilings) to facilitate movement for attacks. Defending forces assemble counterattacks undetected, move them along covered and concealed routes, and achieve surprise at the point of counterattack. Attacking forces in compartmented terrain often leave forward elements in isolated positions or expose long and vulnerable flanks to friendly counterattack and interdiction.

MASS AND CONCENTRATION

5-17. The urban environment restricts defenders' ability to mass and concentrate overwhelming combat power against an attacking enemy due to limits on maneuver space and line of sight. This can be seen in the example Stalingrad vignette below. Restrictive terrain reduces all forces' maneuver options, whether attacking or defending. Defenders position forces in protected and mutually supportive primary, alternate, supplementary, subsequent, and strongpoint engagement areas. Relatively few well-positioned defenders can generate significant lethal effects. Without positional advantage and corresponding protective effects of the terrain, defenders should expect attacking forces to mass numbers to achieve the necessary combat power to overcome this advantage. Commanders accept certain risks to mass effects at decisive points or for their main efforts. Concentrating forces increases the risk of large-scale losses from enemy fires and weapons of mass destruction. Commanders mitigate this risk by using dispersion, cover and concealment, and military deception to mass at precisely the correct time and to avoid detection of friendly troop concentrations by enemy ISR assets.

5-18. Knowledge of the complex terrain permits defending forces to plan engagement areas that maximize effects of their combat power. As time and mission permit, commanders consider the necessity and risk to mission of removal or destruction of civil, personal, or government property to facilitate UO defense. Removal or destruction can affect future civil support and stability operations. Defending forces remove fences, walls, rooftops, and even entire buildings to facilitate fields of fire and unmask indirect fire flight paths, because enclosed spaces can limit minimum elevations, ranges, and indirect fire munition trajectories. Forces carefully choose firing positions for indirect fire systems so that flight paths travel between buildings into engagement areas. By leveraging their knowledge of the terrain, numerically inferior defenders synchronize devastating fires on offensive forces that are forced by terrain and reinforcing obstacles to mass

in confined spaces where fires can have the greatest effect. Additionally, effective use of snipers to observe or call for fire, to support maneuver forces through direct engagement, or in a CCIR or information collection role, to multiply the effects of combat power, can have devastating effects on enemy morale. See TC 3-22.10 for additional information on sniper operations.

5-19. Commanders designate, retain, and, when necessary, reconstitute a reserve. They employ their reserve to exploit counterattack opportunities, regain local superiority, preserve integrity of their defense, and prevent friendly culmination. They reconstitute their reserve from other forces when their reserve is committed.

Urban Defense in a Major Operation: Stalingrad—1942 to 1943

The German and Soviet battle for Stalingrad in late 1942 illustrates how a tactical urban area defense integrates into a larger mobile defense. In conjunction with the Soviet victory in the area defense of Kursk in July–August 1943, the German Army was destroyed to an unrecoverable point of culmination, allowing later Russian offensive success with the capture of Berlin. Along with Western front Allied actions, they ended the war. These two victories were the turning point of initiative in WWII. Stalingrad was a battle fought on a huge scale: it involved army groups on both sides and thousands of square kilometers. Although the city was relatively small, it remained the focus of both German and Soviet offensive and defensive oeprations during the six-month battle.

In the summer of 1942, the Germans launched a strategic offensive in southern Russia. Its goal was the valuable oil fields of the Caucasus. German forces turning south into the Caucasus exposed a vulnerable flank to Soviet forces positioned between the Don and Volga Rivers. For the German Caucasus operation to succeed, it had to destroy Soviet forces between the Don and Volga, establish a good defensive line, and capture Stalingrad. This city would anchor the German defense and interdict the critical flow of supplies from the Caspian Sea via the Volga River into central Russia. Stalingrad, by virture of its name, also had important political and cultural value to the Germans and Soviets. The opening phases of the German offensive were successful. German forces—the 6th Army and 4th Panzer Army—entered the outskirts of Stalingrad in late August 1942 (see inset 1 of figure 5-2).

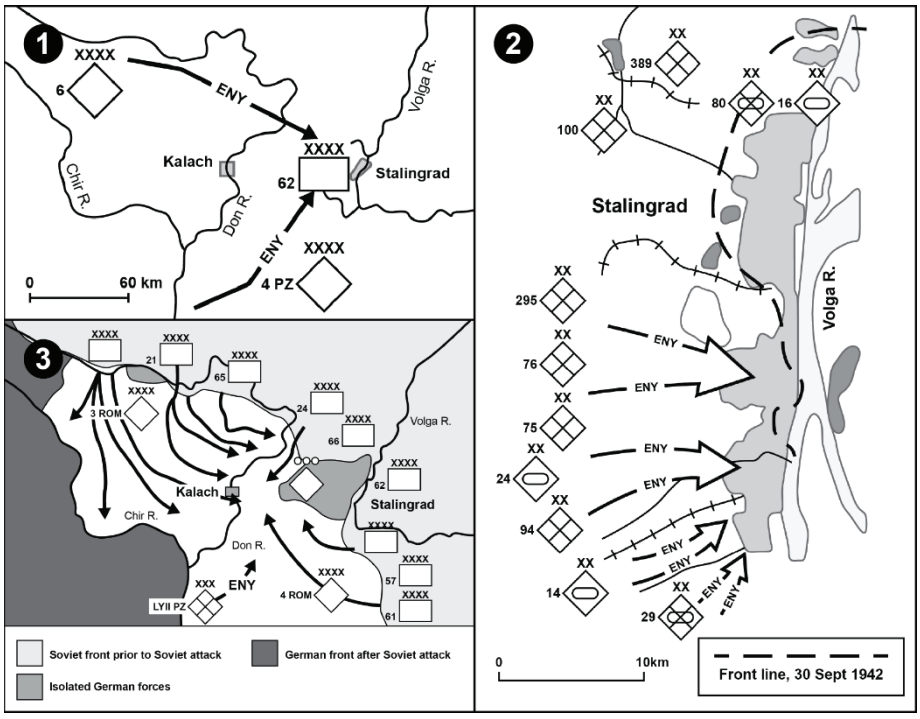


Figure 5-2. (1) German Attacks to Seize Stalingrad, Summer 1942, (2) German Attacks to Seize Stalingrad, September 1942, (3) Soviet Attacks trap German 6th Army

After a month of intense fighting, the Germans possessed nearly 90 percent of the city. At this point, the 6th Army commanded all German forces in and around Stalingrad. The Soviet 62nd Army's defense was reduced to a front only a few hundred meters deep and a couple of kilometers long on the banks of the Volga. The soviet defenses hinged on fortress-like concrete industrial buildings and the fanatical bravery and tenacity of soldiers and civilians fighting in the city's remains. See inset 2 of figure 5-2.

Beginning in mid-September, the Soviet command began looking at how to convert the defense of Stalingrad into an operational opportunity. During October and November, the 62nd Army held on to its toehold in Stalingrad. While maintaining the defense of the 62nd Army, the Soviets secretly began to build up strength on both flanks of the German 6th Army. The Germans increased their vulnerability by securing the 6th Army's flanks with less capable Romanian, Hungarian, and Italian armies. Also, the 6th Army moved powerful German divisions into the city and rotated with German divisions that were exhausted by urban combat.

On 19 November 1942, the Soviets launched OPERATION URANUS that attacked two Romanian armies with seven Soviet armies. Simultaneously, to aid the 62nd Army in further fixing the German 6th Army, the 8th Russian Army attacked. Within five days, the Soviet armies of the Don Front, Southwest Front, and Stalingrad Front met near the city of Kalach and sealed the fate of the German 6th Army's 300,000 troops in Stalingrad. See inset 3 of figure 5-2.

On the third day of the soviet offensive, when encirclement seemed inevitable but not yet complete, the 6th Army commander asked permission to withdraw from the trap. The German high command denied permission, believing the Army could be supplied by air and then a renewed offensive could break through to the city. On 12 December the German LVII Panzer Corps launched an offensive north to break through to Stalingrad. This offensive made progress until another Soviet offensive on 16 December forced its cancellation. This ended any hope of recovering Stalingrad and the 6th Army. On 31 January 1942, the 6th Army surrendered after sustaining losses of almost two-thirds its strength. The Soviets captured over 100,000 prisoners.

The successful defense of Stalingrad reveals many lessons. Tactically, the defense showed how using the terrain of a modern industrial city wisely could increase the combat power of an inferior defending force and reduce the maneuver options of a mobile, modern, attacking force. The Germans' inability to isolate the defenders reveals another element of the Soviets' tactical success. The Germans never threated the Soviet supply bases east of the Volga, and, despite German air superiority, the Soviets continuously supplied and reinforced the 62nd Army across the Volga River. Soviet artillery west of the river also was able to fire in support of Soviet forces and was never threatened with ground attack nor effective German counterfire.

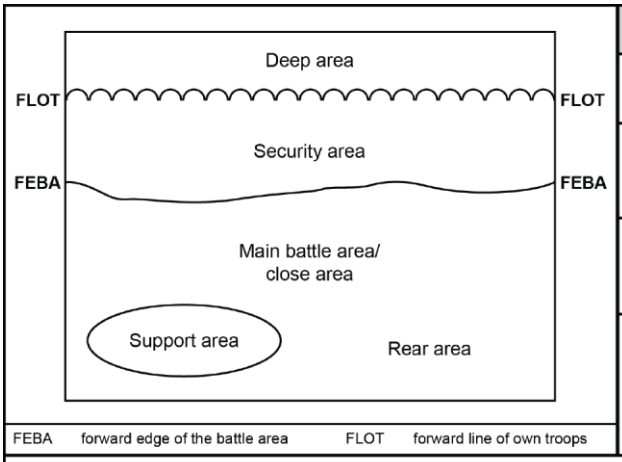
At an operational level, the Soviets demonstrated a keen understanding of using an urban area within the context of a mobile defense. The 62nd Army's stubborn area defense of Stalingrad drew the bulk of German combat power into the urban area, where they were fixed by a smaller and quantitatively inferior defending force. This allowed the Soviets to build combat power outside the urban area. The Soviets shaped for a mobile defense by positioning powerful Soviet armor forces in open terrain outside the urban area against quantitatively inferior German allied forces. In OPERATION URANUS, the mobile defense's strike force destroyed the enemy outside the urban area and trapped the greater part of the best enemy formations inside the urban area. The trapped units were then subjected to dwindling resources and extensive psychological operations, further isolated into pockets, and defeated in detail.

MANEUVER

5-20. Maneuver allows a defending force to achieve and exploit a position of advantage over an enemy force. See chapter three and four for additional discussion on forms of maneuver. Even in defense there are elements of offense, and forms of maneuver can be used in rapid transition. Defensive maneuver in an urban setting may include spoiling attacks in an area defense or retrograde, or counterattacks in a mobile defense. The defending force uses multiple forms of maneuver (described in chapter 4) in combination with three forms of defense: perimeter defense, defense of a linear obstacle, and reverse slope defense (FM 3-90-1).

OPERATIONS IN DEPTH

5-21. *Operations in depth* is the simultaneous application of combat power throughout an area of operations (ADP 3-90). Commanders plan their operations through the depth, height, and breadth of their AOs. They create conditions by disrupting enemy long-range fires, sustainment, and C2. These disruptions weaken enemy forces and prevent any early enemy successes. Operations in depth prevent enemy forces from maintaining their tempo. In defense, commanders establish a security area and the main battle area with its associated forward edge of the battle area (see ADP 3-90 and figure 5-3). However, commanders and staffs should be mindful that a defensive urban operation can quickly change to an offensive operation, and therefore should plan areas of operation, unit boundaries, and other movement and control measures accordingly. Thoughtful planning in this regard can facilitate quick transitions to other operation branches or sequels thus also facilitating consolidation of gains. Urban terrain facilitates defensive operations in depth. The same buildings and other structures that hamper maneuver allow small units to displace to supplemental and alternate fighting positions undetected and protected from enemy fire. This makes concentric rings of defense more viable than in other environments as it causes delay and disruption of attacking forces. From a larger perspective, elements can employ long-range fires to disrupt the enemy force as it moves towards the city, providing an additional layer to the defense.



Offensive and defensive UO framework
The ***deep*** area is where the commander sets conditions for future success in close combat (ADP 3-0).
The ***forward line of own troops*** (FLOT) is a line that indicates the most forward positions of friendly forces in any kind of military operation at a specific time (JP 3-03).
A ***security area*** is that area occupied by a unit's security elements and includes the areas of influence of those security elements (ADP 3-90).
The ***forward edge of the battle area*** (FEBA) is the foremost limits of a series of areas in which ground combat units are deployed to coordinate fire support, the positioning of forces, or the maneuver of units, excluding areas in which covering or screening forces are operating (JP 3-09.3).
The ***main battle area*** is the area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy (ADP 3-90).
The ***close area*** is the portion of the commander's area of operations where the majority of subordinate maneuver forces conduct close combat (ADP 3-0).
A ***support area*** is the portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations (ADP 3-0). For example, field trains command post (FTCP), brigade support area (BSA), division support area (DSA), corps support area (CSA), joint support area (JSA).
*The rear area, described in **FM 5-0**, is that area within a unit's area of operations extending forward from its rear boundary to the rear boundary of the area assigned to the next lower level of command. The preponderance of forces in the rear area support and sustain forces in the close area.*

Figure 5-3. Offensive and defensive urban operations framework

FLEXIBILITY

5-22. Defensive flexibility results from detailed planning. Commanders develop defensive flexibility by ensuring that plans adequately address branches and sequels to include alternate and subsequent positions and emphasize counterattack options. The urban area facilitates defensive flexibility because forces are able to at times better gauge enemy actions; they can adjust and adapt the urban terrain for defensive operations with little or no preparation. The effect is similar to having multiple, prepared positions on nearly every possible approach. Urban areas permit rapid, covered movement within interior lines, especially in superstructure spaces. This permits swift movement to, and occupation of, strong defensive positions with little or no preparation. However, urban defenses are not without limitations. Limited lines of sight, interrupted weapons trajectories, difficulty of lateral and other movement, and other factors complicate urban defense. While generally an effective environment to attrite and delay a foe, urban environments also introduce obstacles to a defender.

5-23. The defense also has more flexibility since established defenders often know and better understand the urban terrain's effects on operations. Normally, defenders will not get lost as easily due to multiple terrain association options. Because most defenses are approached and prepared by units traveling through the city during offensive UO, defenders are most knowledgeable about complex lines of sight and masking effects and best understand the ballistic characteristics of individual structures. Defenders use their knowledge to optimize criteria for engagement area development and disengagement line determination. Exceptions may occur when a defense is hastily occupied or the length of time a defense has been in place is insufficient to garner an advantage.

5-24. Urban defense forward, in depth, and outside the objective area gives commanders options, time, and space to adjust their defense, counterattack, or transition to offense. These options may not always be available, however, forcing units to defend inside of cities. An external, forward area, or mobile defense mitigates danger to the urban population and potentially reduces collateral damage. Defense from outside the urban area takes advantage of Army/Marine Corps standoff long-range engagement capabilities, denies the enemy the opportunity to close with Army/Marine Corps forces or noncombatants, and provides greater protection from fires via dispersion. A forward defense is appropriate when Army/Marine Corps forces have enough resources to defend open terrain and when time permits deploying extensive obstacles and constructing protected positions. Taking advantage of natural terrain obstacles, such as rivers, aids in the defense.

DEFENSIVE BATTLEFIELD/BATTLESPACE ORGANIZATION

5-25. Urban defensive operations are organized within the overall battlefield/battlespace organization of sustaining, shaping, and decisive operations/decisive actions (the Marine Corps recognizes both spatial and purpose-based battlespace frameworks of deep, close, and rear and sustaining, shaping, and decisive, respectively). The success of an urban defense depends on shaping and sustaining actions supporting the decisive operation/decisive action, but commanders sequence, and synchronize all of them to achieve unity of effort. BCTs can expect the division or corps to use their capabilities in conjunction with the defensive advantages of urban terrain to provide an economy of force to other decisive operations or main efforts. Sustaining operations in defensive UO ensure freedom of action. Critically, urban sustaining operations ensure security of LOCs and establish effective movement control. Shaping operations in defensive UO create conditions for decisive operations/decisive actions. Shaping operations vary greatly depending on the type of defense. For example, in a mobile defense, the shaping operation may be the fixing force and the decisive operation/decisive action may be the assault force for units seeking to destroy the enemy. In contrast, in an area defense, the fixed defense may be the decisive operation/decisive action for a unit seeking to hold ground. In the urban defense, decisive operations/decisive actions focus on accomplishing the commander's mission. The decisive operation/decisive action might not defeat the enemy's main effort, and it might not prevent enemy occupation of large portions of an urban area if those tasks are not essential to mission accomplishment. For example, if the defense's objective is to protect a critical communications node, then—depending on the commander's overall intent—enemy actions to secure an airfield elsewhere may not be important.

DECISIVE

5-26. Decisive defensive UO are used to either retain terrain, force culmination by destroying the enemy in the main battle area, or facilitate freedom of action as friendly forces retrograde. When a commander defends forward within an AO, the force is organized so that most of the available combat power is committed early in the defensive effort. To accomplish this, the commander may deploy forces forward or plan counterattacks well forward in the main battle area or even beyond the main battle area. If the commander has the option of conducting a defense in depth, security forces and forward main battle area elements are used to identify, define, and control the depth of the enemy's main effort while holding off secondary thrusts. Using offensive elements within the defense, the defending unit contributes to the larger operation by denying the enemy their AO or destroying the enemy to such an extent that the urban area becomes too costly an objective to attain. By disrupting and separating enemy combined arms elements, their cumulative effectiveness is reduced, and U.S. force combined arms overmatch weapons and techniques can be used to destroy them. For example, the defense that separates enemy infantry from its tanks can better use armor, artillery, or antitank systems to destroy enemy tanks on their flank or rear, thus forcing enemy infantry to lose significant mobile protected firepower. The defending unit continuously prepares and improves defense until they transition to offense or until they begin to fight.

SHAPING

5-27. Shaping defensive UO seek to set conditions favorable to the defender outside of the city, mitigate risk to civilians, and maximize preparation of the terrain to deter or defeat the enemy. This often involves establishing appropriate, linked echelon strongpoints, usually at the company level. Shaping defensive UO seek to offset, counter, and regain the initiative possessed by the attacker. Because of this, urban area shaping operations may quickly shift to decisive operations, as commanders shift missions, task organizations, priorities of effort, fires, and sustainment and apply leadership to accomplish the mission.

SUSTAINING

5-28. Sustaining defensive UO seek to maximize use of interior LOCs to sustain fixing or striking defensive forces. As UO defenders expect increased enemy force ratios, they plan for increased requirements for classes of supply (especially Class IV, V, VIII, and IX) and increased need for health services support. For example defensive UO sustainment planning should account for an increased demand for lethal munitions—such as anti-personnel and anti-tank munitions (for example, shoulder-launched munitions and mines)—with less focus on nonlethal munitions, such as smoke munitions that obscure movement. Carefully balancing unit and Soldier/Marine combat loads is essential. Sustaining defensive UO in a mobile defense also aims to maximize the reach and combat power of striking forces.

FORMS OF URBAN DEFENSE

5-29. Just as UO offense has distinct forms and types, so does UO defense. The following forms of defense have unique purposes and planning considerations: defense of a linear obstacle, perimeter defense, and reverse slope defense (see ADP 3-90 for additional information and graphics).

DEFENSE OF A LINEAR OBSTACLE

5-30. Defense of linear obstacles may be part of either an area or mobile defense. Urban areas provide many natural linear obstacles that do not require deliberate preparation. Linear defense of obstacles that involve urban features includes using physical terrain such as rivers, mountains streets, avenues, open areas, or other recognizable terrain that facilitate defensive engagement lines, areas, and other control measures. A linear defense in depth in and around a city economizes forces as friendly forces may not be able to cover an entire large or particularly dense urban area. The depth provides two advantages in economy of friendly forces. First, it allows commanders to mitigate risk to gain an advantage over enemy forces by preventing their containment or isolation of bypassed friendly defensive positions; this diffuses enemy combat power as they continue the attack in depth. Second, using good adjacent unit coordination and mission orders, local defending units may immediately and violently counterattack enemy attempts to seize penetration points or

bridgeheads while higher echelons continue to conduct deeper shaping operations by isolating penetration or bridgehead sites with fires, maneuver, ISR, or other means.

PERIMETER DEFENSE

5-31. UO perimeter defense occurs in all directions, is used to hold critical terrain, can be used when not tied into adjacent unit defenses, uses most combat power on its exterior, and can be used in either area or mobile defense. It can be used in other circumstances such as when subordinate forces bypass the enemy and must defend. Perimeter defense also can be used when conducting base cluster defense in support or remote areas away from main body forces, such as tactical assembly areas, forward operating bases, or combat outposts. Perimeter defense is planned to respond to the widest range of enemy action, which includes branch or sequel plans to counterattack. Early warning through aggressive patrolling and security operations aids UO perimeter defense success. A centrally located reserve is positioned to rapidly react to a perimeter penetration in any direction. Cities serve as natural strongpoints due to their movement restricting nature, but can be made stronger by tying the defense to natural obstacles such as rivers, shores, or other restrictive terrain. City perimeter defenses also benefit from interior lines that aid LOCs, resupply, CASEVAC, or MEDEVAC. Figure 5-4 on page 5-14 illustrates perimeter defenses and engagement area control measures in varying echelon and terrain situations.

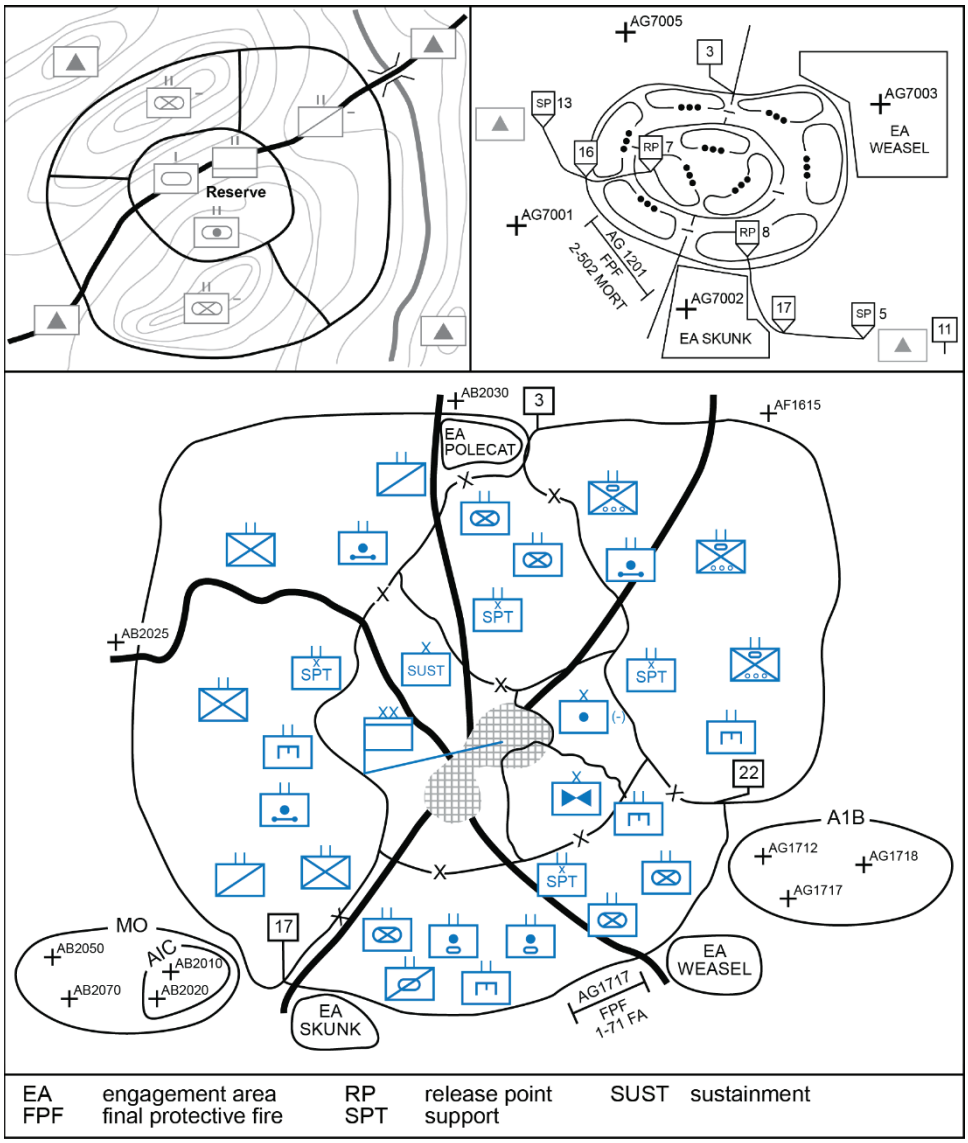


Figure 5-4. Perimeter defenses and engagement area control measures

5-32. Battalions most often conduct effective perimeter defenses in the main battle or close areas aided by BCT shaping operations, but divisions and corps can also organize them as necessary by further shaping UO defense in security areas or in offensive deep areas. These areas can be within or outside of the city (see table 5-1 on page 5-22 for recommended depths and frontages by decisive action operation and echelon type). Units can choose to defend with the majority of forces on the exterior of the perimeter or defend with positions in depth of the urban area. The former method maximizes combat power to the defender's front, reduces risk of fratricide, and aides maneuver and fire control measure planning. The latter, defense in depth method economizes combat power and provides more options for either mobile defense striking forces or retrogrades. Reconnaissance is employed outside the perimeter to provide early warning, and units positioned or maneuvering there coordinate passage of lines into and out of perimeter units.

5-33. Forces behind front perimeter echelon positions may cover the gaps, flanks, and front-line transition movements to alternate or supplementary defensive positions with direct, indirect, or obscuration fires. Defensive plans provide for using all available support, including field artillery systems firing danger close, attack helicopters conducting close combat attack, and fixed-wing assets conducting close air support. Fire support from units outside the perimeter is integrated into the overall defensive plan, thus conserving UO

perimeter defense units' ammunition. Perimeter UO defenders disrupt and harass approaching enemy forces in the security area with patrols, ambushes, air attacks, or fires before making contact with attackers. Open terrain gaps between units are covered with fires, but gaps are not allowed between fighting positions in restrictive terrain with restricted fields of fire and observation.

5-34. Terrain management planning is used to mitigate counter-fire and counter-air risk by placing deconflicted azimuth of fire mortar firing points, position areas for artillery, aviation tactical assembly areas, landing zones, pickup zones, and forward arming and refueling points within or well behind the perimeter security distance but placed out of enemy range to ground maneuver forces or echelon headquarters. The commander in a perimeter defense designates the trace of the perimeter, battle positions, contact points, and lateral and forward boundaries. The commander can use engagement areas, target-reference points, final protective fires, and principal direction of fire as fire control measures such as those in figure 5-4. The commander designates start points, release points, and checkpoints, passage points, and passage lanes for use by local reconnaissance, surveillance, and security elements operating outside the boundary of the perimeter. Vehicle, antiarmor, air defense, and sniper positions are prepared to cover likely avenues of approach with combined arms support and may use hide positions to augment surprise, cover, and concealment. Perimeter defenses may be augmented with creation or construction of obstacles to aid in fixing, turning, or blocking attackers in main battle or engagement areas.

5-35. Attacks against a city perimeter may range from long-range sniper, mortar, or rocket fire attacks by suicide demolition squads to attacks by major enemy ground and air forces. Mortars, artillery, tanks, and antiarmor missile systems from within the perimeter engage the enemy at long ranges. As the attack comes within small arms range, other weapons on the perimeter engage the enemy. If the assault continues, the force employs its available final protective fires. If the enemy penetrates the perimeter, the reserve blocks the penetration or counterattacks to restore the perimeter. After committing the initial reserve, the commander must reconstitute another reserve to meet other threats. This force normally comes from an unengaged unit on another portion of the perimeter. If the commander uses an unengaged force to constitute a new reserve, the commander must retain sufficient forces to defend the vacated sector, unless the situation forces the commander to assume that degree of risk.

REVERSE SLOPE DEFENSE

5-36. In UO, units organize a reverse slope defense on the portion of a terrain feature or slope with a topographical crest that masks the main defensive positions from enemy observation and direct fire. While not mutually exclusive, units control the topographical crest either through occupation or direct fire, thus denying the terrain to the enemy as shown in figure 5-5 on page 5-16. Reverse slope defense can promote surprise in forcing the enemy to commit, reduce indirect fire effects, and draw UO battle into close contact and small arms range. In some cases, manmade features on top of rolling terrain within urban areas may serve as the reverse slope, such as elevated or tall building clusters. In other cases, the crest and reverse slope can be created, either through incidental or deliberate building demolition or rubbling or through obstacle creation, for example, berm or wall construction. The fire, movement, and maneuver control measures previously mentioned continue to apply to the reverse slope defense. The commander should employ sufficient forces to provide observation and a security screen for the main battle area on ground that should be retained. The defending force maintains observation and fires over the forward slope as long as possible, preventing massing for a final assault. Main defensive positions mass fires on the enemy as it crosses the topographical crest. All or part of the defending force may employ this technique. This is generally useful at lower tactical levels, such as battalion and below.

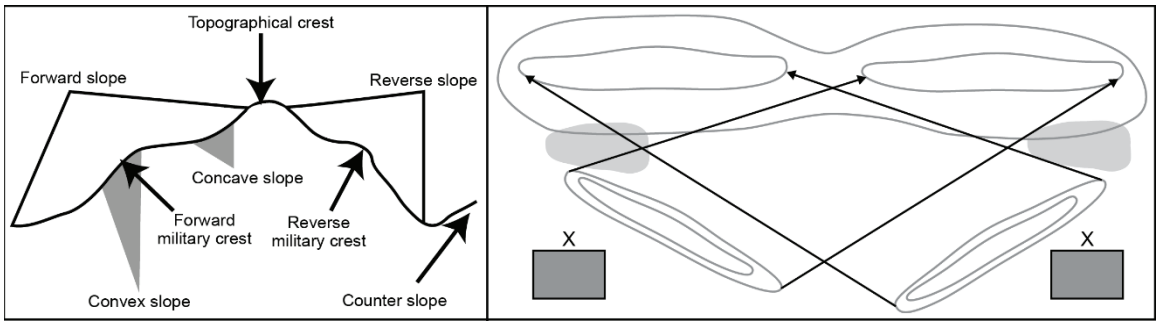


Figure 5-5. Slope terminology and oblique defilade

5-37. A commander chooses to conduct a reverse slope defense when—

- The crest and forward slope are untenable because the enemy enjoys a quantitative or qualitative advantage in firepower at that point.
- Weapons cannot depress enough to engage.
- The crest and forward slope offer little or no cover and concealment.
- The forward slope has been lost or has not yet been seized.
- Units on the flanks can adequately cover the forward slope.
- Variance in the force's tactical pattern is advisable to deceive or surprise the enemy.
- Forced into a hasty defense while in contact with or close to the enemy.

5-38. Using the reverse slope defense has several disadvantages:

- The effective range of direct fire weapons may be limited.
- Once security elements withdraw, the enemy can advance largely unimpeded until attacking elements crest the high ground in front of the main defensive positions.
- The enemy has the advantage of attacking downhill.
- Maintaining observation of the enemy is difficult.
- In some cases, obstacles can be covered only from positions on the forward slope.
- The engagement is decisive and likely to result in one or both forces destroyed or defeated.

TYPES OF URBAN DEFENSE

5-39. The three types of urban defense are area defense, mobile defense, and retrograde.

AREA DEFENSE

5-40. At the operational level, an area defense includes both urban areas and open maneuver areas. Commanders normally benefit from an area defense because preventing an enemy from crossing an obstacle dispersed poses less risk than a force that may be fixed or unable to counterattack. The most common defense in an urban area and the most suitable for the characteristics of this distinct environment is the area defense. *Area defense* is a type of defensive operation that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADP 3-90) or as a type of defense in which the bulk of the defending force is deployed on selected terrain. Principal reliance is placed on the ability of the forces in the defended localities to maintain their positions and to control the terrain between them. The reserve is used to add depth, to block, or restore the battle position by counterattack (USMC Dictionary).

5-41. Although an area defense in an urban area does not directly seek to destroy or defeat attacking enemy forces outright, as an objective it can aim to force culmination of the enemy's attack. An urban area defense works in its open, surface, subsurface, and supersurface terrains to effectively exhaust enemy resources and shape conditions for a transition to offensive operations. For example, in the summer of 1943 during WWII, the Soviet area defense of the city of Kursk and its surrounding salient, along with German losses and attrition

at Stalingrad, created conditions for the Soviets to seize the initiative from the German Army, principally contributing to Allied victory. The urban area is a strongpoint to force enemy movement in a different direction or to fix enemy forces as part of a large, mobile defense occurring in the AO outside the urban area (see figure 5-6).

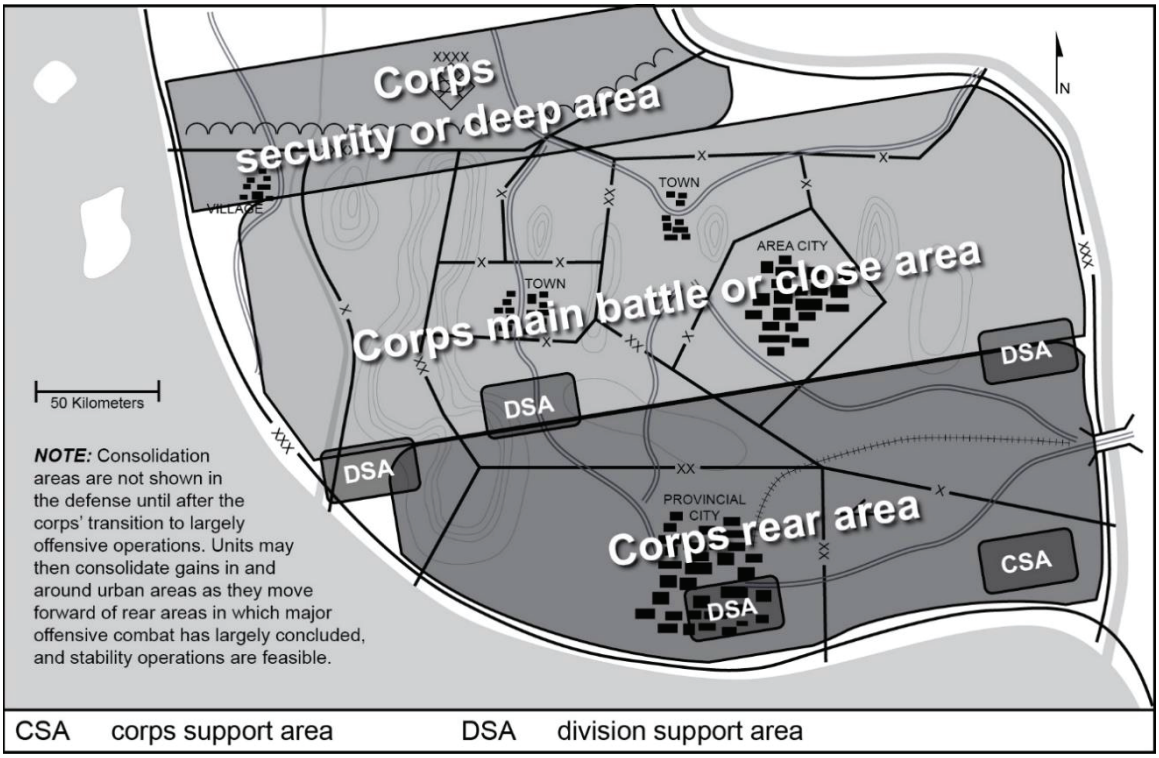


Figure 5-6. Example corps area defense in depth

MOBILE DEFENSE

5-42. A mobile defense can operate in an urban area but only under specific conditions. *Mobile defense* is a type of defensive operation that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADP 3-90) or defense of an area or position in which maneuver is used with organization of fire and utilization of terrain to seize the initiative from the enemy (USMC Dictionary). It requires the defender to have greater mobility than the attacker. To shape a mobility advantage, an urban defender effectively uses the terrain and task-organizes the forces' mobility with a fixing force, a striking force, and a reserve. Typically, the striking force in a mobile defense consists of one-half to two-thirds of the defender's combat power. The principles of applying mobile defense in an urban area remain the same: a small fixing force stops the enemy and limits any ability to maneuver while a striking force quickly maneuvers and counterattacks to destroy the enemy (see figure 5-7 on page 5-18).

5-43. UO mobile defense of a linear obstacle gives the enemy an opportunity to cross the obstacle with a portion of the attacking enemy force. As part of the penetrating enemy force passes the obstacle and enemy forces are divided, the mobile defense strike force seeks to isolate then destroy the bridgehead force. Mobile defense strike forces use the advantage of urban terrain, limited visibility, or obscuration to hide until the enemy's forward elements have passed, in essence conducting an ambush. Until committed, the striking force maintains a perimeter defense. Similarly, bypassed friendly forces may not immediately breakout but rather maintain an area or perimeter defense in depth to exploit enemy destruction.

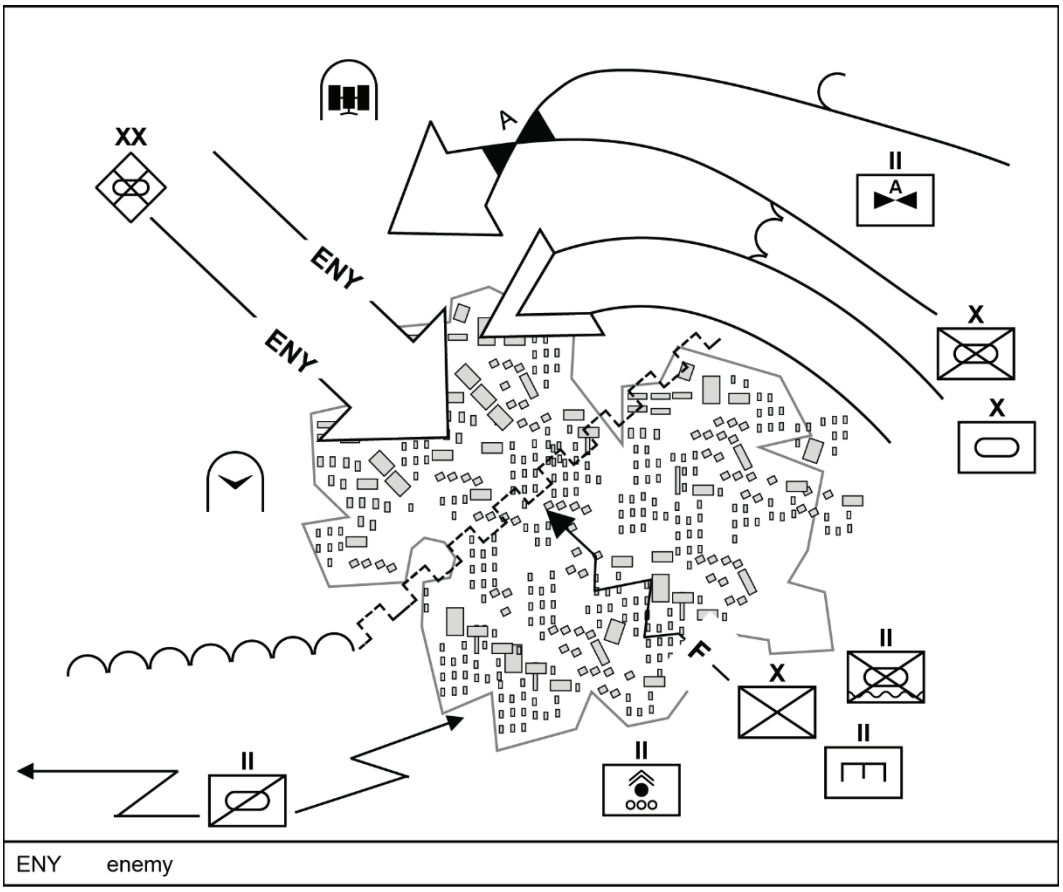


Figure 5-7. Urban mobile defense with defense of a linear obstacle

5-44. One key to executing a mobile defense in an urban area is enticing an enemy force into the depths of the urban area where the enemy force begins to lose mobility options. A well-placed fixing force augmented with manmade obstacles and a naturally constrictive terrain can stop a much larger force. If the attacking force is largely mounted and armored, its mobility in the urban area generally decreases to less than that of dismounted infantry. If the enemy attacking force's movement into the urban area is mounted and rapid, the enemy commander's situational understanding also diminishes. Then the striking force, consisting of dismounted infantry forces, executes the counterattack with surprise from multiple directions and dimensions (subsurface, surface, supersurface, and airspace). Man-portable antiarmor weapons—firing from flanks and top down and having support from precision indirect fires from both organic and joint systems—rapidly destroy the enemy.

5-45. From the perspective of commanders of a major operation, an urban environment can help defending forces achieve a mobility advantage over an attacker in a broader sense. Defending commanders can attempt to shape the battlefield/battlespace so that the attacker commits significant resources into an urban area where maneuver capabilities are reduced. A disproportionately smaller defending force, which relies on the defensive combat power advantages of the urban environment, reduces and fixes the attacker's maneuver capabilities. Other defending forces mass outside the urban area and then strike the enemy with a combined mobility and firepower advantage.

RETROGRADE

5-46. Army/Marine Corps forces use variations of retrograde in an urban defensive operation. A *retrograde* is a defensive task that involves organized movement away from the enemy (ADP 3-90) or any movement or maneuver of a command to the rear, or away from the enemy (USMC Dictionary). Retrogrades can be used as part of larger operations to prevent encirclement or envelopment or to preserve forces for other

offensive or defensive operations (see figure 5-8). The three variations of retrograde are delay, withdrawal, and retirement (see ADP 3-90 and MCWP 3-01 for more information):

- A **delay** is when a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on enemy forces without becoming decisively engaged. In delays, units yield ground to gain time while retaining flexibility and freedom of action to inflict the maximum damage on enemy forces.
- **Withdrawal** is to disengage from an enemy force and move in a direction away from the enemy. Withdrawing units, whether all or part of a committed force, voluntarily disengage from an enemy force to preserve the withdrawing force or release it for a new mission.
- A **retirement** is when a force out of contact moves away from the enemy.

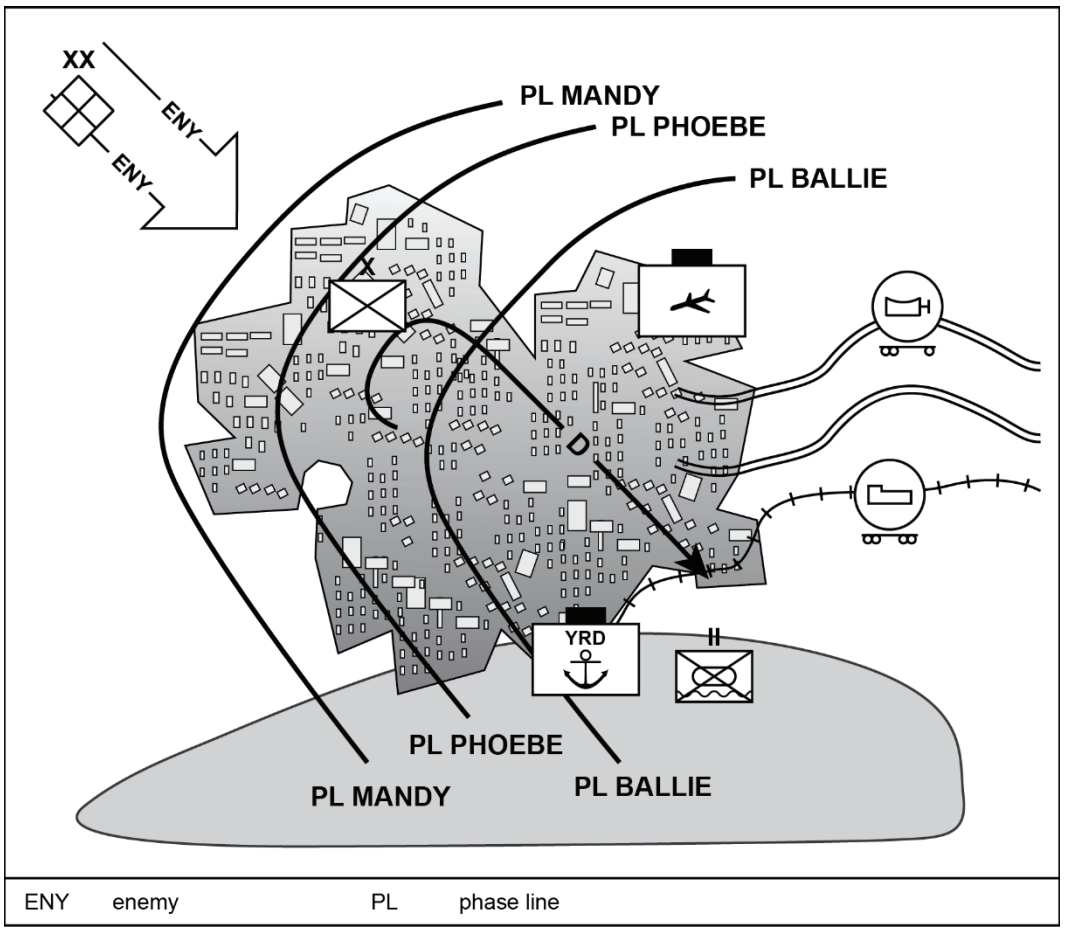


Figure 5-8. Delay through an urban area

5-47. An urban environment's natural cover and concealment, as well as the compartmented effects, facilitates delays. Delays can effectively draw the enemy into an urban area for subsequent counterattack or as an integral part of a withdrawal under enemy pressure. For example, the Australian infantry of their 9th Army retrograded and delayed against German Field Marshal Rommel's armored formations with some 15,000 Soldiers into the port city of Tobruk from April to August 1941. They were then replaced by the British 70th Division, who later lifted the siege with the 1st and 32nd Army tank brigades in a breakout in December 1941. Retained port sustainment access greatly aided their defeat of the German force in North Africa. Delaying units quickly displaced from one covered and concealed position to another position; the repositioning options were vast. Compartmented effects forced the attacking enemy to move on well-defined and easily interdicted routes. These effects limited the enemy's ability to flank or bypass delaying positions.

5-48. Cover and concealment afforded by an urban environment usually facilitates withdrawals, where friendly forces attempt to break contact with the enemy and move away. The urban environment restricts

enemy reconnaissance from lower elevations, where it is less able to detect friendly forces moving out of position, and presents excellent opportunities for deception actions. In dense urban areas with high-rise or singularly tall buildings, however, this covering effect can be reduced because enemy forces can observe and engage friendly forces from above. In an urban environment, a small security force's ability to remain concealed until contact significantly slows enemy attempts to regain contact once Army/Marine Corps forces have broken contact and begun to move.

5-49. An urban area's transportation and distribution network potentially facilitates retiring forces that are not in contact. The network can quickly move large forces and associated resources using port facilities, airfields, railheads, and well-developed road networks.

Defending Encircled

5-50. In large-scale combat operations and limited contingency operations, UO defending forces can become encircled at any time. This is especially true during noncontiguous operations and may be a focus, or part of, other planned operations to divert enemy forces or attention or as part of military deception operations. Joint forcible entry forces are often placed in positions where they may become encircled. An encircled force can continue to defend encircled, conduct a breakout, exfiltrate aerially or toward other friendly forces, or attack deeper into enemy-controlled territory. In addition to skillful use of maneuver and fires, encircled forces conduct patrols, reconnaissance or infiltrations, demonstrations or feints, or shaping attacks to facilitate breakouts (see FM 3-0 and ADP 3-90 or MCWP 3-01 for additional information on organization, control measures, breakout, and exfiltration when defending encircled). After gaining understanding from planning and reconnaissance, a commander's chosen form of maneuver once encircled depends on the senior commander's intent and the mission variables, including the—

- Availability of defensible terrain.
- Relative combat power of friendly and enemy forces.
- Sustainment status of the encircled force and its ability to be resupplied, including the ability to treat and evacuate wounded Soldiers/Marines.
- Morale and fighting capacity of the Soldiers/Marines.

5-51. The commander in a perimeter defense designates the trace of the perimeter, battle positions, contact points, and lateral and forward boundaries. For local reconnaissance, surveillance, and security elements operating outside the boundary of the perimeter, the commander designates checkpoints, contact points, passage points, and passage routes. Commanders can use engagement areas, target reference points, and final protective fire linear or groups or series of targets as fire control measures. See figure 5-4 on page 5-14 for a depiction of a perimeter defense employing examples of these measures.

CONSIDERATIONS OF URBAN DEFENSE

5-52. Defensive considerations vary depending on the level of warfare at which the operation is conducted, the type of defense, and the situation. Pending desired UO end states and city contexts, most issues below apply to commanders conducting operational-level large-scale combat UO major operations and campaigns as well as limited contingency operations, battles, and engagements at lower tactical levels. Both levels of UO defense occur and have effects across the multi-domain extended battlefield. A useful planning and execution consideration model described herein, previously, and in subsequent chapters is the understand, shape, engage, consolidate, and transition framework. (See Appendix B for a detailed example of a defensive urban operation.)

UNDERSTAND

5-53. Commanders defending in an urban area assess many factors to clarify their understanding. Their mission statement and guidance from higher commanders focuses their assessments. Of note, they remain cognizant that defensive UO and defended urban areas often offer keys to controlling or denying essential LOCs in support of larger operations. Commanders maximize natural and key terrain with layered defenses that facilitate the most rapid transition to the offense to regain initiative. If the mission is to deny an enemy access to port facilities in an urban area, then the focus of the commander's assessment is much different than if the mission is to deny the enemy control over the entire urban area. The METT-TC/METT-T structure

guides the commander's assessment. Of these, the enemy and environment—to include the terrain, weather, and civil considerations—significantly impact the commander's understanding of urban defensive operations.

The Enemy

5-54. In the urban defense, a key assessment is the commander's understanding of the enemy. The commander determines the attacker's general scheme, methodology, or concept. In the urban environment, it can be more difficult to determine the enemy's objective than in other environments, as there are so many more requirements and options for cover. In addition to destroying friendly forces or seizing of a piece of ground, they may be attempting to influence the local population or control infrastructure. Not understanding the enemies' intermediate objectives can cause units to waste forces securing unimportant sites or leave critical locations undefended.

5-55. Generally, an attacker takes one of two approaches. Both approaches will likely seek to use detailed reconnaissance and heavy preparatory fires to shape the enemy offensive UO. The first and most obvious approach is a direct engagement aimed at attacking the city or city networks. Attackers may choose an approach march pace in order to rapidly seize urban footholds and objectives. With this approach, defending forces mitigate risk by maximizing disruption, flexibility, speed, maneuver, surprise, and economy of force. A secondary, more indirect approach is a deliberate movement to contact, beginning with attempts to isolate U.S. forces. With this approach, defending forces need to maximize preparation, security, and operations in depth. The second method gives the attacker more options to isolate and bypass, attack later, or continue the offense via cordon and search or search and attack in the urban area. Innumerable combinations of these two approaches exist, but the enemy's intentions toward the urban area will favor one approach over another. In the MDMP/MCPP, staffs can use estimate data on maneuver corridors, rates of advance of the attacking enemy in varying terrain, and example Soviet frontages found in ATP 2-01.3 to better develop defensive and engagement areas and to assign unit AOs or battle positions.

5-56. The defending commander conducts defensive planning and force allocation for the area of influence (not limited to the urban area) but anticipates defensive branches and sequels for areas of interest outside the unit's AO. This consideration is especially important in any form of retrograde. The commander's primary concern is preventing isolation by defeating enemy efforts outside the area or defeating an enemy attacking the urban area directly. For the higher commander, this assessment determines how to allocate forces in and outside the urban area. For the commander in the urban area, this assessment clarifies threats to sustainment/logistics operations and helps shape forces.

The Environment

5-57. A second key assessment in the urban defense is the density of the urban environment. A commander's understanding of the urban environment, as in any defensive scenario, is based on mission requirements and on a systemic analysis of the terrain in terms of observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment (known as OAKOC). The Marine Corps uses KOCOA as a memory aid for key terrain, observation and fields of fire, cover and concealment, obstacles, and avenues of approach. It is also based on potential CBRN and fire hazards that may be present in the urban area. A commander's understanding accounts for the unique characteristics of urban terrain, population, and infrastructure as detailed in chapter 1.

5-58. Based on the varying urban street patterns and functional areas, units adjust the way they conduct defensive operations when faced with different conditions. For example, in creating an engagement area development plan units consider available longer lines of communication that extend line of sight, weapons ranges, and how different spaces can optimally provide alternate or subsequent battle positions. In another example, a unit will defend a city with a grid pattern differently than a radial pattern, and controlling converging center points in a radial pattern will facilitate disruption of attacking enemy movement as defenders are able to economize forces. Along with the advantages and disadvantage listed in chapter 1, population size and density impact the need to potentially change priority of units, resources, or efforts. Units consider units changing their approach when facing a hostile population.

5-59. Generally, units occupy less terrain in urban areas than in more open areas due to urban area complexity and the need to secure multiple axes or avenues of approach and increased superstructure or subterranean

spaces. For example, an infantry company, which might occupy 1,500–2,000 meters in an open terrain defense, usually occupies a frontage of 300–800 meters in urban areas. In another example, visualize a city like Leavenworth, Kansas with a population of approximately 50,000 and with dimensions of 5 x 7 kilometers (35 km^2) or roughly 20 x 80 blocks. This city would require a minimum of two fully equipped combat brigades (or Marine Corps regimental landing teams), along with a division or joint force headquarters for synchronization, to attack and seize the area successfully. Reverse planning for employing a prepared urban defense benefits from using a range of planning force ratios modified from those found in ATP 2-01.3. See table 5-1 for a comparison of mission-dependent rural versus urban operation force ratios. As mentioned previously, UO using force ratios of three to five times that of operations in open or rural terrain enable greater chance of success and depend on the environment's complexity. Depending on the commander's intent and desired end state, an area of similar size could conventionally be defended by as little as three or more battalions with a synchronizing C2 headquarters (BCT or USMC regimental landing team), and combat power enablers such as fires, aviation, sustainment, or other support. On the contrary, UO force ratios of 300–500 percent greater than operations in open terrain posit greater chance of success, and, in the case above, two or three BCTs could be used for defense.

Force Ratios and Frontages

5-60. The density of buildings in the urban area, building sizes and heights, construction materials, rubble, street patterns, and avenue of approach widths dictate the actual frontage of units. However, for initial planning purposes, table 5-2 provides approximate historical frontages and depths for units defending in an urban area. To more accurately develop a contemporary large-scale combat operations defensive UO scheme as part of major operations or campaigns, units develop a situation template for a corps or division using ATP 2-19.3. Tables 5-3 and 5-4 (page 5-24), originally from ATP 5-0.2-1, aid planning for BCT and below and division rates of advance, considering levels of resistance and level of terrain movement restriction. Units understand and plan for proportionally increased forces and reduced rates of advance as the density of terrain increases.

Table 5-1. Typical and urban operations planning force ratios

Open or rural terrain force ratio (ATP 2-01.3) (friendly: enemy)	Typical mission	Urban operations restrictive terrain force ratio (friendly: enemy)
1:7	Delay	3:7 to 5:7
1:3	Defend (prepared)	1:1 to 5:3
1:2.5	Defend (hasty)	3:2 to 2:1
2.5:1	Attack (hasty positions)	8:1 to 13:5
3:1	Attack (prepared position)	9:1 to 15:1
1:1	Counterattack (flank)	3:1 to 5:1

Table 5-2. Approximate defensive frontages and depths

Unit	*Frontage (Blocks*)*	*Depth (Blocks*)*
Battalion	4 – 8	3 – 6
Company	3 – 4	2 – 3
Platoon	1 – 2	1
*Average block is 175 meters (191 yards)		

Table 5-3. Brigade and below opposed rates of advance (km/hr)

Degree of resistance	***Prepared defense[2]***						***Hasty defense or delay[3]***					
Attacker:defender ratio[1]	Unrestricted terrain		Restricted terrain		Severely restricted		Unrestricted terrain		Restricted terrain		Severely restricted	
	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted
Intense Resistance 1:1[4]	.6	.5	.5	.3	.15	.1	1.0	.8	.8	.5	.4	.2
Very heavy 2:1[4]	.9	.6	.6	.4	.3	.2	1.5	1.0	1.0	.7	.6	.3
Heavy 3:1[5]	1.2	.7	.75	.5	.5	.3	2.0	1.2	1.3	.9	.8	.5
Medium 4:1	1.4	.8	1.0	.6	.5	.5	2.4	1.4	1.75	1.1	.9	.8
Light 5:1	1.5	.9	1.1	.7	.6	.5	2.6	1.6	2.0	1.2	1.0	.9
Negligible 6:1[6]	1.7+	1.0+	1.3+	.8+	.6+	.6+	3.0+	1.7+	2.3+	1.3+	1.1+	1.0

Notes.
[1] The relative combat power ratio must be computed for the unit under consideration. Rates are reduced by 12 at night.
[2] Prepared defense is based on defender in positions prepared for a minimum of 24 hours.
[3] Hasty defense is based on defender in positions prepared for less than 24 hours.
[4] Units cannot sustain these rates for 24 hours.
[5] Sustained rates of advance are not possible without a ratio of 3:1, except in very rare instances usually involving complete surprise.
[6] Rates of advance greater than 6:1 ratio are between this row and unopposed rates.
The following are the factors for tactical surprise:
–Complete surprise rate from table above x5 (example: 1989 Operation JUST CAUSE, 1973 Yom Kippur).
–Substantial surprise rate from table above x3 (example: 1991 Operation DESERT STORM, 1967 Israeli attack in Sinai).
–Minor surprise rate from table above x1.3 (example: 1944 Operation OVERLORD).
–Effects of surprise reduce by 13 on day 2, by 23 on day 3 and do not apply on day 4.

Table 5-4. Division opposed rates of advance (km/hr)

Degree of resistance	*Prepared defense*[2]						*Hasty defense or delay*[3]					
	Unrestricted terrain		Restricted terrain		Severely restricted		Unrestricted terrain		Restricted terrain		Severely restricted	
Attacker : defender ratio[1]	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted	Mounted	Dismounted
Intense Resistance 1:1[4]	2	2	1	1	.6	.6	4	4	2	2	1.2	1.2
Very heavy 2:1[4]	5–6	4	2–3	2	1.5–1.8	1.2	10–12	8	5–6	4	31–3.6	2.4
Heavy 3:1[5]	7–8	5	3–4	2.5	1.2–2.3	1.5	13–16	10	8	5	3.9–14.8	3
Medium 4:1	8–10	6	4–5	2.3–3	2.7	1.8	16–20	12	10	6	4.8–6	3.6
Light 5:1	16–20	10	8–10	4.8–6	5.4	3	30–40	18	20	9	9–12	5.4
Negligible 6:1[6]	24–30	12	12–15	7.2–9	8.1	3.6	48–60	24	30	12	14.4–18	7.2

Notes.
[1]Rates are reduced by 12 at night.
[2]The relative combat power ratio must be computed for the unit under consideration.
[3]Prepared defense is based on defender prepared positions for a minimum of 24 hours.
[4]Hasty defense is based on defender preparing positions for less than 24 hours. Two numbers indicate hasty defense/delay factors
[5]Sustained rates of advance are not possible without a ratio of 3:1, except in very rare instances usually involving complete surprise.
[6]Rates of advance greater than 6:1 ratio are between this row and unopposed rates.
The following are the factors for tactical surprise:
–Complete surprise rate from table above x5 (example: 1989 Operation JUST CAUSE, 1973 Yom Kippur).
–Substantial surprise rate from table above x3 (example: 1991 Operation DESERT STORM, 1967 Israeli attack in Sinai).
–Minor surprise rate from table above x1.3 (example: 1944 Operation OVERLORD).
–Effects of surprise, reduce by 13 on day 2, by 23 on day 3 and do not apply on day 4.

SHAPE

5-61. Commanders shape UO according to the type of defense they conduct. If conducting an area defense or retrograde, they use shaping actions like those for any defensive action. Command posts and communications nodes tend to be relatively static in the defense, but commanders place them in hardened areas or protective terrain to reduce their electronic and visual signatures. Command posts remain capable of rapidly relocating in response to battlefield/battlespace developments. Important shaping actions that apply to all defensive UO include—

- Preventing or defeating isolation.
- Separating attacking forces from supporting resources.
- Creating a mobility advantage.
- Applying economy of force measures.
- Effectively managing the urban population.
- Planning counterattacks.

Preventing or Defeating Isolation

5-62. Failure to prevent isolation of the urban area can lead to failure of the entire urban defense. This cannot be overstated. In defensive planning, commanders anticipate that the enemy will attempt to isolate the urban area or portions of the urban area, especially if defending noncontiguously. Mobile joint forcible entry units will be, by their nature, essentially surrounded or enveloped partially in some form if projected within enemy lines during large-scale combat. Lack of preparation time may cause a commander to maintain a larger than normal reserve or accept greater risk. Defensive planning addresses in detail defeating enemy attacks aimed at isolating the urban area. Commanders defeat this effort by allocating sufficiently mobile forces, such as armored or Stryker formations, where they may affect the outside of the urban area to prevent its isolation.

Interior urban lines will benefit more from heavy armor with infantry support than from Stryker units, as the latter, with their speed and firepower, are better suited to maintain cover or screen missions, flanks, or, optimally, to rapidly secure rear or support areas. An enemy force often attacks along the boundaries of defending units to break through the main battle area and exploit seams and gaps in friendly LOCs. Therefore, commanders at every echelon must ensure their defense is properly layered, mutually supportive, and coordinated with flanking and supporting units and adequate reserve considerations. To gain time for organizing a defense, commanders may order the security force to conduct a delay while the main body disengages and moves to more advantageous positions. Information protection and operations security based on deception can also be used to mislead the enemy regarding the defensive array in and outside the urban area. Such information convinces the enemy that a direct attack against the urban area is the most favorable approach.

5-63. If the enemy has successfully isolated the urban area, commanders of a major operation have several COAs. Three options include an exfiltration; a breakout attack by forces defending the urban area; or an attack by forces outside the urban area to relieve the siege. A fourth option combines the last two: counterattacks from both inside and outside the urban area to rupture the isolation. Time is critical to the success of either operation. Commanders plan for both contingencies to ensure rapid execution if necessary. Delay permits enemy forces surrounding the urban area to prepare defenses, reorganize their attacking force, retain the initiative, and continue offensive operations. Passage of time also reduces resources of defending forces and their ability to breakout. Therefore, commanders and staffs of a major operation must vigilantly avoid isolation when Army/Marine Corps forces are defending urban areas in their AO.

Separating Attacking Forces from Supporting Resources

5-64. Commanders of a major operation primarily use fires and IO/OIE for disruption and for separating enemy forces attacking the urban area in time and space from supporting echelons and resources. The purpose of this shaping action mirrors a conventional area defense. It aims to allow a defending force to defeat the enemy forces piecemeal as they arrive in the urban area without support and already disrupted by deep fires and IO/OIE against information systems. This separation and disruption of the enemy sets the conditions for a mobile defense if commanders choose to execute that type of defense. These operations also prevent the enemy commander from synchronizing and massing combat power at the decision point in the close or main battle area.

5-65. If the urban area is part of a major mobile defense operation, the urban defense often becomes the fixing force on which the assault force hinges. Additional objectives may be securing and defending critical infrastructure and incorporating those considerations into the defense plan. However, enemy forces may bypass it or isolate the fixing force as an economy of force measure if the enemy does not view it as a significant threat. For example, this technique was used by Allied forces in isolating, but not securing, the port towns of Lorient and Saint Nazaire in WWII. See the chapter 4 vignette on Brittany Ports on page x-x. Commanders shape the defense to encourage the enemy to attack into the urban area. They lure the enemy using a combination of techniques depending on the situation. They make the urban area appear only lightly defended while other alternative COAs appear strongly defended by friendly forces. Placing the bulk of the defending forces in concealed positions well within the urban area and positioning security forces on the periphery of the urban area portrays a weak defense. In other situations, the opposite is true. If the urban area is an important objective to the enemy, friendly forces make the urban area appear heavily defended, thus ensuring the commander commits sufficient combat power to the urban area to overwhelm the defense. Both cases have the same objective: to cause a major commitment of enemy forces in the urban area. Once the enemy commits, the mobile defense striking force attacks and defeats the enemy outside the urban area. This facilitates destruction of the enemy as they are isolated in the urban area.

5-66. In urban tactical operations, many shaping actions mirror those in defensive operations. The size and complexity of the urban area prevent defending forces from being strong everywhere. Shaping operations designed to engage the enemy on terms advantageous to the defense have particular importance. Shaping actions include reconnaissance and security operations, passages of lines, and movement of reserve forces prior to their commitment. In addition, shaping operations are critical to the urban defense include mobility and countermobility operations, offensive IO/OIE, economy of force operations, and population management operations.

Creating a Mobility Advantage

5-67. In urban terrain, countermobility operations greatly influence bringing the enemy into engagement areas of defending forces. Countermobility operations—based on understanding the urban transportation system, design, and construction characteristics—are unusually effective (see chapter 2). Demolitions have important implications for creating impassable obstacles in urban canyons as well as for clearing fields of fire where necessary. Careful engineer planning makes the already constrictive terrain virtually impassable to mounted forces where appropriate, thus denying the enemy combined arms capabilities. Countermobility operations in urban terrain drastically increase the defense's ability to shape the attacker's approach and to increase the combat power ratios in favor of the defense. As with all aspects of UO, countermobility considers collateral damage and the second- and third-order effects of obstacle construction.

5-68. Well-conceived mobility operations in the urban terrain can provide defending forces with mobility superiority over attacking forces. Army/Marine Corps forces achieve superiority by carefully selecting routes from primary, alternate, supplementary, and subsequent positions, and moving reserves and counterattack forces. These routes are reconnoitered, cleared, and marked before the operation. Army/Marine Corps forces maximize cover and concealment characteristics of the terrain. Using demolitions, lanes, and innovative obstacles denies defense of these same routes. Additionally, vertical mobility, such as airborne, air assault, or air landed forces creates additional positional advantage options for maneuver, resupply, and casualty evacuation.

Applying Economy of Force Measures

5-69. Economy of force is extremely important to an effective tactical urban defense. A metroplex, metropolis, or megacity is too large and too easily accessible for defending forces to be strong everywhere. Economy of force enables the defending force to mass effects at decisive points. Forces used in an economy of force role execute security missions and take advantage of obstacles, mobility, and firepower to portray greater combat power than they actually possess. They prevent the enemy from determining the actual disposition and strength of the friendly defense. If, contrary to expectations, the enemy strongly attacks, the air and ground mobility of Army/Marine Corps forces—stemming from a mounted maneuver capability, planning, and an intimate knowledge of the terrain—allows them to delay until reserves can meet the enemy. Security forces in an economy of force role take position in parts of the urban area where the enemy is less likely to attack.

Effectively Managing the Urban Population

5-70. Another way to shape urban defensive operations is population management. In most cases, defending force commanders arrive in the urban area before combat. This gives them the opportunity to reduce the negative impact of military operations on civilians. Consequently, they can better manage and protect the population (a legal requirement) and gain more freedom of action for their forces. Analyses conducted by warfighting function should inform the commander's approach in conducting civil-military operations. Messages and approaches to the conduct of civil-military operations are greatly affected, and may vary greatly from one block to another, due to the human terrain.

5-71. Managing civilians during the defense is a function of the size, disposition, and needs of the population and the resources available to the commander. Requesting higher support or coordinating with NGOs and the local civilian leadership for support may compensate for shortages of resources. Resources devoted to population management are weighed against availability, military mission requirements, and possible collateral damage affecting tactical, operational, or strategic success. Evacuating an urban area's population may be impractical. Commanders then attempt to create protected areas, moving civilians to them. Moving the population allows defending forces to more liberally apply fires, emplace obstacles, and relieve combat units and support units of requirements to continue life support for civilians while executing combat operations. Overall, effective civil-military operations can turn a friendly or a neutral population into an effective force multiplier providing support to every warfighting function.

Planning Counterattacks

5-72. Counterattacks and spoiling attacks shape the battlefield/battlespace for defensive success. The defending force rapidly counterattacks an enemy success with its reserve, the forces at hand, or a striking force before the enemy force can exploit that success. Counterattacks as a shaping tool have two applications: retaining the initiative and separating forces. The opportunity for effective counterattacks is brief, however, and timing is critical. If conducted too early, the counterattack expends resources required later. If conducted too late, it may be ineffective. Commanders need to understand the effect of the urban environment on time-distance relationships; otherwise, the timing of the attack will be off and the operation desynchronized. Additionally, successful commanders develop plans beyond the counterattack to exploit potential success.

ENGAGE

5-73. Engaging the urban area in a defensive operation requires decisively defeating the enemy's attacks through concentrated use of combat power. Defensive forces prevent isolation; use the terrain to their advantage to employ precision supporting fires; and use direct fire from protected positions aligned against carefully selected avenues of approach, kill zones, and engagement areas. The combat power of the defense, augmented by shaping actions and the urban terrain, thus overwhelm and force culmination of the enemy attack. Like urban offensive operations, effective engagement in urban defensive operations typically results from successful actions at the tactical level of warfare. These actions include—

- Performing aggressive information collection that facilitates defense, security, or stability operations.
- Creating depth.
- Executing an effective obstacle plan.
- Conducting coordinated counterattacks.

Performing Aggressive Information Collection

5-74. Information collection efforts initially focus on identifying relevant information about the location and nature of the enemy's main effort. Once identified, the joint ISR focus shifts to assessing the rate at which the enemy attack moves to its culminating point. Indicators of culmination may be physical fatigue of enemy forces, a breakdown in enemy C2 capability, difficulty providing logistics support, or the increasing time required to reorganize small units to attack. When commanders identify enemy culmination, friendly forces may exploit this with a counterattack before the enemy has a chance to transition to a hasty defense. Forces consolidate gains during and after the defense by using information collection to answer CCIRs that facilitate a transition to and conduct of security and stability UO.

Creating Depth

5-75. Depth in defense is the key to forcing the enemy to culminate. An urban defense strives to prevent the enemy from penetrating it or destroying forward elements. Aviation forces—due to their speed, mobility, and versatility—in conjunction with airborne, air landed, or air assault infantry can be of particular value as reserves or to reinforce penetrated depth areas. Units task-organize short- or medium-range air defense assets to the lowest level possible to protect C2 nodes and counter enemy air attack, airborne, or air assault efforts to isolate or disrupt the defense. The defense is designed with the greatest depth possible. Defending forces weaken the enemy to the fullest extent possible by attacking it from each position but without permitting themselves to be destroyed by fires or close assault. Instead, as enemy combat power builds against individual positions and a disengagement line is reached, subordinate leaders use mission orders including disengagement criteria. These criteria allow adjacent units to move on preplanned routes to subsequent positions, preventing friendly force flank exposure. Fixed-wing and rotary-wing aviation forces in conjunction with fires facilitate disengagement of ground forces by covering alternating or successive rearward bounds. Planned subsequent positions are mutually supporting, so units withdrawing from one position to another have supporting positions covered by fires. Army/Marine Corps forces constantly force attacking forces to deploy and reorganize without achieving decisive effects against defending forces.

5-76. Another form of nonphysical depth that can be created in a defensive urban operation is to partner with local civil or security forces such as police, thus building bilateral support. Normally, populace support is

needed for a U.S. or partnered force to effectively work with local civil authorities. This is especially true in DSCA operations on U.S. soil; see ADP 3-28 for more information on DSCA. Building trust and forming agreements between leaders is essential. Top leaders such as division or corps commanders frequently engage either official or unofficial local leaders by using effective forms of leadership whether that be through positional or personal power and influence. For example, after 1st Brigade Combat Team, 1st Armored Division began to secure Ramadi, Iraq in 2006–2007 the unit was several months into the operation before they built enough trust to receive an offer of local militia support from 11 sheiks. Known as the Anbar Awakening, the unit built and received support with messages of resolve to the community, somewhat different from the coalition's message of simply transitioning responsibility to Iraqi forces and departing. By using effective urban combat techniques, information operations, civil affairs forces, combined with resolute and creative conventional and special operations force integration, the unit secured the city by creating 18 additional urban strongpoints during the year. The 'clear, hold, build' technique with effective combat techniques and political engagement would have larger successful implications for divisions and corps as it was used during U.S. force surge periods later in 2007–2008.

Executing an Effective Obstacle Plan

5-77. An *obstacle* is any natural or man-made obstruction designed or employed to disrupt, fix, turn or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force (JP 3-15). Obstacle zones, belts, and groups in the urban defense canalize, interrupt, and delay enemy maneuver, giving the defender a significant advantage. An *obstacle belt* is a brigade-level command and control measure, normally given graphically, to show where within an obstacle zone the ground tactical commander plans to limit friendly obstacle employment and focus the defense (JP 3-15). Obstacles should not hinder future offensive UO, usually depicted by obstacle restricted areas. An *obstacle zone* is a division-level command and control measure, normally done graphically, to designate specific land areas where lower echelons are allowed to employ tactical obstacles (JP 3-15). Commanders also must remain aware of the risk posed by obscurants used in conjunction with enemy breach efforts or breaching and infiltration conducted during periods of limited visibility.

5-78. Two categories of reinforcing obstacles are tactical and protective. A *tactical obstacle* is an obstacle employed to disrupt enemy formations, to turn them into a desired area, to fix them in a position under direct and indirect fires, or to block enemy penetrations (JP 3-15). Tactical obstacles maximize the effects of fires, denying the ability of a force to move, mass, and reinforce. Therefore, tactical obstacles affect the tempo of operations. The three types of tactical obstacles are directed, situational, and reserved. Commanders employ protective obstacles to protect people, equipment, supplies, and facilities against threats. Protective obstacles have two roles, defense or security (ADP 3-90).

5-79. Separating dismounted forces from mounted forces in urban areas through use of obstacles disrupts the cohesion of the attacker and reduces combat power. Cities themselves can be obstacles to operational maneuver. Obstacles also expose the enemy's individual elements to the effects of a counterattack. A friendly combined arms element can effectively counterattack the leading enemy dismounted force while leaving the enemy armored force vulnerable to antiarmor attack by dismounted forces.

Conducting Coordinated Counterattacks

5-80. A counterattack is one of the key actions of an urban defense. As the attacker moves into the depth of an urban area, the attacker's forces may become fatigued, suffer from attrition, and become increasingly disorganized. The attacker likely also creates an increasingly long and exposed flank. At all levels, forces defending urban terrain look for opportunities to counterattack. The counterattack regains the initiative and makes the enemy fight in multiple directions. Infiltration using superior knowledge of the terrain (including supersurface and subsurface capabilities) and skillful use of stay-behind forces permits attacking the enemy throughout the depth of its formations. Small-scale counterattacks enable commanders to exercise C2 and apply sustainment/logistics capabilities. These counterattacks set the conditions for a deliberate attack leading to the ultimate destruction of the attacking enemy force.

CONSOLIDATE

5-81. Consolidation is as important to urban defensive operations as to offensive operations. Many consolidation considerations for the urban offense apply equally well to the defense. Commanders reinforce or reposition maneuver forces and fire support assets on the urban battlefield/battlespace based on weaknesses uncovered during rehearsals and opportunities discovered during actual execution. While maximizing the many advantages of urban defense, the commander of an urban defense aggressively seeks ways to weaken enemy forces before they enter the urban area and initiate close combat. Commanders combine the static and mobile elements of the defense to strengthen their positions in relation to the enemy while seeking every opportunity to transition to urban offensive operations. As in urban offensive operations, commanders conduct necessary reorganization actions that they were unable to accomplish during execution. Units do not consolidate gains in UO defense. As units regain initiative and transition to the offense in and around the urban area, they then consolidate gains in rear or support areas prior to, or while, resuming the offense or as they transition to stability UO.

TRANSITION

5-82. Transitions in urban defensive operations occur at all levels. As with offensive operations, commanders of major operations address which units are assigned to continue to operate in the area after defensive operations have ceased. In defensive UO, this task is not as challenging as an occupation mission during urban offensive operations. The psychology of troops defending an urban area differs from those attacking it. Defending forces become accustomed to the environment, having experience in the environment before combat. Due to reduced visibility, line of sight, and communications, forces can perceive they are isolated or left behind when they are not. This aspect requires that Soldiers/Marines have resilient morale, strong communication, leadership, and morale visits from the chain of command. Regarding training, follow-on missions can be more easily assigned to a unit that has successfully defended the urban area. This COA takes advantage of the defending unit's experience in the area and its relationships with other agencies that were operating alongside the units before and possibly during the defense. In defensive operations, regardless of civilians' attitudes, policies regarding that population were established before the successful defense, and the command likely has experience executing operations with civil authorities and other agencies. These relationships are not new and remain significant to UO, whether transitioning to further offense or stability tasks. Commanders therefore prepare to execute various stability tasks or use a successful defense to springboard into more decisive offensive operations.

Transition to Offensive Operations

5-83. Units that have successfully defended an urban area transition to offensive operations or sustained stability operations. A rapid transition to offensive operations requires identification, preparation, and training of units designated to assume missions as the defending units leave the urban area. This preparation emphasizes continuity of policies and relationships already established. A relief in place occurs. The new occupying units provide not only a continuity of policy, but also a continuity of attitude toward the urban area, its population, and its institutions.

Transition Emphasis to Stability

5-84. At the end of a successful urban defense, operational commanders generally expect civil authority, control, and jurisdiction to increase. With security established, units use their initiative to maintain security and begin to implement their recovery plan. However, defending units are generally still responsible for all of the responsibilities inherent with stability operations tasks to provide support to the populace as applicable under international law. In UO against a regular threat—pending the desired end state and terms established by either defeat, surrender, or armistice—forces begin to reestablish infrastructure and civil control. In UO against irregular threats, forces enable security and empower host-nation forces to reestablish rule of law and support economic recovery. UO transition to stability may also involve supporting joint force missions, such as humanitarian assistance and disaster relief, and foreign internal defense, such as building HNSF partner capacity. Additionally, the civilian population may be anxious to return to the urban area, but where possible, forces set conditions to ensure relative safety. This could involve additional offensive missions, such as cordon and search to ensure an area has been cleared of mines, obstacles, or booby traps such as IEDs.

5-85. Defensive combat requires virtually complete military control of the urban area; however, after a successful defense, a rapid transition occurs from military control to civilian or joint military and civilian control. Important transition tasks include demilitarizing munitions, clearing obstacles, and searching for isolated enemy pockets of resistance. In some circumstances, this effort can be assisted by vetted, transitioned HNSF that are rearmed to an acceptable level of risk only. For example, defeated nations forces in 1847's Mexican-American war and in 1945 post-WWII Japan were not completely pacified or disarmed. Instead, their constabulary and army was given small arms for internal security and law enforcement. Conclusion of defensive operations also requires transition to joint civil-military tasks such as evaluating structures for safety, restoring essential services, and possibly creating joint law enforcement. Commanders of major operations, using a civil-military operations center and staff organization, anticipate these requirements and begin early preparations to ensure a smooth, successful transition. The civil-military operations center provides a place where stakeholders can coordinate their activities as unified action partners. FM 3-57 states that the civil-military operations center serves as the primary coordination interface for U.S. forces and unified action partners, humanitarian organizations, intergovernmental organizations, government organizations, multinational forces, host-nation government agencies, and other civilian agencies of the United States Government. Civil-military operations centers may be established at multiple command levels to facilitate unity of effort at different echelons. See ATP 3-57.70 for additional information on the civil-military operations center.

Chapter 6
Urban Stability Operations

This chapter details the purpose and characteristics of urban stability operations. The chapter also details stability tasks and considerations for battlefield/battlespace organization.

In the philosophy of war there is no principle more sound than this: that the permanence of peace depends, in large degree, upon the magnanimity of the victor.

Colonel I. L. Hunt

PURPOSE OF URBAN STABILITY OPERATIONS

6-1. Army/Marine Corps forces conduct stability operations or activities to deter war, resolve conflict, promote peace, strengthen democratic processes, and retain U.S. influence or access abroad. Often gains are consolidated from a successful UO offense by transitioning to effective stability UO. Stability operations in the urban environment are often conducted in competition, crisis, or return to competition stages in the competition continuum. Like the second Punic War example below, stability operations and the consideration of ways to bring peace to the populace and defeated enemy may allow better consolidation of gains. The primary contribution of military forces to stability operations is security. A *stability operation* is an operation conducted outside the United States in coordination with other instruments of national power to establish or maintain a secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief (ADP 3-0). Stability tasks promote and sustain regional and global stability. Nearly every urban operation involves some type or form of stability activity combined, sequenced, or simultaneously conducted with offensive and defensive tasks.

Scipio's Noble Deed

Roman general Publius Cornelius Scipio Africanus Aemilanus conquered the port of Carthage (New Spain or "Cartagena"), located in what is today southern Spain, in 210 BC during the second Punic war. One widely retold anecdote that emerged from this conquest was his return of a beautiful young captive woman, unravished, to her family and fiancé. This gesture reportedly promoted his reputation for justice and mercy among the local conquered population, which facilitated their acquiescence and cooperation with his rule. Along with Scipio's command of the sea, the reputed event became emblematic of his shrewd diplomatic approach to stabilizing and consolidating Roman gains in a series of campaigns, eventually clearing the way for his eventual conquest of Carthage itself. The results of the third Punic war would not be as magnanimous.

CHARACTERISTICS OF URBAN STABILITY OPERATIONS

6-2. Worldwide urbanization, migration trends from rural to urban areas, littoralization, connectedness, and more centralized populations in urban areas increase the chance that Army/Marine Corps forces will conduct stability tasks in or near urban areas. The method of conducting UO in general can be seen as invasive or subversive. In the perspective of an invasive or offensive UO, attacking forces typically attempt to secure the urban area from the outside-in. In this example, enemy forces overtly occupy before or seize internal control of urban areas from friendly forces. In subversive infiltration or penetration UO, forces with the initiative

seize control of the area from friendly forces or of the population through internal means by securing from the inside-out. This method undermines, surprises, and severely disrupts the stability of friendly force operations in the urban area. For example, in the 1968 battle for Hue City, the North Vietnamese Army, through Viet Cong forces, covertly saturated most of the city (with the exception of the headquarters of the Army of the Republic of Vietnam citadel, and the U.S. advisor Military Assistance Command – Vietnam compound) before the major combat of the Tet Offensive initiated. Combinations of these means influence the urban area, and commanders require unity of effort from military and civilian actors.

6-3. Because urban areas serve as economic centers, government centers, and embassy locations, enemy activities often focus on them. Repairing or restoring urban infrastructure may be a critical task in stability UO. Supported nongovernmental and governmental organizations and agencies are not as logistically self-sufficient as the Army/Marine Corps. Therefore, these agencies often center their operations in urban areas to use the area's infrastructure for support.

6-4. Just as offensive and defensive UO contain elements of stability as part of larger operations and decisive action, stability operations in a city also contain windows where the preponderance of operations requires a shift to more offense and defense (see figure 6-1). To win in an urban operation, the stability force must be able to provide security, retain the initiative, and assist in consolidation of gains for the joint force. Adversaries must be deterred and defeated, should they chose to continue fighting, and civilians under military forces' protection must be safeguarded. While consolidation of gains activities consist of security, most offensive, defensive, and stability tasks involve combat operations against bypassed enemy forces. Consolidation of gains is not synonymous with stability, counterinsurgency, or nation-building (FM 3-0). Units involved in close combat do not conduct consolidation of gains activities; these activities are conducted by separate maneuver forces in the designated corps or division rear or support areas. Agencies supporting stability UO may require military protection/force protection to accomplish their missions. Some distinguishing characteristics of these wide-ranging operations include—

- Long and short duration.
- Joint and interagency.
- Unilateral or multinational.
- Increased civil-military and legal considerations.
- Greater potential for ambiguity.
- Increased constraints necessitating more restrictive ROE.
- Amplified need for cultural and political sensitivity.

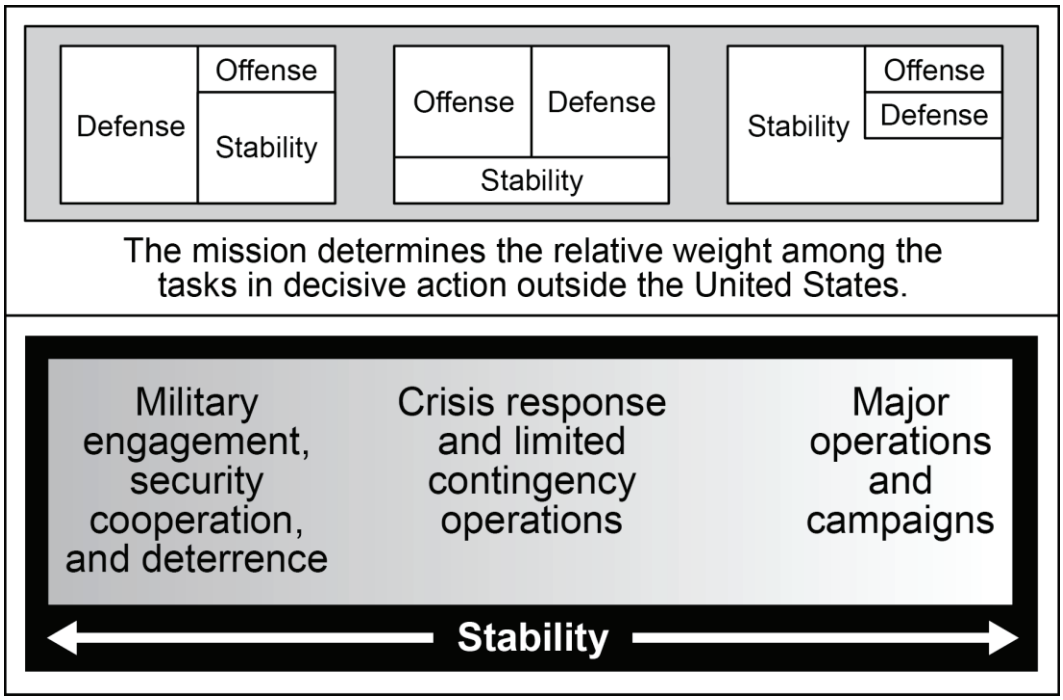


Figure 6-1. Stability tasks in decisive action (top), and across the range of military operations (bottom)

6-5. Stability tasks are diverse, varied in duration, and increasingly multinational. Units conduct stability tasks overseas as part of a campaign or major operation. Like all UO, they are usually joint and combined arms and occur across the multidomain extended battlefield/battlespace. Unlike urban offensive and defensive operations, they are more often interagency operations and adhere to more restrictive ROE. The multiplicity of actors involved usually increases the scope and scale of required coordination and communications. Adverse conditions in urban stability tasks arising from natural or manmade disasters or other endemic conditions—such as human suffering, disease, violations of human rights, or privation—modify the urban environment. Unresolved political issues and tenuous agreements, difficulties discriminating combatants from noncombatants or between parties of a dispute, and the absence of basic law and order all complicate an already complex and uncertain environment. Civil-military and legal considerations are critical in all UO but have additional complexity and importance in urban stability tasks. Properly informing and influencing the correct audiences through IO/OIE is essential. Finally, recognizing, defining, and achieving the desired end state for stability operations in urban areas is often more difficult than achieving end states for offensive and defensive operations.

6-6. Commanders of major operations involving urban stability tasks should not expect clear guidance. They must learn, adapt, live with ambiguity, and operate within established commander's intent and ROE using mission orders that have just adequate controls to synchronize operations and mitigate risk. They cannot expect to operate in a political vacuum (even commanders at the tactical level). Rather, they should expect to work alongside both governmental and nongovernmental leaders and organizations. Commanders conducting UO should not expect an easily identifiable enemy located across a clearly demarcated line. Commanders expect changing and additional missions and tasks, without having every means at their disposal to carry out those missions. Many tasks required may be ones for which their units have never, or rarely, trained, but commanders mitigate this risk through detailed rehearsals. Finally, competent commanders show restraint with a keen sensitivity to political considerations and to other cultures, even if they find them confusing or repugnant.

STABILITY OPERATIONS TASKS

6-7. Stability tasks involved with UO differ when applied to a specific urban area. Due to the complexity of the environment, commanders carefully arrange their forces and operations according to purpose, time, and space to accomplish the mission. Each urban stability operation has seven distinct tasks that aid in forming stability UO lines of effort or operation. These tasks correspond with the stability framework (see figure 6-2), the joint stability functions, and the U.S. government DOS stability sector matrix (see figure 6-3 on page 6-6). From ADP 3-07, the Army stability tasks are:

- Establish civil security.
- Support to civil control.
- Restore essential services.
- Support to governance.
- Support to economic and infrastructure development.
- Conduct security cooperation.

6-8. Per MCWP 3-03, the Marine Corps recognizes six core stability tasks that flow directly from joint stability functions, and they are:

- Establish civil security
- Provide humanitarian assistance
- Support and/or provide restoration of essential services
- Support establishment of civil control
- Support economic and infrastructure development
- Support to governance

PLANNING

6-9. + After large-scale combat operations or limited contingency operations, U.S. forces predominantly provide the area and local security necessary for a return to normalcy, but they maximize consolidation of gains and economy of force by coopting and influencing civil security forces, public service agencies, and their leaders to assume the lead of those efforts where possible with U.S. assistance. For example, an idle, yet competent refugee or internally displaced person population can be led, trained, and task-organized with NGO or host-nation assistance to be empowered with their own return to a socioeconomic system through job training, security roles, manufacturing, or by performing civil works. Enabling a population—and their potentially defeated, disarmed, or repurposed security forces—to earn a living wage not only provides subsistence for individual and family needs, but also allows them to resume their lives. This promotes human dignity, respect, and responsibility; gives hope for the future; and disrupts the potential for crime, discontent, and insurgency. For example, the 2003 OIF disbandment of the Iraqi Army created a large-scale security problem, with many disenfranchised military or police turning to illegitimate sources of employment or insurgency, thus creating a larger stability problem for coalition forces. Alternatives may include keeping a base security structure that employs security professionals while reducing armament; changing force artifacts such as uniforms, flags, or vehicles; stationing units at alternate locations; and implementing new leadership under the coalition provisional government. Building or reestablishing trust through effective communication between the populace and any new security force is essential to urban stability framework and operations (see figure 6-2).

6-10. UO stability tasks are usually long duration, difficult, complex, and typically the least desired task or least trained by U.S. forces. Because of this, units conducting UO as part of larger major operations, campaigns, battles, or engagements should avoid the pitfalls of failing to plan, rehearse, and account for stability tasks or joint phase four and five (stabilize and return to civil control) in a return to competition post-conflict. With consideration to host-nation requests or the mandates of post-conflict peace agreements, forces should not assume a host nation, partner, or other entity will address stability needs adequately in part or in whole. Therefore, careful assessments are required before, during, and after stability UO to gauge progress. As in other operations, stability UO plans include tailored branches and sequels to assess success in LOOs and LOEs using appropriate measures of performance and measures of effectiveness. In most UO, the terrain,

dense population (both military and civilian), and participating organizations further complicate this arrangement.

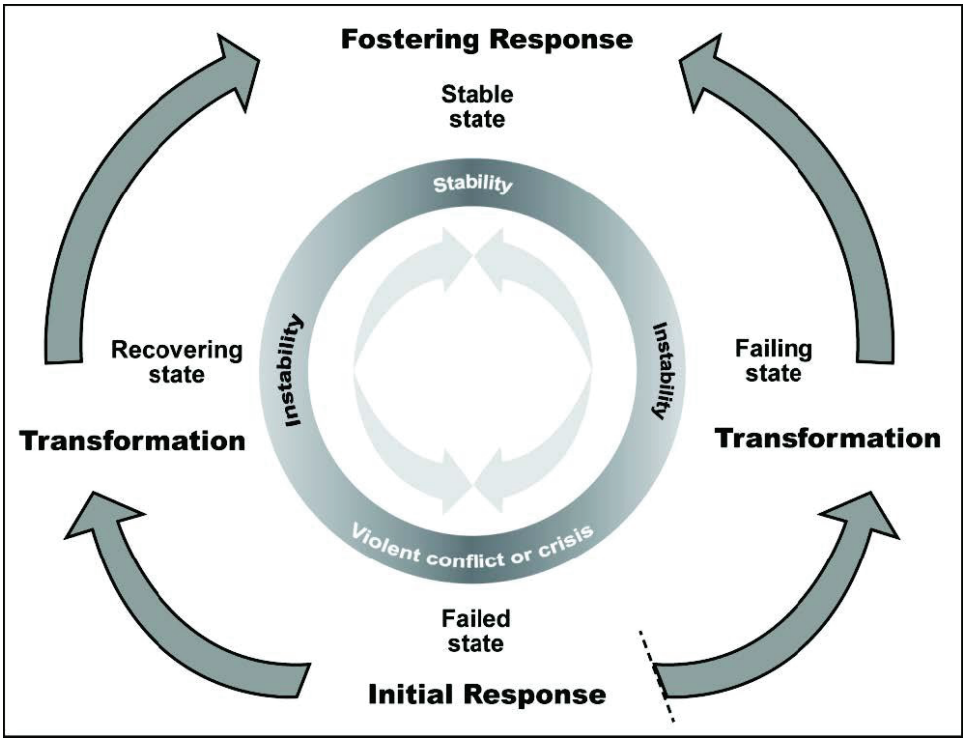


Figure 6-2. The stabilization framework

6-11. The stabilization framework encompasses all the tasks performed by military and civilian actors throughout the range of military operations. The framework guides understanding of the effort to help unify efforts across the competition continuum, usually in competition or crisis settings, or after large-scale combat operations conflict has concluded. The framework influences the commitment necessary to shape military engagement activities during peacetime to prevent conflict, return to competition, and to rebuild a nation torn by conflict or disaster (see figure 2-1 on page 2-2 and figure 6-1 on page 6-3).

6-12. The missions, tasks, and activities that make up these actions fall into three broad categories of initial response, transformation, and fostering sustainability (see figure 6-2). Initial response generally reflects tasks executed to stabilize an operational environment in a crisis state. Military forces conduct stability operations during or after a conflict or disaster when the security situation hinders the introduction of civilian personnel and at the request of host nations. Military forces perform tasks during an initial response to provide a safe, secure environment through area security. Performing these tasks allows military forces to attend to the immediate humanitarian needs of the host-nation population, focusing on minimum essential stability operations tasks.

6-13. Transformation represents the broad range of post-conflict reconstruction, stabilization, and capacity-building tasks. Transformation is essentially a consolidation of gains. Military forces perform these tasks under conditions relatively free from most wide-scale violence, often to support broader civilian efforts.

6-14. Having achieved military purposes at strategic or operational levels, between transformation and fostering activities and cessation of most military conflict are where the preponderance of U.S. influence may shift to other elements of national power such as diplomatic, informational, or economic ways or means. Fostering sustainability encompasses long-term efforts that capitalize on capacity-building and reconstruction activities to establish stable conditions so forces can transition control to legitimate civil authorities. Commanders subjectively assess less tangible populace conditions around a city to determine if they are met sufficiently in regards to winning. They also objectively assess if a host-nation's society has

achieved adequate relative objective end state conditions so that military operations can transition or cease (see figure 6-3). The end state conditions for all U.S. entity stability lines of effort are—

- A safe and secure environment.
- Established rule of law.
- Social well-being.
- Stable governance.
- Sustainable economy.

6-15. Minimum essential stability operations tasks, especially during large-scale combat operations, focus on protection and well-being of civilian populations. These tasks are implied in every operation order and require provision of minimum levels of security, food, water, shelter, and emergency medical treatment. The tasks include—

- Establishing civil security, which requires Army/Marine Corps units to protect the population from violence and restore public order.
- Providing immediate needs, which requires Army/Marine Corps units to ensure the population has food, water, shelter, and emergency medical treatment.

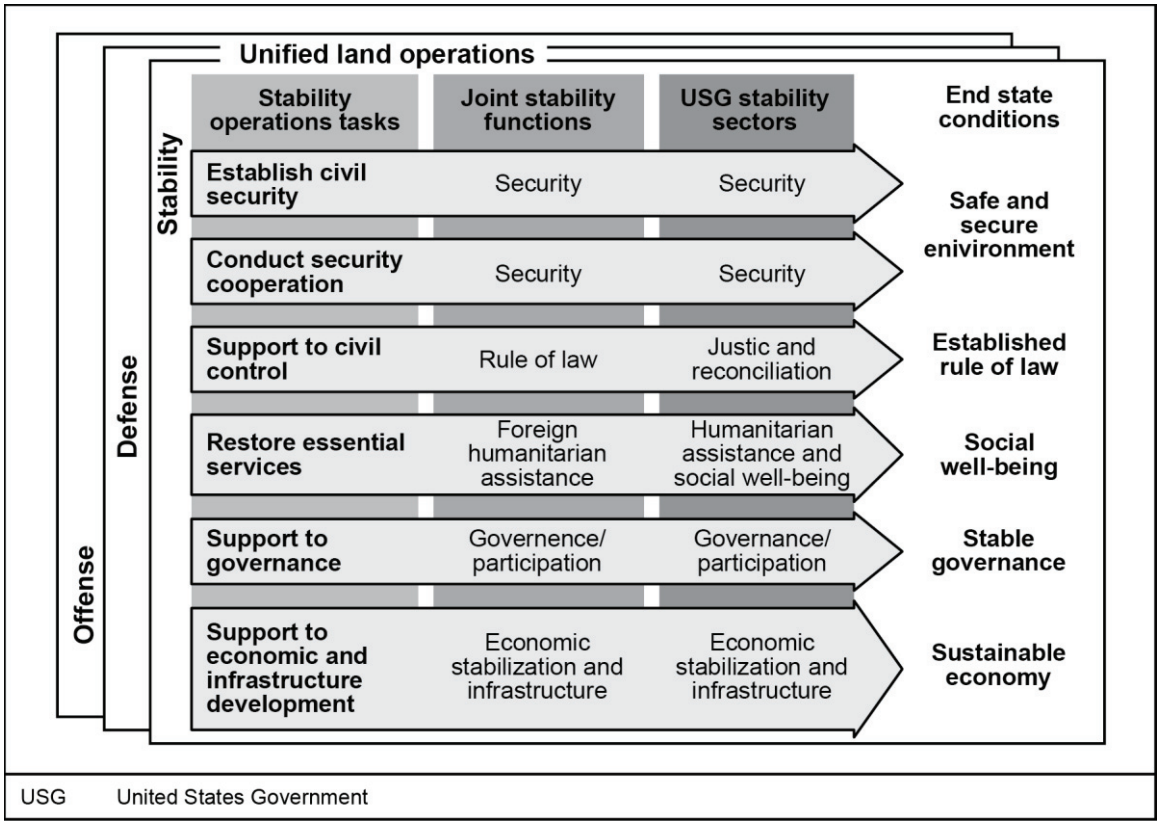


Figure 6-3. Integrated stability operations tasks

6-16. The support and assistance that Army/Marine Corps forces provide during these operations is temporary, although it may be of long duration. Commanders plan and execute stability operations with that essential consideration always in mind. Eventually, the government and administration, either foreign or domestic, secures and supports the population by themselves. Therefore, commanders envision and set conditions that allow for transitioning control and responsibility to legitimate civilian authorities. While commanders only provide assistance and support based on specific and well-planned civilian requests, more often commanders determine requirements in collaboration with competent civilian authorities and agencies or, initially in some cases, with little or no civilian assistance at all. Ultimately, transition planning occurs as an integral part of the overall operational planning. Transition planning includes collaboration with

appropriate civilian agencies and organizations as early as possible. Such planning enables a seamless transition to civilian control without major setbacks and loss of forward momentum.

STABILITY OPERATIONS

6-17. Stability operations establish, sustain, and exploit security and control over foreign areas, populations, and resources so that military forces can achieve end state conditions. Urban areas act as decisive points to accomplish many types of stability operations because urban areas are the centers of population, culture, economy, and government. Much of the support provided by Army/Marine Corps forces aims to assist national, regional, or local governments to restore essential services and infrastructure and to reestablish civil order and authority. The location of civilian authorities in urban areas will, by necessity, be a dominating factor in accomplishing the mission. As importantly, many stability operations—such as the example vignette below of enforcing peace in Bosnia—require interacting with, influencing, controlling, or protecting all or parts of the civilian population. Stability tasks generally fall into one of three categories, representing the collective effort associated with an operation focused on stability operations:

- Tasks for which military forces retain primary responsibility.
- Tasks for which civilian agencies or organizations likely retain responsibility, but military forces are prepared to execute.
- Tasks for which civilian agencies or organizations retain primary responsibility.

6-18. When a functional, effective host-nation government exists, military forces work through and with local civil authorities and link civil and military efforts. Together they restore stability and order and sometimes reform the security institutions that foster long-term development. In this situation, the size of the force and the scope of the mission are more limited. However, in a worst-case engagement scenario, the security environment is in chaos, and the state is in crisis or has failed altogether. In these situations, international law requires the military force to focus on essential tasks that establish a safe, secure environment and address the immediate humanitarian needs of the local populace. These situations require a force capable of securing borders, protecting the population, holding individuals accountable for criminal activities, regulating the behavior of individuals or groups that pose a security risk, reestablishing essential civil services, and setting conditions in an operational area that enable the success of other actors.

6-19. Success in the stability component of an operation often depends on the commander's ability to link military and civilian lines of effort and to identify, prioritize, and sequence the tasks essential to mission success. While the six Army stability tasks apply to all stability UO, security is fundamentally required for the other tasks to be effective. The tasks of establishing civil security and control generally must occur before subsequent tasks may consolidate stability gains in an urban area. See ADP 3-07, MCWP 3-03, ATP 3-07.5, and FM 3-07 for more details and examples of stability tasks necessary for success.

Bosnia-Herzegovina–Operations JOINT ENDEAVOR, GUARD, and FORGE

The Socialist Federal Republic of Yugoslavia, created in the aftermath of the Second World War, once consisted of six “republics” and two autonomous regions. President Josip Broz Tito held these together for roughly thirty-five years until his death in 1980. He was a strongman, the head of a communist dictatorship but nonetheless succeeded in subordinating multiple ethnic and religious—Catholic, Orthodox Christian, and Muslim—rivalries to maintain a sort of pan-Yugoslavian ethos and identity. The country, however, began to show fissures in its political system and national unity after Tito’s death and the collapse of the Soviet Union in 1989. Yugoslavia remained communist for another ten years, into the 1990s, but the additional collapse of communism throughout Eastern Europe proved too destabilizing and the country disintegrated into chaos and civil war.

The war resulted in the collapse of the country and the violent separation of ethnic groups—Bosnians, Croats, Macedonians, Montenegrins, Serbians, Slovenians—into multiple states within central Europe (see figure 6-4). The civil war lasted four years, beginning in Bosnia-Herzegovina in April 1992 then spreading throughout Yugoslavia, Bosnia-Herzegovina, Croatia, North Macedonia (at the time known as the former Yugoslav Republic of Macedonia), Montenegro, Serbia, and Slovenia.



Figure 6-4. Bosnia-Herzegovina region, 1992–1995

Brutal urban warfare characteristics emerged with multiple incidents of ethnic cleansing and complete disregard for international standards of humane conduct during war. The estimated number of people killed over three and a half years of fighting ranges from 140,000 to 250,000. Four out of every five deaths were noncombatants. In addition, the fighting created 1.3 million refugees.

NATO involvement in the former Yugoslavia began in Bosnia-Herzegovina in December 1995, after the signing of the Dayton Peace agreement. It established Bosnia-Herzegovina as a single, democratic, and multi-ethnic state with two entities: the Federation of Bosnia-Herzegovina and the Republika Srpska (Serb Republic). NATO conducted a peace enforcement mission initially referred to as the implementation force which transitioned to the stabilization force. The U.S. Army provided one-third of the personnel for the initial 60,000 member implementation force, with an eventual deployment of 24,000 Soldiers and 12,000 major equipment items, to include tanks, armored combat vehicles, fires, and joint airpower (see figure 6-5). Implementation force activities, titled Operation JOINT ENDEAVOR, began on 2 December 1995, then transitioned to the stabilization force designation, titled Operation JOINT GUARD, on 20 December 1996. Army involvement continued through 1998, thereafter transitioning further still to Operation JOINT FORGE, which ended in November 2004 with a transfer of responsibility to the European Union.

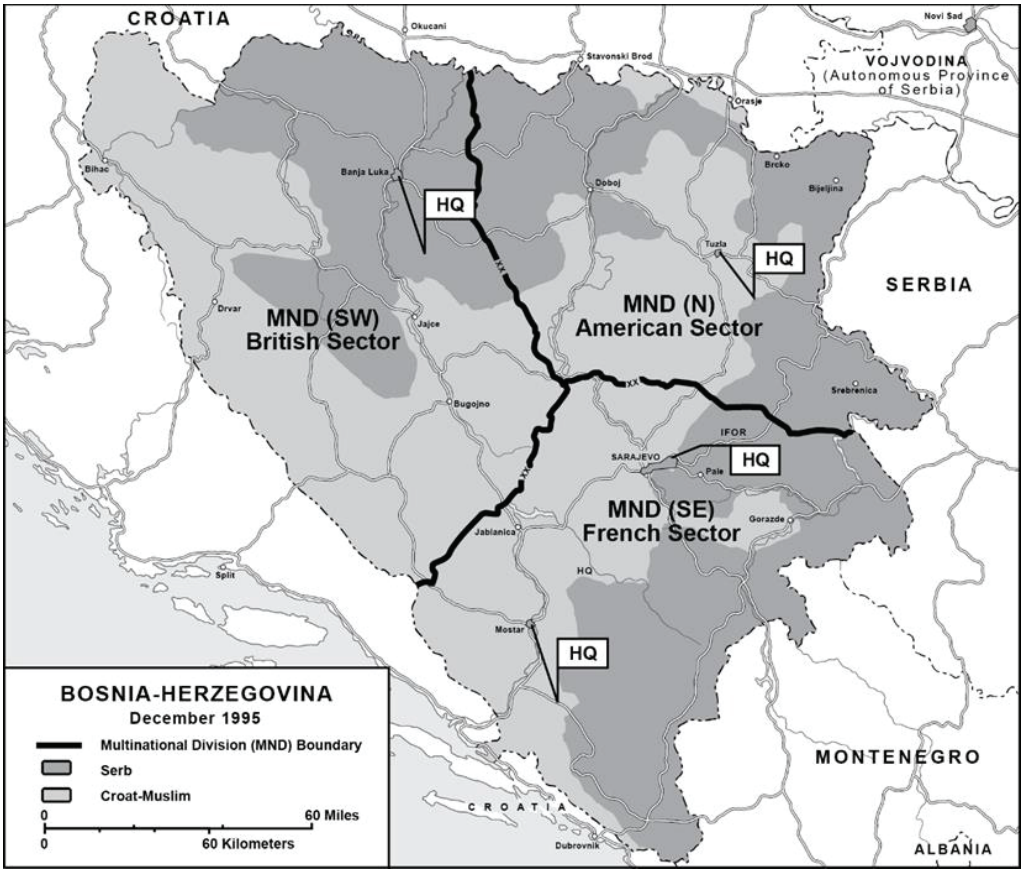


Figure 6-5. Bosnia-Herzegovina, Serb, and Croat-Muslim boundaries in 1995

The U.S. Army's participation in the implementation force and thereafter the stabilization force contributed to a safe and secure environment conducive to civil and political reconstruction, one of the six stability tasks. Their purpose was to deter or prevent a resumption of hostilities between ethnic and religious entities and to promote a climate in which the peace process could continue. This often meant the confiscation of weapons, arrest of adversary forces, and support to civilian organizations. Initial and long-term activities included—

- Asserting regional control through checkpoints on roads and bridges.
- Conducting aggressive patrolling.
- Providing area security through supporting local defense reform.
- Supervising de-mining operations and removal of other munitions and weapons.
- Arresting individuals indicted for major or war crimes.
- Assisting the return of refugees and displaced people to their homes.

The multinational stabilization force troops carried out regular patrols throughout Bosnia and Herzegovina to maintain a secure environment. In addition, the U.S. Army supported stabilization forces in the creation of deployable multinational specialized units to manage instances of unrest. Finally, the U.S. Army's participation as the stabilization force underscored multiple challenges, needs, and requirements prior to and when conducting stability operations, to include—

- Conducting intense predeployment training. Realistic and demanding training is needed to properly prepare personnel for the most likely scenarios. This includes fully understanding ROE and a multi-domain ability to conduct operations in the information environment.
- Establishing requirements for integration. This includes consolidating gains to work closely with incoming partner units and agencies to ensure smooth transition in theater to NATO forces.
- Understanding strategic consequences. The tactical actions of units, particularly those at the company level and below, could have strategic implications on overarching mission success. Mission orders should reflect this reality and thoroughly prepare and entrust junior leaders and Soldiers/Marines to execute security operations with the requisite authority and responsibility to maintain operating tempo without undue strategic risk.
- Understanding the need for patience and time. Obtaining results when executing stability UO requires patience, particularly when interacting with the population, and time to establish relationships that enhance LOO and LOE results.

Establish Civil Security

6-20. Establishing civil security provides for the safety of the host nation and its population, including protection from internal and external threats. This is essential for a safe and secure environment. Proliferation of increasingly diverse information dimensions and diffuse power structures limits traditional state-owned monopolies on using violence to coerce or achieve political aims. In other words, non-state actors, proxy agents, irregular threats, criminal or ideological violent extremist organizations can and will affect the security environment in cities and contest a military or government security forces' ability to secure the populace. Increasing numbers of malign actors may choose to conduct their own UO within larger cities that counter U.S. force, host-nation, or coalition-partner interests. Civil security is the most resource intensive UO stability task in terms of manpower, materiel, and monetary support and is a necessary precursor to all other stability tasks. Without a reasonable level of civil security, other stability operations tasks are ineffective. Civil security requires four necessary conditions:

- Cessation of large-scale violence.
- Public order, to include potential interim detention and adjudication.

- Physical protection, to include a secure economic environment.
- Territorial security from internal and external threats.

Support to Civil Control/Support Establishment of Civil Control

6-21. Support to civil control centers on justice reform, the rule of law, and public order underpinned by efforts to rebuild the host-nation judiciary, police, and corrections systems. It encompasses the key institutions necessary for a functioning justice system including police, investigative services, prosecutorial arm, and public defense. Civil control tasks, along with oversight, accountability, and transparency of the justice sector deter corruption that threatens security, justice, and governance institutions. Despite differing goals and objectives, terrorist groups and criminal organizations may converge at times to plan or complete particular UO of common interest against civilian or coalition forces, exploiting ungoverned or masked spaces. The proliferation and democratization of connectivity allows illegitimate entities to influence marginalized social groups. Impartiality of judges in their application of the law to incarcerate convicted individuals is essential to building public trust in due process and a just system. Civil control tasks focus on building temporary or interim capabilities to pave the way for host-nation or international organizations to implement permanent capabilities. Civil control includes attaining the following necessary conditions:

- Just legal frameworks.
- Public order.
- Accountability to the law.
- Access to justice.
- Legitimate state monopoly over the means of violence.
- Culture of lawfulness.

Restore Essential Services / Support and/or Provide Restoration of Essential Services

6-22. Efforts to restore essential services ultimately contribute to achieving a stable democracy, a sustainable economy, and the social well-being of the population. In failing or failed states or in the aftermath of armed conflict and major disasters, military forces support efforts to establish or restore the most basic civil services: the essential food, water, shelter, and medical support necessary to sustain the population until local civil services are restored. The immediate humanitarian needs and security for the local populace are always a priority. Provision of essential services includes these necessary conditions:

- Access to and delivery of basic needs and services.
- Access to and delivery of education.
- Return and resettlement of dislocated civilians, including refugees and internally displaced persons.

Support to Governance

6-23. Governance is the process, systems, institutions, and actors that enable a state to function. Effective, legitimate governance ensures that these are transparent, accountable, and involve public participation. Military efforts to support governance build progress toward achieving effective, legitimate governance. Military support to governance focuses on restoring public administration and resuming public services while fostering long-term efforts to establish a functional, effective system of political governance. The support provided by military forces shapes the environment for extended unified action by other partners. Their efforts eventually enable the host nation to develop an open political process, a free press, a functioning civil society, and legitimate legal and constitutional frameworks. Good governance includes the following necessary conditions:

- Provision of essential services.
- Stewardship of state resources.
- Political moderation and accountability.
- Civic participation and empowerment.

Support to Economic and Infrastructure Development

6-24. Military tasks executed to support the host-nation economic sector are critical to sustainable economic development. Often, military governance direction to a reestablished host-nation governance is required to implement effective economic reforms. For example, in WWII, the Supreme Commander for Allied Powers General Douglas MacArthur, and his staff democratized reconstructive economic power focusing on reforms in the Japanese government to implement a three-phased reform approach. In phase one, the Japanese government, with military oversight and significant U.S. economic aid, broke up the ruling wealth groups known as zaibatsu. The government passed laws that seized ruling class wealth through taxes, and decommissioned a majority of larger zaibatsu groups and their officers. Secondly, the plan involved the government implementing land reform laws that allowed farmers to obtain long-term, low interest loans toward ownership of formerly zaibatsu-owned land. This land was fairly and equitably bought from the zaibatsu through use of Japanese government bonds and then made available to Japanese farmers. Finally, laws were enacted that allowed assembly and establishment of labor unions for Japanese workers to promote fair employment, fair wage practices, and small business ownership. The economic viability of a state is among the first elements of society to exhibit stress and ultimately fracture as conflict, disaster, and internal strife overwhelm the government. Signs of economic stress include rapid increases in inflation, unemployment, uncontrolled escalation of public debt, and a general decline in the state's ability to support the well-being of the people. Economic problems inextricably relate to governance and security concerns. As one institution begins to fail, others often follow.

6-25. Infrastructure development complements and reinforces efforts to stabilize a host-nation economy. It focuses on a society's physical assets and supporting services that enable the state's economic viability. These include construction services, engineering, and physical infrastructure in the following sectors:

- Transportation such as roads, bridges, railways, airports, ports, and waterways.
- Telecommunications.
- Energy (such as natural resources, the electrical power sector, and energy production) and distribution.
- Municipal and other public services.

6-26. With economic aid and infrastructure development come many interests from multiple actors. Friendly forces are cautious when attempting to understand aid implications. They use aid judiciously to positively impact fairness perceptions among key groups and seek to mitigate potential sources of friction or corruption. For example, some evidence indicates that U.S. government aid projects in and around Wanat, Afghanistan were not administered to the satisfaction of some controlling elder groups, and thus through civil personal power the elders passively facilitated some attacks on U.S. forces. Careful consideration and overt or discreet lines of communication should be used in conjunction with civil affairs operations to prevent perceptions of unfairness that may foment unrest among a population’s leaders or their people groups.

Conduct Security Cooperation

6-27. Establishing or reestablishing competent HNSF is fundamental to providing lasting safety and security for the host nation and its population. These forces primarily counter external threats. However, they also assist in other key missions including disaster relief, humanitarian assistance, and some other internal military threats. Developing HNSF is integral to successful stability operations and includes organizing, training, equipping, rebuilding, and advising various components of HNSF.

6-28. *Security cooperation* is all Department of Defense interactions with foreign security establishments to build security relationships that promote specific United States security interests, develop allied and partner nation military and security capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to allied and partner nations (JP 3-20). Security cooperation is often coordinated by the U.S. military's security cooperation organization in a country. The Marine Corps does not consider conducting security cooperation a stability task. These interactions include all DOD-administered security assistance programs that build defense and security relationships promoting specific U.S. security interests. Such interests include all international armaments cooperation activities and security assistance activities to—

- Develop friendly, partner, and allied military capabilities for self-defense and multinational operations.
- Build partnership capacity and enhance or establish relationships with regional national militaries that promote bilateral and coalition interoperability, strategic access, and regional stability.
- Gain operational access that supports U.S. strategic requirements in a theater providing freedom of movement and freedom of action during military operations. Access also facilitates other means of support to include information and intelligence sharing and technology.

Provide Humanitarian Assistance

6-29. U.S. forces can support host-nation governments by providing humanitarian assistance during a manmade or natural disaster. This is often referred to as either foreign disaster relief or foreign humanitarian assistance. The goal is to complement, but not replace, the host-nation civil authority's efforts when the need is gravely urgent and when the humanitarian emergency overwhelms normal relief agencies. The participation of U.S. forces can immediately and directly relieve or reduce human suffering, the spread of disease, hunger, and overall privation. An effective, immediate response by the United States almost always includes the initial involvement of those military forces immediately available to the GCC. For example, urban areas that have sustained a natural disaster, such as an earthquake, hurricane, or tsunami. Effective humanitarian assistance requires—

- Coordination between support U.S. forces and interagency partners. This includes disaster relief and noncombatant evacuation missions.
- Understanding host-nation capabilities and providing the appropriate level of support during humanitarian assistance missions.
- Assisting the host nation in providing security to prevent and deter looting, civil unrest, or the interference of humanitarian assistance operations (distribution of supplies) by criminal networks.
- Conducting a medical assessment of the impact of the humanitarian crisis, such as disease threats due to the lack of potable water, energy availability (electricity, oil, natural gas, etc.) and the impact of the terrain (rubbling effect).
- Securing existing or rebuilding adequate port facilities to effectively distribute supplies.
- Conducting emergency infrastructure repairs.

6-30. U.S. forces are likely to conduct humanitarian assistance operations to primarily reduce human suffering but also to prevent a serious international situation that could threaten the political or military stability of a region considered of interest to the United States, which will likely begin and end within an urban area.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR INCIDENTS

6-31. CBRN incidents can be disastrous and are of particular concern during UO. In urban areas, the potential for catastrophic loss of life and property is enormous during a CBRN event. CBRN incidents can result from a military or terrorist threat, which adds a law enforcement dimension to the disaster, or from a toxic industrial material accident.

6-32. An urban area intensifies and exacerbates the effects of CBRN attacks. Subways and other subsurface areas prevent dispersion of chemicals or pathogens, making limited chemical or biological attacks more lethal or damaging as heavier-than-air agents settle in those low-lying areas. A nuclear attack in an urban area produces catastrophic results such as collapsing structures, flying debris, and fires. Dispersion patterns of CBRN weapons are affected by urban terrain and are more difficult to predict and monitor. Large-scale CBRN attacks produce hundreds of thousands of casualties, but even a limited attack requires evacuating and screening large numbers of civilians. Requirements for medical support, basic life support, and, if necessary, decontamination may quickly overwhelm the capabilities of Army/Marine Corps forces, even with augmentation.

6-33. Explosive events in urban areas have become commonplace throughout much of the world. During UO, terrorists use explosive devices, such as an IEDs, to attack military forces, civilians, and even aid

workers and to destroy key infrastructure. A terrorist can easily conceal explosive devices in an urban area and set them up to attack a target from the bottom, side, or top.

6-34. Similar to disasters, panic and disorder often accompany the CBRN event. Fleeing civilians clog transportation routes and distribution infrastructure. Physical destruction also affects other components of the infrastructure of critical and immediate concern such as energy, administration, and human services to include water, sanitation, medical, firefighting, and law enforcement. Because CBRN attacks can affect all elements of infrastructure, overall recovery time lengthens and areas beyond the urban area feel the effects.

DECISIVE, SHAPING, AND SUSTAINING STABILITY OPERATIONS

6-35. Decisive, shaping, and sustaining stability operations lend themselves to a broad conceptual orientation during stability operations. While sustaining operations are inseparable from decisive and shaping operations, they are not usually decisive themselves. Most stability operations occur in and around cities. Planning and execution of urban stability operations should consider the use of stability mechanisms in an operational approach.

Stability Mechanisms

6-36. A *stability mechanism* is the primary method through which friendly forces affect civilians in order to attain conditions that support establishing a lasting, stable peace (ADP 3-0). As with defeat mechanisms, combinations of stability mechanisms in LOEs and LOOs produce complementary and reinforcing effects that accomplish the mission more effectively and efficiently than single mechanisms do alone (see figure 6-6). The four stability mechanisms are compel, control, influence, and support. Compel means to use, or threaten to use, lethal force to establish control and dominance, affect behavioral change, or enforce compliance with mandates, agreements, or civil authority. Control involves imposing civil order. Influence means to alter the opinions, attitudes, and ultimately the behavior of foreign friendly, neutral, adversary, and enemy targets and audiences through messages, presence, and actions. Support means to establish, reinforce, or set the conditions necessary for the instruments of national power to function effectively.

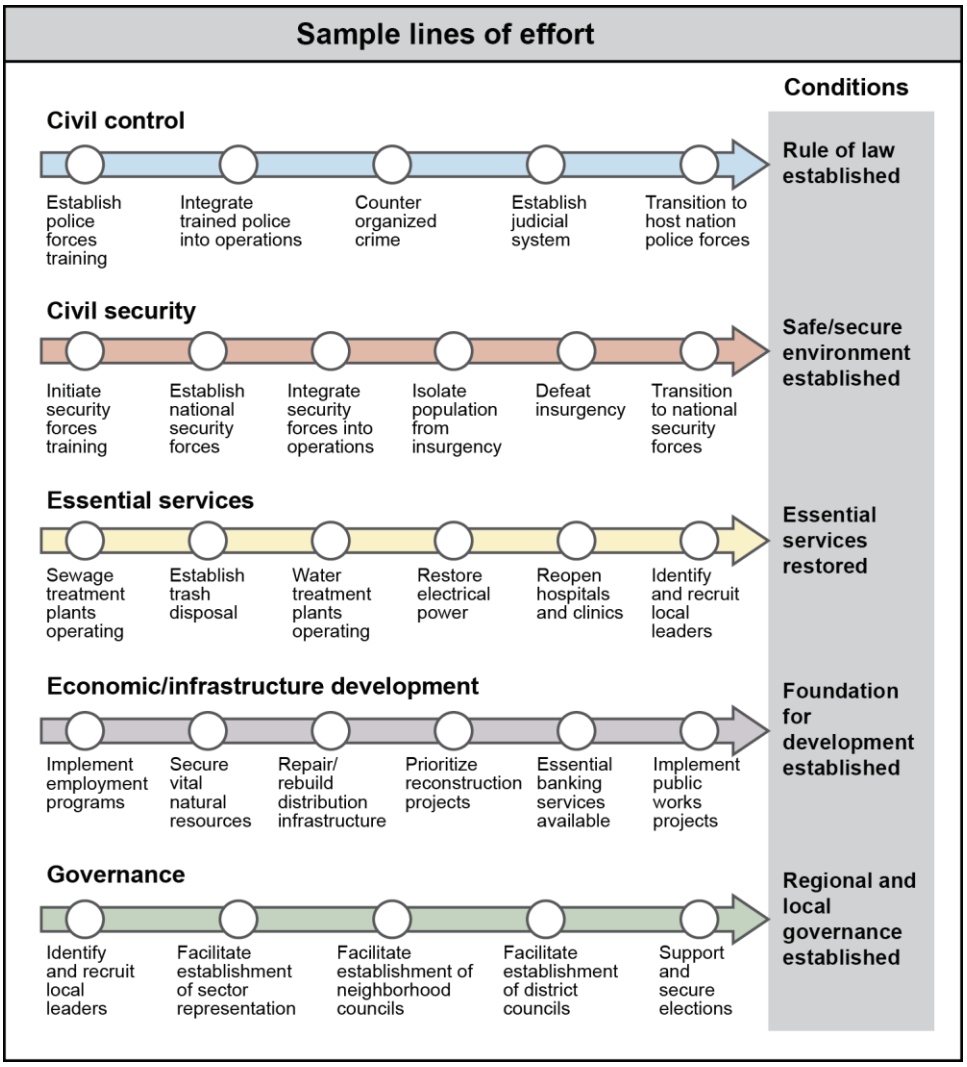


Figure 6-6. Sample, purpose-based stability lines of effort

Decisive Operations/Decisive Actions

6-37. In urban stability operations, decisive operations/decisive actions may take many months or years to achieve end state conditions and include multiple actions. Commanders must objectively and subjectively assess how, if, and when they have been relatively achieved. Most UO that attack underlying causes of problems, or those that seek to prevent or relieve such conditions, usually take longer. Decisive stability UO should be tailored to the local area in which they are being performed. For example, the special inspector general for reconstruction of Afghanistan noted that, from 2002–2017, the amount of reconstruction aid money spent did not necessarily correlate to stability effectiveness in Operations ENDURING FREEDOM or INHERENT RESOLVE. Due to political pressures, compressed timelines, and short tours of duty, NGO, intergovernmental, and military forces did not have the persistent duration necessary for unity of effort in creating effective long-term stability. Counterintuitively, stability programs were launched in highly contested areas that were unsecure and had to be seized or cleared multiple times; therefore, governmental entities or populations were unable to significantly benefit or consolidate gains from them. This applied particularly at strategic and operational levels. Decisive stability UO maximize capacity of stability mechanisms in conjunction with adequate portions of defeat mechanisms that use adequate measures of performance and effectiveness. Regardless of population sentiment toward U.S. or coalition forces, forces

must compel, control, influence, and support the stability UO LOE. Forces using stability mechanisms in UO should be able to—

- Compel threat forces through discriminate use or threat of violence. Subsumed portions of offensive or defensive UO within the stability operation should be able to lethally and decisively win any fight via defeat mechanisms with a minimum of collateral damage in and around the city.
- Control urban areas, borders, key terrain, and individuals through area security, providing conditions for civil order and economic security.
- Influence public perception of U.S. force legitimacy and dissuade adversary decision makers or networks among the host-nation populations, primarily through nonlethal means, and through ethical IO/OIE or necessary applications of combat power.
- Support aid organizations, civil agencies, and host-nation governments to create effective governance and restoration of civil services.

6-38. Effective stability UO seek to solve the root problems rather than the symptoms. See FM 6-0 for how to properly plan around and identify the problem. Most stability UO point to a common goal of attempting to return the area and its population to a state of normalcy. Law and order is established to protect critical infrastructure and inhabitants and their property from lawlessness and violence. This effort is often critical to the decisive operation/decisive action or main effort and focuses allocation of resources through various phases, conditions, and times of stability UO. See ADP 3-07 for additional information on decisive points. Some examples of UO stability decisive points may include—

- Securing national, regional, state, provincial, or county borders within the AO mandate.
- Repairing a vital water treatment facility.
- Obtaining political support from key tribal or local leaders for a transitional authority.
- Establishing a training academy for national, regional, state, provincial, county, city, or local security forces.
- Securing a major election site.

Shaping Operations

6-39. Shaping operations set and maintain the conditions for executing decisive operations/decisive actions by reducing the complexity of compressed operational variables in UO. Stability operations may be affected by policy objectives or strategic U.S. interests and may not occur. While this possibility should be understood, as received from higher headquarters' directive guidance, these types of decisions are outside or above the commander's purview. However, when conducting urban stability or DSCA tasks, U.S. force shaping operations always include IO/OIE before, during, and after that influence perceptions and maintain legitimacy.

6-40. Often, various participants and their potentially divergent missions and methods are involved. U.S. force commanders coordinate their task organization and planning efforts early and continuously to ensure that their decisive, shaping, or sustaining operations are not working against other agencies', partner's, or nation's efforts and operations. These entities may have the lead role in the operation. For example, in 2016–2017, joint and Army efforts to establish the global coalition against ISIS and build partner capacity in ground Iraqi and Syrian defense forces against a hybrid threat helped shape regional and global conditions for offensive success during Operations EAGLE STRIKE (Mosul) and ECLIPSE (Raqqa). In these instances, effective offensive UO in and around those cities set conditions for the consolidation of gains and stability UO efforts to come from others, albeit from non-U.S. sources. In this case the security, stability, and reconstruction responsibility, as agreed by nations, became the host nation's.

6-41. In post large-scale combat, stability shaping operations will be conducted primarily by rear or support area forces or military governance structures in concert with the host nation and other civil agencies as provisional authority or new governments are reestablished. This capability is not in current force structure, and MGO forces would have to be created. A critical shaping operation is coordinating to develop a common purpose and direction among agencies or partners, particularly those that experience continuous personnel turnover during a lengthy operation. In some instances and with some organizations and agencies (particularly NGOs), genuine unity of effort may prove elusive. In post-conflict large-scale combat, military governance must provide this unity of effort. However, Army/Marine Corps commanders who recognize the

differences in aims and goals can conduct operations with less friction. Commanders actively request and include inter-organizational partners in mission readiness exercises or any other training for stability or DSCA tasks.

6-42. Stability operations are best shaped by the military in providing security to civilian experts. Most often in post-large-scale combat operations situations, the U.S. Department of State or U.S. Agency for International Development (USAID) has a primary role in returning to a post-conflict area to affect a state of relative peace and level of competition favorable to U.S. interests. However, they do not provide security. Detailed large-scale integration and synchronization of efforts is needed to mirror effective host-nation governance structures, both geographically and at echelon within appropriate spans of control. Expert assistance can come from the DOS or USAID in the form of conflict, reconstruction, or stabilization teams. As described in chapter 4, stability operations transitioning from offense after large-scale combat require local and regional expertise to effectively conduct stability tasks and achieve stability end states.

6-43. During Soldier leader engagement, key leader engagement, or other information-related capability use in limited contingency operations, historical evidence reveals that foreign security force (FSF) threats are most prevalent during stability operations. During these operations, U.S. forces work closely with FSFs to re-establish security and essential services, thus often presenting a greater risk of insider attacks. From 2008–2017, 96 FSF attacks were carried out against U.S. or multinational forces conducting stability operations in Afghanistan. These attacks resulted in approximately 152 U.S. or multinational deaths and over 200 wounded personnel. However, this does not mean that attacks are limited to specific missions or phases. The potential for an FSF threat exists anytime U.S. forces are partnered with FSF and can occur during operations to shape, prevent, or win during large-scale combat operations (see ATP 3-13.5 and ATP 3-37.15 for additional information).

Sustaining Operations

6-44. Sustaining operations enable decisive and shaping operations, prevent culmination, and include logistics, base security, movement control, terrain management, and infrastructure development. Units regenerate, build, and position combat power to best consolidate gains and support stability UO. Sustainment/logistics bases, especially those located in urban areas, become an attractive target for hostile civilians. Commanders actively and aggressively protect these bases as well as LOCs. They allocate and adjust resources and direct sustaining operations to support shaping or decisive operations through branches or sequels or as conditions change.

CONSIDERATIONS OF URBAN STABILITY OPERATIONS

6-45. Many considerations presented in urban offensive and defensive operations apply to urban stability tasks, particularly those that address how to understand the urban and overall operational environment. When planning stability UO, staffs may need to use the Army design methodology for ill-structured problems. Staffs consider all perspectives and asset options available for request from sister services, JIIM entities, and the joint force. In doing so, they seek to recognize the complexity of the environment, balance resources and capabilities, account for planning horizons and gates, and avoid planning pitfalls such as planning too rigidly into the future with too much detail or using the plan as a script for execution. Because situations in which stability tasks normally occur share strong similarities with any urban environment, many of these considerations closely link to the urban fundamental tasks presented in chapter 2. Taken together, commanders often find them useful in conducting UO throughout operations. (See Appendix C for a detailed example of an urban stability operation.)

UNDERSTAND

6-46. In urban stability operations, commanders carefully assess the political dimension along with the other operational variables of an operational environment, as well as their role and the media's part in managing information. These operations are tied to the exercise of diplomatic power. The media often focuses on operations in urban areas, thus gaining considerable public and political attention. With such intense media scrutiny, military objectives in urban stability operations often directly link with political objectives. The relationship between the levels of warfare—strategic, operational, and tactical—is often closer than in urban

offensive and defensive operations. Effective commanders carefully nest military objectives within political objectives. Commanders ensure that the ways and means to accomplish their objectives, which includes security and protection/force protection measures, hold up to media scrutiny and are appropriate for the situation and environment. All levels of command understand the link between political and military objectives, to include a basic understanding at the Soldier/Marine level. One uncoordinated, undisciplined, or inappropriate action, even at the lowest level, could negate months or years of previous, disciplined effort. Commanders balance security and protection/force protection measures with mission accomplishment. Ineffective measures put Soldiers/Marines at too great a risk and jeopardize the mission. Conversely, overly stringent measures make it difficult for forces to interact with the population closely — which is essential in many of these operations. Finally, commanders thoroughly assess nongovernmental and governmental organizations and agencies operating in or near urban areas within their AO. Once understanding is achieved, commanders describe and direct operational approaches and courses of action for staff and units plan, prepare, execute, and assess.

Political and Military Objectives

6-47. In urban areas where military ways and means are used to meet U.S. ends, commanders translate political objectives into military objectives that are clear and achievable, with clear tasks and purposes that can lead to the desired stability task end states. In many stability operations, defeat of an enemy is not the ultimate desired end state, and diplomatic, economic, and informational means are used in conjunction. Political objectives may be vague, increasing difficulties for commanders framing problems and analyzing missions. This applies to tactical- and even operational-level commanders, unskilled at higher level, strategic political-military assessments. Each type of stability operation is distinct, often unfamiliar to the executing unit, and unique to the specific situation. These factors make it difficult to determine specific tasks that will lead to mission success. Therefore, as commander's plan, they simultaneously establish assessment frameworks to aid in understanding and evaluating progress and gauging mission accomplishment (see JP 3-06 for additional assessment information). For example, staffs may focus CCIR and ISR collection metrics to provide suitability or security force readiness percentages in the six stability task lines of effort, or staffs may seek metrics that measure progress in a construct, such as a PMESII-ASCOPE and SWEAT-MS view.

Note. Commanders should consult the U.S. Agency for International Development's (USAID) *Field Operations Guide for Disaster Assessment and Response* when conducting their assessments and developing measures of effectiveness for many urban relief operations.

6-48. The DOS developed a detailed list of stability-focused, stabilization and reconstruction essential tasks (hereafter referred to as the essential stability task matrix). Specifically, the Bureau of Conflict and Stabilization Operations maintains DOS proponency for stability and often interfaces with DOD elements. The essential stability task matrix helps planners identify specific requirements to support host nations in transition, so host nations can prevent armed conflict, prevent civil strife to sustain stability, or restore stability post-conflict. The essential stability task matrix serves as a detailed planning resource, and the matrix continues to develop as forces implement it during operations. Forces can apply this matrix as a resource for both peacetime and conflict situations. For more information, see the Post Conflict Reconstruction Essentials Tasks Matrix (see https://2001-2009.state.gov/s/crs/rls/52959.htm, https://2009-2017.state.gov/j/cso/resources/index.htm, ADP 3-07, and figure 6-3 on page 6-6 for more information). The essential stability task matrix divides the tasks conducted during operations and their relative duration for execution across five broad technical areas called stability sectors:

- Security.
- Justice and reconciliation.
- Humanitarian assistance and social well-being.
- Governance and participation.
- Economic stabilization and infrastructure.

6-49. Assessment frameworks, or plans, contain qualitative and quantitative criteria by which to measure progress toward objectives and the effects necessary to meet those objectives in lines of effort or operation.

Quantifiable criteria must be measurable and link cause with effect. Qualitative criteria provide context and the commander's estimate of the situation. These criteria are known as measures of performance (euphemistically, “Are we doing the correct things?”), and measures of effectiveness (euphemistically, “Are we doing things correctly?”). In concert, these measures help determine the changes required and are essential to the assessment cycle required for urban stability or DSCA tasks. In a humanitarian relief operation to aid a starving populace, commanders could determine that the decisive effort is delivering safe food to the urban area. To judge success or effectiveness, they could determine that the appropriate measure is the number of food trucks dispatched daily to each distribution site—the more trucks, the more effective the efforts. This measure correlates with the overarching measure of effectiveness: a decline in the mortality rate. If no significant decrease in deaths due to starvation occurs, commanders may need to reassess and modify the tasks or measures of effectiveness. A better measure may be to track the amount of food consumed by those in need instead of simply counting the number of trucks dispatched. Measures of effectiveness can be formed for many stability or DSCA tasks to help return most societies to some degree of normalcy and self-sufficiency. Examples include the following:

- Restoring law and order.
- Decreasing morbidity and mortality rates.
- Securing safe food and water.
- Restoring critical infrastructure.
- Resettling the population.
- Reestablishing economic activity.

6-50. Commanders develop both measures of effectiveness and measures of performance to establish or restore security and provide logistics. Table 6-1 provides example measures of effectiveness from the strategic to tactical levels for a possible stability operation.

Table 6-1. Example measures of effectiveness

Measures of Effectiveness: The Need to Measure Progress		
Strategic-Level Criteria	***Operational-Level Criteria***	***Tactical-Level Criteria***
Accountable to the American people for defining and measuring progress toward defeating terrorism and meeting national security goals.	Accountable to the strategic level for measuring operational success and providing linkage to strategic goals.	Responsible to the operational level for measuring tactical success and providing linkage to operational goals.
Examples: • Prevention of the insurgency from receiving aid or resources from other international groups. • A functioning national government. • Amount of international support and aid to reconstruction. • Number of nations contributing manpower to multinational forces.	Examples: • Host-nation security forces trained and equipped. • Denial of the merging of insurgent forces with terrorist groups. • Amount of distributed— ▪ Electricity. ▪ Liquid propane gas. ▪ Gasoline. • Functioning provincial governments.	Examples: • Reduced indicators of enemy activity. • Reduced attacks on multinational forces in the area of operations. • Reduced civilian-on-civilian violence in the area of operations. • Host-nation security force recruitment goals met. • Host-nation security force training goals met. • Number of reliable human intelligence walk-ins.

6-51. Political objectives are fluid and modified in response to new domestic and international events or circumstances. Thus, assessment is continuous, and commanders must adjust their own objectives and subsequent missions accordingly. In urban stability tasks, commanders develop military objectives that support or align with the objectives of another agency that has overall responsibility for the urban operation. In this supporting role, commanders receive numerous requests for manpower and material assistance from the supported agency and other supporting agencies operating in the urban area, including elements of the

urban population. With such unclear lines of authority and areas of responsibility, commanders ensure that tasks, missions, or requested Army/Marine Corps resources fall clearly in the intended scope and purpose of the Army's/Marine Corps' participation in the operation. Commanders must not develop or execute missions based on inadequate or false assumptions, misinterpreted intent, or well-meaning but erroneously interpreted laws or regulations by any organization, including the lead agency. When missions appear outside their scope, commanders quickly relay their assessment to higher headquarters for immediate resolution. The commander's goal is not to limit or slow military participation, but to contribute as intended and in consonance with political objectives and the law.

Security and Protection/Force Protection Measures

6-52. Commanders plan for security, continually assess the security of their forces operating in an urban area, and constantly review protection/force protection measures. Establishing a robust intelligence, particularly HUMINT, network that can determine the intentions and capabilities of the enemy and the urban populace is the basis for establishing protection/force protection for Army/Marine Corps forces operating in an urban environment. Many such operations, particularly stability operations, require extra time to forge a lasting change. Over time even the complex urban environment may seem benign, particularly in peacetime when objectives center on helping others and avoiding violence. Without continued, aggressive command emphasis, Soldiers/Marines lull into complacency. Also, during periods of transition or the transfer of authority from one unit or organization to another, departing Soldiers/Marines often shift their focus to redeployment activities and away from protection/force protection concerns. Usually then Army/Marine Corps forces are most vulnerable to terrorist and insurgent tactics, such as bombings, kidnappings, ambushes, raids, and other forms of urban violence.

6-53. Although protection/force protection does not ensure a successful urban stability operation, improper assessment and inadequate protection/force protection measures can cause an operation to fail. Keeping a neutral attitude toward all elements of the urban population—while maintaining the appropriate defensive posture—enhances security. While civil populations must be protected to the greatest extent possible, they are not the object of stability operations. The group or force that can best provide civil security will be the group that the population trusts and follows. For example, threats often seek to cause politically unacceptable casualties. An improper threat assessment and a lapse in security at the tactical level could result in casualties and cause doubts in the population of the security force's efficacy. That result could affect strategy by influencing host-nation or domestic popular support and, subsequently, national leadership decisions and policy.

6-54. Emphasizing security and protection/force protection measures does not mean isolating Soldiers/Marines from contact with the urban population. On the contrary, commanders need to balance survivability with mobility according to the factors of METT-TC/METT-T. Survivability measures—such as sandbagging, hardening, or fortifying buildings and installations, particularly where large numbers of Soldiers/Marines are fed and billeted—are necessary and require considerable command attention. On the other hand, mobility operations preserve freedom of action and deny an enemy the opportunity to observe, plan, and attack urban forces. A continual Army/Marine Corps presence in an urban area provides the urban population with a sense of security and allows Soldiers/Marines to develop a detailed knowledge of the patterns of life in their assigned AO. Armed with this knowledge, they can detect the absence of normal or the presence of abnormal that might indicate a potential threat. Overall, mission degradation and increased risk to the force can result if protection/force protection measures prevent Army/Marine Corps forces from conducting prudent missions and establishing an active and capable presence.

Participating Organizations and Agencies

6-55. Across the competition continuum, but more so in stability operations in competition or crisis settings, numerous NGOs relieve adverse humanitarian conditions. Adverse conditions are more likely in areas of dense population and infrastructure. For example, in 1994 during Operation UPHOLD DEMOCRACY, over 400 civilian agencies and relief organizations operated in Haiti. Commanders assess all significant NGOs and governmental agencies operating or likely to operate in or near the urban area. Commanders assess each organization's—

- Functions, purposes, or agendas.

- Known headquarters and operating locations.
- Leadership or senior points of contact (including telephone numbers).
- Communications capabilities.
- Potential as a source for critical information.
- Financial abilities and constraints.
- Logistics resources: transportation, energy and fuel, food and water, clothing and shelter, and emergency medical and health care services.
- Law enforcement, firefighting, and search and rescue capabilities.
- Refugee services.
- Engineering and construction capabilities.
- Other unique capabilities or expertise.
- Previous military, multinational, and interagency coordination experience and training.
- Rapport with the urban population.
- Relationship with the media.
- Biases or prejudices, especially toward participating U.S. or multinational forces, other civilian organizations, or elements of the urban society.
- Capability for self-protection, to include armament.

Commanders determine the resources and capabilities that these organizations bring and possible problem areas to include resources or assistance they will likely need or request from Army/Marine Corps forces. Where feasible, and in conjunction with the DOS, units establish and maintain relationships by assigning liaison officers to NGO headquarters or specific units in appropriate AOs to coordinate with NGOs. Units distribute coordinating relationship personnel and units down to the lowest level needed to maintain security and affect positive stability change within the commander's intent. Civil affairs personnel and civil-military operations centers also provide the commander with essential civil information through civil engagement and civil reconnaissance and are an outlet to interface with a population. These organizations are critical to meeting the population's immediate needs and minimizing the effects of collateral damage or disaster. However, commanders consider whether a close relationship with any of these organizations compromises the organization's appearance of neutrality (particularly threat perceptions) and adversely affects their ability to assist the population.

SHAPE

6-56. Commanders conduct many activities to shape conditions for successful urban stability operations. In urban stability tasks, two activities rise to the forefront of importance: IO/OIE and security operations. In certain instances, either of these may themselves become decisive operations/decisive actions. In competition settings divisions and corps build knowledge and expertise of their regionally aligned areas of operation. They help the Army and the joint force by shaping the environment and deterring conflict as they conduct training and planning with partner nation forces.

Conducting Information Operations

6-57. Conducting IO/OIE is essential to shape the urban environment for successful conduct of stability operations. Vigorous IO/OIE influence the perceptions, decisions, and will of the threat, the urban population, and other groups in support of the commander's mission. Information operations objectives are translated to information-related capability tasks that are then executed to create a commander's desired effects in and through the information dimension. These operations isolate an urban enemy from sources of support; neutralize hostile urban populations or gain the support of neutral populations; and mitigate the effects of enemy IO/OIE, misinformation, rumors, confusion, and apprehension. Developing an effective assessment plan is essential to ensuring IO/OIE objectives are achieved as planned. One of the most valuable methods for obtaining data for use in this process is face-to-face encounters with targeted audiences by unit patrols and HUMINT, military information support operations, and civil affairs teams. A valuable technique may be to conduct periodic, unbiased surveys or opinion polls of the civilian population to determine changes in their perceptions and attitudes.

Protecting Civilians and Critical Infrastructure Security Operations

6-58. Security for NGOs and civilians may also be an important shaping operation, particularly for stability tasks. Commanders provide security to civilian agencies and NGOs located near, or operating in, the urban area so that these agencies can focus their relief efforts directly to the emergency. Commanders also need to protect the urban population and critical infrastructure to maintain law and order if the urban area lacks competent security or police forces. Some areas have nonexistent or incapacitated security or police forces or organizations that are susceptible to corruption. Other areas have undergone drastic changes as the result of a natural disaster. These areas require additional security or police forces augmentation. Like the example vignette below on the Los Angeles riots of 1992, DSCA units consider not only geographic terrain effects during mission analysis, but also human, political terrain or security force areas of responsibility such as police jurisdictions when planning unit areas of operation. These appropriate boundary considerations may reduce military liaison burdens, improve responsiveness, economize forces, and better synchronize resources. While not a stability operation, additional information on DSCA missions are found in ADP 3-28 and subordinate DSCA manuals.

Civil-Military Boundaries: Los Angeles Riots, 1992

A judgment that the civil disturbance was occurring within a "nonlinear" operational area precluded the establishment of unit boundaries by the California Army National Guard division staff. Military unit areas of operations were instead designated to coincide with the jurisdiction or area of responsibility of the law enforcement agency or police station receiving support. This sort of direct coordination between midlevel law enforcement leaders and supporting military units greatly improved what was at best an ad hoc process for requesting and approving military support to local police.

Preserving Resources Security Operations

6-59. Just as forces may be at risk during urban stability operations, so may their resources. In urban areas of great need, supplies and equipment are extremely valuable. The most important resources for the civilian population are their basic needs for survival: food, potable water, medical supplies, shelter, clothing, and fuel. Criminal elements, insurgent forces, and people in need may try to steal weapons, ammunition, food, bottled water, uniforms, construction material, medical supplies, and fuel. Adversaries may also use these resources to co-opt or coerce the civil populace into aiding their cause. Protecting these resources becomes a critical shaping operation. Otherwise, Army/Marine Corps forces and supporting agencies may lack the resources to accomplish their primary objectives or overall mission.

Prioritizing Resources and Efforts

6-60. During urban stability operations, commanders face limited resources to shape the battlefield/battlespace, conduct their decisive operations/decisive actions, and accomplish their objectives. They continually prioritize, allocate, and apply those resources to achieve the desired end state. To this end, they may develop an order of merit list for proposed projects and update it over time. To some degree, Army/Marine Corps forces protect and sustain the local urban population. Commanders tailor their objectives and shape their operations to achieve the greatest good for the largest number. Commanders apply the urban fundamental of preserving critical infrastructure to reduce disruption to residents' health and welfare. Second, they apply the urban fundamental of restoring essential services, which includes prioritizing efforts to provide vital services for the greatest number of inhabitants possible. In operations that include efforts to alleviate human suffering, the criticism of any participating organization is likely to be that not enough is being done or Army/Marine Corps forces are not being responsive enough. Therefore, commanders develop clear measures of effectiveness not only to determine necessary improvements to operational plans but also to demonstrate the results of their Soldiers'/Marines′ hard work and sacrifice and U.S. commitment to the operation.

Contributing to Improvement of the Urban Economy

6-61. When a nation is conducting reconstruction and infrastructure repair in limited contingency operations, commanders consider several activities to improve the urban economy if so tasked. In post-conflict large-scale stability operations, U.S. military governance and partner nation and international aid economic support will likely be necessary to restart the economy over a considerably longer period. Commanders also consider contracting with any remaining indigenous businesses and organizations, normally through local formal or informal community leaders, to restore public services and key infrastructure. This activity significantly contributes to rapid restoration of the local economy and reduces civilian dependence on the U.S. force and agency logistics resources. Contractors primarily hire local civilians, as may be stipulated in contracts, helping to satisfy urban job requirements, providing income for local individuals and families, and possibly inspiring critical elements of society to assume responsibility for restoration efforts. Hiring local civilians potentially reduces enemy influence by diminishing their malign sources of aid, including insurgency and trafficking of humans, drugs, or weapons for profit. For example, in some theaters, hiring of military-age males for legitimate security forces or local enterprises reduces an adversary's available human talent pool used to support their objectives or insurgency. However, commanders are careful not to displace other occupations with better paying contract jobs that may harm other stability tasks or security sectors. For example, a doctor who was previously well paid may make more as a contract translator, thus harming the community services available and disrupting the natural economic system. On the other hand, hiring indigenous personnel for short-term projects does not replace the need for long-term economic planning and development of stable jobs. The overall reconstruction effort is guided by other agencies. The commander's intent and guidance to subordinate commanders provides a coherent contribution to the urban population's needs in the AO.

ENGAGE

6-62. The focus of the Army/Marine Corps is warfighting. Therefore, when Army/Marine Corps commanders conduct many urban stability tasks, they adjust their concept of success. Commanders often find themselves in a supporting role and less often responsible for conducting decisive operations/decisive actions. They accept this supporting function and capitalize on the professional values they have instilled in each Soldier/Marine, particularly the dedication to duty and courage to do what needs to be done to support accomplishing the mission, despite difficulty, danger, and personal hardship. Commanders also put accomplishing the overall mission ahead of individual desires to take the lead, desires often fulfilled by being the supported rather than supporting commander. In many stability tasks, success may be described as settlement and compromise rather than victory. Yet, Service professionalism and values—combined with inherent adaptability, aggressive coordination, perseverance, and reasonable restraint—allow Army/Marine Corps forces to engage purposefully and dominate during complex urban stability tasks.

Adaptability

6-63. Adaptability is particularly critical to urban stability tasks because these operations present complex challenges to commanders for which no prescribed solutions exist. Many commanders lack the experience and training to provide the basis for creating the unique solutions required for these operations. Since the primary purpose for the Army/Marine Corps is to fight and win in land or littoral combat against the enemy, the challenge then is to adapt urban warfighting skills to the unique stability or DSCA situation.

6-64. Doctrine, both joint and Service, provides an inherent cohesion among the leaders of the Armed Forces. Still, Army/Marine Corps commanders conducting urban stability tasks work with and support other agencies that have dissimilar purposes, methods, and professional languages. Commanders adapt as each situation and the urban environment demand without losing their orientation. They encourage and allow subordinates to exercise creative and critical thinking required for planning and executing these UO. Commanders also recognize good ideas and effective tactics, techniques, and procedures, regardless of their source—other Services, multinational partners, nongovernmental and governmental organizations, and even the threat—and adapt them for their own purposes in UO. For example, after large-scale combat operations, major damage to infrastructure or economic restoration efforts may require broad technical expertise that can only be provided by host-nation residents, regional civilian experts, or from reachback to continental U.S. expertise in fields such as justice, forensics, science, engineering, education, agriculture, finance, or

economics. Commanders plan for and use civil affairs and DOS/USAID experts to bring forward and leverage civil-military teams that can best assist stability UO.

6-65. Adaptability also springs from detailed planning that carefully considers and realistically accounts for the extent of stability tasks. Although no plan can account for every contingency and completely eliminate the unexpected, good plans, which include detailed civil considerations, provide platforms from which to adjust course more readily. Adequate planning allows commanders to not only react more effectively, but also to be forward thinking and take actions that favorably steer the course of events.

Aggressive Coordination and Synchronization

6-66. In urban stability tasks, the increased number of participants' (both military and nonmilitary) divergent missions and methods challenge coordination and synchronization. Significant potential for duplicated effort and working at cross-purposes exists. Like combined arms or joint operations, integration of other units, agencies, organizations, companies, or NGOs is essential to achieving unity of command, resolving grievances in a timely manner and with few resources, and achieving stability task end states. The success of UO often depends on establishing a successful working relationship with all groups operating in the urban area. Although an absence of unity of command may exist among civil and military organizations, commanders can influence other participants not under their command by using persuasion, good leadership, and innovative ideas.

6-67. Commanders establish, as necessary, separate task organizations for combat operations and for stability tasks to increase coordination and enhance local, NGO, and international support. Further, aligning the unit or subordinate units with NGOs may contribute to establishing popular legitimacy for an operation and place greater pressure on enemy forces. In some instances, commanders organize part of their staff around government, administrative, and infrastructure functions that mirror the urban area in which their forces are operating (see figure 1-3 on page 1-10). Developing a mirror urban area organization gives greater legitimacy to the urban government or administration and eases transition of responsibility once forces achieve the end state. Commanders are mindful, however, that local groups seen allying themselves with the Army/Marine Corps or multinational authorities will likely experience pressure to demonstrate their independence as established dates for redeployment or other critical events approach. In some instances, that demonstration of independence may be violent. Commanders may establish a civil-military operations center to coordinate and synchronize actions on a continuous basis between allies, NGOs, and host-nation agencies.

6-68. Within the constraints imposed by the factors of METT-TC/METT-T and operations security, commanders coordinate all tactical stability operations with other agencies and forces sharing the urban environment. Access, input, and maintenance of the joint COP is key to synchronizing operations. Importantly, units coordinate appropriate information and intelligence sharing with participating organizations. Commanders overcome difficulties such as mutual suspicion, different values and motivations, and varying methods of organization and execution. Frequently, they initiate cooperative efforts with participating civilian agencies and determine how their objectives and plans complement or conflict with those agencies. Inclusion of agencies in boards, work groups, and in-process reviews is essential. Commanders can then match Army/Marine Corps forces' capabilities to the needs of the supported agencies. Reconnaissance and liaison elements, heavily weighted with civil affairs, engineers, and medical personnel, may be deployed immediately to determine what type of support Army/Marine Corps forces should provide. Overall, consistent, regular coordination fosters trust and makes unity of effort possible in urban stability tasks where unity of command is difficult or impossible to achieve.

Perseverance

6-69. The society of a city is a major factor responsible for increasing the overall duration of UO. This applies to urban stability operations in which success may depend on changing people's fundamental beliefs and subsequent actions. Modifying malign actor behavior requires influence, sometimes with coercion or control, demonstrated competency, and perseverance. The urban population is convinced or persuaded to accept change through credible security action and achievement of stability task end states. Necessary change takes as long as or longer than the evolution of the conflict. Decades of problems and their consequences cannot be immediately corrected. Frequently, the affected segments of the urban society must see that change is lasting and basic problems are effectively addressed.

6-70. In most stability operations, success will not occur unless the host nation—not Army/Marine Corps forces—ultimately prevails and consolidates security gains. The host-nation urban administration addresses the underlying problem or revises its policies toward the disaffected portions of the urban population. Otherwise, apparent successes are short lived. The UO fundamental of understanding the human aspect is of paramount importance in applying this consideration. With an understanding of the society's history and culture, commanders gain an advantage in accurately identifying the problem, understanding root causes, quickly engaging and assisting key civilian leadership, and successfully planning and executing overall UO.

Reasonable Restraint

6-71. Unlike offensive and defensive operations where commanders seek to apply overwhelming combat power at decisive points, restraint is essential to success in urban stability tasks. In large-scale combat, the focus is on destroying the peer threat. This involves employing combat power selectively, discriminately, and precisely at decisive points in accordance with assigned missions and prescribed legal and policy limitations. Similar to the UO fundamentals of minimizing collateral damage and preserving critical infrastructure, restraint entails restrictions on using force to avoid adverse cascading secondary or tertiary effects. Commanders of major UO consult their designated judge advocate and issue or supplement ROE to guide the tactical application of combat power. The excessive or arbitrary use of force is prohibited. Even unintentionally injuring or killing inhabitants and inadvertently destroying their property and infrastructure undermines legitimacy and the urban population's sympathy and support for UO. Collateral damage can cause the supported civilian population to become hostile. In urban stability or DSCA tasks, even force against a violent opponent should be decisive but restrained in application, considering necessity and proportionality. Undue force is counterproductive, resulting in the need for commanders to apply ever-increasing force to achieve the same results.

6-72. Although restraint is essential during urban stability operations, Army/Marine Corps forces must always be capable of decisive albeit limited combat operations. This is in accordance with the UO fundamental of maintaining a close combat capability. This capability must be present, visible, and displayed in a nonthreatening manner. A commander's intent normally includes demonstrating strength and resolve without provoking an unintended response. Army/Marine Corps forces must be capable of moving quickly through the urban area and be available on short notice. When necessary, Army/Marine Corps forces apply combat power rapidly, forcefully, and decisively to prevent, end, or deter urban confrontations. Keeping this deterrent viable requires readiness, constant training, and rehearsals. It also requires active reconnaissance, superb operations security, a combined arms team, and timely, relevant, accurate, and predictive intelligence.

CONSOLIDATE

6-73. Since UO are often part of a larger campaign, many consolidation activities necessary to secure gains in urban offensive and defensive operations apply to urban stability tasks. However, the greatest obstacles to attaining strategic objectives come after major urban combat operations. Therefore, emphasis shifts from actions to ensure the defeat of enemy forces to those measures that address the needs of the urban population, manage their perceptions, and allow responsibility to shift to a competent provisional authority. Shifts can occur from Army/Marine Corps forces to legitimate indigenous civilian control or from the intermediate step to other military forces, governmental agencies, and organizations.

Continued Civilian and Infrastructure Protection

6-74. Following urban offensive or defensive operations or in some limited contingency operations, forces may need to secure and protect the civilian population and much of the civilian infrastructure from the civilians themselves. After having minimized collateral damage and preserved critical infrastructure, commanders implement measures to preclude crime, looting, or destruction by the urban population and mitigate civilian-on-civilian violence. Measures may be as simple as allowing the urban police force to return

to work or may be as difficult as hiring, vetting, and training an indigenous police force. In the latter case, commanders determine—

- The number and operability of police stations.
- Responsibility for recruiting, hiring, training, and equipping the urban security or police force. The accountable unit, organization, or agency considers a vetting process, suitable salaries and wages, and appropriate training standards.
- The appropriate responses toward those civilians who threaten, oppose, or harm the new police force.

6-75. Alternatively, civilian security firms from inside or outside the urban area or country provide supplemental protection until indigenous police forces can function fully. In large-scale combat, military or governance security forces enforce curfews and potential martial law. Further, the commander of the major urban operation manages expected instability primarily with Army/Marine Corps forces. Often, this requires larger numbers of infantry, military police, and dismounted forces. Other populace and resource control measures such as martial law or curfews under military governance help protect civilians (and NGOs) and infrastructure. Previous shaping operations aimed at improving the local economy also assist in this regard.

Resolute Legitimacy

6-76. Closely linked to the restraint described in paragraphs 6-71 and 6-72 is legitimacy or the proper exercise of authority for reasonable purposes. In humanitarian assistance missions, forces should not be perceived as favoring one side or group of the population over the other, but rather providing security for all. For example, some of the 1993 Mogadishu raid challenges, losses, and political consequences might have been prevented if United Nations operations in Somalia aid was distributed differently. Also, if regaining the initiative was approached in a tactically or operationally more comprehensive combined arms way, friendly force strengths may have better denied an adversary exploitative sources of influence and power over the populace.

6-77. Achieving or maintaining legitimacy during urban stability or DSCA tasks is also essential in gaining and maintaining support of the urban population. Commanders ensure legitimacy by building trust with the population, projecting a credible force, and appropriately using that force. Perceptions play a key role in legitimacy, and skillful IO/OIE can shape perceptions. For example, successful offensive UO in Operation EAGLE STRIKE (Mosul) against ISIS bolstered Iraqi defense force credibility and legitimacy, as they consolidated gains in the hard-won ground combat effort; upon request, U.S. forces assisted them through shaping operations using fires, ISR, and sustainment. However, the result was a successful UO that met both nations' interests, and little in the way of follow-on stability operations by U.S. forces was needed. Commanders send messages that are consistent with the actions of their forces. Generally, the urban population accepts the use of force if that force is used impartially and in the furtherance of rule of law. Perceptions that force is excessive or that certain groups are favored over other groups, especially when represented as such by malign actors on social media, erodes legitimacy and generates resentment, resistance, and, in some situations, violent acts of revenge.

6-78. In limited contingency operations requiring stability operations tasks using offense and defense against an elusive insurgent or hybrid threat, commanders may explain to urban residents why damage was necessary, or even apologize. U.S. forces do not pay restitution for all operations that result in damage. There is specific funding set aside for specific circumstances where damage occurs because of combat. However, this is not automatic nor a matter of course. Forces either proceed through the claims process or possibly offer solatia payments which are mutually exclusive processes. For example, claims resulting either from action by an enemy or directly or indirectly from an act of the armed forces of the United States in combat are not payable under the Foreign Claims Act (10 USC 2734). In post large-scale combat stability operations, initial operations do not facilitate recompense for collateral damage and must be addressed by rear or support area forces. In this case, MGO and security is conducted by U.S. forces until a feasible provisional authority and constabulary or police force is reestablished. During UO, a single Soldier's/Marine's violation of the law of armed conflict may hinder an offensive or defensive combat mission or significantly degrade a commander's ability to project an image of impartiality and legitimacy. Fortunately, disciplined Soldiers/Marines contribute immeasurably to gaining and maintaining legitimacy, mitigating ill will, or otherwise winning an urban population's trust and confidence.

6-79. In stability operations, the greater effort needed for success will often be to win the battle of perceptions and ideas, although missions to seize terrain and triumph over remaining violent enemies remains. Inconsistencies in limited contingency operation messages and behavior provide threats with raw material for their propaganda and precipitate doubt in the minds of an urban populace who might otherwise support Army/Marine Corps objectives. However, after large-scale combat, U.S. and partner forces must maintain dominance on use of force through MGO, thus deterring instability, crime, insurgency, or counterattack guerrilla behavior. Commanders seek to continually assess the drivers of instability in their AOs using all available legal means. Partnering, conducting surveys, community policing and close monitoring of popular media or social media outlets give units a sense of potential grievances that could be contributing to larger problems.

TRANSITION

6-80. Commanders of major operations are the focal point for synchronizing tactical stability operations tasks with strategic diplomatic and political issues. They are also the critical links between national intelligence resources and the tactical commander. Because strategic, diplomatic, and political changes quickly transition the type of UO, commanders must inform subordinate tactical commanders of changes in intelligence, policy, and higher decisions. The potential to rapidly transition to urban combat operations emphasizes the need to maintain the capability to conduct close, urban combat. Failure to recognize changes and transition points may lead to UO that do not support the attainment of the overall objective and needlessly use resources, particularly Soldiers'/Marines′ lives. Therefore, Army/Marine Corps forces on the ground in an urban stability operation must be more aware of the strategic environment than the threats and the civilian population, each of whom has their own means of monitoring the international and national situation.

Provide Security for Legitimate and Capable Civilian Control

6-81. Commanders maintain or enhance the credibility and legitimacy of the government and police of the urban area in limited contingency operations and, in the case of stability operations, of the host-nation's military forces operating there. In accordance with the urban fundamental of transitioning control, urban commanders must conclude UO quickly and successfully, often so forces can use assets elsewhere in the AO. After large-scale combat, no security force may exist to transition to, because they were defeated. Transitioning control entails returning the control of the urban area back to civilian responsibility as soon as feasible. In post-conflict large-scale combat, military governance executes until provisional authorities or host nations can be reestablished. The current force structure does not allow this scale of MGO currently. In either case, the military and the urban area's leadership and police, in their given form, are integrated into all aspects of urban stability tasks to maintain their legitimacy. They are allowed or influenced to lead when developing and implementing solutions to their own problems. This requires commanders to transition from "leading from the front" to "leading from behind" in an advisory and assistance role, but they continue to remain accountable for security of their forces and for implementing stability operations tasks. Effective transition to civilian control and responsibility after large-scale combat requires commanders at all echelons to understand the basic operation of civil governments and the administration and management of key urban infrastructure.

6-82. If the host-nation's leadership, military, and police are not up to the task in limited contingency operations or have been defeated or disbanded in large-scale combat, commanders can take steps to increase their capabilities. Commanders coordinate training, advice, and assistance from civil affairs units or other nongovernmental or governmental organizations and agencies. In MGO, after combat has subsided, major operations and campaigns continue with large-scale forces to establish security and conduct stability tasks with the U.S. force that remains. The current force structure does not currently support this scale of operation. Sometimes, new leadership and a restructured force may be required, particularly when previously corrupt and no longer trusted by the population. Commanders candidly assess the urban leadership's ability to govern, protect, and support itself early in the planning process. Only then can commanders ensure that resources and a well-thought out and coordinated plan—particularly with civilian organizations and agencies—are available for transition. Information operations are paramount in these instances to ensure that the urban population sees the training and rebuilding process itself as legitimate. Throughout urban stability tasks, commanders shape the conditions to successfully hand over all activities to reinforced or reestablished urban civilian authorities upon U.S. civil leader direction.

Maintain Focus

6-83. Many stability operations often require perseverance, a longer term U.S. commitment with operational endurance, and an established, sustainable battle rhythm. Lengthy operations also require a transitional rotation of Army/Marine Corps units into the AO to sustain and continue the mission. Considerations for these transitions are similar to a relief in place and battle handover combined with considerations for deployment and redeployment. In addition to any threat considerations, planning for urban transitions between units often include an emphasis and understanding of the following:

- Formal and informal civilian leadership and relationships.
- Government institutions and administrative functions.
- Ongoing reconstruction projects.
- The urban economy.
- Participating nongovernmental and governmental organizations and established relationships and cooperation activities, particularly information sharing.
- Significant key events affecting or likely to affect operations.
- Significant cultural lessons learned as a result of the outgoing unit's operations.

6-84. The commander of the major operation ensures that the incoming unit understands the political and strategic objectives behind tasks that it is required to accomplish. Otherwise, the new unit redundantly and unnecessarily plans operations similar to those conducted by the previous unit, without achieving the desired end state or accomplishing the mission.

Transition Trust

6-85. If units successfully establish and cultivate relationships with the urban populace and their leadership and have built an effective level of trust, their anticipated departure from the AO as part of a unit rotation schedule may have detrimental effects on working relationships. As a result, local leaders develop deep anxieties about the replacement force and its ability to be as good as the current unit. In a rotational, limited contingency operation, incumbent forces take steps to identify successful and ongoing efforts and activities in which the new unit can continue to achieve success. In some instances, the current unit delays a project or activity whose scheduled completion is close to the date of relief or the transfer of authority so the new unit can have immediate success. In other instances, the incumbent unit uses reverse planning for projects or activities to ensure that the new unit can schedule a completion date soon after arrival. The goal for the outgoing unit is to ensure that the new unit is readily accepted and that both units execute a seamless relief in place. In an urban environment after large-scale combat, coalition provisional authority friendly forces facilitate military governance in a longer term, national, or regional setting and transition authority to a credible government. In this case, the units assigned at echelon perform the tasks above to control the population.

Modify Objectives to Match the Current Environment

6-86. While incoming commanders should create a seamless transition with their outgoing counterparts in limited contingency operations, they also fully use the opportunity to review the current political, strategic, and local urban environment to determine potential modifications to lines of effort, operation, and unit objectives. After large-scale combat has subsided, EAB, JTF, or higher headquarters can recommend a continuity plan that may involve keeping the headquarters in place while reconstituting tactical units and consolidating gains by conducting stability tasks and reintroducing civil agencies. Initially, forces may be inadequate to support a rotational concept. Units may fall into the trap of executing a disjointed series of six-month to one-year rotations that do not significantly contribute to solidifying the conditions required to ultimately transition the urban environment back to legitimate civilian control. In large-scale combat, division, corps, or field Army headquarters and units will likely remain in place long enough to see objectives through transition to provisional authorities or a feasible host-nation government. In operations that involve longer term commitments, the potential exists for the same unit to conduct two or more rotations back into the same AO. Commanders resist the desire to continue with previous lines of operations that, at the time, were deemed successful. An urban environment changes in response to Army/Marine Corps actions and this change necessitates subsequent operational adaptations to build on successes.

Provide a Conditions-Based End State

6-87. Military operations are conducted to achieve political strategic objectives set by civilian policy makers. Commanders focus on the operational end state of their operational or tactical objectives to best achieve those objectives under restraints and constraints set by higher headquarters, civil authority, and the national caveats guiding coalition members. After large-scale combat, commanders continue to provide adequate forces for security. They also conduct other stability tasks to consolidate gains for as long as necessary in order to transition unit responsibilities to a competent provisional, other national, or host-nation authority.

6-88. Episodic large-scale UO involving many forces in an offense or defense may still be required if a sufficient threat presents itself. Commanders find the best accommodations for coalition members that maximize their contributions with respect for their limitations. While operational end states serve a valuable purpose in achieving unity of effort, commanders balance them against achievement of specific milestones or events. These measures of effectiveness reveal true progress. Progress toward strategic and operational goals is susceptible to many changes and to delay, particularly in multinational partnerships likely to be a part of most future UO. Additionally, an inflexible timetable allows enemy forces to adjust their plans to their benefit and to friendly forces' detriment.

This page intentionally left blank.

Chapter 7
Large-Scale Combat Operations

This chapter describes UO in large-scale combat. The chapter provides an overview of large-scale combat operations and their tactical enabling tasks that apply to offense and defense, forcible entry, and transitions to consolidate gains. It also describes UO in large-scale combat operations with regard to defensive or offensive operations.

On no account should we overlook the moral effect of a rapid, running assault. It hardens the advancing soldier against danger, while the stationary soldier loses his presence of mind.

Carl von Clausewitz

PURPOSE OF URBAN OPERATIONS IN LARGE-SCALE COMBAT

7-1. Army/Marine Corps forces conduct urban operations as part of large-scale combat operations to provide security and prompt, sustained land forces to the joint force. Large-scale combat operations involve multiple divisions, corps, or field armies supported by theater army, Army Service combatant commands (ASCCs) or joint force land component commanders (known as JFLCCs) under the JTF. Control and security of large cites requires large-scale forces. Large-scale combat operations are inherently joint. Considering contemporary peer or near-peer adversary threat methods must account for a broadened competition continuum that may include competition below armed conflict in multiple theaters, limited contingency operations in others, or conflict or combat in yet another. A commander’s approach to urban operations also requires additional consideration of cyberspace, space operations, and information dimension challenges in multiple domains and dimensions. Approaches also consider the homeland as a potentially affected element of competition, crisis, or armed conflict. Nowhere are all of these domains and dimensions more prolific than in urban centers. Long-duration forewarning or military power mobilization is not ensured in today's environment after declaration of hostilities, and units must be manned, trained, and equipped to fight as designed upon short notice. Forces conducting large-scale combat operations may have an advantage, however, as the enemy is more clearly identified as combatant for example, by their uniforms. An additional advantage during major operations is that war is declared, which changes many aspects of planning, resources, and authorities available to commanders. Major conflict usually involves nation-state or uniformed military or paramilitary forces.

7-2. Example large-scale combat operations pretexts may include invasions, declarations of war, activation of NATO operations in support of an Article 5 violation(s), or escalation of limited contingency operations being prosecuted by a JTF. While a limited contingency operation may be relatively short in duration, it still may be large in scale based on the quantity of forces used (multiple divisions with functional or multifunctional brigades' support or multiple corps). For example, Operation EAGLE STRIKE in 2017 used a U.S. JTF partnering with many nations and over 10 Iraqi division equivalents to retake Mosul and North Iraq from ISIS. While this partnered JTF was limited in duration and did not use many U.S. ground maneuver forces, the scale of forces used for offensive and defensive operations was large. This coalition provided SOF, sustainment, fires, and ISR to the partner forces. Limited U.S. forces were involved, however, in planned stability operations by the host nation.

7-3. The elements of decisive action (offense, defense, and stability) serve large-scale combat operations well if they are sequenced in the most rapid, complementary succession possible to accomplish the commander's intent. These goals are facilitated by well-synchronized joint combined arms. Near-peer hybrid threats may have one or more peer-threat capabilities, providing them with periodic domain superiority that U.S. forces must continually assess and counter. Regional peer threats are described in chapter one. As an

example, sophisticated integrated fires and anti-aircraft or anti-tank systems produced by peer adversary nation-states can be provided to near-peer, hybrid, irregular, or proxy threat forces for use against U.S. forces and partners. Leadership is a key element of ordering operations well and countering temporary enemy domain advantages. Forces gain advantage via tactics, characteristics, and forms of maneuver or defense used in the most effective parallel, simultaneous, sequential, shaping, supporting, and decisive lines of effort and operation, enabling them to win in large-scale combat. Commanders and staffs of divisions, corps, Marine air-ground task forces (MAGTFs), or divisions gain understanding to apply knowledge, skill, experience, and leadership to these problems at operational levels to shape tactical advantage success.

7-4. Army/Marine operational forces act under the authority of the Constitution and Title 10, United States Code through the direction of the President, Secretary of Defense, and Service Secretaries aided by the advice of the Chairman and the Joint Chiefs of Staff. DODD 5100.01 describes common directed joint and service responsibilities. GCCs direct the action of service component, joint force, and functional component commanders to achieve objectives in their geographic or functional area (JP 1). Part of the Army's Title 10 responsibilities directed through the DOD and combatant commands are to set geographic theaters. This is most often done through Army Service component commands using administrative control. See FM 3-0 for additional theater setting responsibilities.

7-5. When the theater Army, mission-necessary established field Army, or corps is conducting administrative control, those echelons and staffs act to create conditions that consolidate gains and aid in conflict advantage and movement of follow-on forces if large-scale combat operations occur. For example, much like historical staff rides, current urban area site visits or security force assistance integration with partner nations enhances understanding for future UO training and planning. Additionally, information evaluation and assessment in support of potential targeting or selection of restricted strike locales at theater level creates shared understanding of future potential areas of urban operation. Conditions for theater setting just before conflict onset often involve occupation or seizure of urban aerial and sea ports of debarkation to facilitate rapid, expeditionary joint, reception, staging, onward movement, and integration (JRSOI).

AUTHORITIES AND ACCESS

7-6. Large-scale combat operations and UO therein require a permissive, mission command mindset. When crisis, natural disaster, or enemy action requires a large-scale joint response in defense of U.S. or partner interests in or around a city, commanders may provide greater combat authorities and remove constraints so that forces can more effectively approach problems and win. A *constraint* is a restriction placed on the command by a higher command. A constraint dictates an action or inaction, thus restricting the freedom of action of a subordinate commander (FM 6-0). A *limitation* is an action required or prohibited by higher authority, such as a constraint or a restraint, and other restrictions that limit the commander's freedom of action, such as diplomatic agreements, rules of engagement, political and economic conditions in affected countries, and host nation issues (JP 5-0). Examples of large-scale combat operations constraint removal include, but are not limited to, authorization of more destructive munitions in urban areas consistent with the law of armed conflict, such as mines, mine clearance devices, flame throwers, shotguns, dual-purpose improved conventional or other more precise guided munitions, riot control agents, or other nonlethal weapon use. Forces should be well trained on the use of such munitions prior to combat to avoid adverse subsequent effects. For example, most nonlethal weapons can be lethal if improperly used, such as fires or asphyxiation resulting from riot control agents or close range nonlethal rounds striking vital inhabited areas. Units ensure they fully consider, plan, and use restrictive and permissive movement and distributed fire control measures as designed to maximize synchronization of fires, mass or distribute forces and fires quickly, and prevent urban gap or boundary seam exploitations by the enemy. Finally, commanders assign clear roles, authorities, and responsibilities to their various AO command posts, support areas, rear areas, and task-organized units.

7-7. Large-scale combat operations in urban areas frequently require engaging targets near no-strike or collateral damage entities, but this does not necessitate protected site removal from a no-strike list. Effects can occur near or on no-strike entities, such as protected schools, government, religious sites, or infrastructure if self-defense against a positively identified target requires engagement or if the ground commander determines the military advantage to be gained is greater than damage potentially caused to civil infrastructure or the population. For more information, see the Chairman of the Joint Chiefs of Staff Instruction 3160.01D. An example of constraint removal is requiring less stringent collateral damage estimation thresholds to destroy the enemy and protect friendly forces or civilians. Because the tools of

warfare can have strategic adverse effects and prohibit reoccupation or reconstruction of a city by its population, commanders should first seek to proportionally solve tactical or operational problems at the lowest levels with means they have on-hand. Units feasibly and creatively consider what current limitations are upon them, how they might overcome them, and what additional authorities or resources may be requested or constraints lifted to address and shape conditions for their mission accomplishment. In large-scale combat operations, the depth, breadth, and scale of operations may mean that other efforts in the city are more heavily weighted or no resources are available. Units consider new or unique urban operational environment conditions that may require higher headquarters' support such as—

- More distributed and restrictive enemy antiaccess or area denial force postures.
- Security contested in multiple domains or dimensions for which the tasked force does not have capability.
- Adversary TTP have changed.
- A more congested and contested electromagnetic spectrum must be managed.

7-8. The traditional lines that divide peace conditions and states of war are no longer as clear, nor are they simply temporal, binary challenges. Complexity of UO can further blur these lines across domains and dimensions. The Army continuously contributes to the joint force by conducting its strategic roles. More so than other Services, the Army primarily seizes, occupies, and defends land areas. Near-peer threats increase capabilities for conducting limited operations short of the threshold for armed conflict or major combat. U.S. forces continuously counter these by effectively competing, shaping, and preventing enemy activities. This deters adversaries and sets conditions for a rapid theater transition to armed conflict, should deterrence fail or the need arise. The Army is prepared to counter adversary capabilities across the competition continuum using a range of military operations when threats present themselves. When large-scale combat operations commence, the JFC uses Army/Marine forces capabilities across multiple domains and dimensions, from multiple directions to gain or retain the initiative. The JFC seeks decisive advantage by converging all available elements of combat power to exploit the initiative, deny enemy objectives or terrain, defeat enemy capabilities to resist, and compel desired behavior favorable to U.S. and partner interests.

7-9. Army forces may conduct large-scale combat operations in or around urban areas within the joint operations area or theater of operations that contribute to the larger joint campaign. Often, joint access to aerial, littoral (sea, lake, river), or sea ports of debarkation is near cities and requires occupation or seizure to support deployment, operational maneuver, and JRSOI. Army forces conduct joint forcible entry in the form of airborne, air assault, or amphibious landing operations. Currently, more than 50 percent of the world's population lives in urban areas, and this will likely increase to 70 percent by 2050, making large-scale combat operations in or around cities probable. Commanders may conduct UO because they provide a tactical, political, or economic advantage, or when not doing so threatens the joint campaign. Army forces conduct large-scale combat operations in urban areas either as a specific, unique operation, or more typically, as one of a larger series of operations in a joint campaign. UO focus on the threat to or within the urban area and allow other forces to conduct operations elsewhere. Conducting operations in dense urban terrain is complex and resource intensive. Due to the complexity of an urban environment, commanders voice concern to higher headquarters when they do not have sufficient forces for the task issued and must carefully arrange their forces and operations according to purpose, time, and space to accomplish the mission. In most UO, the terrain, dense population, military forces, and unified action partners further complicate this arrangement.

Note. The Army conducts its four strategic roles of shaping the operational environment, preventing conflict, prevailing in large-scale ground combat operations, and consolidating gains as its enduring contributions to the joint force. *Large-scale ground combat operations* are sustained combat operations involving multiple corps and divisions (ADP 3-0). Large-scale combat operations differ in scope and size of forces committed (see ADP 3-0 for more information). Divisions and corps are formations central to large-scale combat operations. Large-scale combat operations occur below the nuclear threshold and are not synonymous with total war.

CHARACTERISTICS OF URBAN OPERATIONS IN LARGE-SCALE COMBAT OPERATIONS

7-10. As with proportion of scale of other operations, all operational variables will be in a varying affected status based on large-scale combat problems. These AO conditions and the variables are cumulative, affected by the external environment, and while likely correlated to the variable sectors in urban areas that cause further problems, they are not necessarily causal to each other. Regardless, degrading conditions in any of the operational variables within a city will have a detrimental effect to some degree on the city's ability to govern or function effectively in support of the population it is designed to support.

7-11. A city's problems may occur in limited contingency operations or large-scale combat operations. For example, competition weakness, corruption, or disruption in the political, military, or economic sectors systems of a city or its surrounding region, state, or nation may invite exploitation of the city and the population. This exploitation can be conducted by any combination or permutation of malign state or non-state organizations, profit-interested companies, cultural or ideological affinity, paramilitary, or military groups. These organizations may also use any combination of lethal or nonlethal means. A related reduction in the capacities of governmental security, social, infrastructure, informational, and physical environment factors occurs over time.

7-12. The primary difference in conducting UO in support of large-scale combat operations from competition or limited contingency operation conditions is the greater lethality; tempo; adversary quantity, density, and proximity to friendly forces and civilians; and resultant time needed to secure urban areas. Defeat of a regional peer adversary or defeat of a significant hybrid threat with near-peer weapon capabilities presents multiple challenges since these adversaries are able to contest more than just the land domain. Lower intensity urban limited contingency operation attacks are likely to be used in either case. However, in support of a main effort large-scale combat operation involving cities, a limited contingency operation urban attack or defense may be considered as part of an adversary military deception or supporting effort. The likely occupation of an urban land area or city is necessary to support the joint force's campaign objectives.

7-13. Urban areas involved in the joint force campaign will likely serve as key terrain or decisive points as they are centers of governance, transport, culture, and commerce. They will involve combat and require holistic dominance or periods of dominance in multiple domains and dimensions. Cities disrupt enemy offense when friendly forces are defending, in a weakened state when facing a superior enemy, reconstituting, or building combat power to transition to offense, thus mitigating culmination. Conversely, cities canalize and contain a weaker enemy, but commanders are careful of enemy deception to not be tricked into diverting forces or attention from more apt, lucrative, or decisive objectives.

7-14. UO compress all characteristic lethality, tempo, friction, fog, and stressors of military stability or combat operations in cities. All contestant forces within urban areas seek to gain or maintain control, initiative, and positions of advantage by achieving security, standoff, and interior lines to mitigate the city's compression effects on operations. The aggregate UO resource requirements in multiples of three to five or more times normal amounts mean that forces may not have enough capacity to control every city or even portions of large cities within a unit's AO or axis of advance. Greater complexity or density increases this base force ratio. Units carefully plan possibilities for branches and sequels that involve simply isolating, isolating with holding and bypassing, or foregoing commitment to economize forces for greater operations. These plans should account for the risk of an unsecure city that may exploit a unit's flank or gap or one that can feasibly be broken out of, potentially causing disruption, havoc, or failure in rear, consolidation, support, or LOCs areas.

7-15. The fundamental characteristics of offense, defense, and stability are used in planning and expand in scale and domain by higher echelon headquarters and units (divisions, corps, MAGTFs (includes Marine expeditionary force [approximate Army corps equivalent] or Marine expeditionary brigade types of MAGTFs). Further, the correct timing and sequence of seizing cities based on changes to terrain, enemy, or friendly force/partner actions is essential. Regardless of the state of a city's population in any given operation, the population must be safeguarded and treated with dignity and respect to the greatest extent possible.

QUANTITY, DENSITY, PROXIMITY AND TIME

7-16. Complexity of urban areas involves greater quantities of personnel and resources, greater densities, closer proximities, and condensed operational action times in large-scale combat operations. To address this complexity, the most adaptable and useful weapon system key to UO will continue to be networked groups of small, highly trained and properly equipped military and security units that can bring maximum lethality and control to bear on enemies through use of joint combined arms maneuver, fires, protection, and sustainment. Increased leveraging of sensing, UAS and manned or unmanned robotic teaming may be means developed and employed in the future by friendly or enemy entities, but units that can synthesize and transition information into joint force employment most rapidly have the greatest chance of overcoming the most complex UO environments. Divisions and corps can help subordinate units set domain conditions by denying domain contestation or inferiority. For example these higher echelon staffs can coordinate air, maritime, space, or cyberspace effect support requests via the JTF for defensive counter air against group two or higher threats. See ATP 3-01.81 for additional counter UAS information. In conjunction with the area air defense plan, this support in effect creates higher altitude no-fly zones overlapping areas of interest around urban areas, civilians, and land or maritime forces with greater protection from enemy UAS, ISR-fires teaming and a greater friendly force permissive fires AO. Units should continue to use training and preparation that will best enable them to see themselves, the terrain, and the enemy in a COP that provides enough detail to tactically act upon and defeat threat COAs faster than the enemy can react.

7-17. Large-scale combat operations may still involve non-peer or hybrid threat adversaries, but when those cumulative threats combine from across multiple geographic areas, the threats may mitigate the effectiveness of joint combined arms. For example, organized criminal elements within a city may support peer-threat mutual interests and COAs to gain or maintain power, or they may be co-opted or coerced by them. The more susceptible force may be leveraged, dislocated, delegitimized, or destroyed quickly to reduce that threat variable's contribution to the large-scale problem. For example, in OIF, U.S. forces negotiated and partnered with gang-like Baghdad militia groups through the Sons of Iraq program to increase population security and stability. A hybrid threat may also prove more resilient if it draws resources such as personnel, weapons, money, or equipment from broader regional, national, or global sources. Friendly force COAs need to account for these additional sources of networked enemy combat power and reduce their effectiveness.

Quantity

7-18. In most large-scale combat operations, initial forces fight to gain and maintain footholds and build combat power as mobilization and deployment continue. U.S. recommendations posit 20:1,000 troops or security forces to civilians, and UN guidance recommends 50:1,000 for a ratio that supports security operations. To truly control, cordon and search, or search and attack to clear a given city or portion therein, U.S. forces need approximately two corps (or six to ten combined arms divisions with a task-organized joint force and functional or multifunctional brigade support) for every 1,000,000 inhabitants. Correlation of forces assessments also depend on the type of operation, the city area and density, and threat force capabilities. For example, if only one percent of a city’s population of 1,000,000 are domain-contesting threats, an aggregate adversary force of 10,000 exists. While they may have disparate interests or targets, these enemies must be shaped to expose themselves to destruction. As with other operations, commanders may attenuate varying UO risk with the tools they control, such as materiel, troop ratios, length of operations, fires, leadership, task organization, and operational area boundaries, to name a few.

7-19. Army forces are key in securing the many support, consolidation, and tactical assembly areas, or bases and base-clusters by providing various levels of tactical combat forces. Bases and clusters are often situated near cities. Attacking large-scale combat operations forces may initially transition to brief periods of defense to establish themselves using urban terrain. Cities and UO offer advantages to creating initial defenses in depth on a large scale, but in any given geographic combatant command, understanding of how and which cities offer greatest advantages in the context of the surrounding environment is essential for planning. This information will also likely aid the theater campaign support plan for any later stability operation envisioned.

7-20. While only a handful of megacities exist that may present a regional peer threat involving UO, the context of adjacent regional large or megacity impacts should be considered (see figure 7-1 on page 7-6). GCC and U.S. Intelligence and Security Command through ASCC military intelligence brigades-theater, expeditionary military intelligence brigades or reinforcing intelligence units can shape or prevent role

competition systemic analyses from macro (nation-state-region) to micro (county-megacity-city-suburb-neighborhood-tribe-family) views. This information gathering can be conducted by security cooperation or security force assistance elements, via partner interoperability activities and exercises, through GCC staff, military intelligence brigade-theater, military and DOS country teams, and foreign area officers and liaison officers. See ADP 2-0 and FM 3-22 for additional intelligence function and security cooperation information.

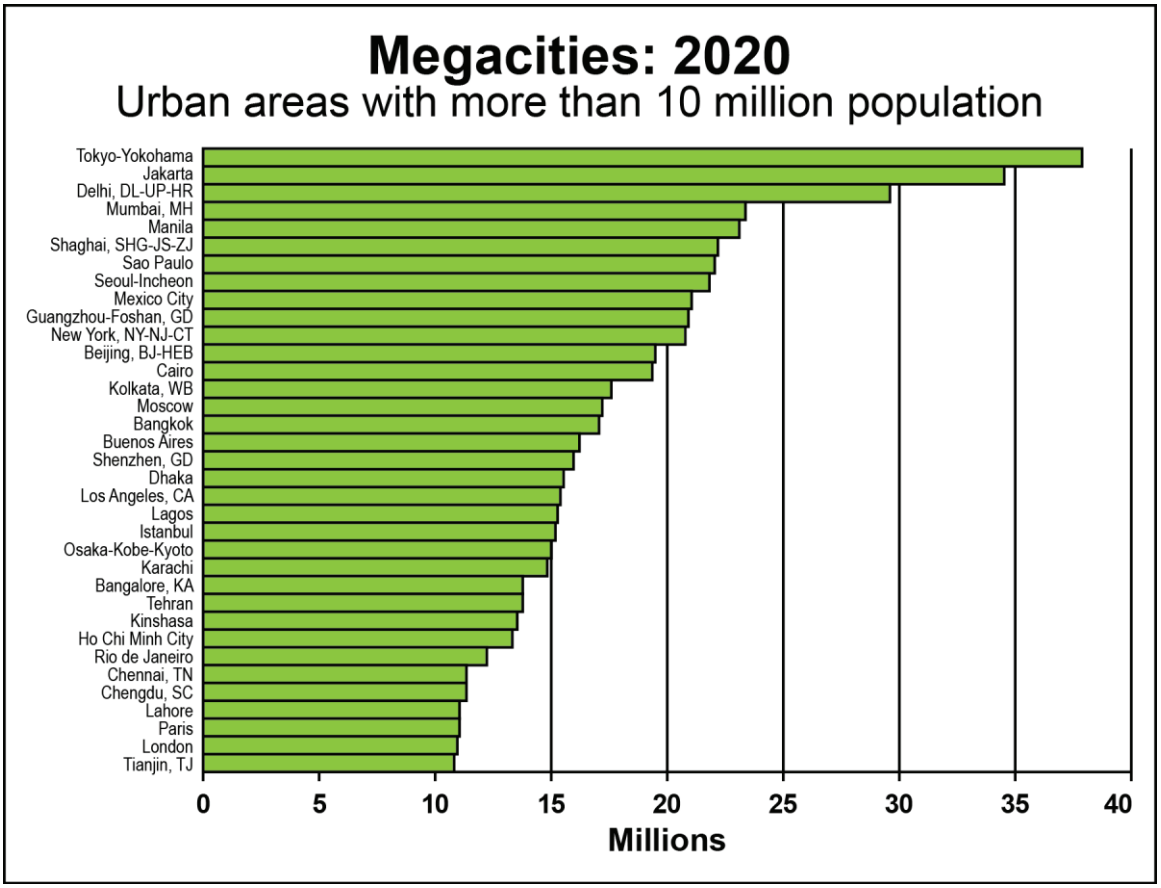


Figure 7-1. Thirty-six global cities with populations over ten million (Demographia 2021)

7-21. In addition to themselves, EAB army, joint headquarters, and GCC staffs with regionally aligned forces and security force assistance formations may leverage consistent site visits to build a body of knowledge and provide analysis of most likely and most dangerous cities over populations of 250,000 that may be involved in a conceivable joint campaign. Regardless of the organization used, assessments and running estimates must be continually updated, as cities change in all manner of operational variable characteristics. Assessment should prioritize, but not be limited to, assessing urban areas, nodes, or networks of over 250,000 people, because these sized cities will likely necessitate large-scale combat operations forces, capabilities, and echelons.

7-22. Alternatively, considering table 1-2 (on page 1-16), inter-city and intra-city assessments may be prioritized for networked assessments based on operationally significant factors such as urban area size, population, density, structural density, proximity, or other larger implications to planning. Intelligence fusion centers process, exploit, and disseminate this information to feed the logistics and joint COP for necessary units and echelons. They especially provide information to theater, setting commands such as sustainment, signal, military police, civil affairs, aviation, SOF, medical, protection, and adjacent intelligence units. Higher headquarters' staffs push parallel planning information to units that need to know. Similarly, lower echelon staffs and tasked units consistently update bottom-up refined estimates and communicate this to higher headquarters and adjacent units.

Density

7-23. Population density and structure in large-scale combat operations greatly determines a force's ability to conduct movement and maneuver, considering city boundaries. Commanders conducting urban operations understand the economic Pareto Principle and its relevance to operations. The Pareto Principle suggests that 80 percent of consequences come from 20 percent of core causes. Following this principle, 20 percent of a city's core—defined as a minimum of 400 people per square kilometer (1,024 per square mile) and under urban use—comprises 80 percent of its economic or labor market. Demographia posits that 80 percent of circumvolving rural land is economically drawn to the core labor market. However, this land accounts only for 20 percent of the remaining population labor or economic potential. UN statistics have shown the tendency for 20 percent of a population to control 80 percent of the income, and therefore exert more economic influence.

7-24. While not directly related, in a limited contingency operation, IO/OIE and military information support operations efforts may need to focus approximately 80 percent of influence efforts on those favorable to friendly force operations, also denying or disrupting concurrent enemy adversary, insurgent, or subversive group influence. This segmented targeting allows consolidation of gains in influence and gaining populace support. In other words, "Those convinced against their will are of the same opinion still."

7-25. Planners are careful when associating politically designated municipality boundaries with economic, population, or cultural boundaries, because they may be correlated but not identical (see figure 7-2). A city is understood over time as an operational area by not only geographic, topographic, people group, or political boundaries, but also as viewed from space via light or other multispectral electronic signature emissions such as cell phones. Like a contemporary U.S. state congressional district, a political area and its representative may represent a given quantity of population over a relatively large geographic area, but the majority of the population concentrates in and around several major cities where they require greater infrastructure, economy, and political recourse and representation to sustain themselves. Understanding these boundaries, ratios, political power structures, and density variations is key for planners' correct understanding of the operational variables or elements of national power to large-scale UO.

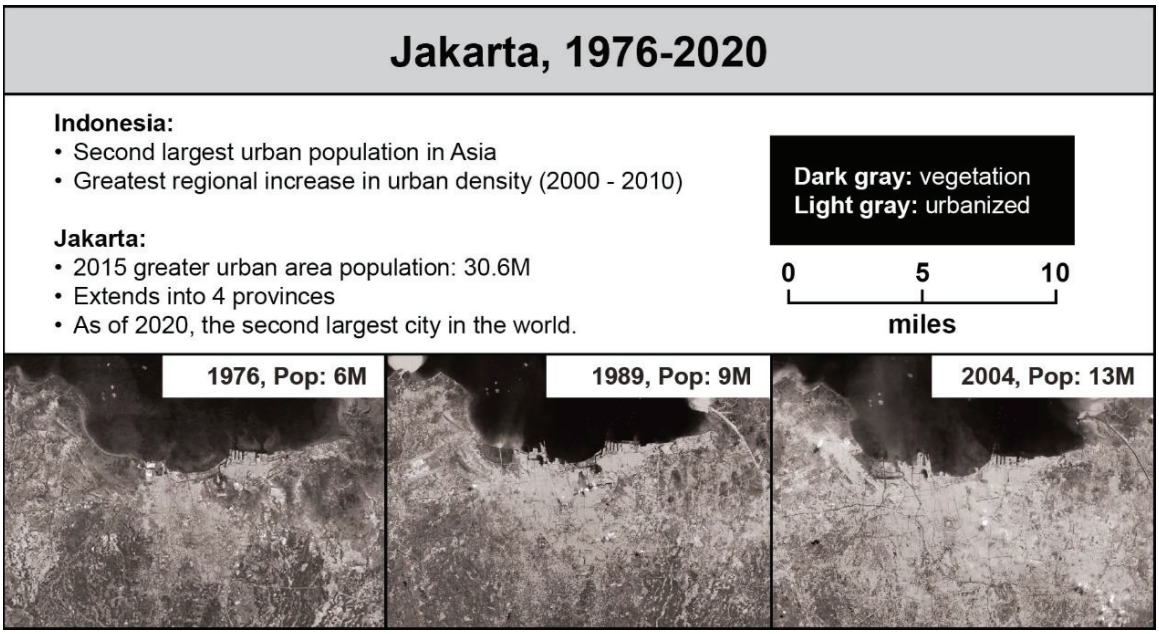


Figure 7-2. Jakarta seen from NASA imagery data over time; it approaches 35 million in 2021

7-26. While large-scale combat operations campaign frontages and depths for divisions and corps likely span hundreds to tens of hundreds of kilometers, the gravitating funnel-fan LOCs convergence points in urban centers will be essential to operational maneuver across theaters of war. Therefore, large-scale combat operations compress these EAB echelons and their forces into fractions of their rural use intended size, and

only upon release exterior to the city will they be required to expand covered frontages. High-rise and subterranean features present opportunities for defenders and challenges to attackers in major unit avenues of approach, mobility corridors, cover, concealment, and stability operations. The effects of combat operations can exacerbate extant disease, crime, or pollution in a city, and create large-scale secondary or tertiary adverse humanitarian problems requiring displacement, migration, repatriation, or care of large populations of civilians. Large-scale combat operations UO are affected by the density of a city, primarily in the much greater quantity of forces required to secure it. Close infantry, armor, artillery, aircraft, SOF, and sustainment coordination is needed to consolidate large-scale gains in large or megacities.

Proximity

7-27. The proximity of large-scale, defensively networked cities poses many obstacles to an attacking force. Because these cities can be mutually supportive, commanders and staffs must choose which EAB axes of advance will most likely result in success for any planned infiltration, penetration, envelopment, or encirclement. Whether in offense or defense, planners consider which cities are essential to achieving operational and tactical desired outcomes. This entails choosing to engage in UO in certain cities and bypassing or setting aside others for isolation or quarantine by rear or support area forces or, in some limited cases, declaring a city "open" or otherwise committing to not entering it.

Note. Open city declarations, as done in Manila by General MacArthur in WWII, only work if the adversary agrees and is likely to retrograde and not occupy, commit to seizure, or otherwise leverage the city. Commanders are cautious of adversary deception operations. In the case of Manila, Philippines, Japanese forces did not retire but rather seized the city, then committed mass atrocities on the populace. The city had to be retaken later by Allied forces at great cost. In the 1968 Tet offensive, Hue City, Vietnam was an "open" city later attacked by North Vietnamese and Viet Cong. The risk of "open cities" must be carefully and continually assessed when conducting operational planning.

7-28. Contact or initial blunt forces may have to fight outnumbered for a time to complete a joint forcible entry or joint or expeditionary reception, staging, onward movement, and to build combat power. Units are most vulnerable from the point of debarkation to movement and integration through reassembly and tactical employment. Therefore, commanders use all available means to prepare the objective with joint service capabilities, expedite movement, rapidly build additional combat power, and practice careful operations security and dispersion. The proximity of large-scale combat operations networked defenses in depth via cities is also affected by the city's surrounding terrain. For example, operations in a city within a forested or mountain environment, such as Lebanon, Korea, or many European cities, enjoy the adjacent terrain's advantages in concealing and covering forces, LOCs, personnel, or subterranean features because these are more naturally defensive. Contrarily, LOCs between networked defended cities in a desert or plains area exposes forces or assets transiting those axes. They are more vulnerable to detection by joint ISR or destruction by fires, aviation, or maneuver forces. Similarly, maritime forces in a subsurface littoral environment that control sea, river, or lake LOCs have additional advantages of movement, maneuver, aviation, and fires options which may facilitate urban land operations.

Time

7-29. In addition to geographic operational constructs of deep, close, consolidation, support, and rear areas, UO are envisioned as part of campaigns, battles, or engagements of encompassing operations. These are evaluated with regard to time: short, intermediate, and long-term planning horizons. Required time generally correlates with accomplishing the unit's mission or objective and is subject to needs of the partner or host nation. Longer duration indicates necessary transition to a branch or sequel. Various echelons of staffs and units anticipate and plan accordingly, and generally the higher the echelon, the greater the planning horizon. Most EAB staffs have current, future, and plans cells functionally aligned to provide commanders with personnel that focus on these areas. For example, a division staff may have robust C2 capability in the current operations portion of its command post focusing on operations from present to 96 hours out. Within the operations section, however, division staff may have future operations cells focusing on 96 hours to 6 weeks and plans cells that focus on 6 weeks to 2 years away from current operations. The transition of plans between

staff sections and cells through timely coordination, orders, and briefs is essential. As staffs obtain guidance for UO, they consider the short, intermediate, and long-term effects of operations therein, and how those best contribute to accomplishing the mission. Commanders disperse and mass forces and combat power at correct times, just before enemy attacks, to foil the attacks and create the most destruction, disruption, disintegration, or dislocation possible.

TACTICAL ENABLING TASKS

7-30. Tactical enabling tasks applied to urban operation problem sets are executed conceptually the same as tasks conducted in rural or open terrain. These tasks in large-scale combat operations continue to support shaping operations for larger offensive, defensive, or stability portions of major campaigns. However, some characteristics of urban environments change the character, tempo, or effectiveness of the enabling task, and, like other operations in an urban environment, these tasks will generally require greater quantities or different attributes of varying task-organized forces.

RECONNAISSANCE

7-31. *Reconnaissance* is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area (JP 2-0). Reconnaissance in offensive urban operations is hindered by building clutter, but defensive operations are aided from adversary reconnaissance by maximum concealment. The five forms of reconnaissance are route, zone, area, reconnaissance in force, and special reconnaissance (see FM 3-0 and ADP 3-90 for further information). The Marine Corps recognizes four types of reconnaissance missions: route, zone, area, and force-oriented reconnaissance; it recognizes a reconnaissance in force as a special-purpose attack (see MCWP 3-01 for further information). Reconnaissance helps prevent urban envelopment or encirclement in defense, and may prevent meeting engagements in the offense, given shorter urban observation lines of sight and engagement.

7-32. Developments in UAS may use manned and unmanned teaming across domains and effecting dimensions to defeat A2AD systems. For example, UAS or other sensors may enable rotary or fixed-wing aviation. Additionally, maritime assets supported by joint suppression of enemy air defense surface-to-surface fires can create penetration points in urban corridors for maneuver forces. Most peer-threat enemy-integrated air defense systems sensors, C2 nodes, or weapons systems need assured power in the form of urban electrical grid draw or power generation requiring ample fuel, and these vulnerability points may serve as air or ground high-value targets. Ground forces set conditions for air or maritime force access and superiority prior to large-scale ground force commitment. In stability UO, reconnaissance assists restoration of security, control, or infrastructure assessments. The large-scale urban battlefield/battlespace rapidly changes, and the human means of information collection that supports CCIRs and IPB is critical to providing timely information. Notably, human assets and means may be more resilient to providing information in a D3SOE. In a fluid urban environment, EAB staffs and headquarters synchronize reconnaissance objectives that are tied to CCIRs, decision support tools or points, or target areas of interest to provide commanders with enough timely information to shift resources or warfighting functions that destroy, disrupt, disintegrate, or dislocate the most critical enemy warfighting systems and functions.

7-33. A *reconnaissance objective* is a terrain feature, geographic area, enemy force, adversary, or other mission or operational variable, about which the commander wants to obtain additional information (ADP 3-90). In cities, the reconnaissance objective is often to determine enemy locations in defensible superstructures or key terrain for future security or stability operations. While EAB units may use non-technical means such as reconnaissance and security tasked brigade in support of a corps, those EAB formations are usually the only headquarters that have the systems, personnel, and processes to develop understanding and communicate it to lower echelon staffs. In this way, EAB units can "see" urban conditions beyond a brigade's organic asset sensing ability and help their subordinate units shape the urban operational area. Divisions and corps also request space-based capabilities as available and aligned during targeting and the target development process.

7-34. Additionally, divisions and corps anticipate synchronizing information collection with joint force capabilities, such as the air-tasking order cycle, to conduct effective deliberate and dynamic targeting, thus shaping deep areas across multiple domains and dimensions in a timely manner for subordinate divisions and

brigades. This deep targeting for urban area and LOC confluence points involves observation of urban areas in depth. These areas provide indications or target engagement information for the presence or movement of large-scale or high-value target enemy formations. EAB UO have the advantage of leveraging the fixed nature of urban areas to determine how adversary actions change in and around them—their composition, disposition, and strength—thus enabling external LOCs operational maneuver. In practice, this means that reconnaissance is conducted a minimum of 72–96 hours prior to other shaping operations in support of the close or maneuver area. Additionally, with proper civil coordination, units may be able to leverage video, imagery, or other civil movement or signals intelligence data available to civil authorities (police, traffic, or transportation entities), which can be used in the target development and execution process in either a deliberate or dynamic way. However, units are careful to exercise intentional operations security procedures to protect civil sources, methods, civil servants, civilians, and friendly forces. For example, revealing the ability to monitor and transfer information potentially used for lethal or nonlethal targeting may place civil workers or infrastructure at risk for offensive or retributional attacks.

7-35. In some instances reconnaissance can be used on alternate objectives to support military deception operations and obfuscate enemy perceptions of future plans. The seven fundamentals of reconnaissance operations are—

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

SECURITY

7-36. Security operations are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force. Security operations may also protect the civilian population, institutions, and infrastructure in the unit's AO. The five forms of security operations are screen, guard, cover, area security, and local security. See FM 3-0 and ADP 3-90 for additional information on the forms and use of security operations. The three types of security operations recognized by the Marine Corps are screen, guard, and cover. Additionally, forces can be assigned rear area security and local security missions. See MCWP 3-01 for additional information.

7-37. The essence of urban security is controlling the area and populace so that a military governance or provisional authority can return operational variables to semblances of pre-conflict functionality or stability. Due to the compressed nature of LOCs in and around urban areas, ample advanced security is necessary to prevent friendly force surprise. Adequate force ratio coverage is needed to consolidate gains in urban areas that are occupied and to maintain peaceful conditions. This coverage requires strict enforcement of any rules, disarmament, martial law, or curfews mandated up to and including the escalation and use of lethal force. Technology, ISR, and patrolling can also help monitor enforcement of these conditions. In addition, these operations are especially useful in UO as they protect civilian populations and infrastructure and facilitate an economic and governance return. The main difference between security operations and reconnaissance operations is that security operations orient on the force, population, or facility being protected, while reconnaissance is oriented toward enemy destruction and terrain control. Successful security operations depend on properly applying five fundamentals:

- Provide early and accurate warning.
- Provide reaction time and maneuver space.
- Orient on the force, population, or facility to be secured.
- Perform continuous reconnaissance.
- Maintain enemy contact.

TROOP MOVEMENT

7-38. The ability of a commander to posture friendly forces for a decisive or shaping operation depends on the commander's ability to move that force. *Troop movement* is the movement of Soldiers and units from one place to another by any available means (ADP 3-90).The essence of battlefield/battlespace agility is the capability to rapid and orderly move to concentrate combat power at decisive points and times. Urban areas offer opportunities and challenges to transportation. In limited contingency operations, congested, canalized, or destroyed urban routes can disrupt unit movement. Therefore, units should plan for ample and alternate mobility corridors or axes of advance appropriate to the echelon conducting UO and should routinely vary their routes. In large-scale or high-intensity urban combat, building rubble, destroyed routes, and unseen superstructure or subterranean avenues, such as mouse holes or tunnels, offer U.S. or enemy forces LOC advantages that should be leveraged or countered, respectively.

7-39. In some cases, enemy perception of urban or large-scale force movement within, toward, or away from objective cities can augment military deception operations in the form of offensive feints or demonstrations. For defense, units use movement to rapidly leverage interior lines and shift forces where needed to reinforce fighting positions or strongpoints or facilitate a breakout. Successful movement places troops and equipment at their destination at the proper time, ready for combat. Transition from movement to maneuver occurs when enemy contact is expected. Troop movements are made by different methods, such as dismounted and mounted marches using organic combat and tactical vehicles; motor transport; and air, rail, and water means in various combinations.

7-40. The method of movement employed depends on the situation, the size and composition of the moving unit, the distance the unit must cover, the urgency of execution, the composition of the urban area, and the condition of the Soldiers/Marines. *Administrative movement* is a movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy ground interference is anticipated (ADP 3-90) or movement when there is little or no likelihood of enemy contact (MCWP 3-01). Administrative movements are made only in secure areas. Rail or port water movements are often required to move heavy forces into urban areas for building combat power. These heavy transport facilities are more vulnerable as fixed sites, and therefore require additional protection from enemy naval or aviation assets, ISR, SOF, fires, or subversion. Units react and transition to maneuver most quickly in urban contact when dismounted, and they use urban features for cover, concealment, and maneuver. Mounted techniques can quickly clear or maneuver over greater distances and areas, but mounts are more vulnerable when dismounting to deploy into combat formations or when needed to maneuver in smaller urban spaces. Units should always use mutually supportive movement techniques, such as overwatch or alternating or successive bounds, if contact is likely. Units may use advanced, flank, or rear guards to give main body moving forces advance warning of any contact, and mobility operations discussed below can facilitate more rapid movement.

7-41. Movement may also depend on the availability, suitability, and capacity of the different means of transportation. Troop movements over extended distances have more extensive sustainment considerations to keep vehicles and troops fueled, fed, rested, and moving. When necessary, dismounted and mounted marches can be expedited by conducting a forced march, but arriving at combat with depleted, damaged, or fatigued forces is risky and can be costly. Movement under limited visibility at night or some adverse weather conditions can provide masking, obscuration, surprise, position of advantage, and initiative. However, air movements are more limited during weather conditions such as fog, extreme temperatures, wind, or precipitation. Planners should acknowledge the large-scale combat loss and casualty potential of airframes or aerial resupply aircraft not arriving or delivering their personnel or cargo to their destination. Upon an aerial joint forcible entry commitment, those forces will be essentially isolated for a time. If they are conducting a raid, by design that involves their extraction or exfiltration. In either case, combat power augmentation in the form of additional weighted fires, air power, ISR, aerial sustainment, follow-on air-landed, air-dropped, or tactical ground column relief, resupply, and support should be a part of any aerial movement or maneuver plan.

RELIEF IN PLACE

7-42. A *relief in place* is an operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and

the assigned zone of operations are transferred to the incoming unit (JP 3-07.3). The incoming unit continues the operations, often as part of a larger operation. A relief may release the relieved unit for other tasks such as decontamination, reconstitution, routine rest, resupply, maintenance, training, or redeployment. The intensity of UO may require the relief of units due to combat stresses or losses. In other instances, relief may serve as part of military deception operations so the enemy commits other forces or reserves to a perceived U.S. strengthened or reinforced sector.

7-43. Reliefs can be conducted in hasty or deliberate fashion and occur sequentially, simultaneously, or staggered. In an urban defense, a relief will often be staggered to properly transition responsibilities for defensive positions and maintain observation and control of obstacles or engagement areas. In large-scale combat, a unit tasked with intense, lethal offensive or defensive operations is either simultaneously relieved or relieved in a staggered manner. The relief may introduce replacement or stability operations forces to consolidate gains through enemy remnant search and attack or to facilitate MGO. This option may reduce perceived hostilities between civilian populaces and strained offensive forces, allowing decompression but control of the urban area.

7-44. A relief in place may also include a transition and deliberate handover of responsibilities from military forces with civil authorities. For example, unit leaders may need to meet and understand what existing political, economic, or security agreements exist. Covering these topics during an in-person meeting will signal the relief in place to the remaining civilian or agency, allow rapid follow-on questions, and build trust by putting names to faces and understanding other nonverbal communication clues. Additionally, departing units conduct a focused, appropriate relief by relaying only the most essential information in both written and verbal form.

PASSAGE OF LINES

7-45. *Passage of lines* is an operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy (JP 3-18). Lines of sight, communication, and movement may be shortened due to urban terrain, thus complicating passage of lines and necessitating more clear marking and passage procedures. In urban operations, passage of lines may facilitate an infiltration, penetration, envelopment, flank attack, or encirclement of a defending enemy's position. A passage may be designated as a forward or rearward passage of lines, as oriented by movement toward or away from the enemy. In urban defense, rearward passage of lines may facilitate a delay. A commander conducts a passage of lines to continue an attack or conduct a counterattack, retrograde, or security operation when one unit cannot bypass another unit's position. Passage of lines often requires close combat in urban areas. It involves transferring the responsibility for an AO between two commanders. That transfer of authority usually occurs when roughly two thirds of the passing force has moved through the passage point. If not directed by higher authority, the two unit commanders determine, by mutual agreement, the time to begin and finish the passage and when to transfer command. They disseminate this information to the lowest levels of both organizations. Several reasons for a commander to conduct a passage of lines are to—

- Sustain the tempo of the offense.
- Maintain the viability of the defense by transferring responsibility from one unit to another.
- Transition from a delay or security operation by one force to a defense.
- Free a unit for another mission or task.

ENCIRCLEMENT OPERATIONS

7-46. *Encirclement operations* are operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communication and reinforcement (ADP 3-90). In urban areas this encirclement control includes securing all relevant underground facility portals within or around the encirclement area objective. Units consider restricting services (such as water, electric, or telecommunications) to an encircled area briefly to gain positions of advantage; however, units are mindful to restore them in order to cause no undue harm to civilians. A unit can conduct offensive encirclement operations designed to isolate an enemy force or conduct defensive encirclement operations because of the unit's isolation by the actions of an enemy force. Encirclement operations occur because combat operations involving modernized forces are likely to be chaotic, intense, and highly destructive,

extending across large areas containing relatively few units as each side maneuvers against the other to obtain positional advantage. See chapter 5 for a discussion of perimeter defense or defending encircled.

7-47. Defending forces can become encircled at any time during large-scale combat operations. This is especially true during urban or noncontiguous operations. An encircled force can continue to defend encircled, conduct a breakout, exfiltrate toward other friendly forces, or attack deeper into enemy-controlled territory. A commander's form of maneuver once becoming encircled depends on the senior commander's intent and the mission variables, including the—

- Availability of defensible terrain.
- Relative combat power of friendly and enemy forces.
- Sustainment status of the encircled force and its ability to be resupplied, including the ability to treat and evacuate wounded Soldiers/Marines.
- Morale and fighting capacity of the Soldiers/Marines.

7-48. Encirclement of a friendly force is most likely to occur during highly mobile and fluid operations or when operating in restrictive terrain. A unit may find itself encircled as a result of its offensive actions, as a detachment left in contact, when defending a strongpoint, when occupying a combat outpost, or when defending an isolated defensive position. Commanders anticipate becoming encircled when assigned a stay-behind force mission, when occupying either a strongpoint or a combat outpost, or at the outset of forcible entry operations before a linkup is completed. The principles of defending encircled also apply to base and base-cluster defense in support and rear areas. The senior commander (except Army Medical Department officers) in an encirclement assumes command over all encircled forces and takes immediate action to protect them. When that commander determines the unit is about to be encircled, the commander must decide quickly what assets stay and what assets leave. The commander immediately informs higher headquarters of the situation. Simultaneously, the commander directs accomplishment of the following tasks:

- Establish security.
- Reestablish a chain of command.
- Establish a viable defense.
- Maintain morale.

7-49. Commanders position security elements as far forward as possible to reestablish contact with the enemy and provide early warning. Vigorous patrolling begins immediately. Each unit clears its position to ensure that no enemy forces are in the perimeter. Technical assets, such as the Joint Surveillance Target Attack Radar System and electronic warfare systems, augment local security elements and locate those areas along the perimeter where the enemy is deploying additional forces. The encircled commander reestablishes unity of command. The commander reorganizes any fragmented units and places Soldiers separated from their parent units under the control of other units. The commander establishes a clear chain of command throughout the encircled force, reestablishes communications with units outside the encirclement, and adjusts command and support relationships to reflect the new organization.

7-50. A *breakout* is an operation conducted by an encircled force to regain freedom of movement or contact with friendly units (ADP 3-90/MCWP 3-01). It differs from other attacks only in that simultaneous defense in other areas of the perimeter must be maintained. A breakout can occur in both the offense and the defense. An encircled force normally attempts to conduct breakout operations when one of the following four conditions exist:

- The senior commander directs the breakout or the breakout falls within the intent of a higher echelon commander.
- The encircled force does not have sufficient relative combat power to defend itself against enemy forces attempting to reduce the encirclement.
- The encircled force does not have adequate terrain available to conduct its defense.
- The encircled force cannot sustain itself long enough to be relieved by forces outside the encirclement.

MOBILITY

7-51. Urban areas encumber movement and maneuver needed to gain positions of advantage. Units use mobility and countermobility techniques to offset these challenges. These are breaching, clearing, gap crossing, using or making combat roads or trails, utilizing aviation, and using aviation combat engineering and countermobility techniques to enable movement and maneuver/maneuver. Units consider population and vehicle traffic as they conduct planning and understand how these congestion areas may affect movement. Additionally, some UO may require the creation of a noncombatant evacuation operation; see JP 3-68 for additional information.

7-52. Breaching activities are conducted to allow maneuver despite the presence of enemy reinforcing obstacles covered by fire and used to shape engagement areas. Breaching is an inherent part of maneuver, and it is one of the most difficult combat tasks to perform. It should be conducted only if bypassing an obstacle is impossible. Breaching activities are characterized by thorough reconnaissance, detailed planning, extensive preparation and rehearsal, and a massing of combat power. A *breach* is a synchronized combined arms activity under the control of the maneuver commander conducted to allow maneuver through an obstacle (ATP 3-90.4/MCTP 3-34A [MCWP 3-17.8]). Generally, breaching requires significant combat engineering support to accomplish. When planning a breach, the staff considers the fundamentals described by the memory aid SOSRA, which stands for—

- Suppress.
- Obscure.
- Secure.
- Reduce.
- Assault.

7-53. Urban areas present many obstacles. Commanders may order clearing activities to facilitate mobility within an AO, and urban areas are a confluence point for many avenues of approach. Critical routes or areas may be cleared of mines, explosive hazards, or other obstacles. These activities could be conducted as a single mission to open or reopen a route or area, or they may be conducted on a recurring basis in support of efforts to defeat an enemy's reestablishment of obstacles along critical routes. *Clearing* is a mobility task that involves the elimination or neutralization of an obstacle that is usually performed by follow-on engineers and is not done under fire (ATP 3-90.4/MCTP 3-34A [MCWP 3-17.8]). It is generally accomplished by destroying, altering, or removing obstacles.

7-54. Clearing of a route or an area is often performed by a combined arms force built around an engineer-based clearance unit. A commander orders enemy obstacles to be cleared within an assigned area or along a specified route. A route clearance may include a transition to an in-stride combined arms breach, if the encountered obstacles are covered by fire and an effective breach organization is available within the task organization, or it can be established. In the absence of engineer support in large-scale combat, units can use available engineer or firepower assets to move or destroy explosives or other obstacles to achieve the mission. They are careful to limit collateral damage or civilian casualties unless unavoidable and necessary. For example, tank rounds, heavy rifle or machine gun fire, artillery, or mortars can reduce constructed or emplaced obstacles to include mines or IEDs in their many forms. Once the in-stride breach is completed and the enemy's ability to interfere with route clearing has been neutralized, the clearing force reverts to the primary mission of route clearance.

7-55. A clearing mission is not limited to reducing a lane or lanes through the identified obstacles as is the case in breaching, since a clearing mission is focused on movement along the route or within an area rather than supporting the maneuver of a combat assault force. In route and area clearance, engineer and explosive ordnance disposal units destroy or remove explosive obstacles that are a threat to mobility along the route or within the specified area. Routes and areas cleared are considered cleared only if they remain controlled by friendly forces. See ATP 3-90.4 for additional information on performance of the clearing task.

7-56. UO may at times benefit from unit creation of combat roads or trails to facilitate interior or exterior line usage in urban areas. These alternate routes can support movement, maneuver, and additional sustainment options in and around a city, further support movement in adverse weather, and be used for vehicles unsuited for rugged terrain. Combat roads require more effort to build than trails, but they support a broader range of vehicles and tend to last longer. Building combat roads and trails is a combat engineering

task conducted in close support to ground maneuver forces that are in close combat. Higher level roadwork is a general engineer task (see ATP 3-34.40/MCTP 3-40D [MCWP 3-17.7]) and the specific application of that level of road construction is detailed in TM 3-34.48-1. The primary difference between combat roads and conventional roads is the degree of permanence and characteristics of the traffic they are designed to support. Combat roads are built to handle low volumes of traffic for a short time. A combat trail is a traveled way that has been cleared of obstacles but has not been temporarily surfaced. A trail may be roughly graded by combat earthmoving equipment to provide a relatively smooth surface. Combat trails are usually adequate for tracked and wheeled combat vehicles. A commander's requirement for combat roads or trails is generally determined by the characteristics of the intended traffic, the duration of the requirement, and the inherent trafficability of the existing ground surface, based on its soil characteristics and weather conditions. In flat, desert areas with dry conditions, for example, once a pathway is cleared of obstacles and marked, the resulting trail can usually support a low volume of most types of vehicular traffic for a short time without any additional effort. See ATP 3-90.4 for additional information on the construction and maintenance of combat roads and trails.

7-57. Combat engineering in support of aviation operations is a combat engineering mission. General engineering units, however, may be required to perform or augment combat engineers that are performing this task, depending on the situation. In UO, this may mean creating, repairing, or repurposing urban areas to support landing and takeoff of specified fixed-wing aircraft and UASs. The BCT organic engineering capabilities require augmentation to meet the full range of aviation support requirements, especially requirements that will likely be more permanent as the phases of an operation progress. Combat engineering in support of aviation operations includes—

- Constructing landing zones.
- Constructing extraction zones.
- Constructing, maintaining, and repairing manned and unmanned landing strips.
- Constructing, maintaining, and repairing forward aviation operating facilities.

7-58. *Countermobility operations* are those combined arms activities that use or enhance the effects of natural and manmade obstacles to deny enemy freedom of movement and maneuver (ATP 3-90.8/MCTP 3-34B [MCWP 3-17.5]). In UO, countermobility is integrated into the maneuver plan. This involves using hasty or deliberate defense or obstacle techniques that use urban buildings or material to deny enemy access to friendly forces or population areas, delay their advance, or direct and canalize enemy forces into suitable prepared engagement areas for destruction by maximizing the effects of fires. Commanders ensure obstacles are integrated with observation and fires and synchronized to avoid hindrance of friendly force maneuver. In limited contingency operations, countermobility construction or destruction efforts can separate a hybrid or irregular enemy from the population or its bases of support. In offensive operations, countermobility aids in isolating the enemy and preventing their repositioning, reinforcement, or counterattack. In defensive operations, countermobility disrupts enemy attack, creating time and depth to shape the defense and protecting friendly force flanks. The primary purposes of countermobility operations are to shape enemy movement and maneuver and prevent the enemy from gaining a position of advantage. Countermobility operations include—

- Constructing the site.
- Constructing, emplacing, or detonating obstacles.
- Marking, reporting, and recording obstacles.
- Maintaining obstacle integration.

This page intentionally left blank.

Appendix A

Offensive Urban Operations Vignette

This example vignette is intended to provide commanders and staffs a broad entry point into visualizing planning considerations for the operations process in an offensive urban large-scale combat situation against a near-peer or regional adversary. It approaches a feasible urban operation problem from the perspective of a commander giving guidance and a concept sketch, but beginning task organization is not prescribed. Understand that as the operation develops all forms of offense, defensive maneuver will likely be fluidly used as the mission, enemy forms of maneuver, friendly priorities of effort, and task organization may change.

CORPS

A-1. Team, after a tough initial landing and a secure foothold, Field Army 1 tasked our Corps 2 to move inland to secure main LOCs in pursuit of a retrograding army tactical group (see figure A-1 on page A-2). As we are at 93 percent combat strength, Corps 1 (80 percent) will move east, north of river Q's more open terrain to continue deeper operational maneuver, but our available general supporting fires will service targets in range from general supporting fires. While air status is generally degraded down to parity or air denial due to heavy A2AD losses and residual enemy capacity from the initial air battle, sea LOCs are more favorable to amphibious movement and maneuver as long as the carrier strike groups can continue to apply sea power. Our corps main effort is to continue pursuit south to secure sea, air, and rail ports of debarkation and seize the major port and provincial city Z. We will use the defeat mechanism of destroying the enemy in the provincial city, but may use the disintegrate or dislocate mechanisms in the surrounding cities. Suppression of enemy air defense and fires needs to focus on facilitating air corridors, setting conditions for Marine amphibious operations, and disintegrating enemy sensing and C2 nodes for their long range fires. Plan to use joint forcible entry where appropriate from our airborne, air assault, or air landed capable forces. X [10th] Marine Expeditionary Force is preparing to help the fleet secure southern sea approaches to provincial city Z for further theater setting. Our mission will involve a movement to contact crossing at least one river. Consider riverine forces as an option in late phase II or III.

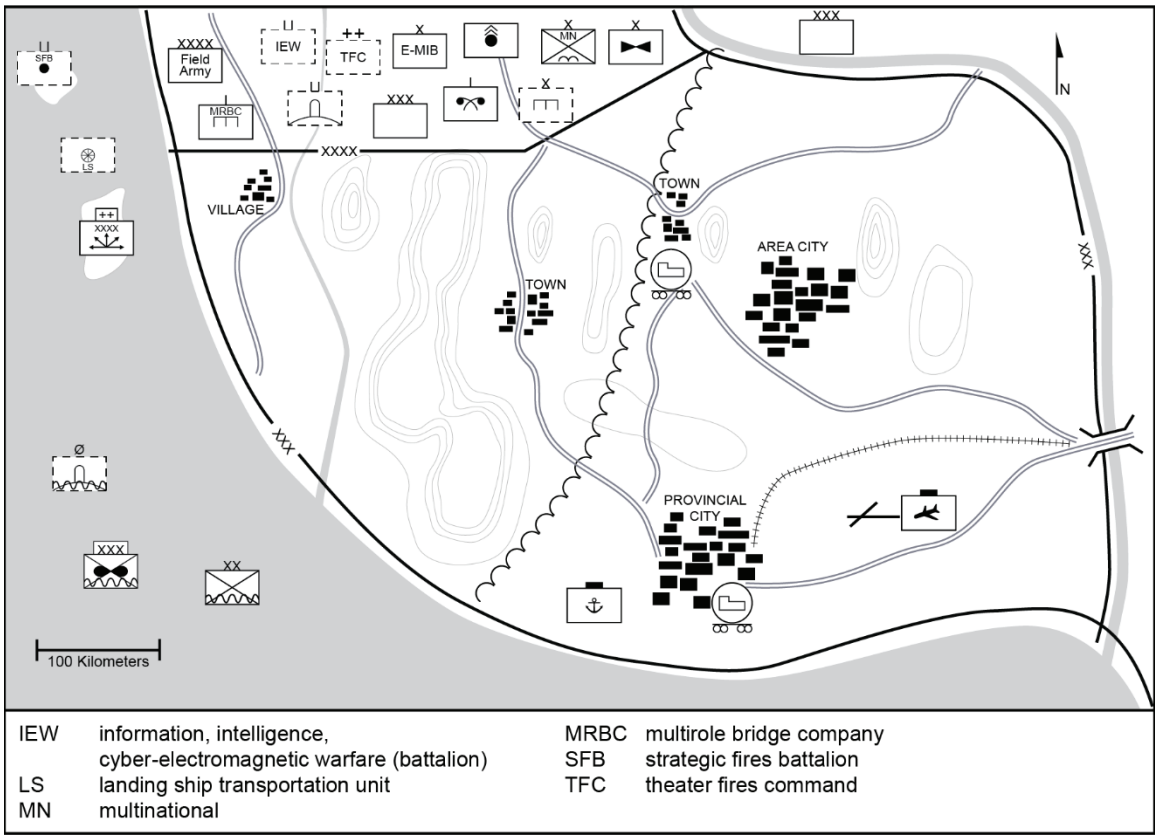


Figure A-1. Field army area of operations for urban operations

A-2. I would like two COAs that result in securing the northern approaches to the seaport provincial town in our AO for follow-on partner, naval, and consolidation of gains forces. Our task organization is similar to that found in FM 3-0 or FM 3-94 figures, but JFC assets are available on early request. As branch plan to these COAs, we should isolate and bypass the area towns and villages en route where possible if under a battalion enemy equivalent strength is encountered within, but they must remain encircled and physically isolated from the enemy main body, and we must control the provincial city Z of 350,000 without destroying its transportation infrastructure. U.S. Intelligence and Security Command and military intelligence brigade intelligence along with our reconnaissance and security units indicates remaining strong (50–60 percent) peer-threat resistance of 2–3 divisions scattered among a defense in depth around the area towns centered on provincial city Z. There are some residual company-sized regular and irregular forces in the villages and towns. Our mandate to liberate country X from its oppressors has given us adequate bilateral forces, but for this operation we must continue to maintain combined arms team force ratios of three to five times those of enemy forces expected in the occupied towns to mitigate attrition, and secure a more rapid and decisive maneuver result.

A-3. Our shaping operations will focus on setting conditions to maintain standoff, interior lines, and security upon approach and inside of the towns and cities. DOS and USAID have helped us in this regard by sending messages through still functioning social media platforms and other information-related capabilities, urging the populace to either displace or shelter in place. Our nonlethal targeting has also focused on shaping our military deception plan as well as on potential defectors of irregular and regular force groups. While space and cyber cannot guarantee completely uninterrupted communications, units should ensure C4I (command, control, communications, computers, and intelligence) plans include appropriate redundancies and analog backups. I want our capabilities to disrupt enemy communications, but leave civilian lines open for messaging and follow-on stability operations.

A-4. While we cannot conduct full noncombatant evacuation operations, once front line combat units have passed, alternate supply routes will be used to channel displaced civilians to partner nation Y refugee camps

they plan on establishing D + 7–14 (see table A-1). Considering sustainment, once we are in the cities and if we experience further 20–30 percent losses, we may consider changing avenues, task organization or priorities of support or fires. Army pre-position stock 12 is available for commitment on authority of release by the JFC commander with theater sustainment command coordination. Continually, our sustaining operations prioritize class I, III, V to the front, and for units below 60 percent combat power, class VII for non-recoverable or repairable end items. Medical units will need advanced stock of 120 percent modified table of organization and equipment for class VIII in support areas, and ground CASEVAC and exchange points will be the most likely method to care for our dead and wounded. Enemy air defense pose too much of a threat to MEDEVAC helicopters or deeper forward arming and refueling points. There is also limited helicopter landing zone space in and around the dense provincial city, but terrain managers should consider parks, commercial parking places, or sporting venues for contingencies and use mountainous masking features to enable aviation where feasible. I want level I care as far forward as possible out of direct fire range, but also secured in hasty strongpoint defenses by available line units. Reserve unit employment may focus on preventing an encirclement via breakout attempt or to help a unit finish. Mobility will need to ensure clearance of routes that are sure to be mined or booby trapped, but units will not delay and will continue to maneuver using direct or indirect firepower to reduce any encountered obstacles.

Table A-1. Example maneuver-sustainment integration and planning

	Maneuver Horizons			***Sustainment Horizons***	
	CUOPS	FUOPS	PLANS	Sustainment on-hand (including en route)	Sustainment planned
BCT	0–12 hours		12–48 hours	3 basic loads of all supplies	Continuous replenishment
DIV	0–24 hours	24–72 hours	72–96 hours	3 days	48–96 Hours
Corps	0–48 hours	48–96 hours	96 hours – 7 days	5 days	72 hours–6 days
Field Army	0–3 days	3–7 days	7–10 days	7 days	96 hours–9 days
Theater				15–30 days	30–90 days

Note. BCTs are not organized for FUOPS. At each echelon, sustainment planners must plan concurrently with their supported headquarters. The time and distances that comprise large complex supply chains required to sustain large-scale combat operations limit their responsiveness. As commanders determine future courses of action, sustainers will have to anticipate requirements to support operations and acquire the supplies necessary to support the operation.
A BCT is designed to carry approximately three basic loads for Classes I, III, and V. Planners at the division level should continually replenish the BCTs as supplies are consumed. At the division level and above, sustainment planners must plan out to the G-5 planning horizon in order to ensure freedom of action for their command. At any given time, an echelon should have on-hand or en-route sufficient quantities of Class I, III, and V supplies to support all FUOPS plans, or put differently, the current plan plus anticipated branches and sequels.

G-5	assistant chief of staff, plans	DIV	division
BCT	brigade combat team	FUOPS	future operations
CUOPS	current operations		

A-5. Planning factors required for determining ammunition consumption include the ammunition combat load, daily estimated expenditure rate, and resupply capability within the context of the proposed or ongoing operation and operational timeframe. These figures will generally include the packaging weight of material in the total weight and cube when determining transportation requirements. *Combat load* is the minimum mission-essential equipment and supplies as determined by the commander responsible for carrying out the mission, required for Soldiers to fight and survive immediate combat operations (FM 4-40).

A-6. As we surround and secure through these urban areas, we will establish support areas, and use civil affairs to assess and begin reestablishment of basic governance functions. Use the maneuver and sustainment planning horizons from figure A-2 on page A-4 and table A-1, and those found in ATP 5-0.2-1, but we may commence sooner if rehearsals are smooth. After security, temporary governance teams will need to be employed to address basic needs down to the block level. Curfews, martial law, and summary courts martial are authorized by commanders to maintain order, prevent crime, insurgency, looting, and destruction. However, commanders must also build trust openly, and communicate to the populace through any remaining

local leaders. The JFC retains capital crime review, but commanders may detain and imprison lawbreakers and prisoners of war until they can receive due process to the rear or support area by military police. To consolidate gains and allow combat unit progress, units are encouraged to empower a local competent city or county government under U.S. supervision, and rearm a constabulary with non-automatic small arms to enforce host-nation laws if they are deemed vetted by the coalition provisional authority judge advocate general.

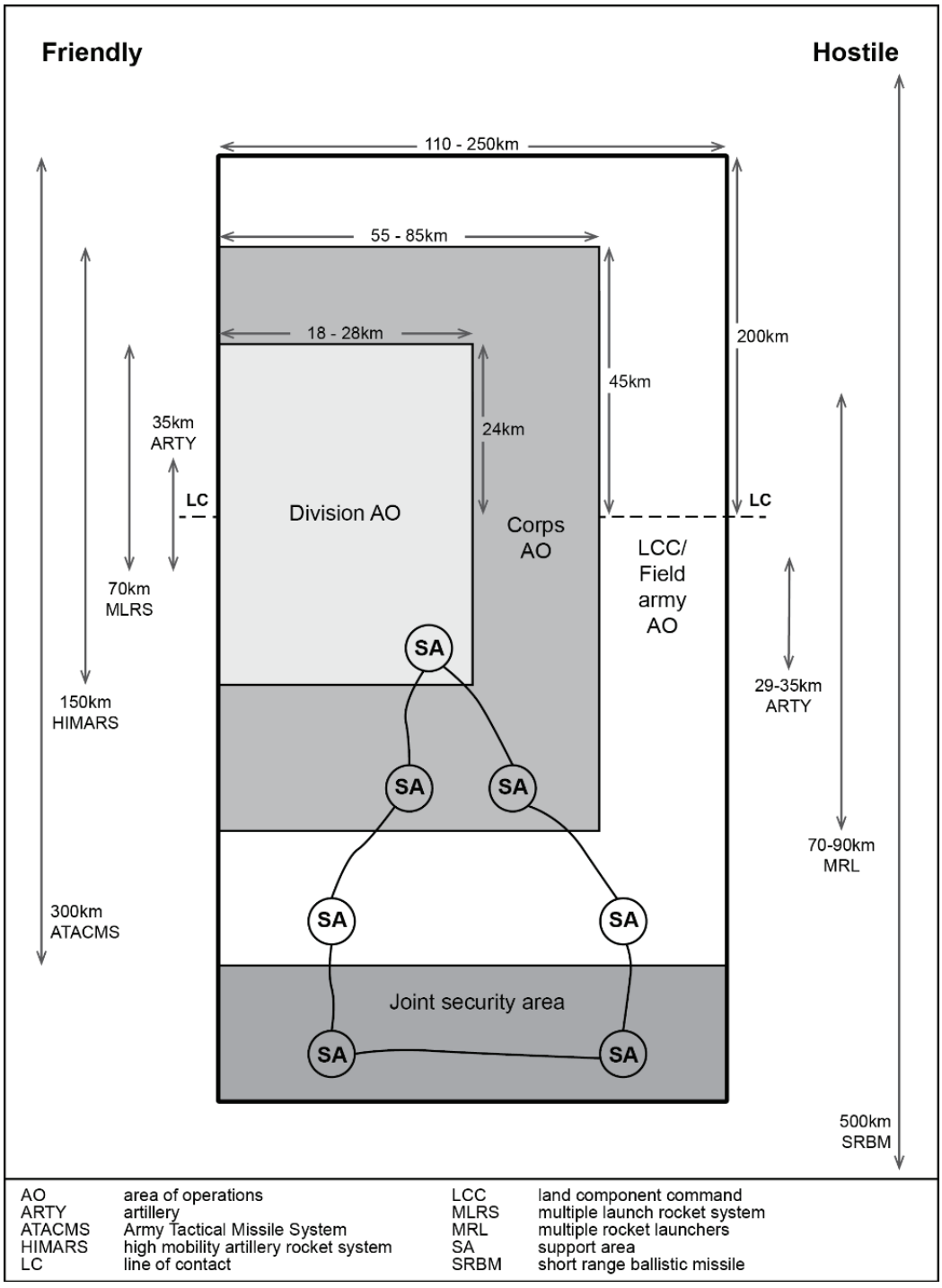


Figure A-2. Field army and corps doctrinal template example

DIVISION

A-7. As division 2 will follow and assume division 1 to secure provincial city Z through the central corridor, our division 3 will fix enemy forces in the village along the western axis of advance followed by its envelopment, isolation, and deeper drive south to an eventual 300 meter wet gap crossing (see figure A-3). I expect this to occur D + 5–7, and pending enemy resistance, the clearance of the village of 7,000 with over a battalion enemy strength should initially take 3–5 days if committed. Movement rates will of course be faster if there is less than a battalion and we are able to encircle, isolate, and bypass the villages and towns quickly. This mission will help secure further undeveloped landing sites for the Marine division, should their port seizure of provincial city Z not progress as planned. I want two COAs that entail the clearance of city by our combined arms team mechanized forces should we encounter over a battalion, with a second and branch that involves isolating the towns with a BCT, and bypassing with the remainder of our combat and functional/multifunctional brigades to develop the gap crossing corridor for remaining corps 1 forces

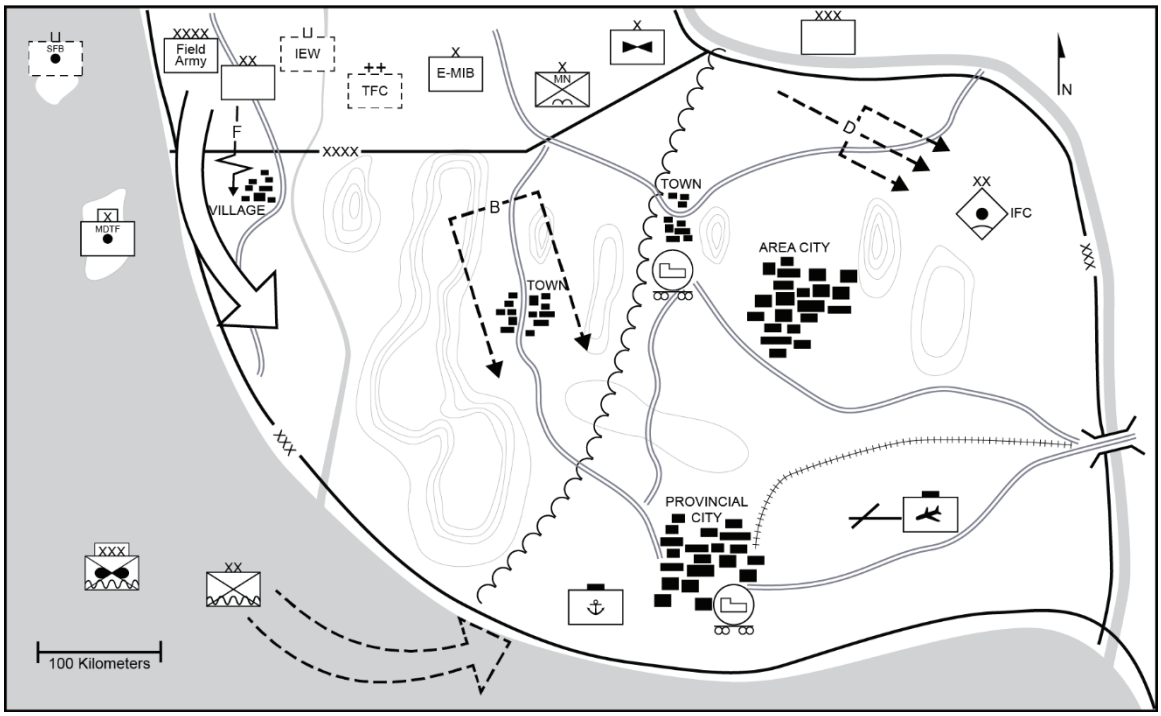


Figure A-3. Division area of operations for offensive urban operations

A-8. Divisions 1 and 2 in the eastern corridor will bypass the towns, but must secure only the railhead in the easternmost town, establishing a hasty perimeter defense until heavier follow-on forces can arrive to encircle this town. Ensure your maneuver enhancement brigades follow close enough to enable their combined arms battalions to secure support area command posts and consolidate gains by securing rear areas in defeating remnant forces. Engineer and military police brigades can help facilitate transition to stability, once major combat has passed and the corps rear boundary moves past them. Division 1 in the east will focus on disrupting the enemy integrated fires command and then secure the airport of debarkation while maintaining exterior lines and cleaning up pockets of resistance in the rear area for division 2 to press south to encircle the area city. Our division 3 will continue our attack with a wet gap crossing to the smaller river to the south with a limit of advance to just outside of armor direct fire range on the perimeter of provincial city Z.

BRIGADE COMBAT TEAM

A-9. Once divisions 1 and 2 have largely enveloped or bypassed northern towns under battalion strength and have secured the area city on approximately D+10, division three's BCTs and the Marine regimental landing team will begin encirclement of provincial city Z to destroy or displace the enemy within and gain

control of sea and rail ports of debarkation (see figure A-4). These COA options need to consider use of the rapid mobility found in our Stryker formations seizing from the south, and once enemy air defense is suppressed we may consider an air assault or a feint to seize city governance or key infrastructure locations (includes city operational variable centers of gravity, major transport LOCs and nodes). The assault into the city must maximize tactical vehicle speed and surprise to transition into initial urban battle positions and footholds, facilitated by close adjacent unit and echelonment of indirect and direct fire coordination from optimal support by fire positions. Our combined arms team armored forces will clear through the city, but units may need to quickly transition to hasty defense as some remaining enemy regimental tactical groups may be consolidating for a counterattack from east of river Q.

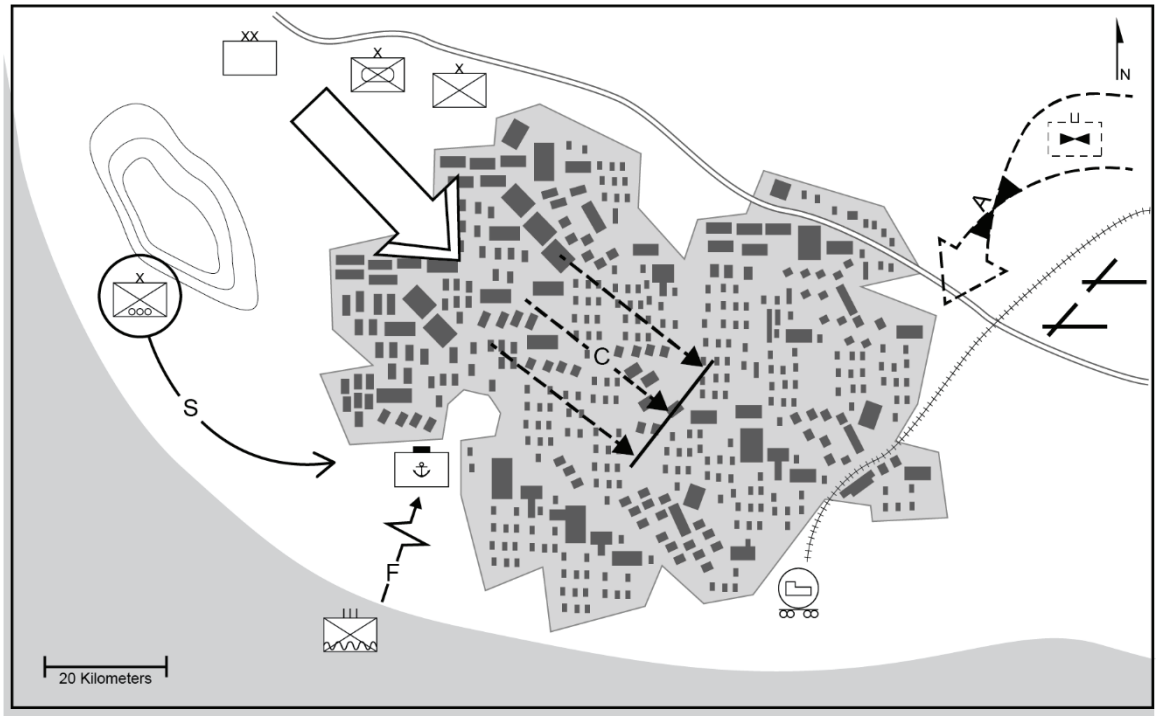


Figure A-4. Division and brigade combat team area of operations for offensive urban operations

A-10. Our ISR should focus on isolating the eastern portion of the city as an economy of force measure until division one can isolate this far side. The corps commander has retained clearance of fires on targets in vicinity of essential power, water, and medical facilities to facilitate the suppression of enemy air defense plan, but units retain the right to self-defense and destruction of forces near these no strike targets if threatened. The air operations center and land component battlefield coordination detachment will work with the supported ground commander to arrange a keyhole template in accordance with ATP 3-09.32/MCRP 3-31.6 /NTTP 3-09.2/AFTTP 3-2.6 with a cardinal direction air axis airspace control plan over the city's coordinating altitude, with forward air controllers (airborne) on station to maintain urban situational awareness, coordinate, and deconflict Air Force and Marine Corps aircraft once ground clearance begins. If significant residual irregular threats remain in the city upon conclusion of major combat against peer-threat forces, we will likely need responsive options to clear through the city multiple times, avoiding civilian casualties, so that consolidation of gains forces can emplace the military governance apparatus until the coalition provisional authority can reestablish country X's government and security forces.

Appendix B

Defensive Urban Operations Vignette

This example vignette is intended to provide commanders and staffs a broad entry point into visualizing planning considerations for the operations process in an urban defensive large-scale combat situation against a near-peer or regional adversary. It approaches a feasible urban operation problem from the perspective of a commander giving guidance and a concept sketch, but beginning task organization is not prescribed. Understand that as the operation develops, all forms of offensive and defensive maneuver will likely be fluidly used as the primarily defensive mission, enemy forms of maneuver, friendly priorities of effort, and task organization may change.

CORPS

B-1. As corps 1 continues to consolidate gains in preparing our area defense in depth, corps 2 to the north of river Q will conduct a mobile defense to retain control of the peninsula in country X (see figure B-1 on page B-2). We will continue to prepare and shape for our division deep operations with our attached general support field artillery and aviation brigades, servicing targets in conjunction with the joint targeting cycle. Our divisions will continue to retain terrain in the towns, deny enemy key city infrastructure in area and provincial cities until additional follow-on U.S. and partner forces can arrive to bolster our field army and transition back to offense. We will use prepared battalion and brigade battle positions and developed engagement areas outside of the city to prevent collateral damage, but one of our two COA options needs to consider what battalion and company secondary perimeter defenses inside of cities will entail. While we can accept risk in potentially retrograding from the smaller towns, we cannot afford to lose the area and provincial cities' key transportation infrastructure, as these are essential to receiving follow-on forces and supplies as well as distributing sustainment through the AO.

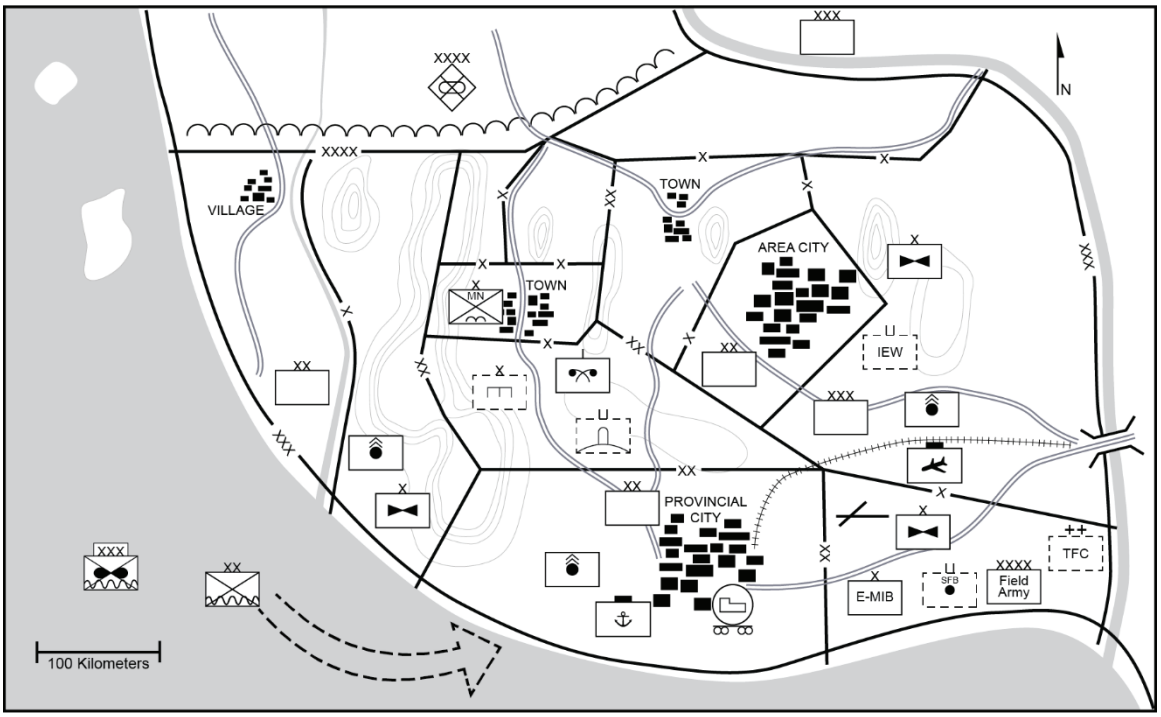


Figure B-1. Corps/Marine expeditionary force urban area defense area of operations

B-2. Our defense must give adequate attention to preparing main battle areas through effective corps and division deep area targeting. Units should also retain sufficient mobile reserves to counter envelopments, and if defending encircled use economy of force measures and terrain to effect a breakout. We can mitigate this possibility through aggressive ISR, patrolling, preparation of secondary positions, maximizing use of terrain through prepared engagement areas, and effectively layering echelon defenses so that passage of lines are feasible forward and rearward. Units should consider branch plans that include rearward passage of lines to secondary prepared or alternate positions, using the strength of fortified buildings and company or greater strongpoints. While we expect civilians to remain neutral to helpful, infiltration of special purpose forces is expected, and so commanders should plan for irregular threat and insurgency risk reduction measures. Protect the populace, but seek to isolate and destroy forces disruptive to bases of support within the urban areas. The rivers and central mountain range in our AO provide naturally defensive terrain, so commanders should be careful to closely tie their defenses into this terrain, and use restrictive land or water features to full effect, avoiding gaps or unobserved areas for the enemy to exploit. Upon transition to offensive operations, our civil affairs, MGO, security, and rear or support area forces will focus on reestablishing security and use feasible temporary governance teams with host-nation support under the coalition provisional authority until DOS and USAID can return and better support a replaced host-nation governance system.

DIVISION

B-3. The joint force commander has authorized Marine Corps elements from the Marine division to support the peninsular port and rail defense (see figure B-2). Our division 3 in the west will focus on creating a mobile defense in depth from the field army northern boundary south to the river. From this southern division/BCT boundary, Marines will prepare riverine and sea forces south to and through the port, guarding division 2's (in the provincial city) western flank. Our division will use the urban terrain and LOCs and eastern division boundary that crests the central mountain range, and we will maximize air corridors over land and sea to provide the joint force air component commander with flexible close air support and air interdiction options, and supporting a permissive ground and naval gun fire environment. Main battle areas should be well forward of urban population concentrations. We can expect a full initial required-supply-rate combat load for 90 percent of our units, but as fighting may continue through D+20 and beyond, controlled-supply-rates will become more restrictive; this will need to reflect in careful high-value target, target selection standards, and

attack guidance focused on denying enemy penetration. Creative use of feints, military deception, and reconnaissance and security operations in your zones will help us economize forces should triggers for retrograde be necessary.

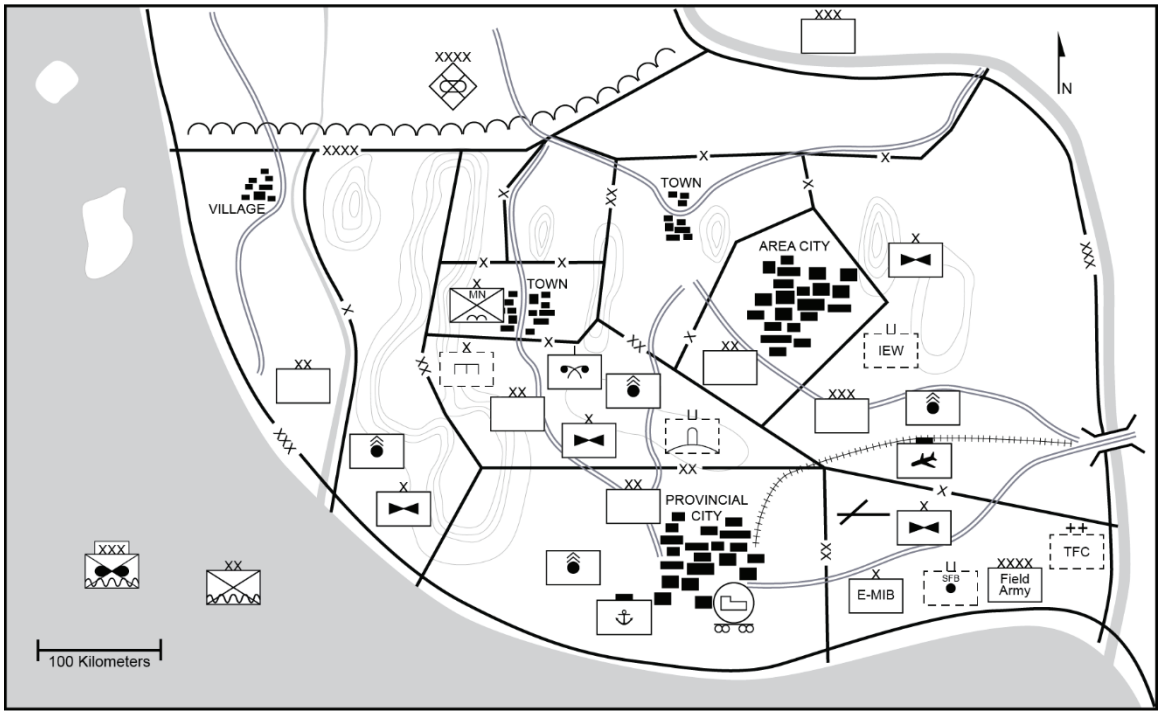


Figure B-2. Division/Marine division mobile defense area of operations

BRIGADE COMBAT TEAM

B-4. Within provincial city Z, MAGTF 11 will defend the southern third of the city, creating strongpoint perimeter defenses around the port as the division's main effort (see figure B-3 on page B-4). Close boundary and fire control measure coordination is critical here. To the northwest, our Stryker brigade will guard to provide early warning and targeting of bypassing enemy forces coming through Division 3's northwest coast axis of advance. Our combined arms brigade will continue to improve the obstacle belt with engineer brigade support to the east of the high ground north west of the city, and tie in to our infantry brigade's combined arms and antitank team forces in the city's northeastern sector. Our fires and aviation brigades will use mobility and survivability displacement in the area east of the city to provide responsive fires in and through air corridors established to provide permissive aviation maneuver, and cannon and artillery fires.



Figure B-3. Brigade combat team/Marine air-ground task force area defense area of operations

B-5. Secondary positions planned within the city will only be used if units encounter aggregate 60 percent or greater losses, but we anticipate potential reinforcement from our westernmost sister division one in order to prevent the port's capture. Information operations has resulted in up to 60 percent of the host-nation populace in evacuating, but where possible units need to facilitate noncombatant evacuation movement under locally available or commandeered transport to Army, Navy, and partner nation evacuation surface ships south of the port. From here, they will move across the sea to United Nations and Red Cross prepared refugee cities. Reassure civilians that once major combat operations have concluded, their property will be protected and the coalition will make every effort to repatriate them. Should irregular or special purpose enemy threat forces be encountered in the city, seek to isolate and destroy them, but do not rule out creating an avenue of limited duration evacuation; if necessary, use appropriate interior city line terrain and obstacles to remove them from their base of support, isolate them, and expose them to targeting. Branch plans should include possibilities of enemy defeat north of our AO by other supporting field army divisions, but also a clear transition to stability operations within provincial city Z.

Appendix C

Stability Operations Vignette

This example vignette is intended to provide commanders and staffs a broad entry point into visualizing planning considerations for the operations process in an urban stability limited contingency operation following large-scale combat against a near-peer or regional adversary. It approaches a feasible urban operation problem from the perspective of a commander giving guidance and a concept sketch, but beginning task organization is not prescribed. Understand that as the operation develops all forms of offensive and defensive maneuver within the stability operation will likely be fluidly used as the mission, enemy forms of maneuver, friendly priorities of effort, and task organization may change.

DIVISION AND BRIGADE COMBAT TEAM

C-1. At the request of the recently liberated country X and provincial city Z, the joint force land component commander's Division 3 with Marine Regiment 11 will conduct a change of mission to operations focused on stability (see figure C-1 on page C-2). Remember that although in stability operations, combinations of offense and defense, security and control are still essential. Tactical combat forces that are level III capable (see FM 3-0) from our combined arms units will continue to isolate and destroy remnant enemy armor and infantry strongpoint defenses in the city. While some irregular threats with limited peer capability remain, key to our transition to urban stability operations will be reestablishing security through subordinate commander AO governance empowerment for the repatriating civilians. Commanders will be responsible for protecting their lives and property and facilitating city control. They will also reintroduce military governance teams to address initial grievances and restore essential services. Should rioting or looting occur, allow host-nation forces to attempt to control the situation first. If initial nonlethal methods and technology used do not deter, isolate, or detain key person or group drivers of instability, then as necessary, controlled and lethal formations will be on hand to deliberately escalate force. Once security and host-nation governance with military governance assistance is rated at an acceptable level by the coalition provisional authority, U.S. DOS, USAID, and other NGOs will be permitted to deploy into appropriate civil economic, political, and cultural spaces. Around the cities, we will manage terrain to build on our newfound air parity with a flexible airspace command and control plan, but continue fires echelonment success by encircling the city with position areas that enable appropriate attack angles along dense urban corridors.

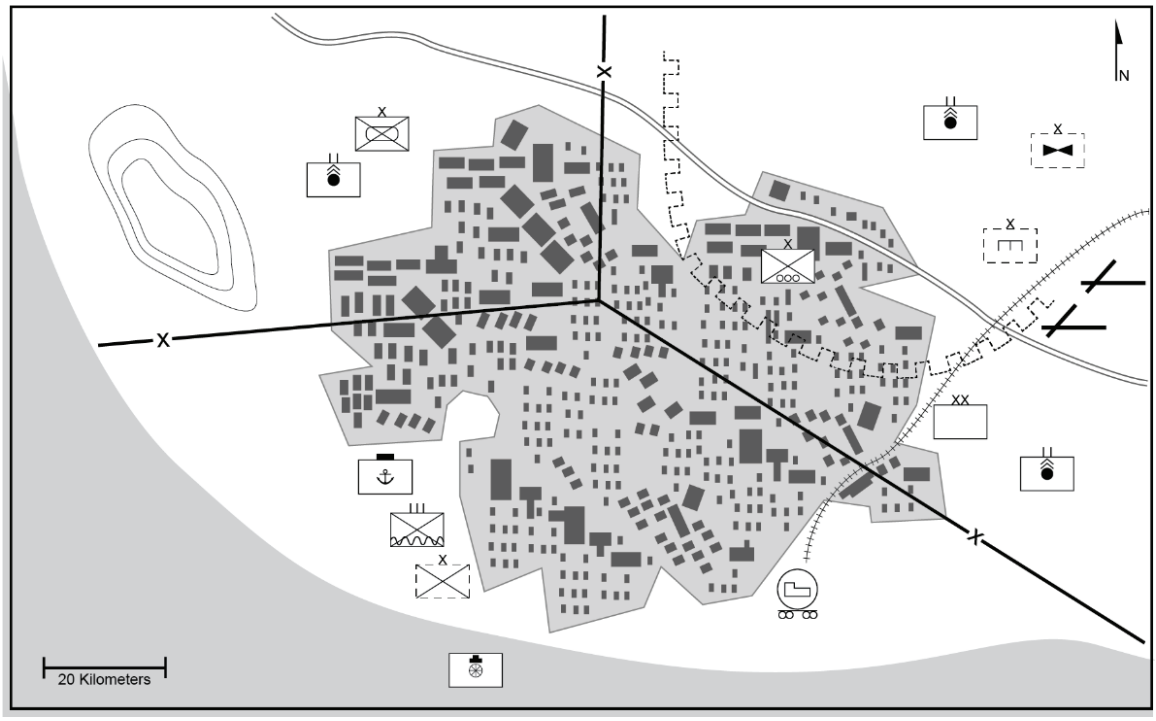


Figure C-1. Division and brigade combat team stability operations

C-2. While we do not expect any significant bypassed force remnant enemy contact over platoon size outside of the city, continuous reinforcing and hardening of positional perimeter defenses and bolstering of extant HNSF is key. Host-nation local, U.S. Army, and Navy ships initially involved in the city's noncombatant evacuation operations will be used to repatriate at a rate of up to 10,000 civilians per week, but our stability COAs need to include a deliberate ordering of population groups by neighborhoods that have private property or business there, and a viable essential service infrastructure areas to minimize suffering. Medical units will augment host-nation capabilities where most needed, but prioritize U.S. force casualty treatment. Military governance teams need to establish contact with remaining local leaders, integrate with inbound repatriating leaders, and continue to use key leader engagement via civil-military operations centers agreed upon and leased through contracting with the U.S. government. City interior units will continue to improve these building defensive positions to deter insurgent attacks and maintain standoff, but accessible to a vetted local populace building trust through daily interaction.

C-3. On D+7 after thorough operational variable and SWEAT-MSO assessments, should insurgent, or criminal activity, coalition attacks, or impasses to peace agreements present themselves, the engineer brigade should be prepared to support creation of an obstacle barrier to isolate the most significantly expected portion of irregular threats in the northeast sector of the city. With HNSF coordination, commanders may use martial law means, detain suspected criminals, use lethal force to protect U.S. or host-nation life, prevent destruction or looting, and use curfews by neighborhood with brigade or regimental commander review and approval on an as needed basis after informing the populace for three days. I expect any irregular force contact with U.S. forces or HNSF to be dealt with lethally and rapidly.

C-4. Marines in the southern sector will tie into division and brigade assessment groups and facilitate fleet operations to flow sustainment into the peninsula and country X. The coalition provisional authority will conduct an assessment at D+60 to facilitate local elections, and by this time military governance teams and judge advocates general will have developed positive working relationships with reemerging justice and security force apparatuses. Once port and fleet operations have resumed at a secure level, Marines will transition with our organic infantry brigade to continue security and restoration of economic, political, justice, and cultural functions until our JFC is released. All BCTs will assess current HNSF capacity and facilitate plans for inbound security force assistance brigades that will help them build further competence and

facilitate our transition from country X. All remaining prisoners of war will need to be safeguarded and transitioned to the joint security area for processing, military justice, and repatriation subject to the peace agreement terms.

This page intentionally left blank.

Appendix D

Urban Operations Training

This appendix describes integration of training at home station and combat training centers using live, virtual, and constructive methods. The appendix details integration of objective training conditions needed to facilitate integrated, progressive, realistic training environments, and highlights unique aspects of training for UO in dense urban terrain.

...The history of war testifies that battle outcomes are most often determined by factors other than a disparity in numbers of people, numbers and types of weapons, or force ratios. All the counting you want to do cannot explain Cannae, Thermopylae, Alexander's Macedonian Army, Napoleon's Grand Army, Bastogne, or Inchon.

On the contrary, history tells us that the outcome of battles most frequently follows from the courage of soldiers, the quality of leadership, and the excellence of training. I've said that before. I didn't invent it. It's apparent in any study of the history of battle. Battle analysis tells us that well-trained soldiers in well-trained teams and crews in well-trained and led units win far more often than not.

What is it that wins? How do we define it? How do we get it? How do we know when we have it? Excellence comes from two things:

• Initiative of leaders in training.

• Willingness of leaders to take the initiative in operations.

Both of these are well-established fundamentals of mobile warfare. In training and operations, but especially in operations, initiative equates to mobility. The side whose leaders seize the initiative, the side that is more flexible and mobile, is the side that most often wins.

Flexibility and mobility of units in training and operations comes from the mental flexibility of leaders. It is the ability to create, to be innovative. It is the willingness to act rather than react. It is the ability to comprehend, to understand meaning and intent rather than seeking after and clinging to rote formulas.

General Donn Starry

D-1. Training for UO in modern cities requires replicating complex terrain with dense population, superstructure spaces, extremely dense infrastructure systems, and connectivity. See figure D-1 on page D-2 for a visual example of the complexities of urban terrain.

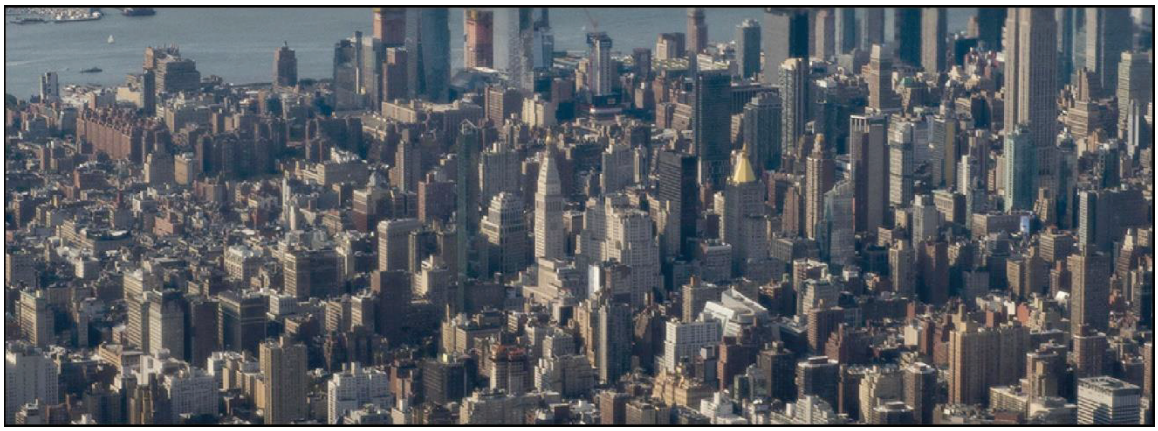


Figure D-1. Modern city terrain complexity

DENSE URBAN TERRAIN TRAINING STRATEGY

D-2. Army units should address the problem of training to prepare for the full range of military operations, fighting inside complex, dense urban terrain to win. The best way to win large-scale urban fights, engagements, and campaigns at the operational level is to set conditions outside of the city, and have developed broad proficiency and mastery of urban warfare individual and collective training tasks to lowest levels. Consistent with ADP 7-0, over short-, mid-, and long-range horizons urban operation training plans enable Soldiers/Marines and units to—

- Train as you fight.
- Train to standard.
- Train to sustain.
- Train to maintain.

D-3. Greater complexity of cities requires greater unit capability and capacity at echelon to deal with the strain of urban combat. This is because most urban battles and campaigns that have military forces engaged in them are able to decisively win through rapid, lethal team, squad, platoon, and company violent actions with adequate battalion and brigade synchronization and warfighting function support in depth or across a broad front as operations may require. Large-scale combat operations are successful when there are adequate divisions and corps trained and equipped in urban warfare. As stated in FM 3-0, "…the Army must be manned, equipped, and trained to operate across the range of military operations starting with the most lethal conditions first—large-scale combat against a regional peer competitor." Dense urban terrain and its associated operational variables cannot be overlooked as we prepare for the future. A regional near-peer competitor, and irregular threats enabled by peer capabilities in a fast paced and complex dense urban environment presents the most lethal conditions to both U.S. and partner forces, and the civilian population. The integration of operational variables as outlined in the Leader's Guide to Objective Assessment of Training Proficiency is designed to increase and scale complexity specific to training for city battles and engagements.

CENTRAL IDEA

D-4. Units must establish a framework for enhancing readiness over time and echelon, with the near-term focus on providing dense urban terrain low-cost, or no-cost training opportunities at home station. This framework must not neglect the fact that urban combat will likely be the most intense, close, and most lethal environment in which Soldiers/Marines will fight. Therefore, to maximize Soldier/Marine lethality the fundamentals of attaining peak physical fitness, advancing in combatives training, maintaining basic, advanced rifle, or crew-served/platform marksmanship, and maintaining tactical casualty combat care training progressions are essential throughout any training plan. The framework must incorporate individual tasks and collective tasks that support both operations in dense urban terrain and assigned mission-essential

task list while simultaneously preparing realistic brigade and higher training events in the current integrated training environment and future synthetic training environment. In addition to conducting training range reconnaissance for planning, units should consult TC 90-1, TC 25-8, and other local military range training documents and regulations to determine training objective condition suitability.

UNDERSTANDING THE DENSE URBAN TERRAIN OPERATIONAL ENVIRONMENT

D-5. It is critical that the lenses used to understand UO incorporates all aspects of the multidimensional OE. Army leaders must immerse themselves in the available knowledge on the subject to fully appreciate the difficulty of dense urban terrain. This may entail leader staff rides to large cities or dense urban environments to visualize or plan a notional operation without troops. To fully understand the urban environment, leaders and units must evaluate the operational variables, four conditions of dense urban terrain (population density, high-rise/subterranean structures, very dense infrastructure systems, and high levels of connectedness), the historical and current context, JIIM operations, host-nation challenges, and potential involved civilian, U.S. government, or nongovernmental organizations.

STRATEGY FRAMEWORK

D-6. Incorporating and exposing units to aspects of dense urban terrain throughout a unit's entire training progression will increase unit proficiency and better posture units to fulfill ASCC or JFC requirements. The outcome of this strategy is to provide units with the means to conduct training in a set of conditions that model or replicate the dense urban terrain environment. To increase unit proficiency at brigade and below, home station training needs to present dense urban terrain environments to prepare individual, leader, and collective training. This will allow for increased complexity at the combat training centers and during joint exercises, which will facilitate innovation and understanding. Increasing unit proficiency at brigade and above will require brigade and higher staffs to conduct planning and decision-making exercises while focusing on aspects of the multi-domain environment. For example, in order for staffs to understand the mass effects cyber and population can have on the range of military operations in dense urban terrain they must plan for and conduct exercises that include those aspects.

REALISTIC DENSE URBAN TERRAIN TRAINING ENVIRONMENT

D-7. Developing a realistic training environment that includes the full range of military operations, from major combat operations to humanitarian assistance and disaster relief is critical to the force's success in the urban environment. The four conditions of dense urban terrain provide the necessary complexity required for training at brigade and below. They can also be scaled in either the Integrated Training Environment or future Synthetic Training Environment to replicate the complexity of operating in dense urban terrain for echelons above brigade, which will often require a JIIM approach (see figure D-2 on page D-4). The Army developed the Jungle Operations Training Center in Panama so there was a dedicated area that contained all of the conditions needed for ideal training simulation. Even though dense urban terrain is a sub-type of urban environment, it is an expensive environment to train for so a solution like Jungle Operations Training Center may not be feasible. However, units should fully leverage home station combined arms collective training facilities, live fire exercise breach facilities, live fire exercise shoot house, urban assault courses with subterranean underground trainers. See TC 25-8 for descriptions of each of these facilities. These offer individual task to battalion collective task negotiation of urban obstacles, can be tailored for use of breaching demolitions, grenades, and other special weapons, in addition to building simultaneity up to live shoot house clearings of multiple story buildings with potential subterranean features. Realistic training must encompass the complexity of dense urban terrain in a way that prepares units at the tactical and operational levels of warfare to best synchronize the warfighting functions in a decisive action training environment.

D-8. In addition to official Army/Marine recent trend sites—such as the Center for Army Lessons Learned, Marine Corps Center for Lessons Learned, and the Battle Command Knowledge System—commanders can create a secure unit-level system to enable units to share lessons learned and tactics to other units, Soldiers, and Marines even in the midst of an operation. These lessons can help tailor mission and urban area specific training prior to or during combat operations. This system may be technology based, procedural, or both. For example, during OIF, the 1st Cavalry Division developed an effective web-based knowledge network that allowed it to actively capture and share lessons learned among subordinate units.

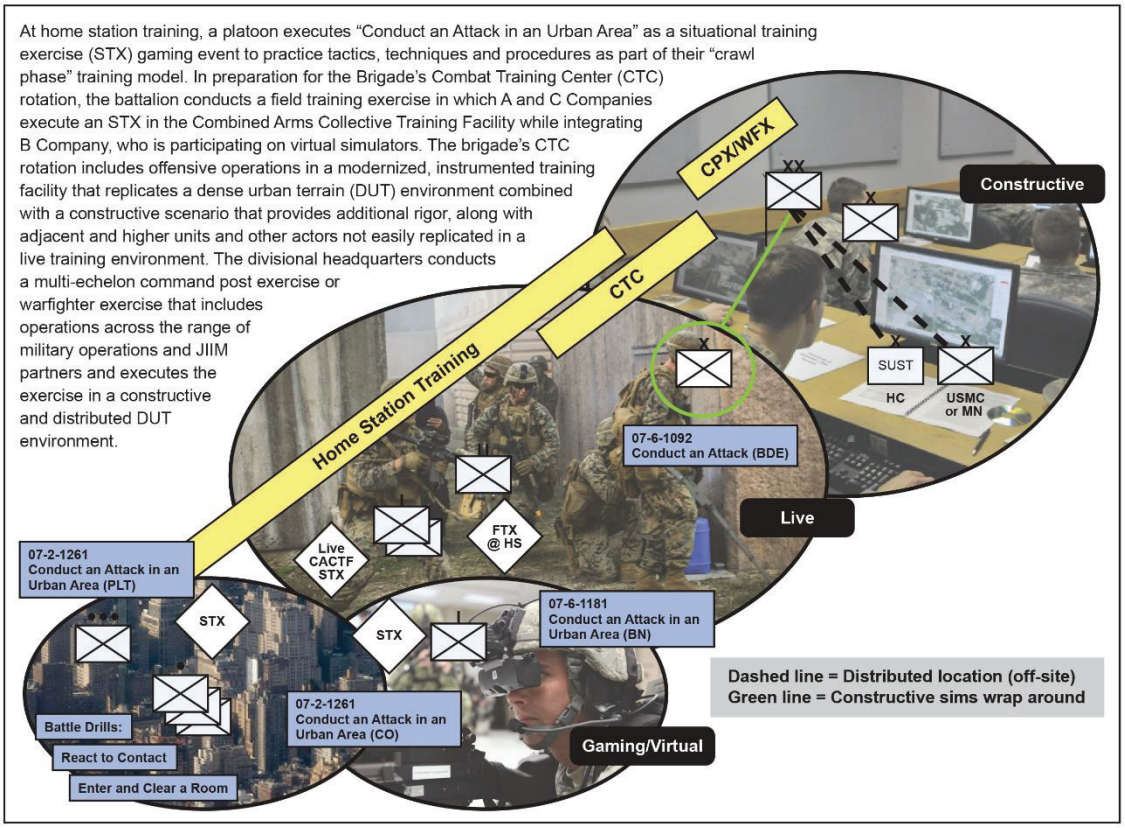


Figure D-2. Example of live to constructive training for dense urban terrain

URBAN OPERATIONS INTEGRATED TRAINING PROGRESSION

D-9. While at home station, unit commanders can use their initiative to infuse realism into the training areas. They are aided by unit training management products and standards available on the Army Training Network. The BCT can develop operational tasks and linked training objectives to facilitate training at echelon (i.e., squad, platoon, company, battalion, and BCT) that will prepare them for a dense urban terrain OE during their upcoming combat training center (CTC) rotation. Using standard and higher headquarters commander directed mission-essential task lists and training guidance, units are able to project and coordinate resources for prioritized training events, progressing in proficiency as individual, crew, platform, and echeloned unit skills increase. Units seek to maintain a status of 'P' to 'T', although factors such as deployments, new equipment fielding and training, and personnel turnover must be accounted for (see table D-1 and FM 7-0 for further information on battle focus integration of collective and individual training and maintaining a training band of excellence).

D-10. Training plans are codified through echelon commander's annual training guidance, with unit resources and actions verified through quarterly training briefs. Commanders build time and resources into guidance and briefs for complications or need for retraining. As units build combined arms proficiency, commanders should incorporate cross-domain consideration such as information, space operations, electronic warfare, and cyberspace capabilities by presenting multi-domain and joint integrated scenarios during home station training. In addition, training is influenced by the unit's status within a sustainable readiness phase, or base on unit status report assessments. Training scenarios should take into account cyberspace electromagnetic activities modernization, air-ground integration in contested airspace, and potential impacts to space-based operations such as interference to GPS navigation signals or satellite communications environment.

Table D-1. Measures of collective task proficiency (FM 7-0)

Abbreviation	*Description*	*Rate of proficiency*
T	Fully trained	Complete task proficiency
P	Practiced	Basic task proficiency
U	Untrained	Cannot perform the task

D-11. Creative solutions such as urban terrain walks, municipality visits, and mass transit navigation will increase Soldier/Marine and leader understanding of the environment. Additionally reading urban operation oriented material and leader development programs offer historical, critical, and creative thinking opportunities. For example, *An Attack on Duffer's Downtown* offers situational vignettes designed for junior officers and noncommissioned officers. These site visits will increase awareness of challenges dense urban terrain presents. This increased understanding will provide insight of what aspects of dense urban terrain can be effectively simulated, emulated, and resourced for home-station training and what needs to be trained at a training center.

D-12. Other Service locations well suited to simulate the multi-domain aspects can be leveraged to provide different training environments. Commanders should seek to provide realistic training at home station and develop environments that force units to conduct cross-domain operations. Home-station training requirements and objectives should be distributed across the force based on lessons learned from previous CTC rotations that incorporated dense urban terrain and its train-up. These actions will lead to the development of new TTPs and SOPs for training towards dense urban terrain. The preparation will need to incorporate a blend of live, virtual, gaming, and constructive dense urban terrain opportunities into home station training as a means to elevate awareness and understanding. This is not a departure from a focus on the decisive-action training environment, but simply a measure of adjusting conditions.

D-13. Constructive simulations are the logical choice for dense urban terrain training for the brigade-to-corps level. The Mission Command Training Program can focus division and corps warfighter exercises on dense urban terrain scenarios to improve operations in and understanding of the dense urban terrain OE. At brigade and below, leveraging virtual and synthetic training capabilities will support training of platoon maneuver operations in the complex OE, especially subsurface, surface, cyber, and human-terrain, giving leaders relatively low-cost methods to sustain proficiency. The enhanced interactive simulations can support tactical training and mission rehearsal in multiple environments.

D-14. As the Army builds capacity and capabilities to operate in a dense urban terrain environment, increasing scenario complexity through incorporation of multi-domain training in the replicated and simulated dense urban terrain OE, such as enhanced cyberspace electromagnetic activities modernization (both at the CTC and home station facilities), will add extraordinary value. In addition, there should be refinement of the personnel simulating the population (for example, operational force and noncombatants) at the CTC based on the desired amount of friction. The human terrain should be adjusted and manipulated to simulate concentration of the populace at desired times and places to exercise the unit's ability to function. It is critical, especially at the brigade level, to simulate the impacts of extreme population density in the dense urban terrain training environment. Integration of civil authorities into dense urban terrain-specific scenarios for the CTCs will reinforce the need to use the full range of military operations within the OE and the need for nonlethal solutions.

D-15. Increasing collaboration between United States Army Training and Doctrine Command, United States Army Forces Command, and the ASCCs should occur to ensure units are preparing to fulfill ASCC requirements. Achieving understanding of dense urban terrain in the unique areas of operation for the ASCCs is a natural progression for the Army, and this GCC understanding parity is similar for Marine organizations in training. It allows organizations to understand the various challenges as they pertain to a specific environment, essentially giving the ASCCs a situational template to any existing doctrinal templates when it comes to dense urban terrain. This understanding can incorporate and drive planning processes in the future to include dense urban terrain scenarios in warfighter forums and ASCC exercises such as Pacific Pathways and Atlantic Resolve.

D-16. Designated ASCC regionally aligned force units can then be identified for dense urban terrain focused training. This provides regionally assigned forces designated units a broader understanding of the complex

OE they will encounter in their AOR. Europe (Atlantic Resolve and Allied Spirit), the Pacific (Pacific Pathways), Africa (Accord), and Korea (Exercises Ulchi-Freedom Guardian and/Key Resolve) all have EAB exercises that involve partner nations, occur in foreign countries, and are already funded. Through partnership with other nations, these exercises could be tailored to provide exposure to dense urban terrain in the host-nation's country. Through distributed live and constructive training, the full range of military operations could be exercised at EAB in places such as Seoul, Singapore, and Lagos.

LIVE TRAINING

D-17. Company- and battalion-level dynamic and complex training conditions (4 or more OE variables against a hybrid threat) will be the primary executers of operations on the ground. The four dense urban terrain conditions of dense population, high-rise and subterranean structures, extreme or radical geometry of infrastructure, and the high level of connectedness can be trained at home station and at the CTCs to varying degrees. Integrated live training should happen at echelon in conjunction with meeting dry, blank, and live fire training qualification gates. For example, squad battle drills to enter and clear rooms or buildings could follow individual and crew training for squad live fire. Similarly, platoon training at a CACTF to secure multiple streets and buildings could follow after platoon live fire training gates are achieved. Units can add complexity of integrating further warfighting function (fires, sustainment, mobility) tasks using battalion and brigade staffs to plan and synchronize training events.

D-18. This training can occur in a modular fashion in which only one of the dense urban terrain conditions is trained on, or all four can be trained simultaneously at a CTC. The four dense urban terrain conditions can be directly translated to the operational variables of PMESII-PT. The social (dense population), information (dense population, connectedness), infrastructure (radical differences), and physical environment (high-rises) operational variables all have a direct linkage to the four dense urban terrain conditions. These conditions can be applied to the various mission variables of METT-TC/METT-T and operational variables of PMESII-PT, and can be executed in a live environment at home station and at the CTCs. Most importantly, the four dense urban terrain conditions can be scaled in complexity to the brigade and EAB level.

SYNTHETIC TRAINING ENVIRONMENT

D-19. The Synthetic Training Environment is the Army's future training environment which provides a single, converged, semi-immersive (non-platform based), fully immersive (reconfigurable platform based), and constructive collective training environment to enable Army leader development and readiness. This cloud-based capability will enable training at the point of need with a reduced local or distributed exercise development and support footprint. The Synthetic Training Environment will use emerging technologies in the seamless application of computer-enabled digital representations of the complex OE, including dense urban terrain. The Synthetic Training Environment enables forces, from squad to brigade combat teams and Functional/Multifunctional Brigades to Echelons above Brigades, to train as they will fight. The Synthetic Training Environment will provide a dynamic representation of the operational (PMESII-PT) and mission (METT-TC/METT-T) variables in the land, air, sea, space, and cyberspace domains and integrate human, information, and physical dimensions to simulate the effects of the four dense urban terrain conditions.

D-20. The Synthetic Training Environment will support realistic and challenging training accessible at home station, in training institutions, at CTCs and while deployed. The Synthetic Training Environment will allow for echeloned simultaneous training from various locations focused on the leaders and staffs from brigade to corps. The capability will leverage modern and emerging technologies, to support training needs ranging from squad battle drills to a commander's staff exercising C2. The Synthetic Training Environment will represent a global synthetic OE that allows the executing unit to execute training tasks within the dense urban terrain OE. As such, developing an understanding of dense urban terrain OE conditions and their effects on military operations is necessary to support development of the Synthetic Training Environment capabilities.

LIVE AND SYNTHETIC TRAINING COMBINED

D-21. Brigade and above dynamic and complex training conditions (all OE variables and a hybrid threat) can be replicated when live and synthetic training aspects are combined (see table D-2 on page D-8 through D-9). When possible, live training in the dense urban terrain environment can and should occur at the brigade level, however the necessity to meet training requirements in the four dense urban terrain conditions may not

require a massive facility out build. Facilities at the National Training Center and USMC's 29 Palms may not need more buildings, but rather repurposing portions of existing urban infrastructure into shanty towns and building a few significant high rises between 7 to 10 stories. Generally, a high-rise structure is one that extends higher than the maximum reach of available fire-fighting equipment. Adding modern instrumentation and a communications infrastructure can increase the realism.

D-22. Additionally, professional role players who are specifically focused on events in portions of the environment at the right time will provide realism to the training. This could include massing populations within three to four blocks, or in vicinity of a high-rise building. This will not require a bigger city training environment but will create dilemmas that are more specific for units, commanders, and staffs that would need to be addressed while operating in dense urban terrain. Any high-rise building of 10 stories or higher adds specific tactical dilemmas that are similar in nature to those seen in Army mountain operations and subterranean operations. Examples of dilemmas include the physical strain on the unit, weapons effects, freedom of maneuver, and synchronization of warfighting functions. Incorporation of shanty towns also has dilemmas for weapons effects, vehicle freedom of maneuver, and unknown impacts of collateral damage. Truly understanding how vehicles maneuver in dense urban terrain can be achieved by repurposing aspects of existing urban training areas. Adding rubble that limits freedom of movement within the dense urban terrain training area and a simultaneous displaced personnel problem external to the dense urban terrain training area further compounds the dilemmas of dense urban terrain as the problem of people density may not be within the confines of the city at all. At the brigade level, the four dense urban terrain conditions of dense population, high-rise structures and subterranean, extreme/radical geometry of infrastructure, and the high level of connectedness can be translated with operational variable framework. Portions of training involving these variables will be executed in a live environment and some will be executed in a constructive and future synthetic environment wrap around.

D-23. In order for tactical units to properly employ METT-TC/METT-T, units need to use PMESII-PT to provide a more complete picture of the environment. Political, social, infrastructure, and the physical environment all encompass the four dense urban terrain conditions and can be trained in a live environment. The military, economic, information, and time variables can be replicated at varying degrees in both the live and synthetic environment. These conditions can be applied to the various mission variables of METT-TC/METT-T, and can be executed in a live environment at CTC (for brigades) and in the constructive or future synthetic environment for EAB.

Table D-2. Urban training: Leaders guide to objective assessment of training

Echelon	*Dynamic and complex*	*Dense urban terrain conditions at echelon*
Company and battalion	Must include four or more operational environment considerations that include a hybrid threat, various types of terrain, time restrictions, and social (population, cultural, and language) implications. Additional variables may include information (media, population perception), infrastructure (bridges, electricity, roads, urban area), or economic (local vendors, contractual, and supply) implications.	**Dense population** Massing of population on forces during tactical operations. Multiple competing cultures/factions engaging with junior leaders. Language proficiency.
		High-rise structures /subterranean Practical troop-to-task dilemmas, fire and maneuver, mobility, sustainment limitations in constrained space, warfighting functions support to maneuver unit challenges. Battle tracking and mission command complexity.
		Extreme/radical infrastructure APOD's and SPOD's security for blue forces, considerations of changing of first world infrastructure (roads, traffic laws, modern construction), to third world shanty towns within blocks of each other.
		High level of connectedness Immediate population messaging by blue/red/green elements via social media radically shifts population perception. Tribal or ethnic connections attempt to leverage blue forces against other population groups. Difficulty in visualizing and understanding the environment that exists in cyberspace (population sentiment).

Table D-2. Urban training: Leaders guide to objective assessment of training (continued)

Echelon	Dynamic and complex	Dense urban terrain conditions at echelon
Brigade and above	A replicated regular, conventional or hybrid threat BDE or division-size OPFOR, with near-peer enablers that should include cyberspace, degraded space environment, EW, advanced ISR, integrated air defense, counter and precision fires, SOF, CBRN considerations, information warfare and air threats. All operational variables must be present to various degrees to stimulate responses for key training objectives.	**Dense population** Masses of the population affected by terrorist acts and masses of the population affected by failing city systems (electric, water, garbage) add humanitarian assistance dilemma's to blue forces during operations.
		High-rise structures /subterranean Complex defenses in high-rises. Freedom of movement in subterranean locations exacerbate troop to tasks. Difficulty in Utilization of joint capabilities and cross domain assets.
		Extreme/radical infrastructure A2AD dilemmas in entering. Competing airspace with red/blue/green UASs. Logistic dilemmas for blue forces and population dispersed through dense urban terrain over time.
		High level of connectedness Hostile elements of the population leverage external support from near-peers through information operations. Political pressure placed on the United States due to commanders' decisions on the ground in real time due to media.

A2AD	air defense and antiaccess area denial	ISR	intelligence, surveillance, and reconnaissance
APOD	aerial port of debarkation	OPFOR	
BDE	brigade	SPOD	seaport of debarkation
CBRN	chemical, biological, radiological, and nuclear	SOF	special operations forces
EW	electromagnetic warfare	UAS	unmanned aircraft system

ADDITIONAL TRAINING CONSIDERATIONS

D-24. The dense urban terrain training strategy does not address training in littoral zones that are common to dense urban terrain throughout the world, due to the lack of training facilities in littoral environments. However, littoral training may ultimately be addressed in the constructive training environment.

D-25. It is likely that the growth of dense urban terrain will increase disproportionately in slums/shanty towns rather than city cores. This strategy does not address dealing with disorder within a dense population that exists in underdeveloped portions of the cities. Operations within the slums should include a SWEAT-MSO analysis as part of the nonlethal fires operations (civil affairs and IO/OIE). These tasks include traditional civil affairs and IO/OIE, but will be synchronized with operations at the brigade and higher level. Commitment to training on how to operate in these areas is required given that slums are often home to

alternatively governed areas and can be urban safe havens for insurgency. Additionally, the very likely challenge of mass migration, both from and to, a large urban area is one that could consume military forces due to the sheer volume of the population and detract from the manpower required to operate in dense urban terrain. This training strategy lacks an approach to address partnerships within the whole-of-government, which includes the interagency, NGOs, intergovernmental organizations, and more. Specific training within the human terrain is crucial to understanding and should include—

- Appreciating interconnectedness of the population (emerging, such as social media, and traditional, such as tribal ties).
- Operating by/with/through host-nation governments (security force assistance).
- Dealing with the authorities of alternatively governed spaces.
- Understanding how violent extremist organizations and criminal organizations leverage the population.

D-26. Emerging technology, including robotic and autonomous systems and big data analytics, is not considered in this training strategy. Applicability of advanced technology to the dense urban terrain OE has been partially addressed by others, including the Joint Concept for Robotic and Autonomous Systems, which contains urban irregular warfare vignettes with both Joint Force and adversary use of robotic and autonomous systems. Further analysis should be conducted to examine the use of emerging technology in the dense urban terrain OE. Additional online training is available through JKO's J3OP-U.S.120, Joint UO for the Joint Force Commanders and Staff Course (https://jko.jten.mil/ – 10 hours).

D-27. The strategy recognizes the varying degree of complexities required at the different echelons ranging from squad to brigade. It does not address the tactical challenges in detail, but through analysis, it has identified the need for a holistic review of units how train for tactical UO at the brigade and below level to meet the four conditions of dense urban terrain.

D-28. The below are all planning factors that will assist units during operations but would require specific training at the battalion and below level in order to facilitate successful operations:

- Time-distance analysis for platoons moving vertically.
- Troop-to-task and enabler ratios for technologically advanced city cores.
- Vehicular capabilities and limitations.
- Understanding of standoff for tactical weapons systems.
- Weapons effects on varied construction.
- Command and control procedures in subterranean environments.
- Logistics considerations to include changes in consumption rates, assured power, vehicle maintenance requirements and field support representative challenges.

D-29. Visualization tools also need to be developed for cross-domain complexity (e.g., a common operating picture that accounts for cyberspace, social media, UAS, and electromagnetic warfare integrated into combined arms maneuver). If an assessment of the above options does not happen, there is risk of this strategy not accounting for critical, but unknown, tactical challenges.

D-30. This training strategy is not comprehensive and it will require commanders to develop creative solutions and leverage soldiers who have lived or been raised in dense urban areas. The value of immersion in the environment cannot be understated. Insight gleaned through immersion will allow commanders, leaders, and soldiers to fully understand the complexity and flows that allow a city to function. This understanding will provide units an increased ability to influence portions of a city without physical occupation.

D-31. In addition to official Army/Marine sites—such as the Center for Army Lessons Learned (https://usacac.army.mil/organizations/mccoe/call), and Marine Corps Center for Lessons Learned (https://www.tecom.marines.mil/Units/Divisions/Policy-and-Standards-Division/Marine-Corps-Center-for-Lessons-Learned/)—commanders can create unit-level systems to enable units to share lessons learned and share tactics with other units even in the midst of an operation. This system may be technology based, procedural, or both. For example, during OIF, the 1st Cavalry Division developed an effective web-based knowledge network that allowed it to actively capture and share lessons learned among subordinate units specific to their area of interest. See ATP 6-01.1 for effective techniques for knowledge management.

Appendix E
Combined and Partnered Urban Operations

This appendix describes UO with partner forces. The appendix details integration of objective training conditions that are needed to facilitate integrated, progressive, realistic training environments, and highlights unique aspects of training for UO in dense urban terrain .

E-1. In today's complex operational environment, U.S. Army and Marine forces will rarely conduct operations by themselves. While they may have singularly Army or Marine organization, personnel and equipment at tactical levels, partner cooperation, and coordination is usually present at the operational and strategic levels surrounding any urban operation. Army commanders create and sustain situational understanding through collaborative planning, integration and training within their organization and with unified action partners to facilitate unity of effort. They provide a clear commander's intent and use mission orders to assign tasks, allocate resources, and issue broad guidance. *Combined arms* are the synchronized and simultaneous application of arms to achieve an effect greater than if each element was used separately or sequentially (ADP 3-0). Like unilateral combined arms, U.S. forces often conduct urban warfare as part of a larger partnered and joint force or at the request of a host nation.

E-2. In limited contingency operation competition or crisis settings where combat authorities stem from the requested support of the host nation, often partnered planning will require close development of relationships and coordination across global time zones and multiple language barriers. While NATO, America, Britain, Canada and New Zealand (known as ABCANZ) standardization agreements and doctrine can be helpful, unit headquarters and staffs must be familiar with them as a starting point to understanding how a partner will fight, along with their equivalent DOTMLPF-P construct. Specific to UO are Standardization Agreements (STANAGs) 6509 and 2593 available at the NATO Standardization Office website (https://nso.nato.int/nso/). Partner nations and their security forces will likely also have operations security and classification or security of information concerns, just as U.S. forces will. Key to sharing information is building mutual trust, and close echeloned parity across deliberate and purpose-built commander and staff relationships which will allow synchronization of operations without placing U.S. or partners in a position of risk to their forces or to their mission. Study and practice through training of these materials along with multinational exercises can facilitate a basis of understanding for what organizational integration points may exist. As with any operation, prior detailed rehearsal before an urban operation is key.

PLANNING

E-3. The theater army, on behalf of the Army, is responsible for support functions in all theaters as designated by the GCC or higher. In this function, whether deploying assisted to a limited contingency related UO or to an opposed A2AD environment, the theater army in coordination with the JFC will need to plan for and coordinate with partner forces or government agencies. Examples include establishing either status-of force agreements or deployment related JRSOI sustainment-related acquisition and cross-servicing agreements. Further, beginning with the end state in mind, these lines of effort should feasibly extend to past joint phase four or five, and consider the return to competition peace-term reconstruction or governance reestablishment aspects. The Joint Operation Planning and Execution System (known as JOPES) can help set the large logistic conditions in time and space when properly synchronized with the operations time-phased force deployment list. The supporting requirements the theater army provides, and that may receive support from a partner nation (or give it to them) as part of Army support to other Services can include—

- Missile defense.
- Fire support.
- Base defense.

- Transportation.
- Fuel distribution.
- General engineering.
- Intra-theater medical evacuation.
- Logistics management.
- Communications.
- CBRN defense.
- Explosive ordnance disposal.

E-4. As U.S. forces will usually not seek to remain as an occupier of a defeated force's land area, partner and host nation planning for the repair, replacement, or reestablishment of governance and economy is key. This will predominantly occur in major cities as part of urban stability operations. While the other operational variables are important, they typically cannot function without the later along with strong, continuous security. The basic goal after combat operations is to return the populace to a state of relative and stable peace as soon as possible, favorable to U.S. and partner interests. After careful assessments, UO partner plans may include options to either re-empower existing, trusted HNSF, or to disband, rearm, and reorganize security forces favorable to partners and host nation after limited contingency or large-scale combat. Partnered UO must also acknowledge that the combined force will not only be fighting with common tactical techniques, but that the combined force will also be required to implement both governments' policy directives and objectives. While other U.S. government, NGO, or civilian agencies can assist in this regard once stable security has been reestablished, the security hand over to transition forces should remain the purview of the joint force or task force commander.

INTEGRATION AND EXECUTION

E-5. As with unilateral U.S. urban operations, setting conditions on the outside of the city is often as important as being able to conduct rapid, lethal combat to defeat the enemy within. As partner plans are made, staffs carefully analyze friendly force strengths and weaknesses within their respective formations and seek to fill any of those operational gaps with trained personnel, organizations, or equipment that can strengthen or synergize the total force across multiple domains and dimensions. Regionally aligned forces and relationships help facilitate integration and execution, building relationships and knowledge over time. This may include using or developing information systems sharing hardware or software, using cultural or language subject matter experts in particularly beneficial urban areas, or distributing task organization to ensure comprehensively capable combined arms teams. Another basic instance is one force's armor battalion with another forces' infantry or other combat arms branch or some suitable combination subject to the needs of the mission or the threat.

E-6. As plans are finalized in operations or training, true integration as the last stage of JRSOI when combat units, commanders and staffs are able to arrive on the ground and begin preparation and rehearsal for the UO mission. In limited contingency operations, U.S. and partnered forces may have the advantage of time and exterior lines to the city, but should be prepared for counter attacks or breakout attempts. In large-scale combat operations involving urban areas, the scale of forces used may be comparatively large to a capable irregular threat within the city. However, large-scale combat against a peer threat should account for necessary UO to occupy, seize, or destroy cities that contain aerial or sea based ports of debarkation. In this case, U.S. forces may be comparatively smaller to land based partner nations not requiring expeditionary deployment. These forces may be initially under the command of a partner nation joint force commander until they can better augment joint force land component commander forces.

E-7. While U.S. or partner formations at the platoon, company, or battalion levels will often remain organically pure, partners or their capabilities may be attached to the task-organized teams. Partner integration often occurs at the brigade and regiment level, but coordination is conducted at echelons above brigade where most partner nation integration may occur at the division or corps operational level. These staffs should be best functionally organized and equipped to deal with UO complexity. This may require acquiring significant equipment not found in organic U.S. formation modified tables of organization and equipment to facilitate interoperability. Tactical integration of communication assets, providing clear delineation of roles and responsibilities, and distinguishing objectives and fire coordination measures must

occur down to lowest tactical levels. Further integration preparation includes providing liaison officers, and other C2 outlets. These personnel should interface within partnered staff access to HNSF headquarters, have access to essential service providers (SWEAT-MSO, fire, EMS, police) and governance organizations. Access to host-nation media or major companies or corporations is also beneficial to stability.

E-8. Finally, once plans are made, rehearsed, and optimal partnered combined arms teams are built, COP understanding for current operations, future operations, and plans must be synchronized with the joint force commander's concept and within Army/Marine Corps staffs at echelons above brigade. This likely will entail units creating mutual liaison space, having regular coordination points, and procedures for sharing of products throughout the commanding headquarters' joint targeting cycle and battle rhythm.

TRAINING

E-9. U.S. forces preparing for partnered operations may have the opportunity at home station to integrate with visiting leaders and units and conduct rehearsals, but more likely, such opportunity will exist with brigade and above units that conduct CTC exercises with partner forces. In any case, U.S. units must carefully assess the training proficiency level of their own and partner nation troops, units, staffs, and commanders. Lack of training or preparation found for urban tasks may require the delay of operations to retrain unilaterally or in an integrated fashion until commanders are confident that their units are proficient (see appendix D).

E-10. Training for host-nation or partner forces can include supporting foreign internal defense to bolster indigenous forces, security force cooperation, or security force assistance in support of reassembling a viable security force from a defeated enemy. In addition to training for security, these partner-training plans should consider dealing with cascading contingency effects that result from military operations in cities. For example, scenarios could include COAs that are designed to deal with or prevent urban events such as destruction of key sewage, water, power, trash, or health infrastructure that results in an epidemic among troops and populace, further exacerbated by a lack of people to conduct agricultural harvesting or economic production that lends to starvation effects. Force health protection is essential in this situation.

E-11. Training for dealing with a civilian populace should include such topics as found in JP 3-06 such as civil-military operations; planning, preparation, and execution of MGO; populace and resource control; health support to civilians; logistics support to civilians and civil agencies; security and protection of civil agencies; and foreign humanitarian assistance. Forward postured forces can plan exercise training design around partnered defense of host-nation cities ranging from table top exercises, to tactical exercises without troops. Such planning and coordination can help develop partner relationships, serve as the basis for planning, and greatly enhance personnel and equipment interoperability. Additionally, the U.S. Army Corps of Engineers can lead urban search and rescue training or provide task forces to units when coordinated for.

This page intentionally left blank.

Source Notes

This division lists sources by page number. Where material appears in a paragraph, it lists both the page number followed by the paragraph number. All websites accessed 21 September 2021.

Chapter 1

1-1 "If war is about politics…"; General Mark Milley, quoted in Matthew Cox, "Chief: Army Will Need Smaller Units for Megacity Combat," Military.com, 21 March 2017, https://www.military.com/daily-news/2017/03/21/chief-army-will-need-smaller-units-for-megacity-combat.html#:~:text=Chief%3A%20Army%20Will%20Need%20Smaller%20Units%20for%20Megacity,future%20units%20to%20resemble%20today%27s%20special%20operations%20forces.

1-4 Offensive Urban Operations Enable Follow-through and Stability Operations…Vignette adapted from David Hunter-Chester, "The Particular Circumstances of Time and Place, Why the Occupation of Japan Succeeded and the Occupation of Iraq Failed," *Military Review* (May–June 2016).

1-9 "Men come together…": Aristotle, quoted in Spiller, *Sharp Corners: Urban Operations at Century's End* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2001), 11.

1-12 "Following WWII, U.S. Army forces engaged…": Sam Fuller, *The US Army and Large Cities Prior to the Global War on Terror* (monograph, Fort Leavenworth, KS: Command and General Staff College Press, 2013), 4.

1-12 "…historical urban battles…"; Roger J. Spiller, *Sharp Corners: Urban Operations at Century's End* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2001), 38–41.

1-22 "From Demographia…"; *Demographia World Urban Areas*, 17th Annual Edition (report, Belleville, IL: Demographia, June 2021), 3, http://demographia.com/db-worldua.pdf.

1-16 Table 1-2. "OIF, Control of Ramadi, 2006." Louis A. DiMarco, *Concrete Hell: Urban Warfare from Stalingrad to Iraq* (Oxford: Osprey Publishing, 2012), 189–210.

Chapter 2

2-1 "The art of war…"; General Ullysses S. Grant. *Selected Quotations: U.S. Military Leaders.* 15 (Washington, DC: Office of the Chief of Military History, 3 February 1964), https://history.army.mil/topics/quotes/Selected_Quotations_US_Military_Leaders.pdf.

2-3 "Since men live…": Sir Julian S. Corbett. *Some Principles of Maritime Strategy* (Annapolis, MD: Naval Institute Press, 1988), 16.

2-3 "For example, in WWII the German Luftwaffe…"; Spiller, *Sharp Corners: Urban Operations at Century's End*, 54.

2-3 "In another example, shelling and bombing of Tokyo …"; Spiller, *Sharp Corners*, 56.

2-5 "For example, Islamic State chose Mosul's dense urban terrain …" Mosul Study Group: What the Battle for Mosul Teaches the Force. September 2017. Asymmetric Warfare Group. Center for Army Lessons Learned, No. 17-24. Fort Leavenworth, KS. https://usacac.army.mil/organizations/mccoe/call. Common access card required.

2-8 "Singapore's social media…": Charles Knight and Katia Theodorakis, "The Marawi Crisis—Urban Conflict and Information Operations" (report, Barton Australia: Australian Strategic Policy Institute, July 2019), https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2019-

07/SR%20141%20The%20Marawi%20crisis.pdf?VersionId=YzEpTfa5fthzq5DiDuORsFFRYcJZGoz5.

2-9 Tactical Urban Operations Sequencing (paragraphs 2-27 to 2-35). Paraphrased from Michael T. Chychota, "Large-Scale Combat Operations in Urban Terrain," chap. 18 in *Large-Scale Combat Operations: The Division Fight*, ed. Dennis S. Burkett (Fort Leavenworth, KS: Command and General Staff College Press, 2019).

2-10 Figure 2-2. General settings of urban operation tactical sequencing. Figure created by author. Created from "Large-Scale Combat Operations in Urban Terrain," chap. 18 in *Large-Scale Combat Operations: The Division Fight*.

2-11 **'Golden Bridge' Shaping Operations. Vignette adapted from** Dodge Billingsley and Lester Grau, *Fangs of the Lone Wolf: Chechen Tactics in the Russian-Chechen Wars 1994–2009* (Fort Leavenworth, KS: Foreign Military Studies Office, 2012), 47.

2-11 **'Golden Wall' Shaping Operations. Vignette adapted from** Gian Gentile, David E. Johnson, Lisa Saum-Manning, Raphael S. Cohen, Shara Williams, Carrie Lee, Michael Shurkin, Brenna Allen, Sarah Soliman, and James L. Doty III, *Reimagining the Character of Urban Operations for the U.S. Army: How the Past Can Inform the Present and Future* (Santa Monica, CA: Rand Corporation, 2017), 48–57, www.rand.org/pubs/research_reports/RR1602.html.

2-11 "In the example that follows—UO in Mosul in 2017…" Mosul Study Group.

2-16 **Joint and Combined Urban Operations. Vignette adapted from** Joel D. Rayburn and Frank K. Sobchak, eds., *The U.S. Army in the Iraq War*; *Vol. I, Invasion, Insurgency, Civil War, 2003–2006* (Carlisle Barracks: Strategic Studies Institute, U.S Army War College Press, January 2019), 344–350.

2-19 "Americans in 1950 rediscovered…": T.R. Fehrenbach, *This Kind of War: The Classic Military History of the Korean War* (Lincoln, NE: University of Nebraska Press, 2013), 275.

2-20 **Operation AL FAJR. Vignette adapted from** Gian Gentile et al, "Reimagining the Character of Urban Operations for the U.S. Army: How the Past Can Inform the Present and Future" (report, Rand Corporation, 2017), 87–91, www.rand.org/pubs/research_reports/RR1602.html.

2-23 "There is still a tendency…": George S. Patton Jr. *The Musicians of Mars*: *A Story of Synchronization for the Company / Team Commander*. Combined Arms Training Activity. (Center for Army Lessons Learned. Fort Leavenworth, KS, June 1990), 4, https://usacac.army.mil/sites/default/files/publications/90-6MoM.pdf.

Chapter 3

3-1 'War plans…', Carl von Clausewitz, *On War*. Edited and translated by Michael Howard and Peter Paret (Princeton University Press, 1976), 579.

3-14 'In combat there is an overriding requirement…' Colonel John G. Pappageorge, "A Relationship Like No Other," *FA Journal* 42 (November/December 1974): 55, https://assets-staging.noviams.com/novi-file-uploads/usfaa/pdfs-and-documents/Field_Artillery_Journals/NOV_DEC_1974_FULL_EDITION.pdf.

3-26 "…ghost front…": James K. Dunivan, "Living with the Dead: Casualties and Consequences in Large-Scale Combat Operations," chap. 14 in *Large-Scale Combat Operations: The Division Fight*, 196.

3-27 "In open terrain…": Russell W. Glenn, "Heavy Matter: Urban Operations' Density of Challenges" (report, Santa Monica, CA: Rand Corporation, 2000), 2–10, https://www.rand.org/pubs/monograph_reports/MR1239.html.

3-28 "Some additional TTP…": Joint UO for the Joint Force Commander and Staff Course (J3OP-U.S.120) or Integration of Lethal and Nonlethal Actions (J3OP-US1157), https://jkodirect.jten.mil.

Chapter 4

4-1 "In war, the only sure defense…"; General George S. Patton, Jr. *Selected Quotations: U.S. Military Leaders* (Washington, DC: Office of the Chief of Military History, 3 February 1964), 56, https://history.army.mil/topics/quotes/Selected_Quotations_US_Military_Leaders.pdf.

4-2 **Aachen**. **Vignette adapted from** *Block by Block: The Challenges of Urban Operations* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2003), 63–85.

4-4 Figure 4-2. Encirclement of Aachen. Charles B. MacDonald, *United States Army in World War II: The European Theater of Operations. The Siegfried Line Campaign* (Washington, DC: U.S. Army Center for Military History, 1993), 282.

4-5 "…infiltration actions by Viet Cong…"; *Block by Block: The Challenges of Urban Operations,* 130.

4-7 **The Operational Context of Urban Operations Brittany Ports—August to September 1944. Vignette adapted from** FM 3-06, *Urban Operations*, October 2006 (obsolete), 7-2; and Lida Mayo, *The Ordnance Department: On Beachhead and Battlefront* CMH Pub10-11 (repr. 1968, Center of Military History, Washington DC, 1991), 262–283, https://history.army.mil/books/wwii/Beachhd_Btlefrnt/ChapterXV.html.

4-9 "Grozny…"; Billingsley and Grau, *Fangs of the Lone Wolf: Chechen Tactics in the Russian-Chechen Wars 1994–2009*, 12.

Chapter 5

5-1 "If we do not learn…"; Clausewitz, *On War*, 181–182.

5-2 **Defense of Bastogne. Vignette Adapted from** Hugh M. Cole, *United States Army In World War II, The European Theater of Operations, The Ardennes: Battle of the Bulge* (Washington, DC: Center of Military History, 1993), https://purl.fdlp.gov/GPO/gpo46222 and http://cgsc.contentdm.oclc.org/utils/getdownloaditem/collection/p4013coll8/id/4068/filename/4078.pdf/mapsto/pdf/type/singleitem.

5-8 **Urban Defense in a Major Operation. Vignette adapted from** FM 3-06, *Urban Operations*, 2003 (obsolete). Earl Ziemke, *Stalingrad to Berlin: The German Defeat in the East* (repr. 1968; Washington, DC: Center of Military History, 2002), 17–75, https://history.army.mil/html/books/030/30-5-1/index.html.

5-19 "What You Need to Know about the Siege of Tobruk." Imperial War Museums website. https://www.iwm.org.uk/history/what-you-need-to-know-about-the-siege-of-tobruk.

5-22 Table 5-1. Typical and urban operations planning force ratios. Adapted from ATP 2-01.3, January 2021, Table B-16.

5-23 Table 5-3. Brigade and below opposed rates of advance. ATP 5-0.2-1, Table D-5. Trevor N. Dupuy, *Numbers, Predictions and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles* (Indianapolis, IN: Bobbs-Merrill, 1979).

5-24 Table 5-4. Division opposed rates of advance. ATP 5-0.2-1, Table D-6. Dupuy, *Numbers, Predictions and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles*.

5-28 "…Ramadi…", 'OIF, Control of Ramadi, 2006,' and Table 1-3. DiMarco, *Concrete Hell: Urban Warfare from Stalingrad to Iraq*, 189–210.

Chapter 6

6-1 'In the philosophy of …'; Hunt, I. L. *American Military Government in Occupied Germany 1918–1920* (Washington, DC: Government Printing Office, 1943).

6-1 **Scipio's Noble Deed. Vignette adapted from** Mike Lundy, Richard Creed, Nate Springer, and Scott Pence, "Three Perspectives on Consolidating Gains, *Military Review* (August 2019).

6-8 **Bosnia-Herzegovina. Vignette adapted from** Cody R. Phillips, *Bosnia-Herzegovina: The U.S. Army's Role in Peace Enforcement Operations, 1995–2004* (Center of Military History, 2005), https://history.army.mil/html/books/070/70-97-1/cmhPub_70-97-1.pdf.

6-12 "For example, in WWII, the Supreme Commander for Allied Powers …"; David P. Cavaleri, *Easier Said Than Done: Making the Transition Between Combat Operations and Stability Operations*, The Global War on Terror Series Occasional Paper 7 (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 38–44, https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/cavaleri.pdf.

6-12 "For example, some evidence..."; *Wanat: Combat Action in Afghanistan 2008* (Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College Press, 2010), 5, 49, https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/Wanat.pdf.

6-22 **Civil-Military Boundaries: Los Angeles Riots, 1992. Vignette adapted from** Christopher M. Schnaubelt, "Lessons in Command and Control from the Los Angeles Riots," *Parameters* (Summer 1997): 88–109.

Chapter 7

7-1 'On no account…'; Carl von Clausewitz*, Principles of War*, 1812, quoted in *Dictionary of Military and Naval Quotations*, compiled by Robert Debs Heinl, Jr. (Annapolis, MD: United States Naval Institute, 1988), 19.

7-6 Figure 7-1. Demographia 2021. *Demographia World Urban Areas,* 8, http://demographia.com/db-worldua.pdf .

7-7 'Demographia posits that 80 percent of circumvolving rural land is economically drawn..'. *Demographia World Urban Areas*, 2–3, http://demographia.com/db-worldua.pdf .

7-7 Figure 7-2. Jakarta images from: http://earthobservatory.nasa.gov/IOTD/view.php?id=5693. Slide adapted for use from study by Dr. Russell W. Glenn, TRADOC G2, on 18 May 2020 for Australian National University.

Figure 7-2. Indonesia and Jakarta statistics from World Bank. 2015. East Asia's Changing Urban Landscape: Measuring a Decade of Spatial Growth. Urban Development Series. Washington, DC: World Bank. doi: 10.1596/978-1-4648-0363-5. License: Creative Commons Attribution CC BY 3.0 IGO. http://www.worldbank.org/en/news/feature/2015/01/26/urban-expansion-in-east-asia-indonesia.

Appendix D

D-1 '...the history of war'; Lewis Sorely, *Press On! Selected Works of General Donn A. Starry, Volume 1* (Fort Leavenworth, KS: Combat Studies Institute Press, U.S. Army Combined Arms Center, 2009), 85, https://apps.dtic.mil/dtic/tr/fulltext/u2/a507478.pdf.

D-2 Figure D-1. Modern city complexity. Photo by Staff Sergeant Andrew Lee, U.S. Air Force. Available at https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/January-February-2018/Cyber-is-the-New-Air-Domain-Superiority-in-the-Megacity/.

D-3 "…leader staff rides…"; J.D. Thomason, *Regionally Aligned Forces and Megacities* (monograph. Fort Leavenworth KS: Command and General Staff College, 2015), 45–48.

D-5 'For example, An Attack on Duffer's Downtown…'; Russell W. Glenn, *An Attack on Duffer's Downtown* (Santa Monica, CA: RAND Corporation, 2001), https://www.rand.org/pubs/papers/P8058-1.html.

Glossary

Terms for which ATP 3-06/MCTP 12-10B is the proponent (the authority), are marked with an asterisk (*) in the glossary. For other definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition. Marines refer to USMC Dictionary. This publication contains complete definitions as well as addendums to the joint dictionary definitions.

SECTION I – ACRONYMS AND ABBREVIATIONS

A2	air defense and antiaccess
AD	area denial
ADP	Army doctrine publication
ADRP	Army doctrine reference publication
AO	area of operations
AOR	area of responsibility
ASCC	Army Service combatant command
ASCOPE	Areas, structures, capabilities, organizations, people, and events
ATTP	Army tactics, techniques, and procedures
ATP	Army techniques publication
BCT	brigade combat team
C2	command and control
CAAF	contractors authorized to accompany the force
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirement
CJCSI	Chairman of the joint chiefs of staff instruction
COG	center of gravity
COP	common operational picture
COA	course of action
CTC	combat training center
D3SOE	denied, degraded, and disrupted space operational environment
DA	Department of the Army
DOD	Department of Defense
DODD	Department of Defense Directive
DOS	Department of State
DSCA	defense support of civil authorities
EAB	echelons above brigade
EM	electromagnetic
FM	field manual

FSF	foreign security force
GCC	geographic combatant commander
GPS	Global Positioning System
HNSF	host-nation security forces
HUMINT	human intelligence
IED	improvised explosive device
IO	information operations
IPB	intelligence preparation of the battlefield (Army)/intelligence preparation of the battlespace (Marine Corps)
ISIS	Islamic State in Iraq and al-Sham
ISR	intelligence, surveillance, and reconnaissance
JFC	joint force commander
JIIM	joint, interagency, intergovernmental, and multinational
JP	joint publication
JRSOI	joint reception, staging, onward movement, and integration
JTF	joint task force
LOE	line of effort
LOC	line of communications
LOO	line of operation
MAGTF	Marine air-ground task force
MCIA	Marine Corps Intelligence Activity
MCDP	Marine Corps doctrinal publication
MCO	Marine Corps order
MCPP	Marine Corp planning process
MCRP	Marine Corps reference publication
MCTP	Marine Corps tactical publication
MCWP	Marine Corps warfighting publication
MDMP	military decision making process
MEDEVAC	medical evacuation
METT-T	mission, enemy, terrain and weather, troops and support available—time available
METT-TC	mission, enemy, terrain and weather, troops and support available—time available and civil considerations
MGO	military government operations
mm	millimeter
NATO	North Atlantic Treaty Organization
NGO	nongovernmental organization
OIF	Operation IRAQI FREEDOM
PMESII-PT	political, military, economic, social, information, infrastructure, physical terrain, and time
ROE	rules of engagement
SWEAT-MSO	sewage, water, electricity, academics, trash, medical, safety, other considerations

SOF	special operations forces
SOP	standard operating procedure
TC	training circular
TM	technical manual
TTP	tactics, techniques, and procedures
UO	urban operation
U.S.	United States
USACIDC	United States Army Criminal Investigation Division
USAID	United States Agency for International Development
USC	United States Code
UAS	unmanned aircraft system

SECTION II – TERMS

administrative movement

(Army) A movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy ground interference is anticipated. (ADP 3-90) (Marine Corps) Movement when there is little or no likelihood of enemy contact. (MCWP 3-01)

adversary

An adversary is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged. (JP 3-0)

air domain

The atmosphere, beginning at the Earth's surface, extending to the altitude where its effects upon operations becomes negligible. (JP 3-30)

area defense

A type of defensive operation that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. (ADP 3-90) (Marine Corps) A type of defense in which the bulk of the defending force is disposed in selected tactical localities where the decisive battle is to be fought. Principal reliance is placed on the ability of the forces in the defended localities to maintain their positions and to control the terrain between them. The reserve is used to add depth, to block, or restore the battle position by counterattack. (USMC Dictionary)

area of responsibility

The geographical area associated with a combatant command within which a geographic combatant commander has authority to plan and conduct operations. (JP 1-0)

breach

A synchronized combined arms activity under the control of the maneuver commander conducted to allow maneuver through an obstacle. (ATP 3-90.4/MCTP 3-34A [MCWP 3-17.8])

breakout

An operation conducted by an encircled force to regain freedom of movement or contact with friendly units. (ADP 3-90)

center of gravity

The source of power that provides moral or physical strength, freedom of action, or will to act. (JP 5-0)

clearing

A mobility task that involves the elimination or neutralization of an obstacle that is usually performed by follow-on engineers and is not done under fire. (ATP 3-90.4/MCTP 3-34A [MCWP 3-17.8])

collateral damage

A form of collateral effect that causes unintentional or incidental injury or damage to persons or objects that would not be lawful military targets in the circumstances ruling at the time. (JP 3-60)

combat load

The minimum mission-essential equipment and supplies as determined by the commander responsible for carrying out the mission, required for Soldiers to fight and survive immediate combat operations. (FM 4-40)

combat power

(Army) Combat power is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time (ADP 3-0)

combined arms

The synchronized and simultaneous application of arms to achieve an effect greater than if each element was used separately or sequentially. (ADP 3-0)

command and control

The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. (JP 1) (Marine Corps amplification) The means by which a commander recognizes what needs to be done and sees to it that appropriate actions are taken. Command and control is one of the six warfighting functions. (USMC Dictionary)

command and control warfighting function

The related tasks and a system that enable commanders to synchronize and converge all elements of combat power. (ADP 3-0)

command and control system

(Army) The arrangement of people, processes, networks, and command posts that enable commanders to conduct operations. (ADP 6-0)

consolidate gains

Activities to make enduring any temporary operational success and to set the conditions for a sustainable security environment, allowing for a transition of control to other legitimate authorities. (ADP 3-0)

consolidation

Organizing and strengthening a newly captured position so that it can be used against the enemy. (FM 3-90-1)

constraint

A restriction placed on the command by a higher command. A constraint dictates an action or inaction, thus restricting the freedom of action of a subordinate commander. (FM 6-0)

countermobility operations

Those combined arms activities that use or enhance the effects of natural and manmade obstacles to deny enemy freedom of movement and maneuver. (ATP 3-90.8)

cross-domain fires

Fires executed in one domain to create effects in a different domain. (ADP 3-19)

cyberspace

A global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (JP 3-12)

decisive action

Any action the commander deems fundamental to achieving mission success. (USMC Dictionary)

decisive point

A key terrain, key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an enemy or contribute materially to achieving success. (JP 5-0)

decisive operation

The operation that directly accomplishes the mission. (ADP 3-0) [see also decisive action]

defeat mechanism

A method through which friendly forces accomplish their mission against enemy opposition. (ADP 3-0)

dislocated civilian

A broad term primarily used by the Department of Defense that includes a displaced person, an evacuee, an internally displaced person, a migrant, a refugee, or a stateless person. (JP 3-29)

electromagnetic spectrum operations

Coordinated military actions to exploit, attack, protect, and manage the electromagnetic environment. (JP 3-85)

electromagnetic spectrum management

The operational, engineering, and administrative procedures to plan and coordinate operations within the electromagnetic operational environment. (JP 3-85)

encirclement operations

Operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communication and reinforcement. (ADP 3-90)

enemy

A party identified as hostile against which the use of force is authorized. (ADP 3-0)

fires

The use of weapon systems or other actions to create specific lethal or nonlethal effects on a target. (JP 3-09) (Marine Corps amplification) Those means used to delay, disrupt, degrade, or destroy enemy capabilities, forces, or facilities as well as affect the enemy's will to fight. Fires is one of the six warfighting functions. (USMC Dictionary)

fire support

Fires that directly support land, maritime, amphibious, space, cyberspace, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives. (JP 3-09)

fires warfighting function

The related tasks and systems that create and converge effects in all domains against the adversary or enemy to enable operations across the range of military operations. (ADP 3-0)

force protection

Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. (JP 3-0) (Marine Corps amplification) Actions or efforts used to safeguard own centers of gravity while protecting, concealing, reducing, or eliminating friendly critical vulnerabilities. Force protection is one of the six warfighting functions. (USMC Dictionary)

friendly

A contact positively identified as a friend using identification, friend or foe and other techniques. (JP 3-01)

hybrid threat

The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting effects. (ADP 3-0)

human intelligence

(Army) The collection by a trained HUMINT collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities. (FM 2-0)

human intelligence operations

Operations that cover a wide range of activities encompassing reconnaissance patrols, aircrew reports and debriefs, debriefing of refugees, interrogations of prisoners of war, and the conduct of counterintelligence force protection source operations. (USMC Dictionary)

information environment

The aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information. (JP 3-13)

information operations

The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own. (JP 3-13)

intelligence

(joint) The product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. (JP 2-0) (Marine Corps amplification) Knowledge about the enemy or the surrounding environment needed to support decision-making. Intelligence is one of the six warfighting functions. (USMC Dictionary)

intelligence warfighting function

The related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment. (ADP 3-0)

key terrain

Any locality, or area, the seizure or retention of which affords a marked advantage to either combatant. (JP 2-01.3)

land domain

The area of the Earth's surface ending at the high water mark and overlapping with the maritime domain in the landward segment of the littorals. (JP 3-31)

landpower

The ability—by threat, force, or occupation—to gain, sustain, and exploit control over land, resources, and people. (ADP 3-0)

large-scale combat operations

Extensive joint combat operations in terms of scope and size of forces committed, conducted as a campaign aimed at achieving operational and strategic objectives. (ADP 3-0)

large-scale ground combat operations

Sustained combat operations involving multiple corps and divisions. (ADP 3-0)

limitation

An action required or prohibited by higher authority, such as a constraint or a restraint, and other restrictions that limit the commander's freedom of action, such as diplomatic agreements, rules of engagement, political and economic conditions in affected countries, and host nation issues. (JP 5-0)

line of operation

A line that defines the interior or exterior orientation of the force in relation to the enemy or that connects actions on nodes and/or decisive points related in time and space to an objective(s). (JP 5-0)

littoral

(joint) Comprises two segments of operational environment: 1. Seaward: the area from the open ocean to the shore, which must be controlled to support operations ashore. 2. Landward: the area inland from the shore that can be supported and defended directly from the sea. (JP 2-01.3) (Marine Corps amplification) A zone of military operations along a coastline, consisting of the seaward approaches from the open ocean to the shore, which must be controlled to support operations ashore, as well as the landward approaches to the shore that can be supported and defended directly from the sea. (USMC Dictionary)

lodgment

A designated area in a hostile or potentially hostile operational area that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations. (JP 3-18)

logistics

(DOD) Planning and executing the movement and support of forces. (JP 4-0) (Marine Corps amplification) All activities required to move and sustain military forces. Logistics is one of the six warfighting functions. (USMC Dictionary)

maneuver

(joint) Employment of forces in the operational area, through movement in combination with fires and information, to achieve a position of advantage in respect to the enemy. (JP 3-0) (Marine Corps amplification) The movement of forces for the purpose of gaining an advantage over the enemy. Maneuver is one of the six warfighting functions. (USMC Dictionary)

maritime domain

The oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals. (JP 3-32)

military operations on urbanized terrain

all military actions that are planned and conducted on a topographical complex and its adjacent natural terrain where manmade construction is the dominant feature. It includes combat in cities, which is that portion of military operations on urbanized terrain involving house-to-house and street-by-street fighting in towns and cities. (USMC Dictionary)

mission command

(DOD) The conduct of military operations through decentralized execution based upon mission-type-orders. (JP3-31). (Army) The Army's approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation. (ADP 6-0)

mission orders

Directives that emphasize to subordinates the results to be attained, not how they are to achieve them. (ADP 6-0)

mobile defense

A type of defensive operation that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force. (ADP 3-90) (Marine Corps) Defense of an area or position in which maneuver is used with organization of fire and utilization of terrain to seize the initiative from the enemy. (USMC Dictionary)

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. (ADP 3-0)

multi-domain fires

Fires that converge effects from two or more domains against a target. (ADP 3-19)

neutral

Is, in combat and combat support operations, an identity applied to a track whose characteristics, behavior, origin, or nationality indicate that it is neither supporting nor opposing friendly forces. (JP 3-0)

obstacle

Any natural or man-made obstruction designed or employed to disrupt, fix, turn or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force. (JP 3-15)

obstacle belt

A brigade-level command and control measure, normally given graphically, to show where within an obstacle zone the ground tactical commander plans to limit friendly obstacle employment and focus the defense. (JP 3-15)

obstacle zone

A division-level command and control measure, normally done graphically, to designate specific land areas where lower echelons are allowed to employ tactical obstacles. (JP 3-15)

operations in depth

The simultaneous application of combat power throughout an area of operations. (ADP 3-90)

passage of lines

An operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy. (JP 3-18)

protection warfighting function

The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. (ADP 3-0)

relief in place

An operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit. (JP 3-07.3)

reconnaissance

A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. (JP 2-0)

reconnaissance objective

A terrain feature, geographic area, enemy force, adversary, or other mission or operational variable, about which the commander wants to obtain additional information. (ADP 3-90)

risk

The probability and severity driven chance of loss, caused by threat or other hazards. (ATP 5-19)

security cooperation

All Department of Defense interactions with foreign security establishments to build security relationships that promote specific United States security interests, develop allied and partner nation military and security capabilities for self-defense and multinational operations, and provide United States forces with peacetime and contingency access to allied and partner nations. (JP 3-20)

security operations

Those operations performed by commanders to provide early and accurate warning of enemy operations, to provide the forces being protected with time and maneuver space within which to react

to the enemy, and to develop the situation to allow commanders to effectively use their protected forces. (ADP 3-90)

shaping operation

An operation at any echelon that creates and preserves conditions for success of the decisive operation through effects on the enemy, other actors, and the terrain. (ADP 3-0)

space domain

The area surrounding Earth at altitudes of greater than or equal to 100 kilometers above mean sea level. (JP 3-14)

stability mechanism

The primary method through which friendly forces affect civilians in order to attain conditions that support establishing a lasting, stable peace (ADP 3-0)

stability operation

An operation conducted outside the United States in coordination with other instruments of national power to establish or maintain a secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. (ADP 3-0)

sustaining operation

An operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power. (ADP 3-0)

sustainment warfighting function

The related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. (ADP 3-0)

system

A functionally, physically, and/or behaviorally related group of regularly interacting or interdependent elements; that group of elements forming a unified whole. (JP 3-0)

tactics

(Army) The employment, ordered arrangement, and directed actions of forces in relation to each

tactical obstacle

An obstacle employed to disrupt enemy formations, to turn them into a desired area, to fix them in a position under direct and indirect fires, or to block enemy penetrations. (JP 3-15)

targeting

The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 3-0)

tempo

The relative speed and rhythm of military operations over time with respect to the enemy. (ADP 3-0/ USMC Dictionary)

threat

Any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. (ADP 3-0)

toxic industrial material

A generic term for toxic, chemical, biological, or radioactive substances in solid, liquid, aerosolized, or gaseous form that may be used, or stored for use, for industrial, commercial, medical, military, or domestic purposes. Also called TIM. (JP 3-11)

troop movement

The movement of Soldiers and units from one place to another by any available means. (ADP 3-90)

***urban operations**

(Army) Operations across the range of military operations planned and conducted on, or against, objectives on a topographical complex and its adjacent natural terrain, where manmade construction or the density of population are the dominant features. Also called UO. (Marine Corps) A military operation conducted where manmade construction and high population density are the dominant feature. (USMC Dictionary)

warfighting function

A group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives. (ADP 3-0)

References

All websites accessed on 24 February 2022.

REQUIRED PUBLICATIONS

These documents must be available to the intended user of this publication.

DOD Dictionary of Military and Associated Terms. May 2022.

FM 1-02.1. *Operational Terms*. 9 March 2021.

FM 1-02.2. *Military Symbols*. 18 May 2022.

Marine Corps Supplement to the Department of Defense Dictionary of Military and Associated Terms (as amended through 10 September 2020). 12 February 2018.

RELATED PUBLICATIONS

These publications are referenced in this publication and contain relevant supplemental information.

JOINT AND DEPARTMENT OF DEFENSE PUBLICATIONS

Unless otherwise indicated, most joint publications are available online: http://www.jcs.mil/Doctrine. Unless otherwise indicated, most Department of Defense issuances are available online: https://www.esd.whs.mil/DD/.

CJCSI 3160.01D, *No-Strike and the Collateral Damage Estimation Methodology*. Washington, DC. 21 May 2021.

DODD 5100.01. *Functions of the Department of Defense and Its Major Components*. Washington, DC. 21 December 2010.

Department of Defense Law of War Manual. June 2015. http://archive.defense.gov/pubs/Law-of-War-Manual-June-2015.pdf.

JP 1. *Doctrine for the Armed Forces of the United States.* 25 March 2013.

JP 2-0. *Joint Intelligence*. 26 May 2022.

JP 2-01.3. *Joint Intelligence Preparation of the Operational Environment*. 21 May 2014.

JP 3-0. *Joint Campaigns and Operations.* 18 June 2022.

JP 3-01. *Countering Air and Missile Threats*. 21 April 2017.

JP 3-06. *Joint Urban Operations.* 20 November 2013.

JP 3-07.3. *Peace Operations.* 1 March 2018.

JP 3-09. *Joint Fire Support*. 10 April 2019.

JP 3-11. *Operations in Chemical, Biological, Radiological, and Nuclear Environments*. 29 October 2018.

JP 3-12. *Cyberspace Operations*. 8 June 2018.

JP 3-13. *Information Operations*. 27 November 2012.

JP 3-14. *Space Operations*. 10 April 2018.

JP 3-15. *Barriers, Obstacles, and Mine Warfare for Joint Operations*. 26 May 2022.

JP 3-18. *Joint Forcible Entry Operations*. 27 June 2018.

JP 3-20. *Security Cooperation*. 23 May 2017.

JP 3-29. *Foreign Humanitarian Assistance*. 14 May 2019.

JP 3-30. *Joint Air Operations*. 25 July 2019

JP 3-31. *Joint Land Operations*. 3 October 2019.
JP 3-32. *Joint Maritime Operations*. 8 June 2018.
JP 3-60. *Joint Targeting*. 28 September 2018.
JP 3-68. *Joint Noncombatant Evacuation Operations*. 26 May 2022.
JP 3-85. *Joint Electromagnetic Spectrum Operations (JEMSO)*. 22 May 2020.
JP 4-0. *Joint Logistics*. 4 February 2019.
JP 5-0. *Joint Planning*. 1 December 2020.

ARMY PUBLICATIONS

Unless otherwise indicated, most Army doctrinal publications and regulations are available online: https://armypubs.army.mil/.

ADP 2-0. *Intelligence*. 31 July 2019.
ADP 3-0. *Operations*. 31 July 2019.
ADP 3-07. *Stability*. 31 July 2019.
ADP 3-19. *Fires*. 31 July 2019.
ADP 3-28. *Defense Support of Civil Authorities*. 31 July 2019.
ADP 3-37. *Protection*. 31 July 2019.
ADP 3-90. *Offense and Defense*. 31 July 2019.
ADP 4-0. *Sustainment*. 31 July 2019.
ADP 5-0. *The Operations Process*. 31 July 2019.
ADP 6-0. *Mission Command: Command and Control of Army Forces*. 31 July 2019.
ADP 7-0. *Training*. 31 July 2019.
AR 381-100. *The Army Human Intelligence (HUMINT) Collection Program* (U). 27 August 2020.
ATP 2-01.3. *Intelligence Preparation of the Battlefield*. 1 March 2019.
ATP 2-19.3. *Corps and Division Intelligence Techniques*. 26 March 2015.
ATP 2-22.82. *Biometrics-Enabled Intelligence (U)*. 2 November 2015.
ATP 3-01.81. *Counter-Unmanned Aircraft System Techniques*. 13 April 2017.
ATP 3-04.1. *Aviation Tactical Employment*. 7 May 2020.
ATP 3-07.5. *Stability Techniques*. 31 August 2012.
ATP 3-13.5. *Soldier and Leader Engagement*. 21 December 2021.
ATP 3-20.15. *Tank Platoon*. 3 July 2019.
ATP 3-21.8. *Infantry Platoon and Squad with Change 1*. 12 April 2016.
ATP 3-21.51. *Subterranean Operations*. 1 November 2019.
ATP 3-34.80. *Geospatial Engineering*. 22 February 2017.
ATP 3-37.15. *Foreign Security Force Threats*. 30 January 2020.
ATP 3-39.20. *Police Intelligence Operations*. 13 May 2019.
ATP 3-39.33. *Crowd Control*. 23 June 2022.
ATP 3-55.4. *Techniques for Information Collection during Operations among Populations*. 5 April 2016.
ATP 3-57.10. *Civil Affairs Support to Populatce and Resources Control.* 6 August 2013.
ATP 3-57.70. *Civil-Military Operations Center*. 5 May 2014.
ATP 3-60. *Targeting*. 7 May 2015.
ATP 3-90.15. *Site Exploitation*. 28 July 2015.
ATP 5-0.2-1. *Staff Reference Guide Volume 1, Unclassified Resources*. 7 December 2020.
ATP 5-19. *Risk Management*. 9 November 2021.

ATP 6-01.1. *Techniques for Effective Knowledge Management*. 6 March 2015.
ATTP 3-06.11. *Combined Arms Operations in Urban Terrain*. 10 June 2011.
FM 1-0. *Human Resources Support*. 25 August 2021.
FM 2-0. *Intelligence*. 6 July 2018.
FM 3-0. *Operations*. 6 October 2017.
FM 3-07. *Stability*. 2 June 2014.
FM 3-09. *Fire Support and Field Artillery Operations*. 30 April 2020.
FM 3-12. *Cyberspace Operations and Electromagnetic Warfare*. 24 August 2021.
FM 3-13. *Information Operations*. 6 December 2016.
FM 3-22. *Army Support to Security Cooperation*. 22 January 2013.
FM 3-34. *Engineer Operations*. 18 December 2020.
FM 3-55. *Information Collection*. 3 May 2013.
FM 3-57. *Civil Affairs Operations*. 28 July 2021.
FM 3-63. *Detainee Operations*. 20 January 2020
FM 3-90-1. *Offense and Defense Volume 1*. 22 March 2013.
FM 3-94. *Armies, Corps, and Division Operations*. 23 July 2021.
FM 4-40. *Quartermaster Operations*. 22 October 2013.
FM 6-0. *Commander and Staff Organization and Operations*. 16 May 2022.
FM 7-0. *Training*. 14 June 2021.
TC 3-22.10. *Sniper (U)*. 7 December 2017. (Common access card required.)
TC 7-100. *Hybrid Threat*. 26 November 2010.
TC 25-8. *Training Ranges*. 2 November 2021.
TC 90-1. *Training for Urban Operations.* 19 May 2008.
TM 3-34.30. *Firefighting*. 23 April 2015.

MARINE CORPS PUBLICATIONS

Marine Corps doctrinal publications are available at https://www.doctrine.usmc.mil/. Marine Corps orders are available at http://www.Marines.mil/News/Publications/MCPEL/.
MCIA 2700-002-03. *Urban Generic Information Requirements Handbook (UGIRH)*. 2003.
MCDP 1. *Warfighting*. 20 June 1997.
MCDP 6. *Command and Control.* 4 October 1996.
MCRP 2-10B.1. *Intelligence Preparation of the Battlefield/Battlespace*. 10 April 2014.
MCRP 3-34.3 (MCWP 3-17.4). *Engineer Reconnaissance.* 1 March 2016.
MCTP 3-02A. *MAGTF Network Engagement Activities. 27 June 2017.*
MCTP 3-10F. *Fire Support Coordination in the Ground Combat Element*. 28 November 2001.
MCWP 3-01. *Offensive and Defensive Tactics*. 20 September 2019.
MCWP 3-03. *Stability Operations.* 16 December 2016.
MCWP 3-31. *Marine Air-Ground Task Force Fires*. 3 June 2011.

MULTI-SERVICE PUBLICATIONS

ATP 2-22.85/MCRP 10-10.F.1/NTTP 3-07.16/AFTTP 3-285. *Multi-Service Tactics, Techniques, and Procedures for Tactical Employment of Biometrics in Support of Operations*. 30 April 2020.
ATP 3-06.1/MCRP 3-20.4/NTTP 3-01.04/AFTTP 3-2.29. *Multi-Service Tactics, Techniques, and Procedures for Aviation Urban Operations*. 22 February 2022.
ATP 3-09.32/MCRP 3-31.6/NTTP 3-09.2/AFTTP 3-2.6. *Multi-Service Tactics, Techniques, and Procedures for the Joint Application of Firepower (JFIRE)*. 18 October 2019.

ATP 3-34.40/MCWP 3-17.7. *General Engineering*. 25 February 2015.

ATP 3-34.81MCWP 3-17.4. *Engineer Reconnaissance*. 1 March 2016.

ATP 3-90.4/MCWP 3-17.8. *Combined Arms Mobility.* 8 March 2016.

ATP 3-90.8/MCTP 3-34B. *Combined Arms Countermobility Operations*. 17 September 2014.

ATP 4-01.45/MCRP 3-40F.7/NTTP 4-01.6/AFTTP 3-2.58. *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations*. 26 March 2021.

FM 6-27/MCTP11-10C. *The Commanders Handbook on the Law of Land Warfare*. 7 August 2019

OTHER PUBLICATIONS

Beckert, Christopher H. *Building a Better Trojan Horse: Emerging Army Roles in Joint Urban Operations*. Monograph. Fort Leavenworth KS: Command and General Staff College, 2015.

Billingsley, Dodge and Grau, Lester. *Fangs of the Lone Wolf: Chechen Tactics in the Russian-Chechen Wars 1994–2009*. Fort Leavenworth, KS: Foreign Military Studies Office, 2012.

Burkett, Dennis S. *Large-Scale Combat Operations: The Division Fight*. Fort Leavenworth, KS: Command and General Staff College Press, 2019.

Cavaleri, David P. *Easier Said Than Done: Making the Transition Between Combat Operations and Stability Operations*, The Global War on Terror Series Occasional Paper 7. Fort Leavenworth, KS: Combat Studies Institute Press, 2005. https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/cavaleri.pdf.

Chiarelli, Peter W. and Michaelis, Patrick R. and Norman, Geoffrey A. "Armor in Urban Terrain: The Critical Enabler." *Armor Magazine*. Fort Knox, KY: U.S. Army Armor Center, March–April 2006.

Clausewitz, Carl von. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton University Press, 1976.

Cole, Hugh M. *United States Army In World War II, The European Theater of Operations, The Ardennes: Battle of the Bulge*. Washington, DC: Center of Military History, 1993. https://purl.fdlp.gov/GPO/gpo46222 and http://cgsc.contentdm.oclc.org/utils/getdownloaditem/collection/p4013coll8/id/4068/filename/4078.pdf/mapsto/pdf/type/singleitem.

Corbett, Julian S. *Some Principles of Maritime Strategy*. Annapolis, MD: Naval Institute Press, 1988.

Demographia World Urban Areas, 17th Annual Edition. Report, Belleville, IL: Demographia, June 2021, http://demographia.com/db-worldua.pdf.

Dupuy, Trevor N. *Numbers, Predictions and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles*. Indianapolis, IN: Bobbs-Merrill, 1979.

Dictionary of Military and Naval Quotations, compiled by Robert Debs Heinl, Jr. Annapolis, MD: United States Naval Institute, 1988.

DiMarco, Louis A. *Concrete Hell: Urban Warfare from Stalingrad to Iraq*. Oxford: Osprey Publishing, 2012.

Evans, David C. and Peattie, Mark R. *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887–1941*. 501–502.

Fehrenbach, T.R., *This Kind of War: The Classic Military History of the Korean War*. Lincoln, NE: University of Nebraska Press, 2013.

Forbes, Christoper S. *In Order to Win, Learn How to Fight: The U.S. Army in Urban Operations*. Monograph. Fort Leavenworth KS: Command and General Staff College, 2015.

Francisco, Jason. *News from the CTC: The Pareto Principle in Combat Operations*. Center for Army Lessons Learned. Fort Leavenworth, KS. 28 June 2019.

Frans, P. B. Osinga. *Science, Strategy and War: The Strategic Theory of John Boyd*. New York: Routledge, 2007.

Fuller, Sam. *The US Army and Large Cities Prior to the Global War on Terror*. Monograph, Fort Leavenworth, KS: Command and General Staff College Press, 2013.

Gentile, Gian, Johnson, David E., Saum-Manning, Lisa, Cohen, Raphael, S., Williams, Shara, Lee, Carrie, Shurkin, Michael, Allen, Brenna, Soliman, Sarah, and Doty III James L. *Reimagining the Character of Urban Operations for the U.S. Army: How the Past Can Inform the Present and Future* (Santa Monica, CA: Rand Corporation, 2017, www.rand.org/pubs/research_reports/RR1602.html.

Glenn, Russell W. *An Attack on Duffer's Downtown*. Santa Monica, CA: RAND Corporation, 2001. https://www.rand.org/pubs/papers/P8058-1.html.

Hunt, I.L. *American Military Government of Occupied Germany, 1918–1920: Report of the Officer in Charge of Civil Affairs, Third Army and American Forces in Germany*. Washington, DC: U.S. Government Printing Office, 1943, vii. Accessed 2 July 2019, https://history.army.mil/html/bookshelves/resmat/interwar_years/american_military_government_of_occupied_germany_1918-1920.pdf.

Hunter-Chester, David. "The Particular Circumstances of Time and Place, Why the Occupation of Japan Succeeded and the Occupation of Iraq Failed," *Military Review* (May–June 2016).

Johnson, David E. *Doing What You Know: The United States and 250 Years of Irregular War*. Washington, DC: Center for Strategic and Budgetary Assessments. 2017.

Lundy, Mike and Creed, Richard, Springer, Nate and Pence, Scott. "Three Perspectives on Consolidating Gains." *Military Review*, August 2019. Fort Leavenworth, KS: Army University Press, 2019. Accessed on 8 January, 2020 at https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2019-OLE/July/Lundy-Three-Perspectives/.

Knight, Charles and Theodorakis, Katia. "The Marawi Crisis—Urban Conflict and Information Operations." Report, Barton Australia: Australian Strategic Policy Institute, July 2019. https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2019-07/SR%20141%20The%20Marawi%20crisis.pdf?VersionId=YzEpTfa5fthzq5DiDuORsFFRYcJZGoz5.

MacDonald, Charles B. *United States Army in World War II: The European Theater of Operations. The Siegfried Line Campaign*. Washington, DC: U.S. Army Center for Military History, 1993.

Mayo, Lida. *The Ordnance Department: On Beachhead and Battlefront* CMH Pub10-11. Repr. 1968, Center of Military History, Washington DC, 1991. https://history.army.mil/books/wwii/Beachhd_Btlefrnt/ChapterXV.html

McGrath, John J. *Boots on the Ground: Troop Density in Contingency Operations*. Fort Leavenworth, KS. Combat Studies Institute. 2006. https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/mcgrath_boots.pdf.

Mosul Study Group: What the Battle for Mosul Teaches the Force. September 2017. Asymmetric Warfare Group. Center for Army Lessons Learned, No. 17-24. Fort Leavenworth, KS. https://usacac.army.mil/organizations/mccoe/call. Common access card required.

Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects.* MFJ Books. 1961.

Pappageorge, John G. "A Relationship Like No Other," *FA Journal* 42 (November/December 1974), https://assets-staging.noviams.com/novi-file-uploads/usfaa/pdfs-and-documents/Field_Artillery_Journals/NOV_DEC_1974_FULL_EDITION.pdf.

Patton Jr. George S. *The Musicians of Mars*: *A Story of Synchronization for the Company / Team Commander*. Combined Arms Training Activity. Center for Army Lessons Learned. Fort Leavenworth, KS. June 1990, https://usacac.army.mil/sites/default/files/publications/90-6MoM.pdf.

Phillips, Cody R. *Bosnia-Herzegovina: The U.S. Army's Role in Peace Enforcement Operations, 1995–2004*. Center of Military History, 2005. https://history.army.mil/html/books/070/70-97-1/cmhPub_70-97-1.pdf.

Plapinger, Samuel. *Urban Warfare in Great Power Competition: Implications and Recommendations for the United States Marine Corps*. Center for Naval Analysis. Arlington, VA. October 2019.

Rayburn, Joel D., and Sobchak, Frank K., eds. *The U.S. Army in the Iraq War*; *Vol. I, Invasion, Insurgency, Civil War, 2003–2006*. Carlisle Barracks: Strategic Studies Institute, U.S Army War College Press, January 2019.

Robertson, William G. and Lawrence A. Yates. *Block by Block: The Challenges of Urban Operations.* Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2003. First published by the Combat Studies Institute Press (Fort Leavenworth).

Schnaubelt, Christopher M. "Lessons in Command and Control from the Los Angeles Riots," *Parameters* (Summer 1997): 88–109.

Selected Quotations: U.S. Military Leaders. Washington, DC: Office of the Chief of Military History, 3 February 1964, https://history.army.mil/topics/quotes/Selected_Quotations_US_Military_Leaders.pdf.

Sorely, Lewis. *Press On! Selected Works of General Donn A. Starry, Volume 1*. Fort Leavenworth, KS: Combat Studies Institute Press, U.S. Army Combined Arms Center, 2009. https://apps.dtic.mil/dtic/tr/fulltext/u2/a507478.pdf.

Spiller, Roger J. *Sharp Corners: Urban Operations at Century's End*. Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2001.

Thomason, J.D. *Regionally Aligned Forces and Megacities*. Monograph. Fort Leavenworth KS: Command and General Staff College, 2015.

U.S. Army Battlebook. Commanding General, United States Army Europe, Senior Leader Staff Ride. The Battle of the Bulge. Bastogne. Tab K, page 1-8. Accessed June 2020. http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll8/id/4068

Wanat: Combat Action in Afghanistan 2008. Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College Press, 2010. https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/Wanat.pdf.

Ziemke, Earl. *Stalingrad to Berlin: The German Defeat in the East*. Repr. 1968; Washington, DC: Center of Military History, 2002. https://history.army.mil/html/books/030/30-5-1/index.html.

NATO AND INTERNATIONAL PUBLICATIONS

Most NATO publications are available at https://nato.int.

STANAG 2593, ED 2. *Education and Training for Urban Operations*. 25 June 2019.

STANAG 6509. *Conduct of Land Tactical Operations in Urban Environments*. 12 May 2022.

UNITED STATES LAW

10 USC. *Armed Forces*.

10 USC 147. *Uniform Code of Military Justice.*

10 USC 2734. *Foreign Claims Act*.

WEBSITES

Center for Army Lessons Learned website. https://usacac.army.mil/organizations/mccoe/call.

http://earthobservatory.nasa.gov/IOTD/view.php?id=5693

Lee, Andrew. U.S. Air Force photo. Available at https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/January-February-2018/Cyber-is-the-New-Air-Domain-Superiority-in-the-Megacity/.

Marine Corps Center for Lessons Learned website. https://www.tecom.marines.mil/Units/Divisions/Policy-and-Standards-Division/Marine-Corps-Center-For-Lessons-Learned/.

Medical course of action tool for casualty estimations. https://www.milsuite.mil/book/docs/DOC-53018.

Milley, Mark. Quoted in Matthew Cox, "Chief: Army Will Need Smaller Units for Megacity Combat." Military.com, 21 March 2017, https://www.military.com/daily-news/2017/03/21/chief-army-

will-need-smaller-units-for-megacity-combat.html#:~:text=Chief%3A%20Army%20Will%20Need%20Smaller%20Units%20for%20Megacity,future%20units%20to%20resemble%20today%27s%20special%20operations%20forces.

New York City Police Department size. https://www1.nyc.gov/site/nypd/about/about-nypd/about-nypd-landing.page.

USAID Field Operations Guide for Disaster Assessment and Response. September 2005. https://scms.usaid.gov/sites/default/files/documents/1866/fog_v4.pdf.

Emergency Response Guidebook. https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/ERG2016.pdf.

Joint UO for the Joint Force Commanders and Staff Course. https://jko.jten.mil/.

Leader's Guide to Objective Assessment of Training Proficiency. https://juniorofficer.army.mil/wp-content/uploads/2017/10/Objective-T-Leaders-Guide.pdf

Post Conflict Reconstruction Essentials Tasks Matrix. https://2001-2009.state.gov/s/crs/rls/52959.htm

U.S. 2010 Census. http://www.census.gov/2010census/popmap/.

U.S. State Department, Bureau of Conflict and Stabilization Operations website. https://2009-2017.state.gov/j/cso/resources/index.htm.

"What You Need to Know about the Siege of Tobruk." Imperial War Museums website. https://www.iwm.org.uk/history/what-you-need-to-know-about-the-siege-of-tobruk.

PRESCRIBED FORMS

This section contains no entries.

REFERENCED FORMS

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate web site at https://armypubs.army.mil/.

DA Form 2028. *Recommended Changes to Publications and Blank Forms*.

This page intentionally left blank.

Index

Entries are by paragraph number.

A–B

air and missile defense, 3-58–3-59

analysis of an urban population, 1-35–1-53,

analysis of urban infrastructure, 1-56–1-86, 4-16
 toxic industrial materials, 1-69

area defense, 5-40–5-41

armor vulnerabilities, 4-20–4-22

attack, 4-47

audacity, 4-11

C

canalization and compartmentalization in urban operations, 3-19–3-20

CBRN incidents, 6-31–6-34

characteristics of defensive operations, *see* defense characteristics

characteristics of stability operations, *see* stability operations characteristics

city demographics, *see* urban population

city design, *see* urban terrain

city layout, 1-29–1-34

see also urban infrastructure

civilians, *see* urban population

COAs for urban operations, 1-43–1-44

collateral damage, 4-16, 4-62

combat engineers, 3-26–3-28
 task organization, 3-28

command and control warfighting function, 3-2
 command posts, 3-7
 commander responsibilities, 3-3, 3-5, 3-6, 3-8, 3-10
 decentralized execution, 3-5
 imagery and information, 3-9–3-10
 protecting communication, 3-11, 3-13–3-16
 urban terrain challenges, 3-3–3-4, 3-9

command posts, in urban operations, 3-7

commander planning considerations, 2-1–2-6, 2-51–2-68, 3-37
 assessment, 4-58–4-118
 for stability operations, 6-45–6-88
 risks unique to UO, 2-40–2-49

commander responsibilities, for command and control, 3-3, 3-5, 3-6, 3-8, 3-10

concentration, 4-10

consolidating in the urban defense, 5-81

consolidating in urban offense, 4-104–4-111

consolidating in urban stability operations, 6-73–6-79

counterattacks, 4-106–4-107, 5-72, 5-80

countermobility, 3-32

course of action development for offensive UO, 4-51–4-118

D

decisive operations for stability, 6-35–6-38

decisive operations/decisive actions for offense, 4-23–4-27

defending encircled, 5-50–5-51

defense characteristics, 5-5
 disruption, 5-14–5-16
 flexibility, 5-22–5-24
 maneuver, 5-20
 mass and concentration, 5-17–5-5-19
 operations in depth, 5-21
 preparation, 5-6–5-10
 security, 5-11–5-13

defense of a linear obstacle, 5-30

defensive battlefield/battlespace, organization of, 5-25
 shaping, 5-27
 sustaining, 5-28

defensive operations, *see* urban defensive operations,

defensive urban operations vignette, B-1–B-5

dense urban terrain, conditions of, D-18
 synthetic training environment, D-19–D-20
 training for, D-2–D-8
 see also urban environments

disrupt, defined, 5-14

E

encirclement operations, 7-46–7-50

enemy forces in urban terrain, 2-10–2-20

engagement in urban defensive operations, 5-73–5-80

engagement in urban stability operations, 6-62–6-72

envelopment, 4-37

exploitation, 4-48–4-49

F

features of urban terrain, 1-10–1-32

fire support in UO, 3-51

firefighting support, 3-104

fires warfighting function, air and missile defense, 3-58–3-59
 commander responsibilities, 3-52, 3-56, 3-63, 3-73
 information operations, 3-60–3-63
 integrating fires, 3-52–3-53
 targeting, 3-54–3-57
 urban limitations, 3-64–3-75

forms of urban defense, 5-29–5-38

frontal assault/frontal attack, 4-42–43

G

general engineering support, 3-102–3-103

gridded reference graphics, 3-10

Entries are by paragraph number.

H

HUMINT, 3-41–3-42

I

inadequate force strength, 2-41–2-42

increased military casualties, 2-44-2-45

infiltration, 4-39

information collection, 3-41–3-50, 4-53–4-57
- biometrics, 3-44–3-46
- police intelligence, 3-47

information networks, 1-7, 1-73–1-80

information technologies, *see* information networks

intelligence preparation of the battlefield, in urban operations, 3-40, 4-53–4-57

intelligence staff, 3-40

intelligence warfighting function, 3-33–3-35
- and commander's critical information requirements, 3-37
- and the intelligence preparation of the battlefield process, 3-40
- and UO challenges, 3-39–3-41
- biometrics, 3-44–3-46
- commander responsibilities, 3-38, 3-43
- in urban stability operations, 3-42, 3-49
- information collection, 3-41–3-50, 4-53–4-57
- police intelligence, 3-47–3-50
- staff responsibilities, 3-38

isolation, 4-67–4-72
- and maneuver, 4-37–4-43
- and transition, 4-80–4-81
- enemy reaction to, 4-76–4-77
- prevention/defeat of, 5-62–5-63

J–K

joint roles in urban operations, 2-2–2-4, 2-24-2-26

L

limited contingency operations, 2-11, 2-26

loss of population support, 2-43

M

military government operations, 1-45–1-47

military police, and stability operations, 3-49
- engagement activities, 3-50
- intelligence collection, 3-47–3-49

mobile defense, 5-42–5-45

mobility, 7-51–7-58

mobility operations, 3-18

movement and maneuver/maneuver warfighting function, 3-17
- and combat engineers, 3-26–3-28
- canalization and compartmentalization, 3-19–3-20
- commander responsibilities, 3-30
- countermobility, 3-32
- in defensive operations, 3-18, 3-32
- in offensive operations, 3-18, 3-32
- mobility operations, 3-18
- night operations, 3-31
- staff responsibilities, 3-17, 3-24
- task organization considerations, 3-24–3-30
- UO vulnerabilities, 3-21–3-23, 3-27

movement to contact, 4-45–4-46

movement vulnerabilities in UO, 3-21–3-23

munitions effect in urban terrain, 1-8–1-9

N

night operations, 3-31

O

offense characteristics, audacity, 4-11
- concentration, 4-10
- minimize collateral damage, 4-16
- surprise, 4-7–4-9
- tempo, 4-12–4-15

offensive operations, *see* urban offensive operations

offensive urban operations vignette, A-1–A-10

operational-level defense considerations, 5-52–5-82

operations in depth, defined, 5-21

P–Q

passage of lines, 7-45

penetration, 4-40–4-41

perimeter defense, 5-31–5-35

planning requirements, for adversary decision making, 2-10–2-20
- for hostile populations, 1-37–1-38
- for risk mitigation, 2-40–2-49
- for stability operations, 6-45–6-88
- for urban defense, 5-52–5-85
- for urban infrastructure, 1-55–1-65
- for urban littorals, 1-25–1-28
- for urban offense, 4-35–4-118
- for urban populations, 1-42–1-53

police intelligence , 3-47–3-50

power structure in urban society, 1-39

preventing fratricide, using visual markings, 3-12

protection/force protection warfighting function, 3-82
- commander considerations, 3-93, 3-94
- firefighting support, 3-104
- general engineering support, 3-102–3-103
- in defensive operations, 3-84
- legal considerations, 3-94–3-100
- protection tasks, 3-83
- tactical considerations, 3-87–3-108
- urban challenges, 3-85–3-86
- waste management, 3-108

proxy forces, 2-15–2-20

public governance, administration and human services, 1-70

pursuit, 4-50

R

reconnaissance, 7-31–7-35

relief in place, 7-42–7-44

retrograde, 5-46–5-49

reverse slope defense, 5-36–5-38

risk considerations for urban operations, 2-40–2-49

S

security, 7-36–7-37

security operations, defined, 5-11

shaping operations for defense, 5-61–5-72

shaping operations for offense, 4-28–4-29, 4-64–4-93

Entries are by paragraph number.

shaping operations for stability, 6-36, 6-39–6-43, 6-56–6-61
SOF in urban offense, 4-82, 4-99–4-100
stability operations, see urban stability operations
stability operations vignette, C-1–C-4
surprise, 4-7–4-9
sustaining operations for offense, 4-30–4-35
sustaining operations for stability, 6-44
sustainment/logistics warfighting function, casualty considerations, 3-80
 commander responsibilities, 3-76
 during large-scale combat operations, 3-77–3-78
 friendly force sustainment, 3-79

T

tactical considerations, 2-24–2-49, 4-23–4-35
target acquisition in an urban environment, 3-54
targeting process, 3-55–3-57
 and the urban populace, 3-57
 commander considerations, 3-56
task organization considerations, 3-24–3-30
tempo, 4-12–4-15
toxic industrial materials, 1-69
transitions, in stability operations, 6-80–6-88
 in the defense, 5-82–5-85
 in the offense, 4-112–4-118
troop movement, 7-38–7-41
turning movement, 4-38

U–V

unity of command, 3-3–3-4
urban city design, *see* urban terrain
urban defensive operations, commander planning considerations, 2-37, 5-52–5-85
 forms of, 5-29–5-38
 importance of, 5-2–5-3
 operations to consolidate, 5-81
 operations to engage, 5-73–5-80
 operations to shape, 5-61–5-5-72
 purpose, 5-1, 5-3
 reserves, 5-19
 sustaining, shaping, and decisive operations, 5-25
 transitions, 5-82–5-85
 types, 5-4, 5-39–5-51
urban environments, 1-2–1-7
 advantages of, 2-7–2-9
 and the intelligence warfighting function, 3-40–3-50
 components of, 1-4–1-6, 2-44
 security challenges, 5-13
 see also defense characteristics, urban infrastructure, urban population, urban terrain
urban infrastructure, 1-54–1-86
 adversary use of, 1-69, 1-76, 2-10–2-30
 categories of, 1-66–1-86
 city layout, 1-29–1-34
 commander considerations, 1-56–1-57
 effects of destroying, 1-59–1-62
 effects on operations, 1-63, 1-68
 tactical effects on operations, 1-64–1-65, 2-26
urban littorals, 1-25–1-28
urban offensive operations, and SOF, 4-82, 4-99–4-100
 and transition, 4-111–4-118
 commander planning considerations, 2-37, 4-5
 forms of maneuver, 4-36–4-43
 importance of,
 operations to consolidate, 4-104–4-110
 operations to engage, 4-94–4-103
 purpose, 4-1–4--5
 sustaining, shaping, and decisive operations, 4-23–4-35, 4-64–4-118
 types of, 4-44–4-50
urban operations, 2-36–2-39
 and large-scale combat, 7-10–7-29
 defined, 1-1, 2-1
 frameworks for visualizing, 4-17–4-35
 joint roles in, 2-3–2-4
 risks unique to, 2-40–2-49, 4-16
urban operations in large-scale combat, characteristics of, 7-10–7-29
 purpose of, 7-1–7-9
urban operations training, at home station, D-9–D-10
 for dense urban terrain, D-2–D-8, D-18
 integrated training progression, 3-6
 live and synthetic combined, D-21–D-22
 live training, D-17–D-18
 scenario complexity, D-14, D-21–D-23
 simulations, D-13, D-19–D-20
 to fulfill ASCC requirements, D-15–D-16
 training plans, 3-6, D-10–D-12
urban population, 1-33–1-34
 and information collection, 3-42
 attitudes of, 1-37–1-38, 2-43
 commander considerations, 1-39–1-40, 1-40,
 composition analysis, 1-35–1-41
 effects on UO, 1-35–1-54
 in defensive operations, 5-70–5-71
 in stability operations, 6-20–6-44
 of an occupied city, 1-33
urban society, *see* urban population
urban stability operations, 6-1–6-6
 and civilian leaders, 1-39
 and information collection, 3-42, 3-49
 CBRN incidents, 6-31–6-34
 civil security, 6-20–6-30
 commander planning considerations, 6-45–6-88
 defined, 6-1
 economic considerations, 1-68–1-69
 infrastructure, 1-71
 operations to consolidate, 6-73–6-79
 operations to engage, 6-62–6-72
 operations to shape, 6-36, 6-39–6-43, 6-56–6-61
 purpose, 6-1
 success requirements, 6-19
 tasks, 6-7–6-44
 transitions in, 6-80–6-88
urban stability operations characteristics, 6-2–6-6

Entries are by paragraph number.

urban terrain, 1-8
  air domain, 1-17
  cyberspace, 1-14–1-15
  information environment, 1-16
  land domain, 1-18–1-21
  maritime domain, 1-22–1-24
  munitions effect in, 1-8–1-9
  space domain, 1-12–1-14
  supersurface and subsurface areas, 1-10–1-11, 1-20–1-21
  urban littorals, 1-23, 1-25–1-28

W–Z

warfighting function, defined, 3-1

This page intentionally left blank.

This page intentionally left blank.

ATP 3-06, C1

20 June 2025

By Order of the Secretary of the Army:

RANDY A. GEORGE
General, United States Army
Chief of Staff

Official:

MARK F. AVERILL
Administrative Assistant
to the Secretary of the Army
2516105

DISTRIBUTION:
Active Army, Army National Guard, and United States Army Reserve. Distributed in electronic media only(EMO).

This page intentionally left blank.

PIN: 202794-001

PCN: 147 000080 00