ATP 3-06
MCTP 12-10B

URBAN OPERATIONS

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***ATP 3-06**
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Urban Operations

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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. This publication supersedes FM 3-06 dated October 2006.

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 joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the conduct of joint urban operations (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. See FM 27-10.

ATP 3-06/*MCTP 12-10B.2* 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:

- Terms and phrasing in italics—Marine Corps.
- Terms and definitions in bold—Terms for which ATP 3-06/*MCTP 12-10B.2* is the proponent publication.
- Terms in bold and definitions 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.

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

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 a DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, United States Army Combined Arms Center, Fort Leavenworth, ATTN: ATZL-MCD (ATP 3-06), 300 McPherson Avenue, Fort Leavenworth, KS 66027-1300; by e-mail to usarmy.leavenworth.mccoe.mbx.cadd-org-mailbox@mail.mil; or submit an electronic DA Form 2028.

United States Marine Corps readers of this publication are encouraged to submit suggestions and changes through the universal need statement (UNS) process. The UNS submission process is delineated in MCO 3900.20, which can be obtained from the Marine Corps Publications Electronic Library Online.

The UNS recommendation should include the following information:

- *Location of change.*
  - *Publication number and title.*
  - *Current page number.*
  - *Paragraph number (if applicable).*
  - *Line number.*
  - *Figure or table number (if applicable).*
- *Nature of change.*
  - *Addition or deletion of text.*
  - *Proposed new text.*

Introduction

ATP 3-06/*MCTP 12-10B* provides commanders and staffs specific information they will need to plan and conduct urban operations. Second, the manual provides multiple templates and examples of products that are routinely used in the conduct of operations. Readers of this publication use ADRP 6-0 and MCDP 6 for discussions concerning roles and responsibilities Soldiers/*Marines* use to facilitate ease of communication among various members of different organizations. It should be noted that commanders may modify products as necessary to meet mission requirements. Local standard operating procedures (Army)/*standing operating procedures (Marine Corps)* (SOPs) 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 both Army/*Marine Corps* doctrine. Specific to Army readers, this publication reflects changes in ADP 3-0, ADRP 3-0, ADP 5-0, ADRP 5-0, and ADP 6-0 and ADRP 6-0.

The following briefly introduces and summarizes changes by chapter:

Chapter 1 addresses the basic characteristics that constitute the urban environment. It describes the urban environment through a discussion of terrain, population, and infrastructure.

Chapter 2 discusses understanding the necessity of urban operations. The chapter highlights the foundations of urban operations, risk considerations, and fundamental tasks in urban operations.

Chapter 3 discusses effects warfighting and tactics in an urban environment. It contains a discussion on each warfighting function with key tactical considerations.

Chapter 4 outlines the purpose of urban offensive operations. It then discusses the characteristics of urban offensive operations. Additionally, it provides a discussion of offensive battlefield/*battlespace* organization, forms and types of urban offense, and considerations of urban offensive operations.

Chapter 5 provides a discussion of the purpose and characteristics of urban defensive operations. Then discusses the characteristics of urban defensive operations. Additionally, it provides a discussion of defensive battlefield/*battlespace* organization, types of urban defense, and urban defensive considerations.

Chapter 6 discusses urban stability operations. It first discusses the purpose and characteristics of these operations. Then it discusses the stability considerations and stability activities in urban terrain.

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Chapter 1
The Urban Environment

This chapter provides a foundational discussion of the urban environment in the context of urban operations. It discusses the tactical implications of urban areas. It then discusses the urban terrain. The chapter concludes with discussions on urban populations and infrastructures.

TACTICAL IMPLICATIONS OF URBAN AREAS

1-1. The effective conduct of urban operations requires a basic understanding of urban environments. Currently more than 50 percent of the world population lives in urban areas and is likely to increase to 70 percent by 2050, making military operations in cities both inevitable and the norm. In some areas, population increases have happened more quickly than local and national governments' ability to provide adequate governance, infrastructure, security, and basic services. These shortfalls can contribute to political instability, increase the likelihood of man-made crises, and compound the adverse effects of natural disasters within cities. The Army defines ***urban operations*** **as those operations across the range of military operations planned and conducted on, or against objectives on a topographical complex and its adjacent natural terrain, where man-made construction or the density of population are the dominant features.** *In the Marine Corps, urban operations is a military operation conducted where manmade construction and high population density are the dominant features (MCRP 1-10.2).* Urban operations are conducted as an integral part of unified land operations. The sheer number of urban areas around the world make urban operations across the continuum of military conflict highly likely, even in areas where governance or infrastructure are not the underlying causes of conflict.

1-2. Opportunistic individuals, criminal networks, and other threat actors often seek to exploit the discontent inherent in a crises 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 (ADRP 3-0). Threats may consist of conventional military forces, unconventional militias or guerilla forces, terrorists, criminal organizations or gangs, or opposing political groups. When discussed in this publication, threat can also include a catastrophic or disruptive event such as a natural disaster (earthquake or hurricane), hunger, or disease. It is increasingly typical to have multiple threats appearing simultaneously in urban operational areas—fighting a three-block war. The first block may find Soldiers/*Marines* conducting foreign humanitarian assistance, while the second block demands Soldiers/*Marines* using measured negotiation to keep belligerents separate, and in the third block they fight in full-scale combat.

1-3. Although urban areas possess similar characteristics, no two are identical. Urban areas vary in terms of population density, construction, culture, and many other factors. The dynamic variety of natural and man-made features in urban areas presents commanders with a multitude of challenges. The nature of the conflict, the attitude of the population, and the purpose of friendly operations during urban operations interact in ways that vary case by case, potentially even in different cities in the same country. Differing cultural and political views may cause differing levels of hostility to or support for friendly operational goals in an urban population, while the potentially large range of adversaries and enemies present in any particular city can significantly influence civilian behavior.

1-4. 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 collect intelligence. Constraints on mobility increase risks to mutual support, reinforcement, sustainment/*logistics*, and casualty evacuation. 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*. While the urban environment shapes the conduct of military operations, the nature of those operations also shapes the urban environment itself—reducing districts to rubble in one area, driving the population into different neighborhoods or out of the city, defining spatial relationships between locations in the city, and affecting the viability of key infrastructure.

1-5. Urban operations often reduce the relative advantage of technological superiority, weapons ranges, and firepower. They have historically demanded large amounts of manpower, are usually time intensive, and require decentralized command and control—a trend that will more than likely continue. Moreover, because there is risk of high civilian casualties, commanders are generally required to protect civilians, render aid, and minimize damage to infrastructure. These requirements can reduce resources available to defeat the enemy, often creating difficult choices for the commander. Densely populated urban areas present information operations and public affairs challenges not normally experienced in less densely populated environments, due to larger media presence and more ubiquitous access to social media and the Internet. Operations conducted in urban areas require precise application of firepower to avoid unnecessary civilian casualties, despite the fact that urban terrain and infrastructure makes precision weapons employment more difficult and degrades munitions effectiveness. Emphasis on reducing collateral damage and civilian casualties may limit fire support to friendly forces.

1-6. The tactical problem of urban operations 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 directly caused by combat itself. Excessive U.S. destruction of infrastructure that causes widespread suffering amongst people may turn initially neutral or positive sentiment toward U.S. forces into hostility that can rapidly mobilize populations and change the nature of the military problem.

1-7. Operating in an urban area always presents the danger of being overwhelmed and defeated in detail, as a large hostile civilian population provides both an immediate (albeit untrained) recruiting source and concealment for a non-uniformed enemy. Significant planning and situational awareness is necessary to prevent forces being fixed and destroyed piecemeal. Tactically mobile, mutually supporting units are critical to success in complex urban terrain. Enemies and adversaries will attempt to isolate friendly forces using command and control by social media, unmanned aircraft systems (UASs), crowd-sourced information, and improvised explosive devices. Electro-magnetic interference, denial of Internet and Global Positioning System (GPS) services, and physical obstacles may demand more reliance on decentralized command and control and mission-type orders by friendly forces.

INFLUENCES ON MILITARY OPERATIONS

1-8. Military forces operate in urban areas for several reasons:

- The urban environment offers defensive advantages.
- The urban area harbors threats which can attack friendly forces elsewhere.
- The urban environment's people (their allegiance and support), infrastructure, capabilities, or other resources have operational or strategic value.
- The urban area has significant symbolic importance.
- The urban area's geographical location dominates a region or avenue of approach.

1-9. Army/*Marine Corps* forces conduct urban operations either as a specific, unique operation, or more typically, as one of a larger series of operations in a campaign. Urban operations focus on the threat to or within the urban area and allows other forces to conduct operations elsewhere. From a defensive perspective, an urban defense gains time and space to reorganize forces in new defensive positions, diverts enemy forces from other critical tasks, or provides time to prepare to conduct offensive operations. Armies may fight in an urban area to gain and control key terrain, such as port facilities or bridges. Urban areas may be located on terrain that dominates a region or an avenue of approach. In these cases, offensive action to secure key terrain enables the achievement of subsequent objectives. Another reason to engage in urban operations is the symbolic—historical, cultural, and political—importance of many urban areas.

UNDERSTANDING THE URBAN ENVIRONMENT

1-10. The urban environment comprises three parts—a complex man-made physical terrain, a population of significant size and density, and a supporting infrastructure. JP 3-06 refers to these three parts as the urban triad. (See figure 1-1.) Cities are unique for the density of these three features; that density is a key aspect of the inherent complexity of urban operations.

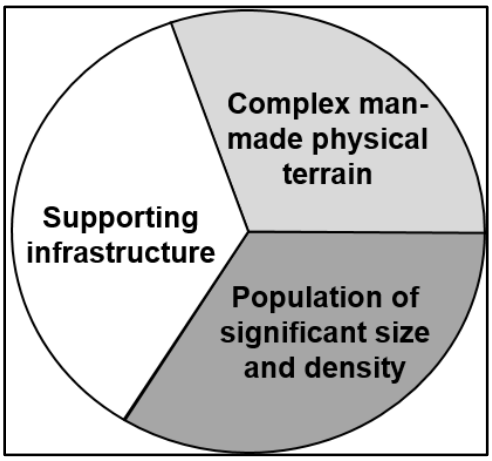

Figure 1-1. The urban triad

1-11. The urban environment consists of terrain, population, and infrastructure. The complex and dynamic interactions and relationships among those key components create an overlapping and interdependent system of systems that presents unique challenges. Flow is the movement of people, resources, or things into or out of a city. Like a living organism, a city relies on flows in (food, air, and water) and flows out (waste) to remain viable. Vast amounts of energy and other vital goods must flow into the largest of cities. It is generally acknowledged that most societies are only a few meals away from chaos if these flows are interrupted. A related characteristic is that urban daytime populations may vary significantly from night populations. During the day, people travel to urban centers for work, shopping, and religious or cultural activities, thereby reducing population in surrounding settlements and increasing that of urban hubs. At night, the flow reverses as people relocate to sleep. The resulting cycle of population movement, which varies among settlements, is highly sensitive to changes in the urban security, the economic and connectivity environment, and conditions in the surrounding countryside.

1-12. In all cities, a complex man-made physical terrain is superimposed on an existing natural terrain. This physical terrain consists of man-made structures of varying types, sizes, materials, and construction sometimes arranged in an orderly manner and sometimes randomly. It may be modern or built around an ancient core, it may contain towering buildings or none over three stories. Urban areas provide human services, as well as a cultural and political structure for the urban area and often beyond, perhaps for the entire nation. An urban area may significantly influence areas beyond its physical boundaries. It may influence a region within the nation, the nation itself, or other countries within a geographical region.

1-13. A population of significant size and density inhabits, works in, and uses the man-made and natural terrain. Urban areas are defined frequently according to size, from villages of fewer than 3,000 inhabitants to large cities with populations of over 100,000. Large cities vary in size, ranging in population from 100,000 to over 20,000,000 and in area from several to hundreds of square miles. The density of the population, not its mere presence, is what makes the urban environment unique. The underlying relational, social, and cultural patterns of the friendly, enemy, and neutral networks among the population must be considered as part of an operational environment across the range of military operations. Due to the widespread use of information technologies that can and are used as a simple command and control architecture, the civilian population has a greater potential than ever before 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.

URBAN TERRAIN

1-14. Understanding urban terrain requires understanding its multidimensional nature. Buildings, streets, and other infrastructure have varied patterns, forms, and sizes. These factors intertwine and make it difficult to describe a "typical" urban area. However, these various factors provide a framework for understanding the complex terrain in an urban area. Man-made features affect military systems and Soldiers/*Marines* and thus, tactics and operations. General effects on urban operations are discussed in this chapter. Specific effects on warfighting functions are discussed in Chapter 3.

1-15. Urban areas present an extraordinary blend of horizontal, vertical, interior, exterior, and subterranean forms superimposed on the natural relief, drainage, and vegetation. An urban area may appear dwarfed on a map by the surrounding countryside. The actual size and scope of the urban area of operations is many times that of a similarly sized portion of undeveloped natural terrain. A multistoried building takes up the same land area as a small field, but each story or floor contains approximately an equal area as the ground floor. In effect, a 10-story building has 11 times more defensible area than "bare" ground—10 floors and the roof. It is the sheer volume and density created by this urban geometry that make urban operations resource intensive in time, manpower, and material.

1-16. Military operations in urban areas may radically alter the physical characteristics of a city in ways not experienced in other environments, increasing operational complications over time. They may cause (either intentionally or not) uncontrollable fires or the loss of electricity. A power outage causes flooding (especially in subsurface areas) by shutting down pumping stations. Entire buildings may be destroyed. Thereby eliminating reference points, leaving large piles of rubble, altering fields of fire, and making movement and transportation extremely difficult. Additionally, buildings and other urban structures, damaged but not destroyed, become or remain effective obstacles and possible booby traps. Even without enemy exploitation, their weakened construction and unstable structure increase the risk of injury to Soldiers/*Marines* and civilians moving within them. The total collapse of a building may not eliminate its defenders. Of additional concern, the likely presence of toxic industrial material (TIM) creates additional obstacles and health hazards.

URBAN SPACES AND SURFACES

1-17. Commanders in other environments address the depth, breadth, and height of their area of operations in terms of airspace and surface. In an urban environment, they broaden their scope to include supersurface and subsurface areas (see figure 1-2) that extend a commander's area of operations. Although separated, each area may be used as an avenue of approach or mobility corridor, lines of communications, or engagement area.

1-18. Supersurface and subsurface areas magnify the complexity of the urban terrain. Commanders consider activities that occur outside buildings and subterranean areas (the external space) as well as the activities happening unseen in buildings and subterranean systems (the internal space). This internal volume further challenges command, control, and information collection activities and increases the combat power required to conduct urban operations. Commanders develop methods and techniques to help themselves, their staffs, and their subordinate commanders and staffs to represent, visualize, and reference these multiple dimensions. Increasing the difficulty, such dimensions change rapidly because of continued urban growth or, as described earlier, the effects of nature and urban operations themselves.

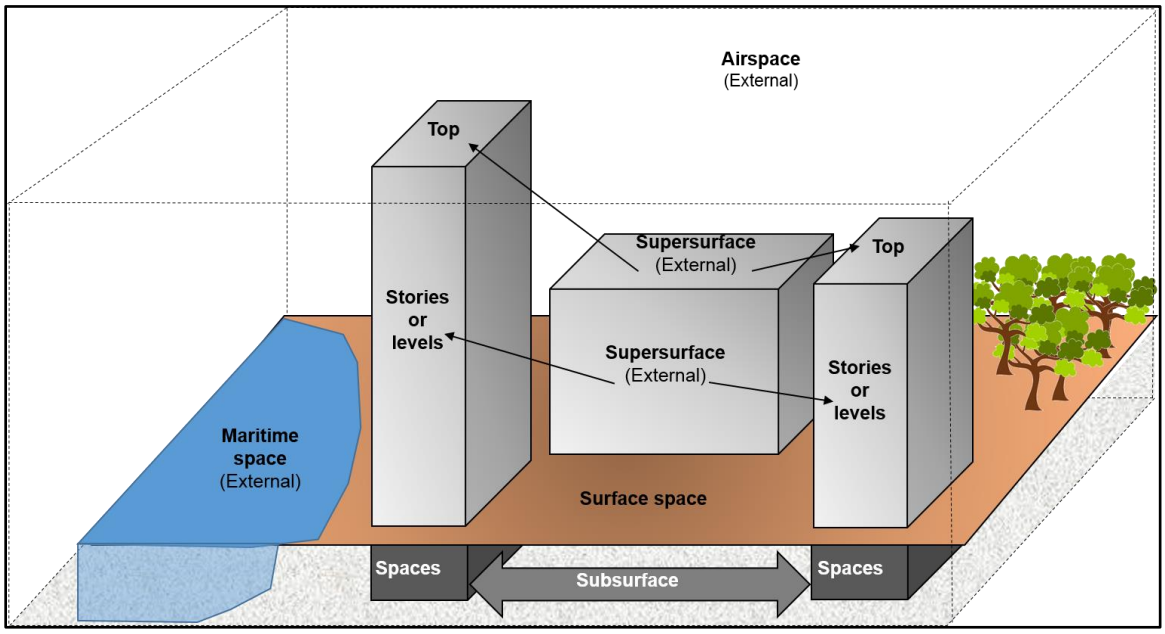

Figure 1-2. The multidimensional urban battlefield

Maritime Space

1-19. In 2013, more than 80 percent of the world's population lived within 60 miles of a coast, while 75 percent of large cities were on a coastline. Maritime space—littorals and waterways—consist of an ocean or sea, large lakes, and major rivers. This space provides key friendly and threat avenues of approach or essential lines of communications for urban areas that border these large bodies of water. This is a significant consideration for commanders. Amphibious, river crossing, and river operations are integral parts of the overall urban operation. These spaces often support critical commerce activities such as maritime shipping, fishing, and recreation that urban operations may impact. Commanders must weigh the benefits of those operations against the impacts to vital commerce and the local populace. Moreover, the increasing urban sprawl of city growth—adjacent cities growing into each other—challenge both landing site selection and landing site egress during the conduct of amphibious operations. Anti-access and area denial capabilities are planning factors for the conduct of urban operations.

Airspace

1-20. As in all other environments, aircraft and aerial munitions use the airspace as rapid avenues of approach in urban areas. Forces use aviation assets for observation and reconnaissance, aerial attack, or high-speed insertion and extraction of Soldier/*Marines*, supplies, and equipment. Some surface obstacles in an urban area, such as rubble, do not affect flight though they may prevent aircraft take-off and landing. Buildings of varying height and the increased density of towers, signs, power lines, and other urban constructions create obstacles to flight and the trajectory of many munitions (masking). These obstacles restrict a pilot's line of sight and physically limit low-altitude maneuverability in the urban airspace. Excellent cover and concealment afforded enemy gunners in an urban area increases aviation vulnerability to small arms and man-portable air defense systems, particularly when supporting ground forces. The potential for a high volume of air traffic (military and civilian) over and within urban airspace—including fixed-wing, rotary-wing, and tiltrotor aircraft, and UASs—can become a significant hazard that causes increased airspace control measures. Weather, such as low visibility, precipitation, cloud cover, and turbulence can hinder employment of aviation assets and eliminate the usage of rapid avenues of approach. Soldiers/*Marines* reference ATP 3-06.1/*MCRP 3-20.4 (MCRP 3-35.3A)*/NTTP 3-01.04/AFTTP 3-2.29 for further considerations.

Surface

1-21. Surface areas apply to exterior, ground-level areas, such as parking lots, airfields, highways, streets, sidewalks, fields, and parks. These areas provide primary avenues of approach and means for rapid advance. Buildings and other structures canalize forces. Obstacles on urban surface areas usually have more effect than those in open terrain since bypass requires entering and transiting buildings or radical changes to selected routes. It is exactly the lack of open spaces that further complicates entry and staging of forces and the employment of fire support assets.

Supersurface

1-22. Supersurface areas include the internal floors or levels (intra-surface areas) and external roofs or tops of buildings, stadiums, towers, or other vertical structures. These areas provide cover and concealment; limit or enhance observation and fields of fire; and restrict, canalize, or block movement. Forces move within and between supersurface areas to create additional, though normally secondary, avenues of approach. Rooftops offer ideal locations to land helicopters for small-scale air assaults and aerial resupply. Engineers analyze buildings for structural integrity and obstacles to include electrical wires, antennas, and explosive hazards. Personnel may be inserted by jumping, rappelling, or fast roping from a hovering helicopter and extracted by hoist mechanisms. Some rooftops are designed as helipads. Roofs and other supersurface areas provide excellent locations for snipers, lightweight handheld antitank weapons, man-portable air defense systems, and communications retransmission sites. These areas enable top-down attacks against the weakest points of armored vehicles and unsuspecting aircraft. Elevated firing positions reduce the value of any cover in surrounding open areas and permit engagement at close range with less risk of immediate close assault. This area (and the subsurface area) requires commanders to think, plan, and execute ground operations vertically as well as horizontally. Urban operations share strong similarities with mountain operations. (See ATP 3-90.97 for discussions on mountain operations.)

Subsurface

1-23. Subsurface areas are below the surface level. These areas present significant challenges to fires, control measures, and protection/*force protection* that commanders must mitigate. These areas are secondary and, in some instances, primary avenues of approach at lower tactical levels. When thoroughly reconnoitered and controlled, these areas offer excellent covered and concealed lines of communications for moving supplies and evacuating casualties. These may also provide sites for caching and stockpiling supplies. Subsurface areas may include subways, mines, tunnels, sewers, drainage systems, cellars, civil defense shelters, and other various underground utility systems. In older cities, these areas may include ancient hand-dug tunnels and catacombs. Both attackers and defenders use subsurface areas to gain surprise and maneuver against the rear and flanks of an enemy and to conduct ambushes. These areas are the most restrictive and easiest to defend or block. Each subsurface area's effectiveness depends on the attacker's or defender's knowledge of their existence and overall design. Army/*Marine Corps* commanders consider potential avenues of approach afforded by the subsurface areas of rivers and major bodies of water that border urban areas. This applies when operating as part of a joint task force that is task-organized with special operations forces or when opposing a threat with similar capabilities.

MAJOR URBAN PATTERNS

1-24. Four major patterns—satellite, network, linear, and segment—describe an urban area and influence urban operations (see figure 1-3). 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 strong point. 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 to attack from the hub as well as 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. The larger the hub, the greater influence it has on satellite urban areas and surrounding rural areas. Commanders must remember that urban areas are not islands. All are

connected to the surrounding rural (and other urban) areas through fluid and permeable boundaries and lines of communications.

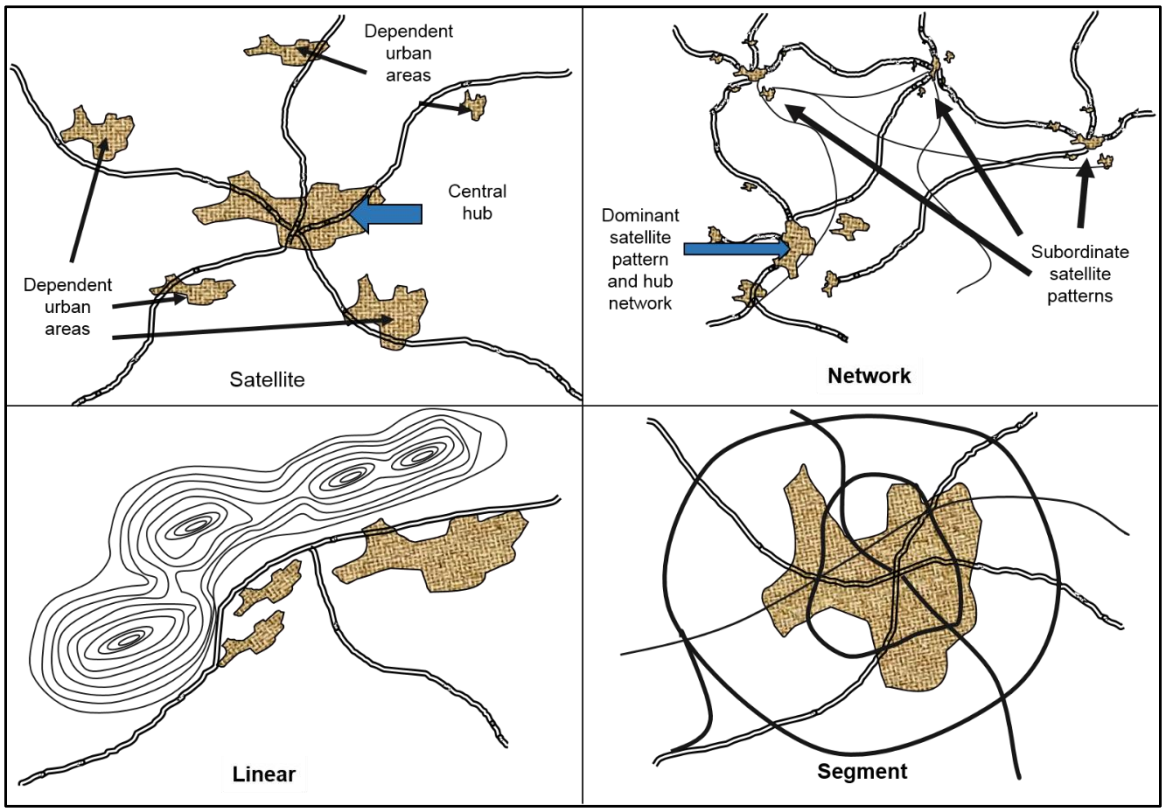

Figure 1-3. Major urban patterns

Satellite Pattern

1-25. This common pattern consists of a central hub surrounded by smaller, dependent urban areas. Lines of communications converge on the hub. Outlying areas support forces in the principal urban area at the hub with means of reinforcement, resupply, and evacuation. In some instances, these outlying areas are mutually supporting battle positions. Commanders consider the effects of the outlying urban areas on operations within the hub, and conversely, the effects of operations within the hub on outlying urban areas. For example, information operations targeted primarily at key leaders and other civilians located within the hub of a satellite pattern influence civilians in outlying urban areas. These activities also achieve necessary effects without committing specific resources to these outlying areas.

Network Pattern

1-26. The network pattern represents the interlocking of the primary hubs of subordinate satellite patterns. Its elements are more self-sufficient and less supportive of each other, although a dominant hub exists. Major lines of communications in a network extend more than in a satellite pattern. These lines of communications take more of a rectangular form than a convergent form. Its natural terrain varies more than in a single satellite array. Operations in one area may or may not easily influence, or be influenced by, other urban areas in the pattern.

Linear Pattern

1-27. Potentially a sub-element of the previous two patterns, the linear pattern may form one array of the satellite pattern or be found along connecting links between the hubs of a network. Most frequently, this pattern results from stringing minor urban areas along a confined natural terrain corridor such as an elongated

valley, a body of water, or a man-made communications route. In offensive and defensive operations, this latter form of the linear pattern helps develop a series of strong defensive positions in depth effectively blocking or delaying an attacking force moving along the canalized terrain.

Segment Pattern

1-28. When dominant natural terrain such as a river or man-made features (canals, major highways, or railways) divides an urban area, it creates a segmented pattern. Commanders can more easily assign areas of operations to subordinate commanders. However, this pattern may fragment operations and increase risk to an operation requiring mutual support between subordinate units. Still, the segmented urban areas may allow commanders to isolate threats more easily in these areas and focus operations within segments that contain decisive points. Although an integral part of the whole (the urban area), each segment develops distinct social, economic, cultural, and political characteristics. This social segmenting benefits commanders who are faced with limited assets to influence or control the urban populace. After thoroughly analyzing the society, commanders focus information operations and populace and resource control measures against specific segments that affect decisive operations/*decisive actions*. Commanders only isolate other segments or monitor any significant changes in the attitudes, beliefs, or actions of the civilians located there.

BASIC STREET PATTERNS

1-29. 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 the 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*, mission command/*command and control*, and sustainment/*logistics*. For example, in some portions of older Middle Eastern cities—designed for foot and animal traffic—roads are too narrow for many military vehicles and armor.

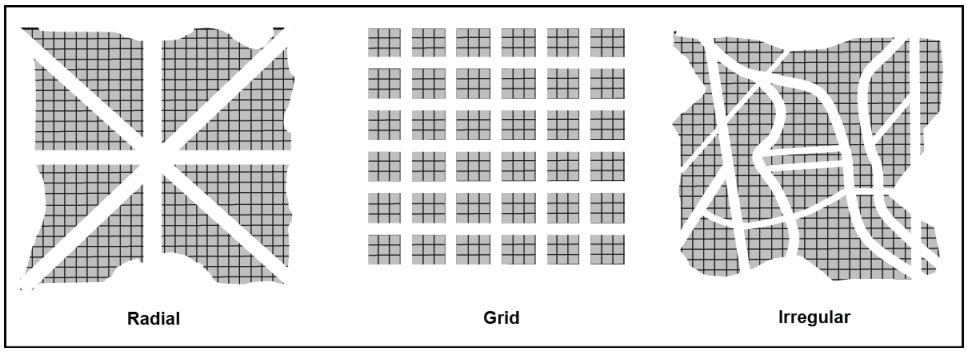

Figure 1-4. Basic internal street patterns

Radial Patterns

1-30. Societies of highly concentrated religious or secular power construct urban areas with a radial design with all primary thoroughfares radiating out from the center of power. Urban areas with this design signal an important historical aspect in the overall analysis of the urban society. Terrain permitting, these streets extend outward in a complete circle or form a semicircle or arc when a focal point abuts a natural barrier, such as a coastline or mountain. To increase mobility and traffic flow, societies add concentric loops or rings to larger radial patterns. Unless commanders carefully plan boundaries, routes, and axes of advance, their subordinate units' movement or maneuver inadvertently funnels toward the center of urban areas with this pattern resulting in congestion, loss of momentum, and an increased potential for ambush or fratricide.

Grid Patterns

1-31. The most adaptable and universal form for urban areas is the grid or rectangular pattern with lines of streets at right angles to one another forming blocks similar to the pattern of a chessboard. A grid pattern can fill in and eventually take over an original radial pattern. Grid patterns appear to ease the assignment of boundaries for subordinate units. However, commanders consider how the natural terrain influences operations and the establishment of graphic control measures. They also consider the influence of the buildings and other structures lining these streets, such as height and construction, before assigning boundaries and developing other control measures. Commanders also consider the following when developing urban graphic control measures:

- Easily recognizable terrain features.
- A threat's potential to exploit a terrain feature.

1-32. In urban areas, commanders consider the descriptions of boundaries, phase lines, checkpoints, and other graphic control measures; they look for descriptions of easily recognizable features. While easily identifiable urban structures—such as unusually tall or oddly shaped buildings, cemeteries, stadiums, or prominent rail or highway interchanges—are useful references, available natural features are better descriptors than man-made features that may be altered or unrecognizable. As an aid to air-to-ground coordination, commanders select features identified by both ground and air forces.

1-33. Commanders consider whether a threat easily identifies a boundary along an easily recognizable terrain feature such as a river. The threat seeks to "find the seam" and exploit the likely control and coordination difficulties associated with boundaries, especially between higher-level units. This requires commanders to position a control measure carefully away from the key feature to provide a designated subordinate force with the terrain and space necessary to control the feature. On the other hand, commanders working closely with local authorities during stability operations may not need to understand the physical effect of street patterns on the assignment of boundaries as thoroughly as they might for combat in urban operations. Instead, commanders assign boundaries overlaid on existing geopolitical boundaries used by local agencies to increase interoperability and aid in unity of effort.

Irregular Patterns

1-34. In most urban areas, existing street patterns emerge from successive plans overlaid on one another regardless of the urban planners' original intent, plan, or vision. Some patterns are well planned to fit with previous plans while others offer a haphazard response to explosive urban growth. The result mixes patterns. Urban engineers and planners specifically design irregular patterns for aesthetic reasons (as in many suburban housing developments) or to conform to marked terrain relief. Irregular street patterns alert commanders and analysts that the underlying natural terrain exerts greater influence over operations than in other portions of the urban area. Finally, irregular street patterns make the movement and maneuver/*maneuver* of forces less predictable. However, a labyrinth of irregular or twisting street patterns increases the possibility of fratricide particularly for units trained or accustomed only to grid patterns.

FUNCTIONAL AREAS

1-35. Throughout the world, urban areas have similar form and function. In form, urban areas contain like characteristics and are readily divisible into distinct areas. Functionally, they are the centers of population, finance, politics, transportation, industry, and culture. While urban areas may be modeled by several different means, figure 1-5 on page 1-10 illustrates the general forms and internal functions. Some forms and functions 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. With the rapid urbanization associated with developing nations, the areas displayed in this urban model often manifest themselves less clearly there than in developed nations.

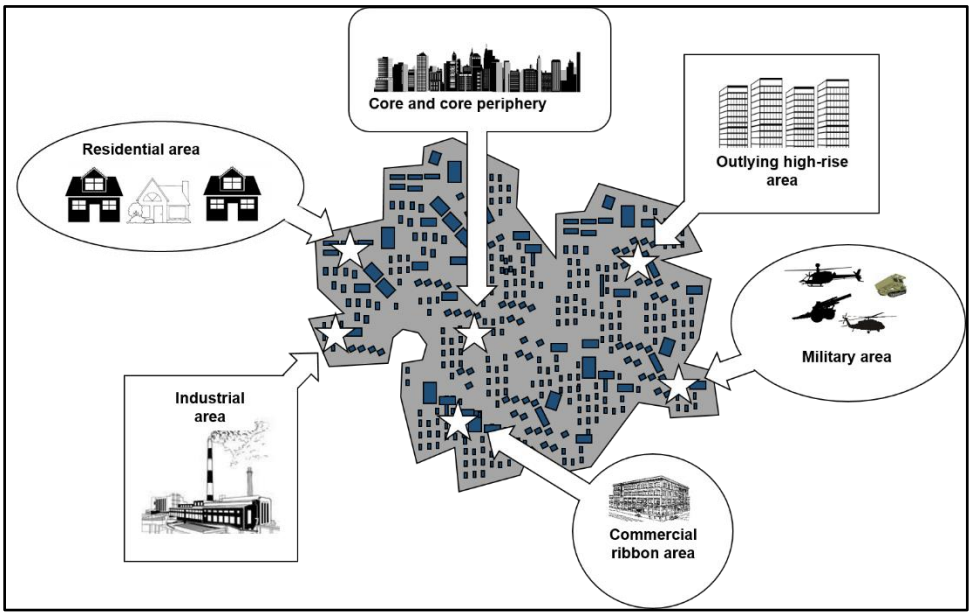

Figure 1-5. Urban functional areas

1-36. Paragraphs 1-37 through 1-50 discuss, in general terms, potential advantages and disadvantages each urban area has toward accomplishing the urban operation. However, construction materials and methods vary drastically. Commanders and their staffs identify specific building types and construction and understand weapons' effects on them. If a commander desires precise effects, the chosen munitions or weapons system must be sufficiently accurate, capable of penetrating the target structure (without exiting the other side), and achieve effects within. Often noncombatants, critical infrastructure, or protected targets are in the vicinity. Commanders determine if the surrounding walls or structures can sufficiently absorb or negate the blast or thermal effects of the weapon. Regardless, commanders understand the structure and composition of buildings and other structures in the urban area of operations to determine the best means to accomplish the mission.

Core Areas

1-37. The core is the heart of the urban area. It is the downtown or central business district. Relatively small and compact, it contains a large percentage of the urban area's shops, offices, and public institutions. Often, it houses the headquarters for commercial and financial activities and contains important cultural, historical, and governmental buildings. Commercial and financial activities prefer the core because of its accessibility. As the focal point of the transportation network, residents find the core the easiest part of the urban area to reach. It normally has the densest concentration of multistory buildings and subterranean features (underground parking garages, underground shopping centers, and basements).

1-38. High-rise buildings, varying greatly in height (often as high as 50 stories above ground and four stories below ground), make up the core of many of today's urban areas. Buildings routinely abut one another with little or no setback from the sidewalks or streets. Building height and density (except in outlying high-rise areas) often decreases from the core to the edge of the residential areas while the amount of open areas frequently increases. Modern urban planning allows for more open spaces between buildings than found in the cores of older urban areas. Most core areas have undergone constant redevelopment resulting in various types of construction. Commonly, brick buildings abound in the oldest part of the core, framed heavy-clad structures in the next oldest part, and a concentration of framed lightly clad buildings are in the newest part. The outer edge of the core, the core periphery, has undergone less change than the oldest part of the core; it contains buildings of uniform height, commonly two to three stories in towns and five to 10 stories in larger urban areas.

1-39. Generally, offensive operations focused in core areas (even when effectively isolated) require greater resources—particularly manpower, time, and information—than in many other urban areas. Mounted maneuver is more difficult in core areas because of fewer open areas, buildings closer to the streets, and an increased density of civilian vehicles. Razed buildings in central core areas, especially high-rise buildings, are greater obstacles to mobility as their rubble can easily block multiple thoroughfares. Rubble piles provide excellent covered and concealed positions for dismounted forces while hindering mounted movement and maneuver/*maneuver*. Consequently, commanders often use more dismounted forces as part of their combined arms operations. Conversely, the core may be critical to urban defensive operations, particularly older areas of heavier construction that afford greater protection/*force protection*. Despite potential difficulties, the core area is important to accomplishing many stability missions since it houses much of the human activity that occurs in the urban area.

Outlying High-Rise Areas

1-40. High-rise areas consist of multistoried apartments, commercial offices, and businesses separated by large open areas, such as parking lots, parks, and individual one-story buildings. High-rise buildings are generally of framed, lightly clad construction with thin walls of brick, lightweight concrete, or glass. The automobile, mass transit systems, and improved road networks encourage these areas to grow and function further from the urban core.

1-41. Similar to the urban core, units given the mission to clear these areas or even portions therein, need more resources—most notably personnel and time—to accomplish their mission. Commanders consider courses of action (COAs) that isolate these entire areas, multiple sections within these areas, or even individual buildings before assigning tasks. Without careful consideration and analysis, some tasks in these areas unintentionally—but rapidly—drain a unit's resources or unhinge other portions of the major operation. When defending, commanders who can integrate these areas in the defense present the attacker with similar resource problems and may be appropriate in a defense to delay. However, defending commanders ensure that they arrange the defense so the enemy cannot easily isolate or bypass the defensive position. A defensive position in an urban structure may require extensive reinforcement due to lightly clad construction.

Military Areas

1-42. Fortifications and military installations are found in or near urban areas throughout the world. Historically, they may have been the "seed" responsible for initiating the growth of the present day urban area. Many countries possess long coastlines and borders with potentially hostile neighbors. To meet their defensive needs, countries developed coastal and border defense works that include extensive subsurface facilities, many contiguous to urban areas. City builders use earth, wood, rock, brick, concrete, steel-reinforced concrete, or any combination of those materials to construct permanent fortifications. Some contemporary constructions have been built subsurface and employ heavy armor, major caliber weapons, internal communications, service facilities, and chemical, biological, radiological, and nuclear overpressure systems. Because they have been built specifically for military purposes, commanders and planners should carefully consider the effects of these military constructions on the conduct of urban operations.

Commercial Ribbon Areas

1-43. Commercial ribbon areas are rows of stores, shops, and restaurants built along both sides of major streets that run through and between urban areas. These same types of areas develop along the roads that connect one urban area to another (strip areas). The buildings uniformly stand two to three stories tall (about one story taller than the dwellings on the streets behind them).

Industrial Areas

1-44. Industrial areas develop on the outskirts of the urban areas where commercial transportation is easiest (along airfields and major sea, river, rail, and highway routes). The road networks in and around industrial areas are more developed and suitable for transportation assets. These areas will displace farther from the core and residential areas as urban planners recognize the potential threat of TIMs. The dispersed pattern of the buildings provides sufficient space for large cargos, trucks, and materials handling equipment. These areas provide ideal sites for sustainment/*logistics* bases and maintenance sites. While older, heavier-clad

structures still exist, new construction consists of low, large, flat-roofed factory and warehouse buildings with large parking areas and work yards. These structures have steel frames and lightweight exterior walls. Multistory structures have reinforced concrete floors and ceilings.

1-45. TIMs may be transported through an urban area (by rail, barge, truck, or pipeline) or be found stored throughout. However, larger concentrations exist in industrial areas, and their presence concerns Army/*Marine Corps* forces operating near them. Some TIMs are heavier than air and tend to settle in low lying and subsurface areas.

1-46. Each year, over 70,000 different chemicals are produced, processed, or consumed globally. An estimated 25,000 commercial facilities around the world produce, process, or store chemicals that have a legitimate industrial use and are classified as chemical warfare agents. Many other chemicals (not classified as weapons) may still be sufficiently hazardous to pose a considerable threat to Army/*Marine Corps* forces and civilians in urban areas. These chemicals can include choking agents, asphyxiates, incendiaries, water contaminants, low-grade blister or nerve agents, or debilitating irritants. Enemy forces can release these chemicals either accidentally or deliberately. For example, on 2 December 1984, nearly 40 tons of methyl isocyanate used to produce pesticides leaked from a storage tank at Bhopal, India; it killed thousands and injured hundreds of thousands. The most common chemicals that may pose an immediate risk to Army/*Marine Corps* forces are highly toxic irritant gases such as ammonia, chlorine, hydrogen chloride, and sulfur dioxide.

1-47. Standard chemical defense equipment does not protect against (and chemical detection devices may fail to detect) many toxic industrial chemicals (TICs). Therefore, the risk to Soldiers/*Marines* operating near the chemicals increases. Commanders must vigilantly identify these potential hazards, carefully consider them as part of their overall vulnerability analysis, factor the analysis into their risk assessment, and execute necessary contamination avoidance measures. Local urban firefighters may be a critical source of information for determining the likely locations of TIMs. Any assessment includes the chance that TICs may be deliberately released by an enemy to gain advantage or accidentally released by friendly actions. (See the U.S. Department of Transportation's *Emergency Response Guidebook*.)

Residential Areas

1-48. Residential areas are dispersed throughout the urban area, however, large suburban areas (or sprawl) normally form on the outskirts. Residential areas consist of row houses or single-family dwellings set in a grid or ringed pattern in a planned development project. Yards, gardens, trees, and fences separate the buildings in a residential area. In some areas of the world, residential areas are located in high-walled compounds with houses built right up to the edge of the street. Modern residential construction is lightly clad, framed wood construction, or brick; however, residential homes formed by poured or pre-cast concrete can be found throughout many parts of the world. The combined population of surrounding suburban areas often far outnumbers the urban area proper. Specific suburbs tend toward homogeneity based on ethnicity, religion, economics, or some other social aspect. Commanders locate and analyze these areas to determine their impact on operations.

1-49. In offensive and defensive operations, commanders assess whether operations pose an unacceptable physical risk to civilians. If so, they relocate civilians to a safer area, perhaps another residential area. If not, commanders implement a stay-put policy for that area and attempt to isolate the effects of the operation from them. During stability and defense support of civil authorities (DSCA) operations, residential locations are the initial focal point for operations since most of the permanent residents are located there.

1-50. This area also contains an urban phenomenon known as shantytowns. These shantytowns may arise in unoccupied low-value land in and around urban areas in underdeveloped countries. Despite lacking streets and public utilities, shantytowns may contain over 50 percent of the total urban population. Their lean-to structures are irregularly laid out, connected by walking paths, and made of any scrap material available: lumber, brick, sheet metal, cardboard, cloth, or vegetation. The random arrangement of structures, the absence of formal street naming and numbering, and often the lack of easily identifiable buildings and terrain create challenges. These challenges include the navigation, coordination, and transmission of accurate information and intelligence. Depending on the operation, the temporary nature of the structures mean that mobility is either more or less restricted than other sections of the urban area. A military force easily knocks down and traverses structures without affecting mobility at all. However, destroying structures can endanger

civilians, damage critical infrastructure, alienate potential allies, or turn a neutral populace hostile. Additionally, already restrictive terrain becomes more so with indiscriminate destruction. Similarly, the makeshift materials inhibit weapons effects less than many other parts of the urban area built more solidly. Certain tank rounds, for example, go much further and injure many more noncombatants than in an area where the primary building material is stone. Regardless, commanders consider the effects of their operations in this area, to include vehicles and weapons, as the weak structures increase the risk of fratricide, civilian casualties, and large rapidly spreading fires.

URBAN POPULATION

1-51. Once commanders have studied the environment's terrain, they consider the populace when planning for urban operations. While urban terrain describes the physical nature of the environment, perhaps the most important mission variable to consider is the people within cities and their surroundings. Urban operations often require Army/*Marine Corps* forces to operate in proximity to a high density of civilians. Even evacuated areas can have a stay-behind population measured in the tens of thousands. This population's presence, attitudes, actions, communication with the media, and needs may affect the conduct of operations. Homogeneity decreases drastically as the size of the urban area increases. Commanders must take into account the characteristics of a population whose beliefs and interests vary. Analysis and understanding of these societal factors is critical to a successful information operations campaign and, thus, the entire operation.

1-52. Civilian populations continually influence, to varying degrees, operations conducted in an urban area because their societal or cultural norms guide their behaviors. These norms affect stability because they guide and influence behaviors, such as the mobility of dislocated civilians to loyalties of civilians. 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 Brazil or Sadr City in Iraq). Of course, understanding such cultural differences differs from adopting them or behaving in a similar manner. While understanding and respecting the urban area's culture or multiple cultures is crucial to successful urban operations, Soldiers/*Marines* function best in dealing with the urban society when they act in accordance with U.S. culture and values.

GROUPS

1-53. Understanding how specific elements of an urban society affect operations and vice versa begins with analyzing composition, size, and location (see figure 1-6 on page 1-14). Because commanders seek to minimize the risk to civilians, the size and location (without regard to composition) are important initial demographic considerations. 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—displaced people clogging lines of communications, for example. When civilians are the primary focus of the operation, this same analysis helps determine decisive points. In this scenario, commanders consider the dynamic nature of the urban environment on many levels, expecting constant motion and change. The densities of pedestrians and traffic often vary according to cultural events, the time of day, religious holidays, sporting events, rush hours, or market times. Therefore, when planning urban operations, commanders consider the patterns of life of the population and their movements in the urban area, including maritime traffic. Identifying and understanding trends and patterns of activity (and disruptions to them) may provide critical information to commanders.

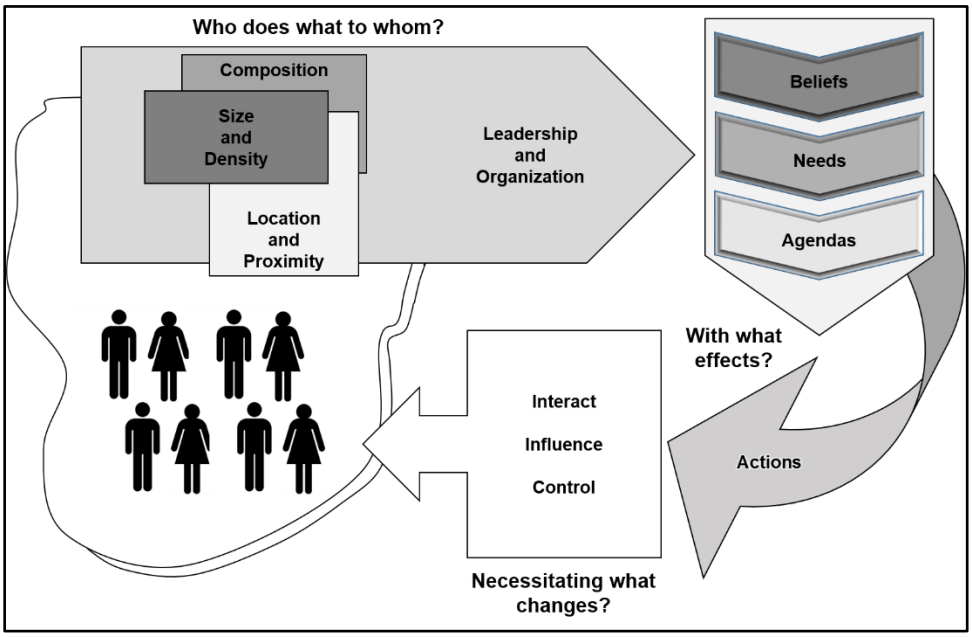

Figure 1-6. Simplified analysis of urban society

1-54. Commanders determine the composition of, or the identifiable groups or organizations within, the civilian urban population. Groups are categorized by race, religion, national origin, tribe, clan, economic or social class, party affiliation, education level, union memberships, age, gender, occupation, or any other significant social demographic. Physical and ideological overlaps and divisions exist between groups. 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. Commanders understand the intricacies of who does what to whom. Such understanding furthers identifying 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. Commanders have expert, detailed, and current knowledge and information to avoid developing simplistic models of social interaction that may actively mislead and add to a flawed COA.

Beliefs, Needs, and Agendas

1-55. Commanders identify and analyze groups that focus on specific segments of the urban society to determine their beliefs, needs, and agendas. It also helps commanders determine how those interests motivate groups to future action or inaction—previous patterns of activity are critical in this regard. This analysis seeks to determine why groups and their leaders act as they do. Commanders consider political, economic, cultural, and religious factors in this analysis. These factors affect all groups to some extent and often provide the basis for their beliefs, needs (actual or perceived), and subsequent behavior.

1-56. Since urban society is so dynamic and the relationship between various elements is so complex, commanders continually assess how their operations affect the society and vice versa. Specifically, they assess how effectively their operations improve interaction with, influence of, and control over civilians. The intended effects always differ from the actual effects of a specific COA. Nowhere is this more prominent than when dealing with the urban society. This chain of effects frustrates understanding during urban operations. Effective commanders continuously monitor these effects to make decisions and modifications while planning, preparing, executing, sustaining, and transitioning urban operations. Commanders may use focus groups, informants, longitudinal studies, social media analysis, and social network analysis to elucidate needs and sentiments and to assess and understand changing civilian perceptions. Commanders rely on many sources to synthesize their understanding of the social dynamic. Initially, certain aspects of a society, such as religion, may not affect the operation. However, if a threat successfully shapes the urban populace's perceptions that Army/*Marine Corps* forces are biased against its beliefs, this aspect (for example, religion)

may become extremely important. In this instance, the urban commander adjusts information operations for public affairs, modifies influences activities for military information support operations (known as MISO) and civil-military operations to counter this propaganda, and diverts other combat power to control the populace. Overall, commanders understand and account for second- and third-order effects of their actions and decisions.

Leadership and Organization

1-57. 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. For a civilian group to exert meaningful influence, its leadership provides vision, direction, and organized coherence. This leadership is a function of personality as well as organization. Some groups depend on a charismatic leader to provide cohesion yet a different person as the spokesperson. Other groups de-emphasize individual leadership and provide redundancy and replacement in decision making. Others combine elements of both of these types of leadership and organization. Based solely on personality, a leader may centralize power or, while still being in ultimate control, decentralize decision making and execution to subordinates. In contrast, a single person heads a group while a ruling council makes and executes policy. Groups centered on one leader, which may or may not be the officially designated leader, produce decisions and initiate actions rapidly but are vulnerable to disruptions if key personalities are removed or co-opted. Groups with shared or redundant leadership take longer to make decisions yet better resist change and outside influence.

1-58. In urban operations, particularly stability operations, leaders at all levels devote considerable effort to identify and cultivate relationships of mutual trust and respect with civilian leaders in their area of operations. This civilian leadership includes political, religious, tribal or clan, ethnic, and economic leaders. Commanders consider that their 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 the leaders they choose to deal with are legitimate and accepted in the eyes of the urban population, otherwise, they may further imbalance an already weak power structure and exacerbate an unstable situation. In unique circumstances, commanders identify and interact with the leadership of criminal organizations.

1-59. Identifying and cultivating relationships with civilian leaders can affect change and allow the urban populace to understand and accept the purpose behind friendly operations. These relationships are the conduit for understanding the urban society's sentiments, perceptions, and reactions to friendly actions. As such, Army/*Marine Corps* forces value reliable and trustworthy linguists who interpret the language as well as serve as cultural advisors. Keeping the local population objectively informed not only of current operations but also of the intent and desired end state will often be a key task for commanders. Inadequate communication efforts can lead to a lack of understanding of intent and alienate a populace, resulting in significant problems in future negotiations. It is imperative that communication be clear and effective and that all leaders are aware of its implications. See FM 3-07 *and MCWP 3-03* for using interpreters and conducting productive meetings and negotiations.

General Population Size

1-60. Urban areas are commonly classified according to the general size of their population instead of by their landmass. These categories establish common terms for shared understanding when discussing a given city; they do not address the variations between cities with the same population size. Additionally, while population size reflects the numbers within a city's defined boundaries, the greater metropolitan area surrounding a city often includes a much larger number of people. For example, as of the U.S. 2010 Census, the City of Los Angeles' population stood at 3.8 million people, with almost 13 million in the greater Los Angeles Metropolitan area. The New York City Metropolitan area contained over 22 million people in the same census. Yet, the population density of the Los Angeles urbanized area was 7,000 inhabitants per square mile to New York's 5,319. While this example demonstrates the complexity of categorizing cities by their population, size is a still a useful tool for analysis at a basic level. Smaller populations suggest homogeneity among the inhabitants—a village is more homogeneous than a megacity. Homogeneity makes consensus or compromise easier to achieve because fewer opposing viewpoints exist. Given this homogeneity, effects of change are more certain and often easier to determine. However, homogenous does not mean identical. Major

social divisions (physical, ideological, economical) and their causes are more easily understood in a smaller population and vice versa. Treating an urban population as a completely homogenous entity leads to false assumptions, cultural misunderstandings, and poor situational understanding.

1-61. As urban areas expand, urban patterns begin to blur and the social complexity increases. For example, as satellite patterns continue to grow, the lines of communications from a central hub to outlying urban areas develop and begin to assume a linear urban pattern. Simultaneously, a hub and its outlying urban areas expand until they merge into a single, large metropolis. On a larger scale, a network pattern grows and unites as a single continuous urban area. Cities with populations of 10 million or more are given a special designation of megacity. There are currently over 20 megacities in the world, and by 2035 there will be close to 40. Megacity growth physically unites smaller urban areas but does not necessarily result in a similar unification of needs and beliefs, resulting in both an increase to physical and social complexities.

Location

1-62. Location considerations apply to each group to help determine to what extent its beliefs or ideologies, needs, and actions impact the urban operation. However, location and proximity may not accurately indicate actual or potential capabilities. Individuals, small groups, and groups located some distance from the actual conduct of the urban operation may be able to influence large portions of the population. These individuals or groups may have a capability disproportionate to their size and proximity especially against objectives that are not terrain oriented as in the case of many stability operations.

Interaction, Influence, and Control

1-63. Commanders cultivate an understanding of a group's—

- Size, location (and proximity to operations), and composition (to include leadership and organization).
- Interests.
- Capabilities.
- Potential actions (intent) and their effects, if any, on operations.

1-64. Commanders develop or modify COAs as appropriate. Certain COAs may be needed to improve the interaction 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 to punish—civilians.

1-65. COAs may include the following:

- Establishing buffer zones and restricted areas.
- Setting up checkpoints and roadblocks with other travel restrictions on people and goods.
- Screening civilians.
- Conducting negotiations (directly or as a mediator).
- Providing or protecting rations, water, and other critical resources.
- Restoring or improving specific key infrastructure.
- Enforcing curfews.
- Inspecting facilities.
- Directing amnesty programs.
- Conducting dislocated civilian operations.
- Conducting detainee operations.
- Implementing a stay-put policy.

1-66. 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 weight 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 host-

nation security forces and local law enforcement. Other elements of the environment—terrain and infrastructure—may fragment efforts and make it difficult to impose control measures throughout the area. Effective commanders carefully assess and understand the urban society's interests (beliefs, needs, and agendas) before implementing any populace and resources control measures to manage a populace. Otherwise, inappropriate controls—particularly if civilians perceive them as unjust punishment—may only aggravate the 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 OF THE POPULATION

1-67. The support of the population, or lack of support, for friendly forces directly impacts operations especially in urban areas. Army/*Marine Corps* forces certainly desire behaviors that support friendly action in any operations. However, those behaviors come at a cost of significant resources to maintain, particularly if expectations include provision of immediate humanitarian and security needs. Neutral behavior is more nuanced. While it is 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 significant security and resource difficulties.

1-68. To influence the behavior of a population, commanders often need and probably require external resources to support humanitarian and governance requirements. Commanders first understand the society's complex nature and character. Second, they understand and accept that every military action or inaction influences the relationship between the local populace and friendly forces, and by extension, mission success or failure. To meet humanitarian and governance requirements—especially if the operation requires prolonged action amongst the population—commanders must effectively integrate military efforts with the other instruments of national power in a whole-of-government approach. With this awareness, commanders take one or more actions:

- Coordinate and plan operations with interagency and coalition partners.
- Implement and assess effective civil-military programs.
- Take the immediate action 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.

1-69. While civil considerations are inherent to every military operation, 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 intimate contact with the population. Commanders consider three objectives regarding civilians of an urban area:

- Minimize the interference of civilians with urban operations. In offensive and defensive operations, this means moving civilians away from combat operations or establishing measures to shield them from its effects. In all operations, it often requires centralizing them in one or more locations that may mean keeping them where they are with population control measures or relocating them to temporary facilities.
- Maximize population support of friendly operations.
- Meet or exceed all legal, moral, and humanitarian obligations.

URBAN INFRASTRUCTURE

1-70. Urban infrastructures support urban inhabitants and their economy. They form the essential link between the physical terrain and the urban society. During urban stability operations, restoration or repair of urban infrastructure is decisive to mission accomplishment. During urban combat operations, destroying, controlling, or protecting vital parts of the infrastructure is necessary to shaping operations that isolate a threat from potential sources of support or that retain those sources of support for friendly use. A 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. Isolating this

threat from these sources requires electricity and transport of water and fuel from outside the urban area. To transport supplies, the threat relies on roads, airfields, seas or river lanes, and rail lines. Controlling these critical transportation nodes prevents the threat from resupplying. Controlling key radio, television, Internet, and newspaper facilities isolates the threat from the urban populace (another potential source of support).

A SYSTEM OF SYSTEMS

1-71. The 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 an urban environment's categories. Each system has a critical role in the smooth functioning of the urban area. Since the infrastructure categories overlap, this discussion covers each category individually and in relation to others to determine an appropriate COA toward it.

Interdependence

1-72. Commanders understand that destroying or disrupting any portion of the urban infrastructure has a cascading effect, either intentional or unintentional, on the other systems of the infrastructure. Yet, they may be able to gain an operational advantage while minimizing unwanted and unintended effects. Commanders can control, seize, or secure an essential facility or structure by using precision munitions, electronic disruption of communications, or special operations forces and conventional ground forces. To gain this advantage, commanders rely 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 command and control 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 develop the best COA.

A Combination of Structures and People

1-73. Each category of the infrastructure consists of both a physical (terrain) component and human component. 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 component 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. Commanders understand and recognize both physical and human components in their assessments.

Potential Impact on Future Operations

1-74. Destroying or incapacitating infrastructure impacts future operations and inhabitants of the urban area. 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

1-75. Requirements to protect, restore, or maintain critical infrastructure diverts substantial amounts of resources and manpower needed elsewhere and places additional constraints on subordinate commanders. 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 down to the individual Soldier/*Marine*—know the limits of battlefield/*battlespace* acquisition techniques (confiscation, seizure, and requisition) in support of mission accomplishment. In stability activities, the safeguarding or restoration of critical urban infrastructure for military or civilian use is normally a decisive point in the overall operation.

1-76. Keys to understanding the magnitude of the resources and manpower required to restore the civil infrastructure include an initial infrastructure assessment and a detailed infrastructure survey. An initial assessment provides the commander immediate feedback concerning the status of basic services needed to meet the urgent needs of the urban population. The systems assessed are based on the commander's vision of the overall end state and the mission variables. For the Army those 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 infrastructure assessment, while typically performed by engineers, 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. Consultants provide informed input.

1-77. While an infrastructure assessment facilitates resolution of immediate challenges to urban reconstruction and restoration, it also provides the initial basis for determining the conditions for successful transition. However, 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 for engineering discussions.)

URBAN INFRASTRUCTURE CATEGORIES

1-78. Simple or complex, all systems fit into six broad infrastructure categories (see figure 1-7). Commanders analyze key facilities in each category and determine their role and importance throughout all phases of the urban operation.

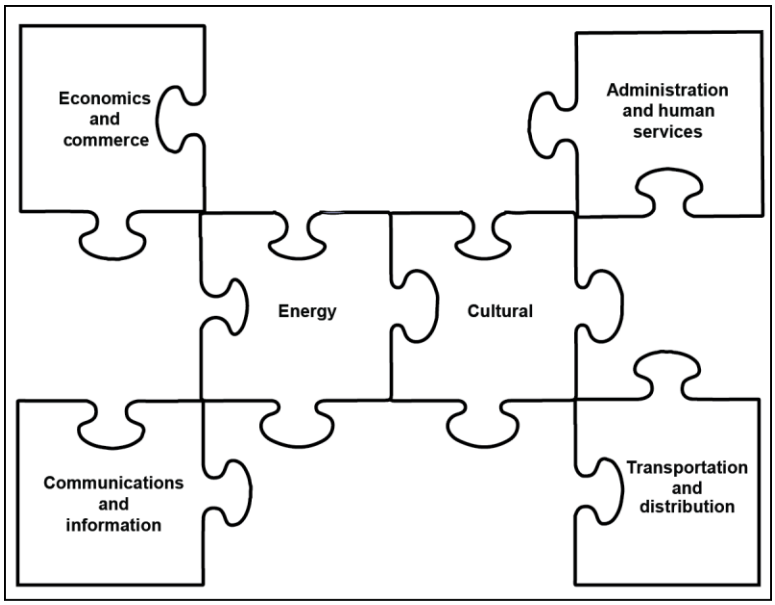

Figure 1-7. Urban infrastructure categories

Economics and Commerce

1-79. 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.

1-80. 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 United States 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 consisting of the creation or restoration (and protection) of businesses, agriculture, and overall jobs is often critical to—

- Generating or maintaining the urban population's support to Army/*Marine Corps* forces and operations.
- Reducing 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.

1-81. The economics and commerce category of the urban infrastructure produces and stores TICs 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 the infrastructure may also 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 the infrastructure, commanders consider the activities and influence of criminal organizations or elements.

Administration and Human Services

1-82. 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 that include 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

1-83. The energy category of the infrastructure provides for essential services and resources for the urban population. Losing the support of essential elements of the infrastructure has an immediate, destabilizing, and life threatening impact on the inhabitants of the urban area. In stability activities, 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 conduct sewage, water, electricity, academics, trash, medical, safety, other considerations (commonly known as SWEAT-MSO) assessment to determine the best COA to restore essential services. Soldiers/*Marines* reference ATP 3-34.81/*MCRP 3-34.3* (MCWP 3-17.4) for further considerations.

Cultural

1-84. This cultural category of the 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

1-85. The communications and information category is composed 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.
- The informal human interaction that conveys information such as messengers, open-air speeches and protests, and everyday conversations.
- Other inventive informal means such as burning tires and honking horns.

1-86. 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 the 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; however, urban governments and administrations are generally less prepared to deal with a collapsed communications and information infrastructure than trained Army/*Marine Corps* forces.

1-87. 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 unpalatable to prevent use of these assets. Forces use these systems to influence public opinion, gain intelligence information, support deception efforts, or support information operations.

1-88. Threats and friendly forces have used social media as an intelligence source, 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

1-89. In many urban areas, information technology links categories of the urban infrastructure. Information technology links functions and systems in the 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.

Pervasive Media Presence

1-90. The media is central to the communications and information infrastructure and a critical operational concern. Compared to other environments (jungles, deserts, mountains, and cold weather areas), the media has more access to urban operations. This is due to ready access to transportation routes such as airports, sea and river ports, and major road networks; to power sources and telecommunications facilities; and to 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 provide the means to strike the right balance.

Information Environment

1-91. Communications and information are subsets of the information environment 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 environment in all its complexity to determine how it affects military operations and, in turn, how military operations affect the information environment. For more information on affecting the information environment to operational and decisive advantage, see FM 3-13.

1-92. Many variables make up the information environment. 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 area of operations, 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

1-93. Successful relations between friendly forces and relevant audiences evolve from regular interaction based on credibility and trust. More information is usually better than less, except when the safety of personnel is at stake. However, commanders cannot withhold information to protect the command from embarrassment. 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. Since the media arrives in the urban area before the conduct of operations, early deployment of public affairs assets may be critical. Commanders—though their information operations officer or representative—synchronize,

coordinate, and de-conflict information-related capabilities in such a manner that the words, images, and deeds of the unit project a coherent and credible narrative.

Transportation and Distribution

1-94. This transportation and distribution category of the 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.

1-95. Similar to communications and information, this facet of the urban environment provides the physical link to all other categories of the 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—multi-modality. 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 that jeopardize the force. The very nature of transshipping nodes requires porosity and consequently every access point represents vulnerability.

1-96. 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 area of operations. Control of decisive points in this infrastructure affects the military operation, 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. Effective commanders consider the effects of using the commercial infrastructure since 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 have to develop innovative methods that limit the transit of threat supplies and reinforcements while facilitating the movement of their own resources and those of civilians. This last consideration attempts to minimize hardship and promote normalcy in the urban area and increases in significance as the need for legitimacy increases.

1-97. 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. Low barriers to entry; family and individual entrepreneur organizations; adapted technology; flexible routes, destinations, and times of service; and negotiated prices characterize the informal system. 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 understand both systems to establish effective movement control and isolate the enemy.

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Chapter 2
Foundations of Urban Operations

This chapter discusses urban operations and their necessity. It discusses the risk considerations. The chapter concludes with a discussion of the fundamental tasks of successful operations in an urban environment.

UNDERSTANDING URBAN OPERATIONS

2-1. Urban operations may span offensive, defensive, and stability tasks planned and conducted on or against objectives on a topographical complex and its adjacent natural terrain where man-made construction or the density of population are the dominant features. Urban operations may occur sequentially or, more likely, simultaneously. Urban operations may be the commander's sole mission or one of several tasks nested in a larger operation. The complex urban environment affects the overall conduct of the mission regardless of the types of operations conducted, whether the urban area is the single focus of the operation or only one component of a larger campaign. Army/*Marine Corps* leaders conducting urban operations must—

- Understand the urban environment to determine decisive points.
- Shape the operation to establish the conditions for success.
- Precisely mass the effects of combat power to engage the decisive points that lead to centers of gravity.
- Continually consolidate gains essential to retain the initiative.
- Transition the urban area to the control of another force, agency, or legitimate and functioning civilian control.

2-2. Commanders understand and consider that the factors influencing a city extend far beyond the area's physical confines. For example, the source providing electrical power to the urban energy system may be located outside of the urban area. Effects of the interaction between components of the infrastructure, located both inside and outside the urban area, extend into smaller neighboring urban areas and surrounding rural areas. This interaction creates political, economic, and cultural impacts. Commanders consider the total urban environment when conducting cohesive and effective urban operations. While the physical infrastructure and terrain is important to define an urban area, the most important variable the commander must deal with is the populace. Leaders firmly decide if urban operations are proper or necessary.

2-3. Most major urban operations require the close cooperation and application of joint Service capabilities. A joint task force may be designated to command and synchronize the efforts of all services and functions in an urban area designated as a joint operations area. If a large urban area falls within an even larger ground force area of operations, a joint task force dedicated to the urban operation may prove inappropriate. These situations still require joint capabilities. 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. The 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 joint, intergovernmental, interagency, and multinational organization. Commanders leverage resources from special operations forces, the Department of State, and the theater of operations to build their intelligence picture and understanding of an operational environment for a reach-forward and continental United States-based reachback to mitigate a reduced footprint in austere environments. Those methods must be complemented with 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

2-5. Commanders decide if it is necessary and possible to conduct urban operations in their areas of operations early in planning a major operation. 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 require control of an urban area or necessitate operations within it. Commanders conduct urban operations because they provide a tactical, political, or economic advantage, or not doing so threatens the larger campaign.

TACTICAL ADVANTAGE

2-6. Cities control key routes of commerce and provide a tactical advantage to the commander who controls them. Control of features such as bridges, railways, and road networks can significantly impact future operations. The enemy can use urbanized areas as a base of operations from which it launches its own offensive operations. It may be advantageous to attack those bases and separate the enemy from its support infrastructure.

POLITICAL ADVANTAGE

2-7. The political importance of a built-up area may justify the use of time and resources to liberate it. Capturing a city could destroy the seat of local and national government. At the very least, it could deal the enemy a decisive psychological blow.

ECONOMIC ADVANTAGE

2-8. The destruction or capture of key industrial and commercial cities with the resulting denial of production and distribution of equipment and supplies 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 the enemy's ability to continue the conflict. Capture of such cities may prove extremely beneficial to the attackers, who can use these resources to their advantage.

POTENTIAL THREATS TO OPERATIONS

2-9. If the enemy is too operationally significant to bypass, or a threat to support operations and lines of communications, 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.

RISK CONSIDERATIONS

2-10. Several considerations exist that make urban operations unnecessary, unwarranted, or prohibitively expensive. Commanders consider operational and environmental risks and then balance those risks with mission benefits to determine whether to operate in an urban environment. The factors shown in figure 2-1 highlight some risks to evaluate associated with urban operations.

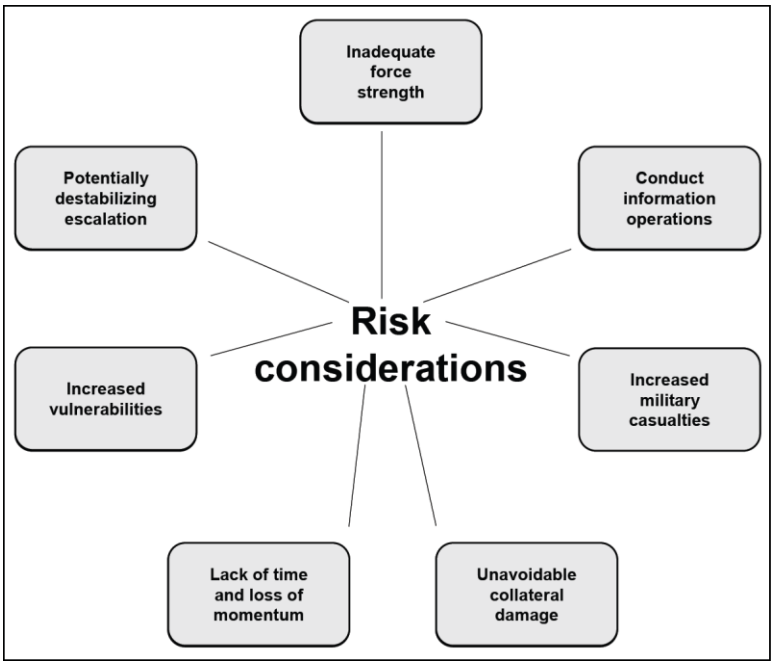

Figure 2-1. Risks associated with urban operations

INADEQUATE FORCE STRENGTH

2-11. When facing prospective urban operations, commanders consider if they have the necessary troops to conduct the operation properly and within acceptable risk. Large urban areas require many forces to establish control under normal circumstances. For example, the New York City Police Department has over 40,000 officers and hundreds of support staff to conduct peacetime law enforcement. While operations may not call for similar dominance of the entire urban area, achieving and maintaining relative combat power are critical to successful operations. Major urban operations, particularly those that are opposed, require a significant number of forces of which infantry will be the largest portion. History suggests urban offensive missions require three to five times greater troop density than for similar missions in open terrain. If commanders lack sufficient force to conduct effective operations, they may postpone or consider not initiating those operations until they have the necessary strength. Commanders add the requirements for troop strength elsewhere in the area of operations to their analysis. Additionally, commanders consider the number and type of forces required to transition from urban offensive and defensive tasks to stability or DSCA tasks when determining overall force requirements, not just the number of forces required to realize objectives for major combat operations. See *Boots on the Ground: Troop Density in Contingency Operations* for further discussions on appropriate levels of force strength.

CONDUCT INFORMATION OPERATIONS

2-12. Along with force strength, commanders consider the type and balance of forces available. This includes assessing their level of training in urban operations. Generally, urban operations put a premium on well-trained dismounted infantry units cohesively integrated with the combat support from armor, fire support, and combat engineer assets. The operational or tactical necessities to clear forces from a dense urban environment, hold hard-won terrain, and interact with the urban population increase dismounted requirements. Army/*Marine Corps* forces conducting urban operations are force tailored to include a larger infantry component. Special operations forces are invaluable in urban operations. Special operations forces include military information support operations and civil affairs forces. These forces are part of the task organization.

2-13. Urban operations include combined arms to ensure tactical success in combat. Although masses of heavy forces are not required, successful urban operations require the complementary effects of all friendly forces. Even if an urban operation does not involve offensive and defensive operations, mobility and protection/f*orce protection* still require armor, combat engineers, and fire support. In urban stability tasks, successful mission accomplishment may require additional civil affairs resources. They are also valuable in urban offensive and defensive operations. When commanders have sufficient close combat forces, they must also organize enough sustainment/*logistics* forces to maintain tempo. Commanders without balanced types of forces, to include proficiency in operating in urban environments, consider alternatives to urban operations or delay until proper force types are trained and available in sufficient numbers.

INCREASED MILITARY CASUALTIES

2-14. Casualties in urban operations are more likely than in operations in other environments. In urban offense and defense, friendly and threat forces engage at close range with little space to maneuver. The urban terrain provides numerous advantages to the urban defender. Higher casualties occur among troops on the offensive where frontal assaults are often the only tactical option. Defenders with limited ability to withdraw suffer high casualties when isolated and attacked. Casualties are more difficult to prevent in urban stability operations because of the dense complex terrain, the proximity of the urban population, and the difficulty in distinguishing friend from foe. The potential for high casualties and the subsequent need for casualty evacuation under difficult circumstances make the positioning and availability of adequate medical resources another important consideration. Additionally, high intensity urban combat and the potential for increased stress casualties require additional units to allow for adequate unit rotations so that Soldiers/*Marines* receive the rest they require. During the battle for Fallujah in 2004, commanders made the decision to attack during the day, consolidating and resting at night.

2-15. Though casualties occur in all operations, commanders recognize the likelihood of more casualties during large-scale or high-intensity urban operations. During the battle for Hue in 1968, for example, many company-sized units suffered more than 60 percent casualties in only a few days of offensive operations. Commanders conducting urban stability operations must know the casualty risk and its correlation to national and strategic objectives. 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 urban operations critically affect 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 objectives within the urban area are equal to the anticipated risk.

UNAVOIDABLE COLLATERAL DAMAGE

2-16. Urban operations require an expanded view of risk assessment for collateral damage. When considering risk to joint and multinational forces, commanders analyze the 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 resulting in headquarters holding commanders to a higher degree of restraint and precision in their operations. Collateral damage also influences the post conflict physical environment and attitudes of the population. Negative impressions of the civilian population caused by collateral damage can take generations to overcome. Destroying an urban area to save it is not an option for commanders. 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 can greatly reduce civilian casualties, some degree of collateral damage may be unavoidable. If collateral damage is likely to be of sufficient magnitude, it may justify avoiding urban operations, which though tactically successful, would run counter to national and strategic objectives.

LACK OF TIME AND LOSS OF MOMENTUM

2-17. Commanders analyze the time required to conduct urban operations successfully. Urban operations can be time consuming and require larger quantities of resources. The density of the environment, the need

for additional time to conduct a thorough reconnaissance, the additional stress and physical exertion imposed on Army/*Marine Corps* forces operating in urban areas, and the potential requirements to care for the needs of the urban population consume time and slow momentum. Commanders cannot permit urban operations conducted as a shaping operation to divert resources from a decisive operation/*decisive action*. Commanders cannot allow urban operations to interrupt critical timelines, unnecessarily slow tempo, or delay the overall operation. Threat forces conduct urban operations with the primary purpose of causing these effects. Commanders recognize that time works against political and military objectives and must plan accordingly to avoid delays or disrupt the decisive operation/*decisive action*. Once commanders achieve major combat objectives however, they often shift resources and focus on urban areas that they previously isolated and bypassed.

INCREASED VULNERABILITIES

2-18. Commanders weigh the potential for increased vulnerabilities when executing urban operations. The complexity of the urban environment makes protection/*force protection* (safety, field discipline, protection, and especially fratricide avoidance) difficult. Forces operating in a large urban area increase risk of isolation and defeat in detail. U.S. air superiority is less advantageous in the urban area. Congested airspace and many obstacles restrict aviation mobility and aircraft are vulnerable to anti-air assets employed from covered and concealed positions within the city. Both assault support and close air support to ground troops are constrained because of these limitations. Responding to unexpected situations or augmenting disadvantageous force ratios when applying joint capabilities is significantly more difficult. Although organized, trained, and equipped for success in any environment, the Army/*Marine Corps'* vulnerability to weapons of mass destruction increases when forces concentrate to conduct urban operations. Commanders may consider not committing forces or limiting the size of a force committed to an urban area because of increased vulnerability to (and likelihood of) attack by weapons of mass destruction.

2-19. Fratricide avoidance concerns commanders in all operations. The complex urban terrain and density of participating forces coupled with typical battlefield/*battlespace* effects (smoke, dust, and burning fires) and weather effects (fog, snow, rain, and clouds) immensely increase the potential for fratricide. Additionally, safety requirements make it difficult to fully replicate conditions in training that allow leaders to become more aware of the conditions that contribute to fratricide. Fratricide has a corrosive effect on a military force. Critical effects include—

- Needless loss of combat power.
- Decreased confidence in leadership, weapons, and equipment.
- Disrupted operations and decreased tempo.
- General degradation of cohesion and morale.

2-20. Effective commanders increase fratricide awareness and emphasize prevention measures during urban operations. Causes can be procedural, technical, or a combination of the two and include—

- Combat identification failures due to poor situational understanding, lack of communication, ineffective coordination, and short engagement ranges coupled with the need for quick reaction.
- Location errors involving either the target or enemy forces due to poor situational understanding.
- Inappropriate control and fire support coordination measures and a failure to receive, understand, or adhere to these measures.
- Imprecise weapons and munitions effects such as an antitank round that penetrates several walls before exploding near friendly forces.

Exacerbating these difficulties occurs when Army/*Marine Corps* forces conduct operations with (or within proximity of) special operations forces, multinational forces, and indigenous security forces including the local police.

POTENTIALLY DESTABILIZING ESCALATION

2-21. In the urban environment, Army/*Marine Corps* forces cannot avoid close contact with enemy forces and civilians that may potentially become hostiles. In stability activities, 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 urban operations using Army/*Marine Corps* forces.

ALTERNATIVES AND RISK REDUCTION MEASURES

2-22. Since urban operations are often high in risk, commanders consider COAs that provide alternatives. When the objective of an urban operation is a facility, commanders consider replicating that facility outside the urban area. For example, a critical requirement for an airfield to sustain operations may lead commanders to consider urban operations to seize or secure one located in an urban area. However, if adequate resources exist (especially time and adequate general engineering support), Army/*Marine Corps* forces may build an airfield outside the urban area and eliminate the urban operation. Similarly, joint logistics over-the-shore operations may be an alternative to seizing a port facility. In some situations, the objective of urban operations may be to protect a political organization such as a government. Relocating the government, its institutions, and its personnel to a safer area may be possible. Commanders may also design an operation to avoid an urban area. For example, if an urban area dominates a particular avenue of approach, commanders may use a different avenue of approach if it allows the same mobility without the risks of going through a city. Using a different avenue of approach differs from isolating and bypassing because the entire operation specifically makes the urban area irrelevant.

2-23. When commanders execute urban operations, they assess potential hazards and develop controls to eliminate or reduce risks to Army/*Marine Corps* forces. The first means to offset risk is to have a thorough understanding of the urban environment and its effects on operations by all members of the force. Measures allow commanders to satisfactorily control urban operations and minimize fratricide without unreasonably restricting subordinate commanders' abilities to accomplish assigned missions. Commanders consider risk mitigation factors to include the following:

- Detailed planning to include thorough intelligence preparation of the battlefield/*battlespace* (IPB) and the development of appropriate branches and sequels.
- Integrated information collection.
- Clear missions and commander's intent including a well-articulated end state that looks beyond the cessation of combat operations.
- Sufficient reserves and rotation of forces.
- Vigilant physical security precautions including increased use of barriers and other defenses, particularly when forces use urban areas as support areas.
- Operational communications and other information systems.
- Effective populace and resources control measures.
- Comprehensive and flexible rules of engagement (ROE) continuously reviewed to ensure they remain adequate for the situation.
- Proper targeting SOPs (including effective fire support coordination measures and a streamlined legal review of targets), positive identification of targets, and controlled clearance of fires. The goal is to achieve precise yet rapid effects with both lethal and nonlethal means. In close air support, positive air-to-ground communications are essential to coordinate and authenticate markings.
- Synchronized information-related capabilities that begin before introducing Army/*Marine Corps* forces into the urban environment and continue well through transition. Commanders emphasize vigilant operations security particularly when operating closely with the media, nongovernmental organizations (NGOs), and elements of the civilian population.
- Active and effective integration, synchronization, and coordination among all forces, agencies, and organizations involved in the operation. Commanders allow adequate planning and rehearsal time for subordinates.
- Responsive, sustainable, and flexible urban sustainment/*logistics*.
- Forces well trained in combined arms operations incorporating joint, interagency, and multinational forces.

- The creation of adaptable, learning organizations. This requires thorough after action reviews conducted during actual operations as well as after training exercises.
- Sufficient control measures (which often include a common urban reference system) as well as standard marking and identification techniques that adequately address limited visibility concerns for both air and ground forces. Commanders ensure that all subordinate units thoroughly disseminate any approved nonstandard reference systems.

2-24. In addition to official Army/*Marine Corps* sites—such as the Center for Army Lessons Learned, Marine Corps Center for Lessons Learned, and the Battle Command Knowledge System—commanders create a 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. This system may be technology based, procedural, or both. (For example, during Operation IRAQI FREEDOM, the 1st Cavalry Division developed an effective Web-based knowledge network that allowed it to actively capture and share lessons learned among subordinate units.)

FUNDAMENTAL TASKS OF URBAN OPERATIONS

2-25. Commanders engaged in urban operations understand fundamental tasks that apply to any urban environment. Urban operations often differ from one operation to the next. However, some fundamental tasks apply to urban operations regardless of the mission, geographical location, or level of command. Some of these fundamentals are not exclusive to urban environments. Yet, they are particularly relevant to an environment dominated by man-made structures and a dense noncombatant population (see figure 2-2).

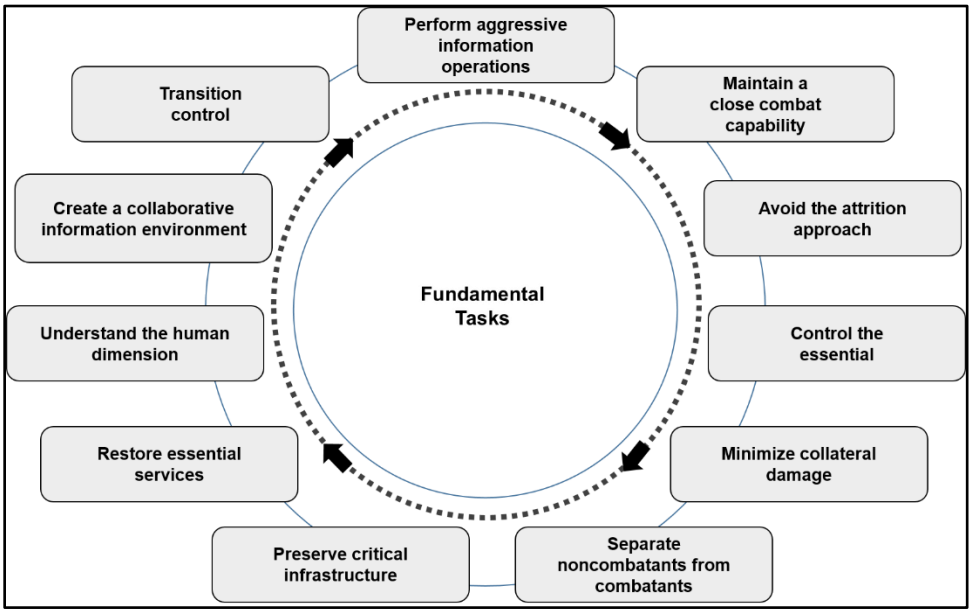

Figure 2-2. Fundamental tasks of urban operations

PERFORM AGGRESSIVE INFORMATION OPERATIONS

2-26. Urban information environments are some of the most complex that commanders face. Through their personal involvement in the planning, preparation, execution, and assessment of information operations, commanders ensure operations in the information environment contribute to overall mission success. Because of the density of noncombatants and information sources, the media, the public, allies, multinational partners, neutral nations, and strategic leadership scrutinize how Army/*Marine Corps* forces participate in urban operations. The proliferation of cell phones, video cameras, Internet capability, and media outlets ensure close observation of the activities of Army/*Marine Corps* forces. With information sources rapidly expanding, public information of Army/*Marine Corps* operations is available faster than the internal military information systems can process it. Army/*Marine Corps* forces aggressively integrate information operations

into every facet and at all levels of the operation to manage perceptions and mitigate unintended consequences. Under media scrutiny, the action of one Soldier/*Marine* has significant strategic implications.

2-27. Information collection operations aim to make the information accurate, place it in the proper context of the Army/*Marine Corps* mission, and make it available to all interested parties including the public, the media, and other agencies. It is a critical task to ensure that the urban population understands how its population and the urban area fit within the commander's vision, intent, and end state.

2-28. Urban operations have short cause and effect links to actions and operations. Because of the close media scrutiny likely during urban operations, a potentially global audience could observe the actions of platoons in real time. For example, the media may film a platoon applying nonlethal force for crowd control. Senior military and political leadership could view the event on the nightly news before the platoon even disengages from the action, much less reports formally through the various levels of command. Senior leaders could direct commanders to adjust ROE before the platoon reports. Therefore, commanders at all levels should understand the urban environment's potential compressive effects on the levels of war. A major impact of these effects can be a lower tolerance for tactical errors and a greater need for detailed planning and precision in execution and weapons' effects (lethal and nonlethal).

MAINTAIN A CLOSE COMBAT CAPABILITY

2-29. Urban operations are marked by a high incidence of intensive combat at close ranges. U.S. forces require the ability to locate, close with, and destroy the enemy, or repel the enemy's assault in an urban environment. Regardless of the technological advances, Army/*Marine Corps* combat forces on the ground accomplish many of the joint force commander's objectives. Those forces must have the training, organization, weapons systems, and skills to isolate an urban objective, gain a foothold, and secure it against a determined enemy, maximizing maneuver, fire support, and effective small-unit leadership to overcome that enemy.

AVOID THE ATTRITION APPROACH

2-30. Previous Army/*Marine Corps* doctrine was inclined toward a systematic linear approach to urban combat. This approach emphasized standoff weapons and firepower. Army/*Marine Corps* force structure does not support this approach toward urban operations. It can result in significant collateral damage, a lengthy operation, and an inconsistency with the political situation and strategic objectives. Enemy forces that defend urban areas want Army/*Marine Corps* forces to adopt this approach because of the likely costs in resources. Commanders consider this approach to urban combat as an exception and justified by unique circumstances. Instead, commanders seek to achieve precise intended effects against multiple decisive points that overwhelm a threat's ability to react effectively.

CONTROL THE ESSENTIAL

2-31. Many modern urban areas are too large to be completely occupied or even effectively controlled without an enormous force. Therefore, Army/*Marine Corps* forces focus their efforts on controlling only the essentials to mission accomplishment. At a minimum, this requires control of key terrain. *Key terrain* is any locality, or area, the seizure or retention of which affords a marked advantage to either combatant (JP 2-01.3). In the urban environment, commanders determine key terrain based on its functional, political, economic, or social significance. A power station or a place of worship may be key terrain.

2-32. All principles of joint operations—objective, offensive, mass, maneuver, economy of force, unity of command, security, surprise, simplicity, restraint, perseverance, and legitimacy—apply to urban operations. The principle of mass, the principle of economy of force, in addition to the principle of unity of command guide urban operations and provide mission focus. Army/*Marine Corps* forces mass combat power only to control those requirements essential for mission success. This permits conservation of combat power. It also implies economy of force and associated risk in those areas where Army/*Marine Corps* forces choose not to exercise control.

2-33. Physical control may not be possible in many urban environments where Army/*Marine Corps* forces are employed. Forces can achieve persistent presence (before conflict, during conflict, and after conflict) to

shape an operational environment and maintain situational awareness where physical presence is not possible. A virtual presence—via social media, engagement with local communities, remote observation, organization and communication with potential allies, and collection and analysis of relevant operational data—may perform a valuable queuing and prioritizing function. It may also build up support networks to ensure that no future joint expeditionary operations should have to deploy blind.

MINIMIZE COLLATERAL DAMAGE

2-34. Forces integrate precision fires, information operations, and nonlethal tactical systems consistent with mission accomplishment while decreasing the potential for collateral damage. Commanders follow and implement established ROE for each urban operation and provide necessary firepower constraints. Information operations and nonlethal systems compensate for some restrictions, especially in stability or DSCA tasks. Commanders continually assess the short- and long-term effects of operations and firepower on the population, infrastructure, subsequent missions, and national and strategic objectives. They also consider what, if any, provisions should be made to amend or address potential collateral damage. Overall, commanders balance restraint and precision with speed and overwhelming combat power. By avoiding unnecessary harm to all elements of the urban environment, 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

2-35. Promptly separating noncombatants from combatants (psychologically and physically) makes an operation more efficient and diminishes some of the threat's potential advantages. This separation also reduces restrictions on the use of firepower, enhances protection/*force protection*, and strips the threat from its popular 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. Soldiers/*Marines* 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

2-36. Commanders analyze the urban area to identify critical infrastructure. They preserve and protect the critical elements for postcombat sustainment/*logistics* operations, stability or DSCA tasks, or the overall health and wellbeing of the indigenous population. Postcombat urban operations are unavoidable. Different from simply avoiding collateral damage, Army/*Marine Corps* forces initiate 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. In some cases, preserving the infrastructure and the urban society's sources of economic and cultural wealth are assigned objectives of an urban operation.

RESTORE ESSENTIAL SERVICES

2-37. Army/*Marine Corps* forces plan to restore essential services that may fail to function before or during an operation. Essential services include power, food, water, sewage, medical care, and security and law enforcement. When conducting urban operations, units use nonlethal and less destructive munitions and capabilities to keep a vital infrastructure intact. Initially, Army/*Marine Corps* forces are the only forces able to restore or provide essential services and commanders must plan accordingly. Failure to do so results in serious health problems for civilians, which can affect the health of Army/*Marine Corps* forces and negatively impact overall mission success. Army/*Marine Corps* forces transfer responsibility for providing essential services to other agencies, NGOs, or the local government as quickly and effectively as possible. Despite potential causes for the failure or destruction of essential services, commanders ensure civilians continually perceive restoration activities as assistance rather than a requirement. Otherwise, civilians may be slow to accept or resume responsibility for their urban area.

UNDERSTAND THE HUMAN CONTEXT

2-38. Commanders carefully consider and manage the perceptions, allegiance, and morale of the civilians. Their assessment of an environment identifies the attitudes of the people toward Army/*Marine Corps* forces. Operational guidance to subordinates—including ROE, protection/*force protection*, sustainment/*logistics* operations, and fraternization—is based on this assessment. Commanders expect and consider the demographic variance in the attitudes of an urban population. They cannot inadvertently apply Western cultural norms to a non-Western urban population. Commanders make reliable assessments based on a thorough understanding and appreciation of the local society and their culture. Developing this ability requires the additional ability to share information effectively among all echelons of command.

2-39. 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 Army/*Marine Corps* forces relative to the urban population. Even during high intensity urban combat, heightened awareness of—and sensitivity toward—civilians lead to a better postcombat situation than if civil considerations were ignored or diminished in importance. An improved postcombat situation enhances transition. As the environment of conflict becomes more complex, the human aspects (and associated moral aspects) take on greater importance and have the greatest potential for affecting the successful outcome of urban operations. Therefore, the human aspect and development of cultural acuity create a discrete planning factor.

CREATE A COLLABORATIVE INFORMATION ENVIRONMENT

2-40. The complexity of the urban environment, particularly the human aspects, requires rapid information sharing—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. The analysis of urban information into the relevant 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. Commanders establish streamlined SOPs, develop commonality among databases, and use existing information systems to disseminate and receive the necessary intelligence and relevant information for subordinates and partner organizations and agencies to exercise effective leadership, make decisions, and establish a unity of effort in this multifaceted environment.

TRANSITION CONTROL

2-41. Because urban operations are intensive in resources, commanders plan to end them quickly but successfully. Depending on the mission variables of METT-TC/*METT-T*, successful transition may take a few days or many years to achieve. The end state of all urban operations transfers control of the urban area to another agency or returns it to legitimate civilian control and responsibility. Rapid transition releases Army/*Marine Corps* resources for use elsewhere and improves the civilian morale and disposition toward Army/*Marine Corps* forces. This end state requires the successful completion of the Army/*Marine Corps* forces mission and a thorough transition plan. The transition plan includes returning control of the urban area to another agency a portion at a time as conditions permit. A successful transition plan considers early alignment of military capabilities with existing urban governmental and administrative organizations, agencies, structures, and districts. Army/*Marine Corps* forces conduct transition planning before the onset of operations and continually adjust the planning as the situation develops.

Chapter 3
Effects on Warfighting Functions and Tactics

This chapter discusses the effects on warfighting functions in an urban environment. It discusses each warfighting function and its particular key tactical considerations for urban operations.

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 (ADRP 3-0). Understanding the effects of the urban environment on warfighting functions helps commanders visualize their operational environment. All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. Understanding this, commanders conduct a thorough assessment and determine the most efficient and effective means of employing Army/*Marine Corps* forces. The staff is intimately familiar with effects in their area of expertise and uses that knowledge to understand the problem 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***
Mission command	Command and control
Movement and maneuver	Maneuver
Intelligence	Intelligence
Fires	Fires
Sustainment	Logistics
Protection	Force protection

MISSION COMMAND/*COMMAND AND CONTROL* WARFIGHTING FUNCTION

3-2. The *mission command warfighting function* is the related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0). In the Army, commanders exercise mission command whereas in the Marine Corps, commanders exercise command and control. The Army defines *mission command* as the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations (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* command and control *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 six warfighting functions. (MCRP 1-10.2).* It is the leader's ability to see the battlefield/*battlespace*, interact with the human component of the environment, and remain intellectually flexible in the face of change that impacts the mission. The mission command/*command and control* system arranges personnel, networks, information systems, processes and procedures, and facilities and equipment that enable commanders to conduct operations. It enables commanders to overcome challenges placed on the tactical internet and system hardware by the urban environment, by the increased volume of information, and by requirements to support the dynamic decision making necessary to execute successful urban operations.

UNITY OF COMMAND

3-3. Although severely challenged, the principle of unity of command remains essential to urban operations. The nature of the operation, the number of tasks, and the size of the urban area may require that Army/*Marine Corps* forces operate non-contiguously. Noncontiguous operations challenge a commander's ability to unify the actions of subordinates, apply the full force of combat power, and achieve success. This crucial principle in an urban environment requires centralized planning, mission orders, and highly decentralized execution. The concept of mission command/*command and control* allows subordinates to be innovative and operate independently according to clear orders, commander's intent, and clearly articulated ROE. Mission orders, military values (duty, honor, courage, integrity, and selfless service), and ROE guide subordinates to make the right decision when facing—

- A determined, resolute, and adaptive threat.
- A complex, multidimensional battlefield/*battlespace*.
- Intermittent or complete loss of communications.
- Numerous potentially hostile civilians close to military operations.
- The constant critique of the media and military pundits.

3-4. Decentralized execution allows commanders to focus on the overall situation—a situation that requires constant assessment and coordination with other forces and agencies—instead of the numerous details of lower-level tactical situations. Fundamentally, this concept of mission command/*command and control* requires mutual trust between commanders and their subordinates. This trust depends on the demonstrated character, competence, and commitment of all members. Commanders must accept risk and trust in the initiative, judgment, and tactical and technical competence of their subordinate leaders. Many times, it requires commanders to exercise patience as subordinate commanders and leaders develop. Positive encouragement, coaching, and mentoring of subordinates often helps develop their increased competence and mutual trust with commanders.

POLITICAL AND MEDIA IMPACT

3-5. Commanders of a major urban operation consider the impact of politics and the media on urban operations and share their perceptions in their commander's intent. They maintain a heightened awareness of the political situation that affects how they exercise mission command/*command and control*. A magnified political awareness and media sensitivity creates a desire to micromanage and a reliance on detailed command. Micromanaging creates tactical leaders afraid to act decisively and with speed and determination, as they wait instead for expected guidance from a higher-level commander. Enemies capitalize on this hesitation by conducting operations faster than Army/*Marine Corps* forces can react. Commanders use mission orders to exercise mission command/*command and control* that express the overarching political objectives and the impact of inappropriate actions, combined with training and trust, decrease the need for detailed command. Leaders reduce a complex political concept to its simplest form, particularly at the small-unit level. Even a basic understanding can curtail potentially damaging political actions and enable subordinates to make the instantaneous decisions required in urban operations—decisions that support military and political objectives.

COMMANDERS' OBSERVATIONS

3-6. Leaders at all levels observe the entire battlefield/*battlespace* to better lead Soldiers/*Marines*, make effective decisions, and give direction. Using personal observations and inputs from others (to include running estimates from the staff), commanders improve their understanding of an operational environment to facilitate exercising mission command/*command and control*.

3-7. Maps often provide the details that commanders need to observe and exercise mission command/*command and control*. Details can include friendly and enemy locations, other appropriate intelligence products, and information systems that accurately depict the urban environment and help establish a common operational picture. The reliability of these details is as important to planning major operations as it is to tactical-level operations. The commander of the major operation ensures that subordinate tactical-level commanders have the necessary products to achieve accurate situational understanding and dominate the urban environment. Frequently, commanders request satellite or aerial imagery to compensate for incorrect

maps or to see drastic changes that occur during or after urban operations, natural disasters, acts of terrorism, or other man-made disasters. Even maps developed and maintained by urban area's administrative activities may not be up-to-date. Extensive and continually expanding shantytowns, for example, may not be mapped at all. Maps may have intentional distortions or critical detail intentionally omitted. Systems used to transliterate some languages—such as Arabic or Chinese to Anglicized alphabets—result in several, and frequently differing, spellings for a single location. Maps also assign names to features that completely differ from those names used by locals.

3-8. Some critical observation products needed in the common operational picture include overlays or gridded reference graphics. Whenever possible, gridded reference graphics conform to the standard military grid reference system to reduce the probability of error when entering target coordinates into targeting systems that use GPS. All participants have these products prior to the urban operations. These observation products focus on ease of reference and usefulness for all forces both ground and air. Overlays and graphics also indicate important societal information or urban infrastructure, such as—

- Religious, ethnic, racial, or other significant and identifiable social divisions.
- Locations of police, fire, and emergency medical services and their boundaries or zones of coverage.
- Protected structures such as places of worship, hospitals, or other historical and culturally significant buildings or locations.
- Underground subway, tunnel, sewer, or water systems.
- Bridges, elevated roadways, and rail lines.
- Electrical generation (to include nuclear) and gas storage and production facilities and their distribution lines.
- Water and sewage treatment facilities.
- Telephone exchanges and television and radio stations.
- TIM locations.

MENTAL FLEXIBILITY

3-9. Commanders exercising mission command/*command and control* while conducting urban operations must remain mentally flexible. Situations change rapidly because of the complexity involved when factoring in people. For example, a stability operation that changes to an operation that requires the use of force. Effective commanders quickly adjust their mental focus from a noncombat to a combat situation and encourage subordinate leaders to adjust as well. Equally important is dealing with populations during combat operations. Consequently, commanders rapidly adjust plans and orders for sudden stability or DSCA tasks that emerge during or soon after a combat mission. In developing their vision, commanders consider the second- and third-order effects of urban operations. By remaining mental flexible, commanders can exercise the most important tenants of mission command*/command and contro*l to better ensure mission accomplishment during all phases and changes.

INFORMATION SYSTEMS

3-10. Commanders need support to exercise mission command effectively. At every echelon of command, each commander establishes a *mission command system*—the arrangement of personnel, networks, information systems, processes and procedures, and facilities and equipment that enable commanders to conduct operations (ADP 6-0). In many instances, the information systems available to the commander directly affect the speed and accuracy all the components of mission command; commanders can leverage information systems and bring them to bear on emerging situations and critical issues. An urban environment particularly challenges information systems that support the 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 common operational picture, 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 urban operations, allocating critical or high-value communications assets are significant and essential to the main effort.

3-11. In an urban environment, units and staffs prepare for and mitigate the communications problems in urban areas (see figure 3-1). Adequate communication, in most cases, are ensured by—

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

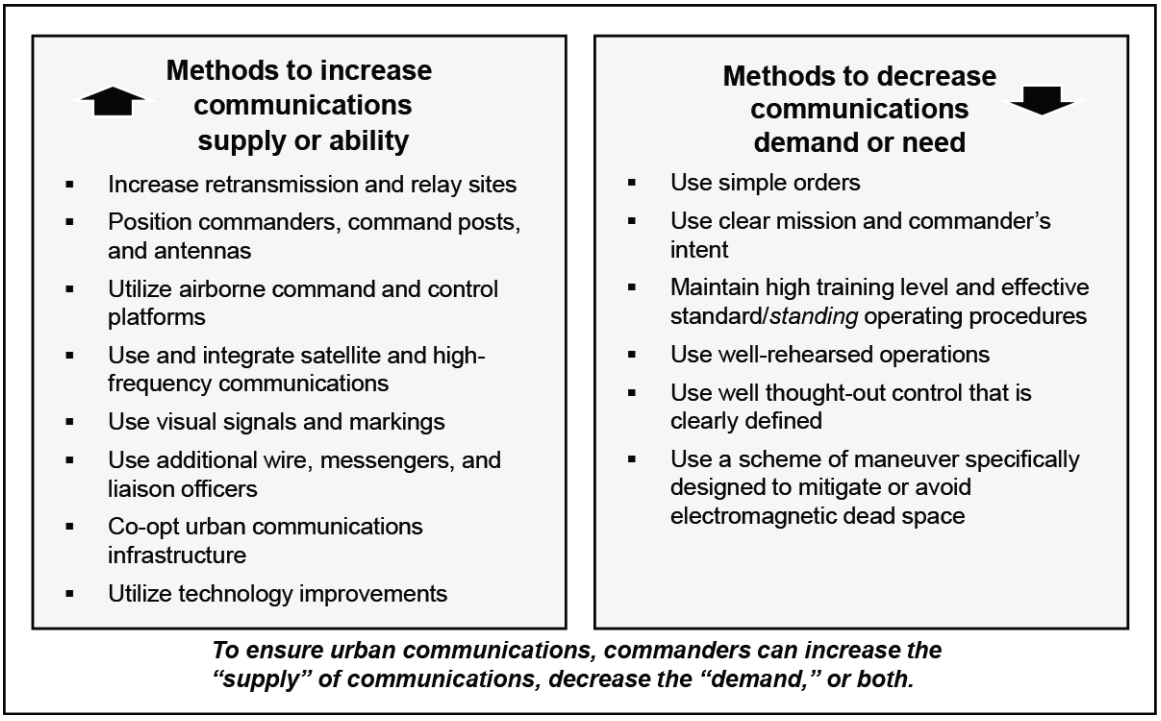

Figure 3-1. Methods to overcome urban communications challenge

3-12. SOPs for visual markings, both day and night, assist in mission command/*command and control*. These SOPs indicate unit locations and other essential information. They coordinate with 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. For example, 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; however, locating and destroying the repeater stations or other land-based elements of a cellular telephone system (or the effects of natural disasters) can 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. Command posts above brigade level ensure they communicate in an urban area without significant disruption. In stability activities, 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 not acceptable, the higher headquarters mitigates it by increasing 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. However, this requires more time, resources, and a detailed urban communications IPB.

3-16. Finally, urban areas overload the information systems with information. Urban operations in all types of conflict generate large volumes of information when crises threaten. This sheer volume easily overwhelms urban operations commanders and command posts, and 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. Staffs create products (visual or textual) to help commanders understand the urban environment, not just present them information to know.

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 advantage over the enemy and other threats (ADRP 3-0). *Maneuver* is employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy (JP 3-0). *The Marine Corps' addendum for* maneuver *is the movement of forces for the purpose of gaining an advantage over the enemy. Maneuver is one of the six warfighting functions. (MCRP 1-10.2).* The potential effects of the urban environment on movement and maneuver/*maneuver* are a significant consideration in urban operations. Understanding this, commanders thoroughly assess those effects and determine the most efficient and effective means of employing their forces. The staffs are familiar with effects in their area of expertise and use that knowledge to understand the problem and develop creative and innovative solutions to achieve their commander's intent.

3-18. In offensive and defensive urban operations, forces use mobility operations to access an objective, allow the movement of reserves, and facilitate resupply or evacuation. In stability operations, mobility operations allow civilian traffic and commerce to resume, letting the urban area return to equilibrium (often a critical objective). In stability operations, mobility keeps lines of communications 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. The urban terrain canalizes and compartmentalizes forces and their fires moving and maneuvering through it. Buildings pose obstacles to mounted and dismounted movement, restricting unit movement along streets. The buildings block movement between streets and thus compartmentalize units. Fires are canalized into open and unmasked areas in which Soldiers/*Marines* can have unobstructed vision, producing concentrated fire zones and areas at road intersections and in front of defended positions. Changing directions, repositioning committed forces, reinforcing forces in contact, bypassing threats, and maneuvering to the threat flank become difficult. Units breach obstacles to help solve these problems. Using assault support aviation to quickly move forces, both forward into contact and to noncombat areas as part of repositioning, permits Army/*Marine Corps* forces to overcome some terrain constraints. However, helicopters and tiltrotor aircraft, operating at low-altitudes in the urban area, are extremely vulnerable. See ATP 3-06.1/ *MCRP 3-20.4 (MCRP 3-35.3A)*/ NTTP 3-01.04/AFTTP 3-2.29 for further discussions on using aircraft in urban areas.

3-20. An urban environment impedes movement and maneuver/*maneuver* considerably due to design. 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. The physical terrain and the urban population provide threat cover and concealment. Air movement and maneuver/*maneuver* is vulnerable for many of the same reasons. In offensive or defensive operations, enemy forces can remain undetected in buildings and in position to ambush Army/*Marine Corps* forces. Consistent with METT-TC/*METT-T*, Army/*Marine Corps* forces clear buildings along maneuver routes prior to mounted movement along those axes. 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. The same buildings provide cover and concealment to enemy air defense capabilities—particularly man-portable air defense systems fired from multiple positions hidden amongst 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 initiates 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

3-22. An effective combined arms task organization ensures that forces are task-organized with infantry, the essential building block for all organizations conducting urban operations. Infantry protects 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 support to its own vehicles—tanks require additional light infantry. 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. Attack aviation elements make best use of standoff capabilities and aircraft speed to conduct running and diving fires. In urban operations, hovering fire is generally avoided. 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 its repetitive use.

3-23. Combat engineers are trained and equipped for urban operations. 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 missions—explosive ordnance disposal teams, military police, and chemical 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.) Urban buildings are often obstacles to movement and mobility because they restrict mounted movement to the 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 turn these obstacles into an advantage by breaching them with "mouse holes" made by explosives, sledgehammers, bulldozers or 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).

3-24. Combat engineers are forward, often task-organized down to platoon level, and can rapidly reduce point obstacles. At a minimum, there should be one engineer vehicle and squad for each section of two armored vehicles. 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*.

3-25. Proportion and organization of combined arms in urban operations differ from operations in other environments. Although based on an accurate METT-TC/*METT-T* assessment, urban operations require an increased proportion of dismounted infantry and engineer capabilities and fewer armor capabilities than in other environments. Lower tactical levels require combined arms in urban operations in which small, well-trained units dominate. Company level requires true combined arms capability and includes combat engineers, military intelligence, reconnaissance, and artillery. Combined arms teams can then form at platoon and squad levels. Because of this, larger units need more civil affairs units, military intelligence units, and combat engineers than habitually attached for combat in more open or less restrictive terrain.

3-26. 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/*Marine infantry regiment*. In turn, the brigade combat team/*Marine infantry regiment* may task-organize this battalion into engineer companies 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 have been established at lower tactical levels, but the parent maneuver unit (in this example, the brigade combat team/*Marine infantry regiment*) 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, urban commanders consider task organizing to create combined arms organizations at lower tactical levels when operations with predominately offensive or defensive tasks and bringing those assets back under their own control when the operation transitions to predominately stability or DSCA tasks.

CONTINUOUS OPERATIONS AND TECHNOLOGY ENHANCEMENTS

3-27. 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 operations mostly during daylight because of technological limitations and fatigue. Night vision technologies, accurate situational understanding, a common operational picture, training, and rotated units help Army/*Marine Corps* forces defeat enemy forces. Those forces are less equipped and adept at night operations. Night operations are also a means of mitigating the air defense threat against air maneuver. Continuous operations through night maneuver with fresh forces are challenging but can overcome many advantages that a stationary force has against maneuver in the urban environment. However, commanders should also consider that streetlights, fires, background illumination (as well as dark building interiors without ambient light), the increased heat absorption of many urban structures, and the skillful use of searchlights by threat forces may limit the effectiveness of night vision devices and make thermal imagery identification difficult.

COUNTERMOBILITY

3-28. Commanders use the countermobility capability to control where the enemy moves in the urban area. Repositioning defensive forces in the urban area is difficult and obstacles are essential to limiting the enemy's maneuver options. During offensive operations, countermobility protects exposed flanks and air assaulting 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.

INTELLIGENCE WARFIGHTING FUNCTION

3-29. 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 (ADRP 3-0). *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). T*he Marine Corps adds that* intelligence *is knowledge about the enemy or the surrounding environment needed to support decisionmaking. Intelligence is one of the six warfighting functions (MCRP 1-10.2).* The urban environment affects this intelligence by degrading reconnaissance capability, slowing the IPB process, (and increasing the importance of credible HUMINT including the contributions of local civilian liaisons), and hindering the intelligence reach capability. The Army/*Marine Corps* forces' response to these effects can result in timely, accurate, and relevant intelligence that facilitates Army/*Marine Corps* forces effectively applying other warfighting functions to the mission within the urban environment. (See ADRP 2-0 *and MCDP 2* for discussions of the intelligence warfighting function.)

DEGRADED INFORMATION COLLECTION CAPABILITY

3-30. The physical environment creates a major challenge to the intelligence warfighting function. The man-made construction in the urban areas provides threats nearly complete cover and concealment. Many sensor capabilities cannot penetrate the subsurface facilities and much of the space within supersurface areas. The mass of buildings also defuses electronic signatures. Tall buildings shield movement within urban canyons from aerial observation except from directly overhead. Urban threats depend less on technology and may thwart some signals intelligence efforts simply by turning off their radios and using messengers. Threat forces use elements of the civilian telecommunications infrastructure for mission command/*command and control*. These systems include traditional landline phones, cellular telephones, and computer-to-computer or Internet data communications. Most urban telecommunications systems use buried fiber or cables, or they employ modern digital signaling technology. These systems are difficult to intercept and exploit at the tactical level.

3-31. Urban characteristics make it more difficult for the intelligence warfighting function to use electronic means to determine threat dispositions and, in offensive and defensive urban operations, identify decisive points leading to centers of gravity. While the urban environment limits some typical collection methods, all enemy electronic and human activity creates some form of observable signature and exposes the enemy to potential collection. Seeking ways to take advantage of these vulnerabilities gives the commander an information advantage over the enemy.

CHALLENGING IPB PROCESS

3-32. The environment's complexity challenges the intelligence warfighting function. The intelligence warfighting function applies the IPB process to the urban environment in accordance with Army/*Marine Corps* doctrine. With more data points for the IPB process to identify, evaluate, and monitor, this application becomes more demanding. The human and societal aspects of the environment and the physical complexity primarily cause this difference. The terrain, society, and infrastructure in an urban environment are all dynamic characteristics. Each one changes radically in response to urban operations or external influences. Relationships between aspects of the environment—built on an immense infrastructure of formal and informal systems connecting the population to the urban area—are usually less familiar to analysts. Thus, the urban environment requires more specifically focused intelligence resources to plan, prepare for, execute, and assess operations than in other environments.

3-33. Compounding the challenges is the relative incongruity of all urban environments. No two urban areas are alike physically, in population, or in infrastructure. Experience in one urban area with a particular population and pattern of infrastructure does not readily transfer to another urban area. Any experience in urban operations is valuable and serves as a starting point for analysis, but commanders and their staffs cannot assume and treat as fact that patterns of behavior and the relationships in one urban area mirror another urban area. The opposite is as likely to hold true. The intelligence warfighting function studies each urban area individually to determine how it works and understand its complex relationships.

3-34. Civilian populations pose a special challenge to commanders conducting urban operations. Civilians react to, interact with, and influence Army/*Marine Corps* forces to varying degrees. Commanders know and account for the potential influence these populations have on their operations. Intelligence analysts revisit or continuously monitor the critical points looking for changes, relationships, and patterns. The actions of Army/*Marine Corps* forces affect their relationship with the urban population and mission success. NGOs deliberately or inadvertently influence civilians. The intelligence warfighting function monitors and predicts the reactions of the civilian population. Accurate predictive analysis of a large population requires specific training and extensive cultural and regional expertise.

INCREASED IMPORTANCE OF HUMAN INTELLIGENCE

3-35. The intelligence warfighting function adjusts to the degradation of its technical collection systems by increasing emphasis on HUMINT in urban operations. *Human intelligence* is the collection by a trained human intelligence collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities (FM 2-22.3). *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 (MCRP 1-10.2).* HUMINT operations may be the primary and most productive intelligence source in urban operations. 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 more detail, and alleviate some of the need to penetrate the urban area with reconnaissance forces. In many urban operations where HUMINT is the primary source of intelligence, acting on single-source reporting is not advised. Yet, situations may arise where commanders weigh the consequences of inaction against any potential negative consequences resulting from acting on uncorroborated, single-source information.

3-36. 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 reconnaissance forces—especially small-unit dismounted patrols. Unit intelligence personnel thoroughly and routinely debrief urban reconnaissance forces and patrols to obtain information to 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. 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.

INTERACTING WITH THE POPULATION

3-37. Whenever Soldiers/*Marines* encounter the urban populace, the resulting interaction can become an important source of information the commander can use to answer questions about the threat and the urban environment. Commanders are not likely 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 to provide relevant information for decision making and to support the overall information collection effort.

3-38. Positive civil-military interaction with the urban populace develops urban liaisons. Developing local liaisons is about Soldiers/*Marines* and their leaders earning the trust and respect of indigenous populations, coalition partners, NGOs, and the personnel of other government agencies. U.S. forces earn the trust of people, regardless of their affiliation, by treating them humanely with dignity and respect and by demonstrating personal integrity. U.S. forces acquire critical information by interfacing with the urban leadership (both formal and informal), administration officials, business owners, host-nation support workers, inhabitants along a unit's patrol route, pedestrians at a checkpoint, civilian detainees, or any other human willing to volunteer information. Soldiers/*Marines* never coerce noncombatants and civilians to

provide information. Commanders direct unit leaders to conduct liaisons with specific local leaders and key members of the community to answer information requests. Critical information also comes from other U.S. and multinational forces and intelligence organizations operating near or within the commander's area of operations. Commanders ensure that U.S. forces operating in an urban area coordinate and de-conflict activities and inform subordinate, geographically responsible commanders with any relevant information that may affect their current operations. A commander routinely provides any relevant information obtained incident to civilian liaison activities to intelligence staffs so they can verify the credibility of the information and share the information with all affected echelons and units.

3-39. NGOs operating in urban areas are beneficial resources for credible and relevant information about the urban environment. However, they are generally not a good source for information about the threat since providing such information violates their neutrality and makes it difficult for them to achieve their humanitarian aid objectives. During the 1999 fighting in Kosovo, for example, the Red Cross provided the most accurate figures regarding the number of Kosovar displaced persons, helping U.S. and other multinational forces to estimate the appropriate level of support required to handle their needs. One successful technique for collaboration, unity of effort, and building relationships of trust and information sharing is to establish a civil-military operations center, inviting NGO leaders to both regularly scheduled and impromptu coordination and synchronization meetings. In addition to a developed understanding of the current needs of the local urban populace, NGOs may also have—

- A network of influential associations.
- Historical archives.
- An extensive understanding of the urban infrastructure.
- Key knowledge of political and economic influences.
- A keen awareness of significant changes in the urban environment.
- Insight into the current security situation.
- Up-to-date Web sites and maps.

3-40. Effective commanders avoid confusing productive civilian associations with HUMINT military source operations. Only trained HUMINT personnel recruit and task sources to seek out intelligence information. Information obtained from Soldier/*Marine* societal connections is normally incidental to other civil-military relationships. For example, as part of infrastructure repair in an urban stability operation, a commander may be instrumental in obtaining a generator for a local hospital. Within the context of this relationship, the commander may develop a rapport with one or more of the hospital's administrators or health practitioners. These civilians may be inclined to provide valuable information about the threat and the urban environment—often on a continuing basis. In any civil-military relationship, commanders ensure that the information civilians provide is not tied to promises of assistance or civilian loyalty.

3-41. Commanders understand that repeated interactions with any one individual puts that individual and his or her family in danger from threat forces. Before this potential danger becomes a reality, commanders refer their civilian connections to trained HUMINT personnel who can handle them more securely and effectively. In addition to civilian protection considerations, commanders turn their civilian associations over to trained HUMINT collectors anytime during the relationship if they consider the information that the contact is providing (or may provide) is credible, relevant, and—

- Provides essential information on a repetitive basis.
- Helps answer the higher-level commander's critical information requirements.
- Affects operations in another area of operations.
- Requires monetary compensation to obtain.

3-42. Commanders do not conduct unofficial source operations by non-HUMINT Soldiers/*Marines* when developing these civilian liaisons. While prohibited by regulatory guidance, such actions run risks by—

- Obtaining unevaluated information that other sources of information cannot cross check and verify.
- Creating perceptions of unequal or favored treatment while potentially limiting the effectiveness of financial recruiting tools available to HUMINT Soldiers/*Marines* constrained by intelligence contingency fund regulations.

- Disrupting ongoing HUMINT operations when different sources are seen to be treated differently by non-HUMINT vice HUMINT Soldiers/*Marines*.
- Providing non-HUMINT and HUMINT Soldiers/*Marines* with the same information potentially leading to a false confirmation of information.
- Increasing the likelihood that untrained Soldiers/*Marines* may fall victim to deception and misinformation.

ESTABLISHED INTELLIGENCE REACH

3-43. Commanders require more sources of information beyond a unit's organic intelligence capabilities to understand urban infrastructure and society. Commanders use intelligence reach to access information and conduct collaboration and information sharing with other units, organizations, and individual subject matter experts. Before deployment and throughout the operation, units establish a comprehensive directory of intelligence reach resources. These resources include national, joint, Service, foreign, commercial, and university research programs. (Prior to deployment for Operation IRAQI FREEDOM, some units established contacts within the local community outside their bases such as police, fire department, and government officials. These contacts expanded their reach once in theater—particularly for information regarding civilian infrastructure and urban administration.) Once deployed, intelligence reach includes effective information sharing and collaboration among adjacent units, other Services, special operations forces, multinational partners, and other nongovernmental and governmental organizations and agencies operating in the area. Army/*Marine Corps* forces consider requesting support from joint intelligence, surveillance, and reconnaissance (ISR) and close air support platforms for nontraditional purposes. These platforms provide current and trending information in an urban environment that has proven valuable to ground commanders. Effective information sharing and collaboration requires common network analysis software and databases to be used among all Army/*Marine Corps* forces and, if possible, other government agencies.

BIOMETRICS

3-44. Biometrics is an emerging capability that extends the intelligence reach of units that operate in an urban environment. Army/*Marine Corps* forces use biometrics to help establish or verify the identity of an individual with certitude. Due to the large concentration of people found in urban areas, this capability takes on additional importance by giving commanders a powerful tool to enhance 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 helps remove their anonymity. Additionally, biometrics can help link the individual to past aliases, locations, and events. Biometrics technology and the tactics, techniques, and procedures to employ it are dynamic. Since this field continues to evolve at a rapid pace, this publication does not address specific tactics, techniques, and procedures for employing this capability. This publication only addresses the broad benefits and challenges that biometrics can bring to commanders and their staffs while conducting urban operations. The following list covers areas where biometrics can positively impact operations:

- Intelligence process.
- Forensics.
- Time-sensitive targeting.
- Base access.
- Local hire and foreign security force screening and vetting.
- 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.
- Finance records for local hires and reconstruction projects.

3-45. Military police and intelligence assets primarily use biometrics; however, Soldiers/*Marines* across all military occupational specialties use and are trained on biometrics-collection capabilities. The publications that follow outline the most recent tactics, techniques, and procedures on employing biometrics capabilities. Some of these publications are Unclassified/For Official Use Only (known as U/FOUO) and will not be discussed:

- ATP 2-22.82.
- ATP 3-39.20.
- ATP 3-90.15.
- FM 3-63.

3-46. While biometrics is a powerful tool, its major drawbacks include difficulty with collections on a large scale and database management. Collecting on a target population, while possible, takes a large amount of manpower and equipment. The primary challenge is the training on the collections tools and regular database updating.

3-47. Commanders consider challenges of collecting biometrics data on targets that have cultural implications. A good example of this is females in Muslim societies. Although infrequent, past terrorist and insurgent activities have increasingly used females for suicide bombings. If biometrics collection is limited to military age males, then insurgents will likely use of females more often. However, for Soldiers/*Marines* to effectively collect on female targets, such a collection will require that only female Soldiers/*Marines* search potential targets. This must be planned for by commanders who train Soldiers/*Marines* in the use of biometrics equipment. While these are significant challenges, events over the last 10 years have shown that future technology will close this gap and make biometrics an easier capability to employ. However, for the near future, commanders must plan for challenges mentioned above using the military decision-making process/*Marine Corps planning process*.

FIRES WARFIGHTING FUNCTION

3-48. The *fires warfighting function* is the related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process (ADRP 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 adds 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 six warfighting functions (MCRP 1-10.2).* Fire support includes the collective and coordinated use of several means to attack targets in the urban area. (See paragraph 2-3 for more on joint capabilities.) These means include target acquisition systems; indirect fire weapons; fixed-wing, rotary-wing, and tiltrotor aircraft; electronic attack; and other lethal and nonlethal means. The urban environment, both the physical terrain and the density of civilians, significantly affects the employment of fire support systems.

TARGET ACQUISITION

3-49. Target acquisition in an urban environment faces several challenges. First, forces have difficulty penetrating the urban environment's increased cover and concealment using sensors and reconnaissance. Acquiring targeting information and tracking targets throughout the depth of the urban area is demanding. Moving personnel or vehicular targets are normally easiest to acquire. However, the cover and concealment provided by urban terrain gives moving targets short exposure times requiring firing systems to act rapidly on targeting data. Targeting the opposing indirect fire units with acquisition radar works more effectively in urban terrain because of the necessary high angles of indirect fire. The urban environment presents similar difficulties for battle damage assessment.

3-50. Commanders of urban operations meet targeting challenges by innovatively integrating reconnaissance capabilities. These capabilities include special operations forces, UASs and aerial observers, and standard reconnaissance assets. Staffs carefully plan for the placement and security of forward observers, joint fires

observers, and joint terminal attack controllers during urban operations. Staffs consider using more artillery systems to ensure the responsiveness (rather than the weight) of fires. Positioning numerous artillery systems reduces the dead space (as discussed in paragraph 3-53) and permits units to establish more direct sensor-to-shooter links.

THE TARGETING PROCESS

3-51. Heightened concerns for collateral damage require that commanders pay particular attention to their targeting process. This process ensures that commanders effectively integrate and synchronize all available combat power—both lethal and nonlethal including offensive information operations—to accomplish the mission. Commanders ensure that techniques and procedures are in place, rehearsed, and understood by all members of their staffs. Additionally, the mission command/*command and control* system must be responsive and agile so an elusive and adaptable threat disappears before units employ the appropriate weapon systems. In an urban area, even 10-digit grid coordinates may fail to identify targets accurately if buildings connect to each other—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. A common urban reference system with graphics, reference points, and other control measures adequate for both ground and air forces also helps identify targets and rapidly clear fires.

3-52. 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, that responsibility does not end with identifying potential collateral damage; the goal is successful mission accomplishment. The commander's intent guides staffs who work to develop COAs that incorporate collateral damage concerns (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.

URBAN EFFECTS ON FIRE SUPPORT

3-53. Both the physical and human components of the urban area affect how units use fire support. The physical aspects, such as the heights and density of buildings, affect how Army/*Marine Corps* forces use fire support. The numbers and concentration of civilians in the area also affect the use of friendly fire support. An urban environment affects the following:

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

Masking and Dead Space

3-54. The physical aspects of the urban environment, such as the heights and concentration of buildings, may cause significant masking and dead space. Masking in an urban environment refers to using the terrain (or buildings) to avoid radar detection. Tall buildings can mask several blocks of area along the gun-target line. Dead space 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 dead space behind a building is about five times the height of the building for low-angle fire; the trajectory of high-angle fire reduces the dead space to about half the height of the building.

Collateral Damage Limitations

3-55. The potential for collateral damage to adjacent buildings may also prevent engagement with artillery. Such damage might cause noncombatant and friendly troop casualties and unintentional (and unwanted)

destruction of buildings. Commanders offset these effects by employing guided munitions such as the 155-millimeter (mm) Excalibur or guided multiple launch rocket system (MLRS) projectiles, carefully placing artillery positions, repositioning artillery as targets change, and using mortars. Mortars have a steep angle of fall and short minimum ranges as a high-angle alternative to field artillery fire. 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 can significantly reduce collateral damage as can delayed detonations (fuse delay) that confine blast effects to building interiors. Collateral damage concerns cause commanders to—

- Maintain approval authority for some sensitive or protected targets (churches or mosques, for example) at higher echelons of command.
- Restrict attacks to certain times of day.
- Give warning prior to an attack so that noncombatants can evacuate the area.
- Incorporate indigenous forces into the operation.
- Abort an attack unless the artillery can achieve the required level of precision effects.
- Prepare specific branches and sequels to information operations 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.
- Develop and rehearse detailed staff battle drills that address clearance of fires in an urban environment.

Acquisition and Arming Ranges

3-56. Shortened acquisition and engagement ranges for supporting fires from attack helicopters affect engagement techniques and delivery options. Vertical structures limit the acquisition and arming ranges since they interrupt the line of sight and create corridors of visibility along street axes. 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 affects. 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. A constant and accurate flow of communication between the ground force and the aircrew dictates methods of attack. For additional information on the use of helicopters for attack engagements and the available limitations of weapons systems carried, see TC 3-04.45.

3-57. 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 "talk-on" aircraft using a common urban reference system (described in paragraph 3-8) helps expedite aerial target acquisition and helps mitigate potential fratricide.

Type and Number of Indirect Fire Systems

3-58. 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 urban operations with mortar platoons from reserve units. This increases the number of systems available to support maneuver units. The artillery has two GPS-enhanced munitions: the guided MLRS and the 155-mm Excalibur projectile, which is suitable for operations with high potential for collateral damage. The guided MLRS's unitary high-explosive warhead employs a steep angle of fall that provides accurate top-attack engagement. The basic rockets for the MLRS may be of limited use in urban areas due to their exceptional destructive capabilities and the potential for collateral damage. However, commanders may use the basic rockets to isolate the urban area from outside influence. Commanders also employ field artillery 155-mm cannons to fire the Excalibur projectile. The Excalibur high-explosive projectile uses a nearly vertical attack angle and can strike within 10 meters of the

target's coordinates. In specific situations, commanders use an individual cannon artillery section to engage a target with direct fire. 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 the exposure of the crew to enemy direct fire. Self-propelled artillery has limited armored crew protection and towed artillery has no protection.

Positioning

3-59. The urban area affects the positioning of artillery. Sufficient space may not exist to place battery or platoon positions with the proper unmasked gun line. This exposure mandates moving and positioning artillery in sections while still massing fires on specific targets. Commanders protect artillery systems particularly when organized into small sections. Threats to artillery include raids and snipers. Therefore, maneuver and firing units place increased emphasis on securing their positions and other appropriate protection/*force protection* measures.

Mix of Munitions

3-60. The mix of munitions used by indirect fire systems change somewhat in urban areas. Units request more GPS-guided munitions to limit collateral damage. Field artillery 155-mm Excalibur projectiles, guided MLRS 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. First, large expanses of polished, flat reflective surfaces common in urban areas degrade laser abilities. Second, the vertical nature of buildings amplifies the geometrical constraints of laser-guided munitions. Lastly, a remote designator is close enough to accurately designate but far enough away not to be acquired by the laser-guided munitions during its flight path.

3-61. The urban environment greatly affects the use of some munitions. Building height may cause variable time fuses to detonate prematurely although variable time fuses are used in high-angle fire to clear 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 (similar considerations apply to air-delivered cluster bombs) 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.

3-62. Depending on the 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 not used in the direct-fire role, forces require a greater mass of indirect fire to achieve desired effects. When increasing the firepower, commanders balance it 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.

3-63. 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 urban operations. 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 there are no combat casualties with which to contrast it, arouse adverse public opinion.

SUSTAINMENT/*LOGISTICS* WARFIGHTING FUNCTION

3-64. 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 (ADRP 3-0). *Logistics* is planning and executing the movement and support of forces (JP 4-0). *The Marine Corps adds that* logistics *is all activities required to move and sustain military forces. Logistics is one of the six warfighting functions (MCRP 1-10.2).* Commanders conducting sustainment/*logistics* to support unified land operations understand the diverse logistic requirements of units conducting urban operations. 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 (to include the population) impacts sustainment/*logistics* support.

3-65. Commanders and staffs consider and plan for friendly force sustainment/*logistics* operations based in a major urban area. Located in major urban areas, these operations exploit aerial ports and seaports, maintenance and storage facilities, transportation networks, theater support contracting opportunities, and labor support. These sustainment/*logistics* operations are also urban operations.

PROTECTION/*FORCE PROTECTION* WARFIGHTING FUNCTION

3-66. 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 (ADRP 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 (MCRP 1-10.2).* Preserving the force includes enhancing survivability and properly planned and executed air and missile defense as well as defensive information operations.

SURVIVABILITY

3-67. Survivability in the urban environment is a significant force multiplier. Properly positioned Army/*Marine Corps* forces take advantage of the increased survivability afforded by the physical terrain. Even a limited engineer effort significantly enhances the combat power of small Army/*Marine Corps* forces. Properly planned and constructed survivability positions protect Soldiers/*Marines* from both direct and indirect fire. Well-protected support bases minimize casualties during long-term stability operations.

3-68. Engineers have key responsibilities for survivability of friendly forces. Engineers provide well-protected support bases; they can enhance the survivability of urban battle positions during major combat operations or campaigns, particularly during defensive operations. These efforts, though still requiring significant time and materials, establish defensive strong points more quickly and with greater protection than in more open terrain. Skillfully integrating strong points into an urban defensive scheme greatly increases the overall effectiveness of the defense disproportionately to the number of forces actually occupying the strong point.

3-69. Commanders increase survivability by ensuring all Soldiers/*Marines* have the necessary protective equipment and training to use it. The use of high explosives in urban terrain compounds their shrapnel effect because they create large numbers of secondary projectiles. Commanders ensure that Soldiers/*Marines* have standard equipment—helmets, gloves, body armor, and chemical protective over garments. Commanders ensure availability of other protective equipment and materials such as—

- Goggles or ballistic eye protection.
- Knee and elbow protectors.
- Riot control equipment including batons, facemasks, and shields.

- Barrier materiel, including pre-formed concrete barriers, wire, and sandbags.
- Fire extinguishers and other firefighting equipment.
- Immunizations.

3-70. Army/*Marine Corps*' urban operations become more challenging when supporting survivability operations for civilians. Such operations range from constructing civil defense shelters or evacuating the population to 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.

AIR AND MISSILE DEFENSE

3-71. Air and missile defense protects the force from air surveillance and air and missile attack. This system—

- Uses the 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 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.

3-72. 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 will likely have limited air and missile capabilities and so seek to achieve the greatest payoff for the use of these 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.

Aircraft

3-73. The enemy uses various aircraft to collect information and inflict damage. The enemy uses rotary-wing aircraft to include air assault, fire support, and sustainment/*logistics*. Some threats use UASs to obtain intelligence and target acquisition data on friendly forces. Increased air mobility limitations and targeting difficulties cause enemy fixed-wing aircraft to target key logistics, mission command/*command and control* nodes, and troop concentrations outside the urban area, simultaneously attacking key infrastructure both in and out of the urban area.

Increased Missile Threat

3-74. The intermediate-range missile capability of potential threats has increased to be the most likely air threat to an urban area. Urban areas, particularly those of friendly forces or multinational partners, make the most attractive targets because of the limited accuracy of these systems. By firing missiles at an urban area, an enemy seeks three possible objectives:

- Inflict casualties and material damage on military forces.
- Inflict casualties and material damage on the urban population.
- Undermine the confidence or trust of the civilian population (particularly if a multinational partner) in the ability of Army/*Marine Corps* forces to protect them.

3-75. If facing a missile threat, commanders conducting urban operations work closely with civil authorities, joint forces, and multinational partners to integrate the Army/*Marine Corps* warning system with civil defense mechanisms. Similarly, Army/*Marine Corps* forces support urban agencies reacting to a missile attack with medical care, medical evacuation support, survivor recovery, and assistance in damaged areas and crowd control augmentation of local police forces. Before such an attack, Army/*Marine Corps* engineers assist and advise urban officials on how to construct shelters.

Increased Security of Assets

3-76. When defending against an air or missile threat in a neutral or hostile urban environment, air defense assets are concerned with security. Separating air defense locations from high population and traffic centers, and augmenting these positions with defending forces, prevents or defeats enemy efforts to neutralize them. Additionally, an increased density of urban operations means an increased concentration of all friendly and enemy systems engaged in air and counterair operations. This density increases friend and foe identification challenges, air space management challenges, and the overall risk in the conduct of air operations. Finally, limited air defense assets, difficulties in providing mutual support between systems, potential mobility limitations, and other effects of the urban environment increase the need for and effectiveness of a combined arms approach to air defense. (See ATTP 3-06.11 *or* ATP 3-06.1/*MCRP 3-20.4*/NTTP 3-01.04/ AFTTP 3-2.29 for employing a combined arms approach in an urban environment.)

KEY TACTICAL CONSIDERATIONS

3-77. The complexity of an urban environment changes and often compresses many tactical factors typically considered in the planning process. Commanders and their staffs often consider the following when planning for tactical urban operations:

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

TIME

3-78. Urban combat operations compress the time available to think and act. The tactical engagements that comprise battles and major urban operations often occur quickly and decisively; therefore, higher-level commanders require the ability to exercise command on the move so that decision making happens quickly. The impact of decisions (or lack of) and the outcome of operations can occur in mere minutes. Often the amount of information and the number of decisions overwhelm the overall ability of information systems to respond. Commanders have little time to influence tactical actions with resources kept in reserve. Reserves and fire support assets are close to the point of decision so that they can respond in time to make a difference. The terrain causes mission command/*command and control* 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.

3-79. The nature of the urban environment compresses the time available to make decisions and increases the number of decisions to make. (See figure 3-2.) This is particularly true at the lower tactical levels. Units seeking to understand an urban area of operations face more potential unknowns than in other situations. For example, large structures presents many more potential firing positions than simpler terrain. Movement in one of those windows forces the Soldier/*Marine* or unit to make a decision quickly regarding the nature of the target—deciding whether it is a threat or a noncombatant. Incorporating combatant and noncombatant discriminatory considerations into all live-fire training improves Soldiers'/*Marines'* ability to make these critical judgment decisions. Commanders who lack understanding of an urban environment rely more on analytic decision making. Analytic decision making is often time-consuming and relies on large amounts of information and clearly established evaluation criteria. Commanders who understand an urban environment can adapt and make rapid intuitive decisions. Intuitive decision making enables commanders to reach a conclusion through pattern recognition based on their knowledge, judgment, experience, education, and perceptions. Intuitive decision making informed by an understanding of the environment and a grasp of a particular situation accounts for second-, third-, and higher-order effects but allows for rapid and timely decision making without a formal process. Commanders blend intuitive and analytic decision making to help them remain objective and make timely and effective decisions; decisions made during urban operations will likely require a combination of analytic and intuitive decision making abilities. (See ADRP 6-0 *and MCDP 6* for more on decision making.)

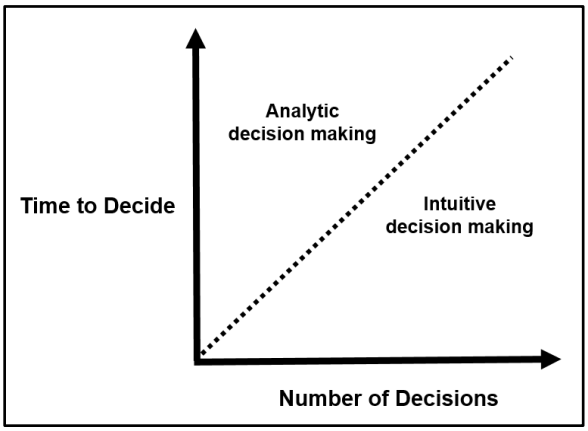

Figure 3-2. Urban understanding and decision making

DISTANCES AND DENSITY

3-80. Commanders and staffs understand the telescoping nature of the battlefield/*battlespace*, the density of threat forces, and the density of noncombatants. Distances in urban operations correspond to the density of threat forces and noncombatants. In open terrain, squads, platoons, and companies control or influence thousands of meters of space. In urban operations, large buildings can absorb the efforts of several companies or battalions. Crowds of thousands can assemble in areas of a few hundred meters requiring correspondingly large forces for control. Maximum engagement ranges, as influenced by the urban terrain, are usually closer. 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 training, planning, force deployment, and strength.

3-81. Time-distance considerations are important throughout planning cycles. Though distances are short, the physical nature of the environment drastically changes the planning factors for unit movements. The higher headquarters measures the advance of a battalion in hundreds of meters per day. Thus, all time and distance calculations that relate to sequencing of forces, synchronizing combat power and other capacities, and making decisions require reevaluation based on the urban conditions.

3-82. 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 de-confliction 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

3-83. The density of ground combat power in a given area increases because of the effect of the terrain on ranges. The complex terrain precludes standoff engagement from extended ranges by dispersed forces. Commanders position 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*.

3-84. Urban terrain increases the utility and effects of snipers, increasing overall combat power. In urban operations, snipers—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 slightly influence operations.

3-85. The dense clutter of the urban environment also affects target acquisition. Systems, such as 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.

3-86. Finally, the density of combat power also increases the vulnerability of Army/*Marine Corps* forces. Many Army/*Marine Corps* systems are protected from enemy systems at longer ranges. The number of enemy systems that can threaten Army/*Marine Corps* forces at a short range increases dramatically. Lack of dispersal makes it likely that a single enemy can target multiple Army/*Marine Corps* systems.

LEGAL SUPPORT TO OPERATIONS

3-87. Commanders consider the legal implications of their actions in a tactical urban environment. They consider the legal guidance and the personnel who give that guidance. In addition, they consider international and host-nation laws and their implications. Lastly, commanders consider the impact of contractors authorized to accompany the force (CAAF).

Legal Guidance

3-88. Legal instruction and training helps commanders and their Soldiers/*Marines* better understand the ROE and make rapid decisions often required in a complex urban environment. Judge advocates advise, assist, and educate commanders with their understanding of international, domestic, and host-nation legal, political, and cultural laws, regulations, and authorities to empower commanders at the point of decision.

3-89. International, host-nation, and U.S. law and other regulatory guidelines have different jurisdictional restrictions. Often these laws and guidelines vary in their 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, often working with civil affairs personnel, to identify and resolve technical legal issues. The staff judge advocate actively advises and participates in all aspects of urban operations 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

3-90. International law affects operational issues and consists primarily of agreements, treaties, and customary law to include the law of war (see FM 27-10). 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 urban operations. Table 3-2 lists and describes the four principles: military necessity, discrimination (or distinction), unnecessary suffering (or humanity), and proportionality.

Table 3-2. General principles of the law of war

Principle	*Description*
Military necessity	The principle that justifies the use of measures not forbidden by international or domestic law necessary to achieve military objectives rapidly.
Discrimination	The principle of distinguishing between combatants (who 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.

3-91. 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 laws and judicial process of the host nation. During armed conflict, however, they have the rights afforded to them by the Geneva Conventions. Commanders are responsible for understanding the international and host-nation agreements and laws that influence foreign urban operations. If local law hinders the 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.

3-92. Commanders may encounter civilian resistance groups whose actions can 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

3-93. 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 area of operations are not placed in positions of jeopardy and distinguish CAAF as noncombatants to prohibit any intentional attacks. However, CAAF must understand the risks that they assume when they engage in activities that might be misconstrued as direct or active participation in hostilities.

SUPPORT UNITS

3-94. Commanders and planners of urban operations consider the support units need when conducting tactical urban operations. They understand the effects of the environment on men, equipment, and systems. Using civilian resources and investing Army/*Marine Corps* resources requires careful consideration by commanders and staff planners.

General Engineering Support

3-95. General engineering support is essential during urban operations. This support helps assess, construct, maintain, and restore essential lines of communications and urban facilities to sustain Army/*Marine Corps* forces, the urban population, or both. Using civilian resources and investing Army/*Marine Corps* general engineering resources requires careful consideration by commanders and staff planners. Since all elements of the urban infrastructure interconnect, general engineering support touches each category to some degree. Table 3-3 on page 3-22 illustrates how urban-specific, general engineering tasks align primarily with the transportation and distribution component as well as energy component of the urban infrastructure. These engineering tasks are significant and readily apply to urban operations. Firefighting support, administration and human services, and waste management also provide support units.

Table 3-3. 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

3-96. 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 lines of communications, but may also allow needed 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

3-97. Fire protection and prevention, as well as firefighting, takes on added significance during urban operations, 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; 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

3-98. 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 the increased risk due to military operations. Commanders provide engineering and firefighting teams to support their own forces and civilians.

3-99. A military force task-organized with multiple firefighting teams, even with maximum use of available civilian fire-fighting assets, only fights some fires in the area of operations. Water distribution systems damaged during operations, chemicals and other TIMs, 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. Such training includes planning covered and concealed movement, withdrawal, and evacuation routes. Training also includes the ability to identify and remove ignition and fuel sources. It provides 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

3-100. Management of all forms of waste—particularly human, putrescible (such as food), and medical—may become a critical planning consideration for Army/*Marine Corps* forces. This particularly applies if the urban waste management infrastructure was previously inadequate or damaged during urban operations or natural disasters, the Army/*Marine Corps* forces are operating in the 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 are especially hazardous when coupled with decaying remains of humans and animals and an inadequate or tainted water supply.

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Chapter 4
Urban Offensive Operations

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

PURPOSE OF URBAN OFFENSIVE OPERATIONS

4-1. Like all offensive operations, urban offensive operations impose the will of commanders on the enemy. The urban offense often aims to destroy, defeat, or neutralize an enemy force. However, the purpose may be to achieve some effect relating to the population or infrastructure of the urban area. Army/*Marine Corps* forces conduct offensive operations to secure a port or a communications center, to eliminate a threat to a friendly government or the urban population, or to deny the threat use of urban infrastructure. No matter the purpose, commanders must use a combined arms approach for successful urban offensive operations.

CHARACTERISTICS OF OFFENSE

4-2. All offensive tasks including those in urban areas contain the characteristics of surprise, concentration, tempo, and audacity. (See ADRP 3-90 for a discussion of offensive tasks.) Commanders consider and incorporate these characteristics in their plans for offensive urban operations.

SURPRISE

4-3. Army/*Marine Corps* forces achieve offensive surprise at the operational and tactical levels. In urban offensive operations, operational surprise is decisive. The goal is to attack the urban area before the enemy expects it, from an unexpected direction, or in an unexpected manner. In urban operations, this requires an attack against urban areas that the enemy believes will provide sanctuary from the technological advantages of Army/*Marine Corps* forces. Usually, urban areas that meet this criterion are not easily accessible. Army/*Marine Corps* forces launch an attack against these urban areas differently: through a vertical assault using airborne or air assault forces, through an amphibious assault, or through a penetration followed by a rapid and deep advance. All three attacks aim to achieve surprise and to deny the enemy time to prepare and establish a defense. Surprise in a major urban operation prevents the enemy from falling back to occupy prepared positions in and around an urban area.

4-4. At lower tactical levels, forces achieve surprise by attacking using creative methods against which the enemy cannot respond to effectively. Army/*Marine Corps* forces achieve surprise by using special operations forces against an enemy prepared for a conventional attack, by attacking decisively with heavy forces when the enemy expects an effort by light forces or special operations forces, or by leveraging Army/*Marine Corps* forces' extensive information-related capabilities. Primarily using information operations of deception, electronic warfare, and operations security, offensive information operations help achieve surprise at all levels. Attacking at night surprises the threat and maximizes the Army/*Marine Corps* forces' training, mission command/*command and control*, and technological advantages. Attacking from unexpected or multiple directions achieves surprise by leveraging Army/*Marine Corps* information systems and superior synchronization of combat power and capabilities.

CONCENTRATION

4-5. In urban operations, the attacking force concentrates the effects of combat power at the point and time of its choosing. The compartmented effects of urban terrain rapidly disperses and dissipates combat power. Commanders position follow and support and follow and assume forces to protect tactical gains, taking into account that the environment typically hinders rapidly repositioning on 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 reinforces or repositions forces more quickly using covered and concealed routes such as sewers, tunnels, or prepared holes made in walls. Successful urban operations 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 set by the environment.

TEMPO

4-6. *Tempo* is the relative speed and rhythm of military operations over time with respect to the enemy (ADRP 3-0/*MCRP 1-10.2*). Tempo in urban operations differs from those operations in more open terrain. Often, the enemy's urban defense aims to take advantage of that difference to disrupt the rapidity and overall tempo of the Army's/*Marine Corps'* major operation. Additionally, the complexity and the potential for increased risk in an urban environment invoke a cautious and methodical response by commanders and their staffs thereby exacerbating tempo differences. Urban operations require careful and meticulous planning and preparation. 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. A high tempo allows Army/*Marine Corps* forces to achieve surprise and quickly gain positions of advantage. Commanders of major operations face the challenge of controlling operational tempo and not allowing the different tempo of urban operations to impede other operations.

4-7. Maintaining the desired tactical tempo presents challenges in urban combat. Because of the complex terrain, defending forces can rapidly occupy and defend from a position of strength, typically to slow the attacker as much as possible in order to attrit him. 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 urban operations 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.

4-8. Offensive operations continue even during darkness. In the past, the environment influenced the tempo of their 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 type of battle rhythm resulted in the forces spending each new day attacking a rested enemy that was in a well-prepared position. Army/*Marine Corps* forces continue operations at night to leverage the limited visibility capabilities, increase situational understanding, and continuously exploit tactical gains. To overcome the physical impact of the environment on Soldiers/*Marines*, commanders rotate fresh forces forward, continuing offensive operations at night. The force that fights in daylight becomes the reserve, rests, and conducts sustaining operations to prepare for future operations.

4-9. Tempo is not the same as speed. Offensive operations balance speed, security, and firepower. Commanders continually plan to secure flanks and airspace as the operation progresses. Mission orders allow subordinate units to make the most of tactical advantages and fleeting opportunities.

AUDACITY

4-10. Audacity means boldly executing a simple plan of action. Superb execution and accepting prudent risk exemplify it. In an urban attack, commanders mitigate risk by thoroughly understanding the physical terrain and its effects on both sides. They study the terrain's complexity to reveal its advantages. Well trained Soldiers/*Marines*—confident in their ability to execute urban offensive operations—foster audacity.

OFFENSIVE BATTLEFIELD/*BATTLESPACE* ORGANIZATION

4-11. Urban offensive operations, like all operations, are arranged using the overall battlefield/*battlespace* organization of decisive, shaping, and sustaining operations. *The Marine Corps employs both spatial and purposed-based battlespace frameworks of deep, close, rear and decisive, shaping, and sustaining respectively*. Each operation is essential to the success of an urban offense, and usually two or more of these operations occur simultaneously. A *decisive operation* is the operation that directly accomplishes the mission (ADRP 3-0). *The Marine Corps uses* decisive action—*any action the commander deems fundamental to achieving mission success (MCRP 1-10.2)*. Decisive operations/*decisive actions* are attacks that conclusively determine the outcome of urban operations. These attacks strike at a series of decisive points and directly lead to neutralizing the enemy's center of gravity. Shaping operations in urban offensive operations create the conditions for decisive operations/*decisive actions*. In urban operations, much of the shaping effort focuses on isolation, critical elements in both major operations and tactical operations as well as engagements. Sustaining operations in urban offensive operations ensure freedom of action. They occur throughout the area of operations and for the duration of the operation.

DECISIVE OPERATIONS/*DECISIVE ACTIONS*

4-12. A tactical commander fights decisive urban combat, whereas commanders conducting a larger major operation influence urban combat by setting the conditions for tactical success. Higher commanders directly influence urban offensive operations by using operational maneuver, coordinating joint fires, closely coordinating conventional or special operations forces, and making provisions for sufficient sustainment/ *logistics* to postpone culmination.

4-13. Tactical urban offensive operations quickly devolve into small-unit tactics of squads, platoons, and companies seizing their objectives. The compartmented effects of the terrain and obstacles to mission command/*command and control* of small units, especially once they enter close combat inside buildings or underground, 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 center of gravity.
- Using mission orders.
- Developing effective task organizations.
- Synchronizing their decisive, shaping, and sustaining operations.
- Managing transitions.

4-14. Like all operations, successful decisive operations/*decisive actions* in urban operations depend on identifying the decisive points so the forces can destroy or neutralize the enemy's center of gravity. 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.

4-15. Commanders select the right subordinate force for the mission and balance it with appropriate attachments. Higher commanders do not direct how to organize the small tactical combined arms teams but ensure that subordinates have the proper balance of forces from which to form these teams. Successful urban offensive operations require small tactical combined arms teams. Urban offensive operations require abundant infantry as the base of this force. However, successful urban combat requires a combined arms approach adjusted for conditions of the environment. In urban offensive operations, commanders typically do not ask whether to include armor and mechanized elements, but rather how best to accomplish this task organization. Precision-capable artillery systems generally support urban operations better than unguided rocket artillery.

4-16. Divisions/*Marine expeditionary forces* entering urban operations may require additional resources. These resources include military intelligence support in the form of linguists, HUMINT specialists, and UAS. Engineering assets will be at a premium—the task organization of a task force executing a decisive operation/*decisive action* may require a one-to-one ratio of engineer units to combat units. Corps and higher engineering support may be necessary to meet these requirements and to 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 augmentation to manage NGOs and civilian government issues.

4-17. Successfully conducting decisive operations/*decisive actions* in the urban environment requires properly synchronizing the application of all available combat power. Army/*Marine Corps* forces have a major advantage in the mission command/*command and control* of operations. Commanders use this advantage to attack numerous decisive points simultaneously or in rapid succession. They also use it to attack each individual decisive point from as many directions and with as many different complementary capabilities as possible. Commanders must completely understand urban environmental effects on warfighting functions to envision and execute the bold and imaginative operations required. Significantly, these operations require that mission command/*command and control* systems account for the mitigating effects of the environment as execution occurs.

4-18. Properly synchronized actions considerably enhance the relative value of the combat power applied at the decisive points. They present to the enemy more requirements than resources with which to respond. Synchronized information-related capabilities and multiple maneuver actions paralyze the enemy's decision-making capacity with information overload combined with attacks on enemy command and control systems. Additionally, well-synchronized actions limit the time the enemy has to make decisions and forces it into bad decisions. In the urban environment, these effects are enhanced because enemy command and control systems are already strained, poor decisions are harder to retrieve, and units that do not react effectively are more easily isolated and destroyed.

SHAPING OPERATIONS

4-19. A *shaping operation* is an operation that establishes conditions for the decisive operation through effects on the enemy, other actors, and the terrain (ADRP 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 center of gravity, this task may become decisive. Other shaping operations include those common to all offensive operations and others unique to urban operations. (See FM 3-90-1 for a discussion on shaping operations.) Unique urban shaping operations may include securing a foothold in a well-fortified defensive sector, securing key infrastructure, or protecting noncombatants. Because of the nature of urban operations, 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 decisive operation/*decisive action* may be relatively small.

SUSTAINING OPERATIONS

4-20. A *sustaining operation* is an operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power (ADRP 3-0). Commanders conducting urban offensive operations ensure security of the sustaining operation and bases. In many situations, lines of communications and sustaining operations may be the greatest vulnerability of the attacking force. Those 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.

4-21. Counterattacks against sustaining operations may take the form of special operations activities aimed at the lines of communications leading to or within the urban area. Choke points such as bridges, tunnels, and mountain passes are vulnerable to these attacks and may require combat forces to protect them. Enemy forces attack the lines of communications to blunt the Army's/*Marine Corps'* combat power advantage in the urban area.

4-22. Attacks against the lines of communications into the urban area may also attempt to isolate the attacking Army/*Marine Corps* forces from its sustainment/*logistics* base. Isolated forces in an urban area are greatly disadvantaged. Effective commanders plan and aggressively execute strong measures to protect their lines of communications, even if it requires reduced combat power to execute their offensive operation.

4-23. Sustaining operations anticipate the volume and unique logistics requirements of urban operations. Specialized individual equipment—such as grappling hooks, ladders, and pads—is identified and provided to troops in quantity before troops need them. Forces stockpile and distribute their attacking units' special munitions requirements including small arms, explosives, and grenades of all types; precision artillery munitions; and mortar ammunition. 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.

4-24. 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 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.

4-25. 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

4-26. Traditional forms of offensive maneuver include envelopment, turning movement, frontal attack, penetration, infiltration, and flank attack. Traditional types of offensive tasks are movement to contact, attack, exploitation, and pursuit. These traditional forms and types listed apply to urban combat. Some have greater application to an urban environment than others do. Moreover, success will belong 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 and in major operations.

ENVELOPMENT

4-27. The envelopment is the ideal maneuver for isolating enemy elements in the urban area or isolating the area itself. (See figure 4-1 on page 4-6.) In an urban area, friendly forces use buildings as obstacles to isolate the enemy. 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 the urban area has more challenges since buildings impede achieving speed of maneuver in the environment. Vertical envelopment or amphibious operations, however, work effectively when fires effectively suppress or neutralize the anti-access or area denial capabilities.

TURNING MOVEMENT

4-28. Turning movements can also be extremely effective in major urban operations. (See figure 4-2 on page 4-6.) By controlling key lines of communications into 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 lines of communications.

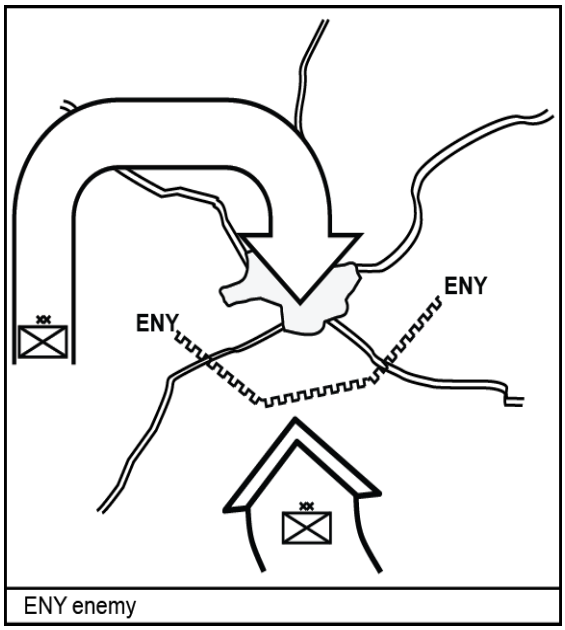

Figure 4-1. Envelopment isolates an urban area

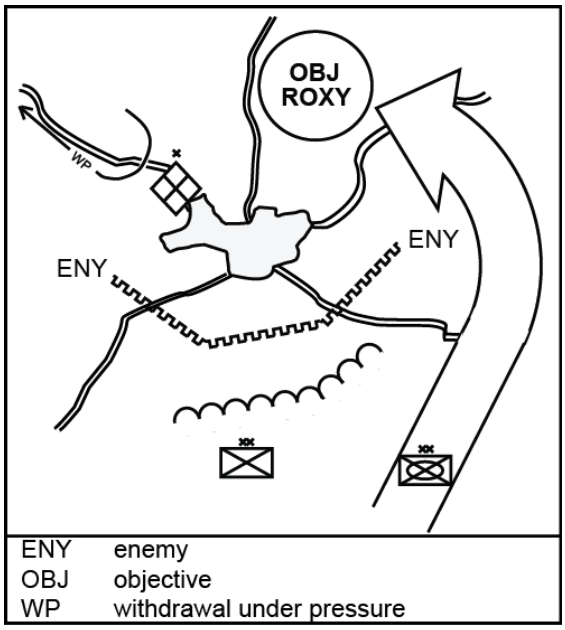

Figure 4-2. Turning movement

INFILTRATION

4-29. Infiltration secures key objectives in the urban area while avoiding unnecessary combat with enemy defensive forces in conditions favorable to them. (See figure 4-3.) 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 common operational picture. 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.

PENETRATION

4-30. Penetration is often the most useful form of attack against a prepared and comprehensive urban defense. (See figure 4-4.) It focuses on successfully attacking a decisive point or on segmenting or fragmenting the defense thereby weakening it and allowing for piecemeal destruction. The decisive 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 decisive 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 always a combined arms team, the potential speed enhances rapid penetrations, firepower, and shock action of armor and mechanized forces.

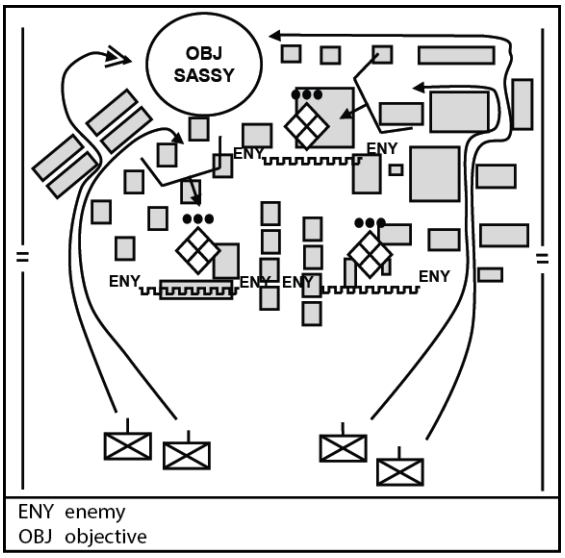

Figure 4-3. Infiltration

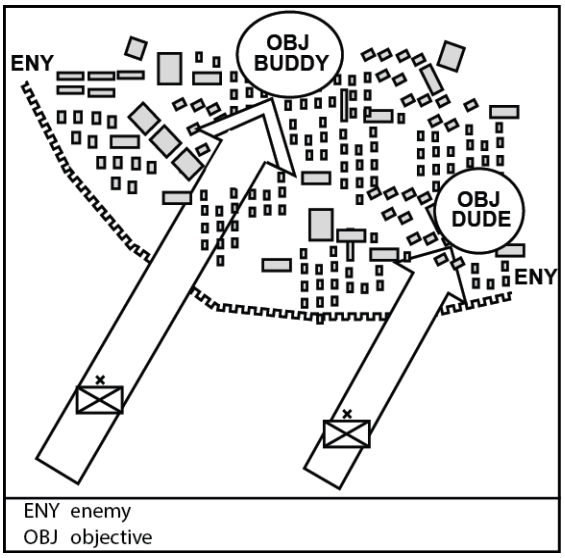

Figure 4-4. Penetration

4-31. Effective commanders consider required actions and resources that apply following a penetration. A penetration results 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 conduct methodical room-to-room clearance operations to secure the area. Securing portions or all of an urban area requires occupation by Army/*Marine Corps* forces to prevent re-infiltration of enemy forces. Securing an area increases manpower requirements. In some situations, commanders may determine that is less costly for Army/*Marine Corps* forces to conduct methodical clearance operations from the outset. Such a course of action frontloads time and resource requirements.

FRONTAL ATTACK

4-32. For the commander of a major urban operation, the frontal attack is generally the least favorable form of maneuver against an urban area unless the enemy is at an obvious disadvantage in organization, numbers, training, weapons capabilities, and overall combat power. (See figure 4-5 on page 4-8.) Frontal attacks require many resources to execute properly. These attacks risk dispersing combat power into nonessential portions of the area and risk 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 that 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) in width.

FLANK ATTACK

4-33. For the commander of a major urban operation, the flank attack is a movement of an armed force around a flank to achieve an advantageous position over an enemy. (See figure 4-6 on page 4-8.) 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.

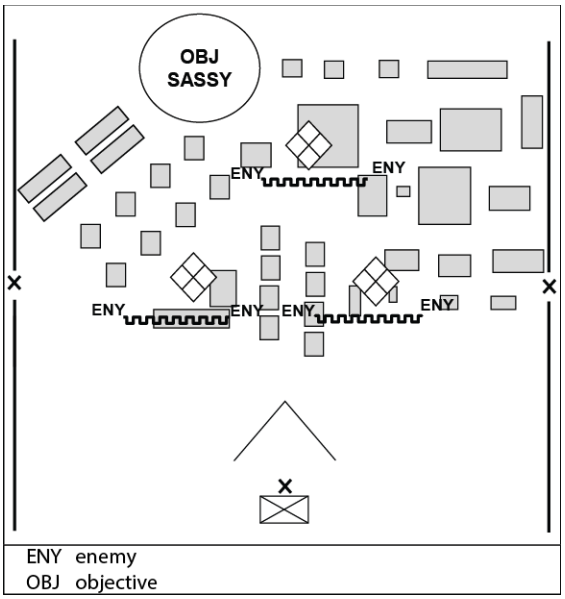

Figure 4-5. Frontal attack

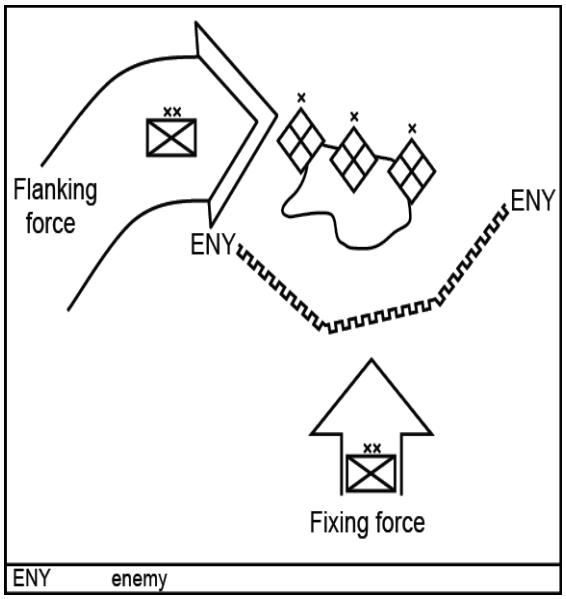

Figure 4-6. Flank attack

TYPES OF OFFENSIVE TASKS

4-34. Commanders consider types of offensive tasks in an urban environment. These tasks include movement to contact, attack, exploitation, and pursuit for offensive operations.

MOVEMENT TO CONTACT

4-35. 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 types of movement to contact: the approach march and the search and attack. The situation determines which movement to contact is appropriate. A conventional force-oriented movement to contact often occurs when 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. 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.

4-36. 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. In a meeting engagement in an urban area, the unit that reacts most quickly and decisively will likely win. 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. Situational understanding enhanced by robust digital information systems that provide an accurate common operational picture also facilitates the rapid reaction of Army/*Marine Corps* units and a synchronized response. This reaction and response allow Army/*Marine Corps* forces to seize the initiative and dominate the enemy.

ATTACK

4-37. The attack is the most common and likely offensive operation that Army/*Marine Corps* forces conduct in an urban environment. 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 re-establishing a coherent defense.

EXPLOITATION

4-38. 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.

4-39. 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

4-40. 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 (MCRP 3-35.3A)*/NTTP 3-01.04/AFTTP 3-2.29 for further considerations.

CONSIDERATIONS OF URBAN OFFENSE

4-41. 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. However, no set rules exist. All urban operations are unique. 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 consideration becomes an operational issue, a tactical issue, or a combination of the two. Some planning and execution considerations that commanders conducting major operations address can include—

- Understanding.
- Integrated surveillance and reconnaissance.
- Focused assessment efforts.
- Shaping.
- Isolation.
- Direct action by special operations forces.
- Information operations.
- Detailed leader reconnaissance.
- Mission orders.
- Effective task organization.
- Engagement.
- Consolidation.
- Transition.

UNDERSTANDING

4-42. The first consideration—and a continuing requirement throughout the conduct of urban operations—is understanding the situation. Commanders base this understanding on detailed information regarding the particular urban area. Since the enemy 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. A comprehensive information collection effort in support of a rigorous IPB process overcomes this obstacle.

INTEGRATED SURVEILLANCE AND RECONNAISSANCE

4-43. Commanders of a major operation in an urban area target reconnaissance deep into the area of operations and area of interest. They apply surveillance and reconnaissance resources against the urban area often leading to decisive ground operations. This surveillance and reconnaissance effort and the understanding it supports continue as long as the urban area remains in the area of operations. Commanders of major operations initially direct surveillance and reconnaissance assets on those information requirements that support whether or not to conduct urban offensive operations. Once decided, surveillance and reconnaissance resources shift to support the planning and execution of the operation in the urban area.

4-44. The commander begins building an initial database for surveillance and reconnaissance. Senior commanders use national and strategic sensors, requested through the appropriate joint force commander. With the full use of these systems, commanders begin building an initial database. Commanders use the database for analyzing the 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.

4-45. Simultaneously, multiple information sources contribute to the database. Intelligence personnel collect, process, vet, store, display, and disseminate the 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 area of operations.

4-46. The gathering and analysis of information pertaining to civil considerations 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.

4-47. As intelligence operations and national intelligence efforts progress, commanders confirm or deny the collected information. Information comes from geospatial intelligence, signals intelligence, and HUMINT sources. Other joint operational reconnaissance and surveillance assets that higher-echelon commanders may have available might include the Joint Surveillance Target Attack Radar System, Guard Rail targeting aircraft, UASs, and space-based systems. If available and feasible, commanders employ special forces reconnaissance assets in the urban environment. These forces seek to confirm or deny the information received from geospatial intelligence, signals intelligence, and HUMINT sources. Employing special operations forces depends on their availability, the particular urban area, the area's ethnic composition, and the relationship between the urban population and the enemy.

4-48. 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 common operational picture 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

4-49. 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

4-50. To be efficient and effective, Army/*Marine Corps* urban offensive operations focus on essential decisive points. Decisive points for an urban attack depend primarily on the mission within the urban area. Decisive points vary widely in composition and size. Since commanders only focus 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 the enemy military capability, but even this large of an objective, when carefully analyzed, may not require destruction of all enemy forces or control of the entire urban area. Decisive points relate directly to the enemy's center of gravity and to mission success. Some decisive points related to the urban enemy's center of gravity may be physically located outside the urban area.

4-51. To determine the decisive points, commanders need to gain specifics on enemy dispositions within the urban area. They use their reconnaissance capability to see into the depths of the area and the intelligence capability to determine the enemy's likely defensive COA. With this information, commanders determine decisive points and apply combat power discretely against them. Effective urban offensive operations require a detailed situational understanding of an area of interest that extends beyond the perimeter of the urban area.

4-52. Commanders see decisive points throughout the depth of the urban area using several actions. (See figure 4-7 on page 4-12.) 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 common operational picture.

Collateral Damage Considerations

4-53. In urban offensive operations, tactical commanders consider collateral damage in their focused assessment efforts. 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

4-54. 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 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, dead space, cover, and concealment can only be identified physically and may change considerably as operations are executed.

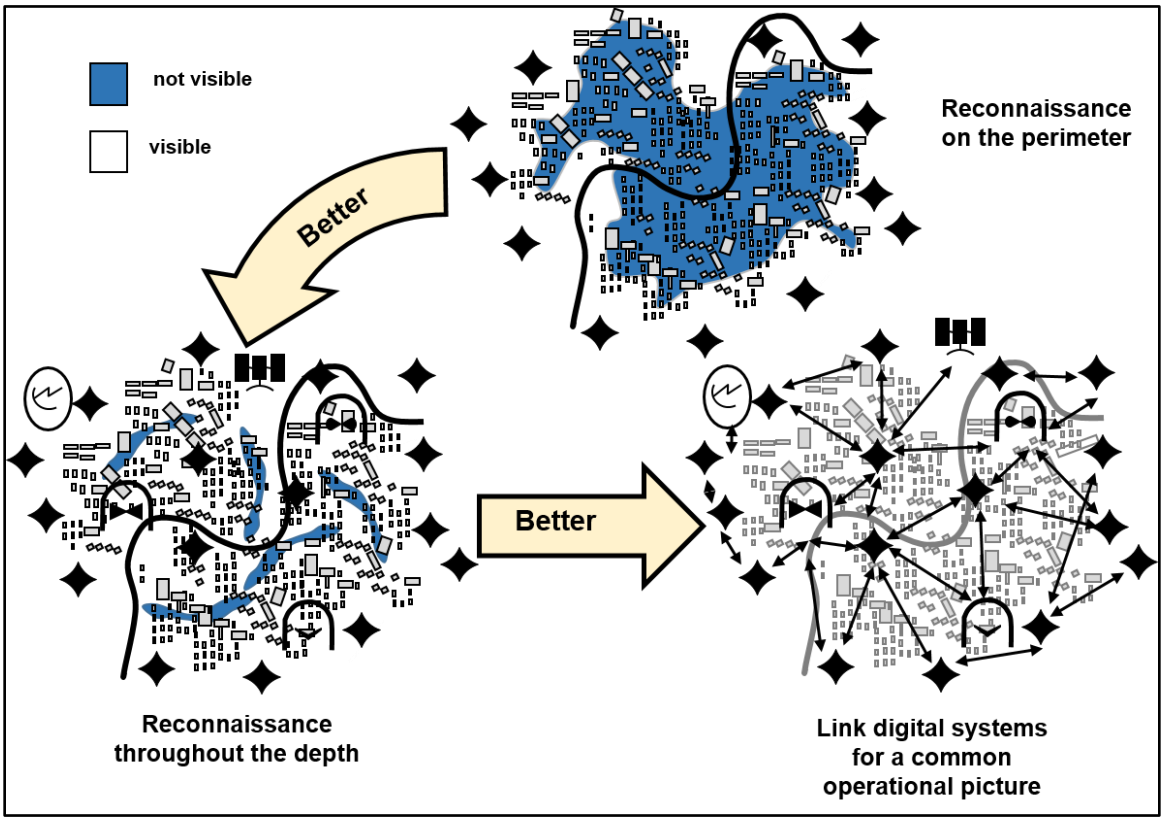

Figure 4-7. Required urban reconnaissance actions

SHAPING

4-55. Commanders of major urban operations consider the impact of shaping operations. Commanders contribute to urban operations when planning and executing effective shaping operations that set the conditions for subordinate tactical success. In urban operations, isolation is a critical condition. (See the discussion beginning in paragraph 4-58.) 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 special operations forces direct actions, information operations 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.

4-56. Shaping operations also take the form of attacks against vulnerable positions. 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.

4-57. 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

4-58. Commanders of major urban operations consider the importance of isolation. In the history of urban operations, a key to success has been the effective isolation of the enemy force. (See figure 4-8.) This applies today and equally well to major urban offensive operations as it does to smaller unit attacks. 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. 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.

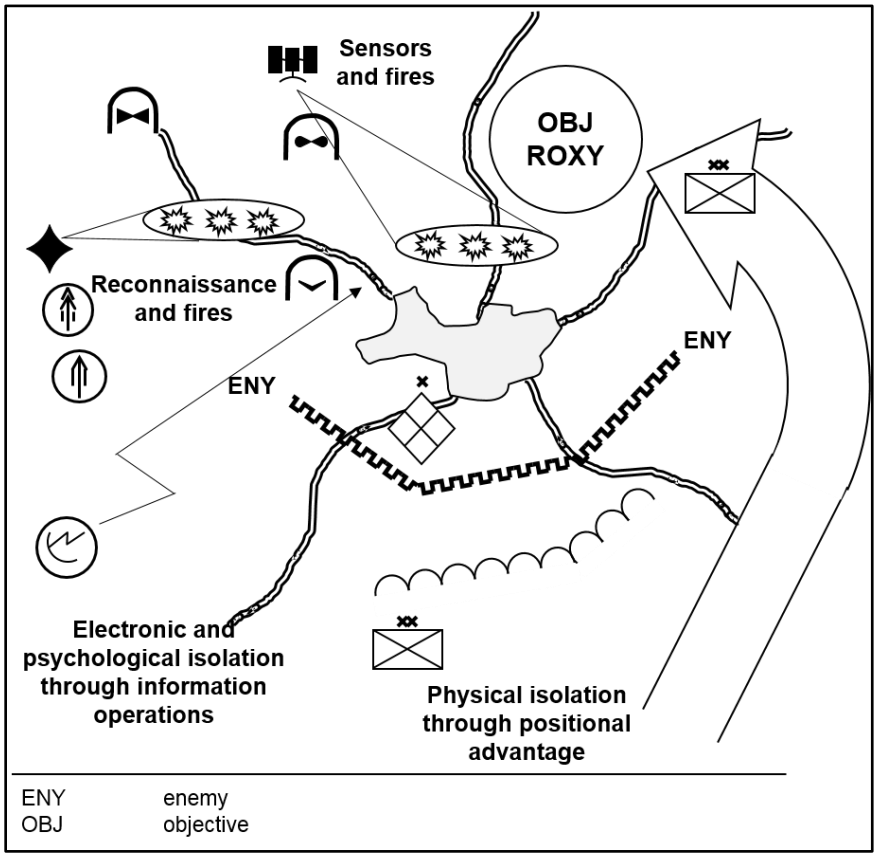

Figure 4-8. Shaping through isolation

4-59. 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 many of the same techniques as used against conventional forces but in larger concentrated doses. Isolating a more unconventional force requires a much greater ability to simultaneously conduct offensive information operations, to integrate civil affairs units and civil-military operations, and to work with allies, NGOs, and local authorities. Lastly, commanders consider that isolating a less conventional enemy increases emphasis on separating combatants from noncombatants.

Offensive Isolation Objectives

4-60. 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.

4-61. Isolating the enemy in the urban area from external support, as well as isolating the enemy from sources of support within the urban area, weakens overall defense. The defense is weakened through a combination of attrition (the enemy cannot replace losses) and the 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.

4-62. 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, create the conditions for its use through effective fire and maneuver against the defenders, and then destroy the enemy through various ambush methods. While friendly forces may be able to move undetected to appropriate ambush sites, it is more likely that this technique 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

4-63. Persistent surveillance of the urban area is essential to all types of actions used to isolate an urban area and as complete as resources allow. 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. However, particularly with sensors, commanders consider that each detection is not necessarily an enemy to be attacked. 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

4-64. 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. Inside enemy-controlled areas, units have more difficulty identifying, eliminating, or effectively suppressing the air defense enemy. The enemy has numerous man-portable air defense weapons and enhanced effects of small arms used for air defense. Therefore, the risk to 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 to any attack).

4-65. 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. Although targets and avenues of approach require continual surveillance, it is usually a less resource-intensive option than those options that include maneuver. Employing indirect or joint fires alone also does not normally require fires assets to remain on standby to accomplish the mission. However, fires must be

able 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 4-9.) A resolute enemy risks significant losses to fires to prevent isolation or attempts to use noncombatants as a shield. Ultimately, commanders use innovative combinations of all techniques discussed. Some units physically block key avenues of approach. Surveillance monitors less important routes and avenues.

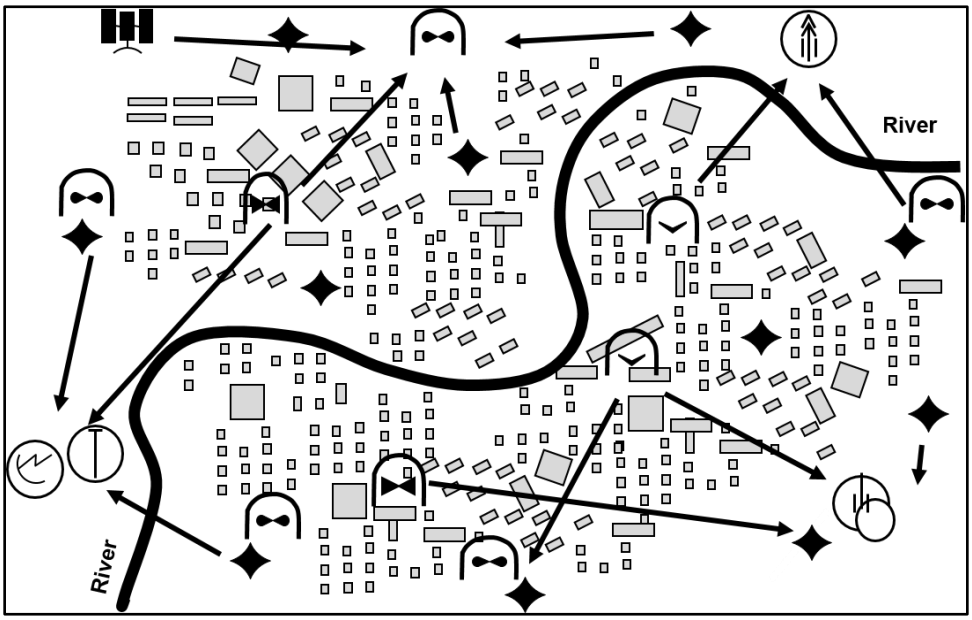

Figure 4-9. Critical sensor to shooter links

Enemy Reactions

4-66. 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 completed 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 out.
- Execute any combination of the above. (See figure 4-10 on page 4-16.)

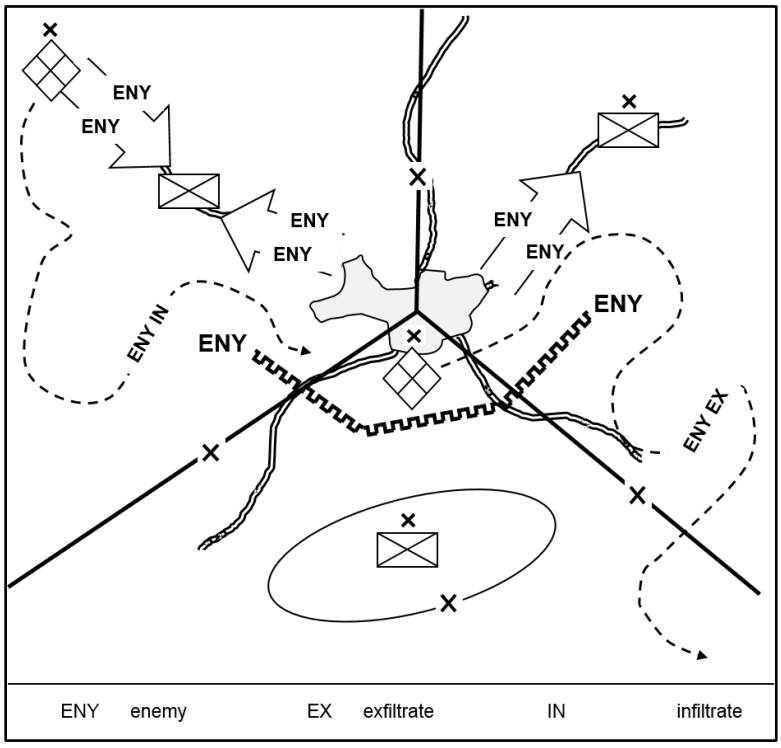

Figure 4-10. Reactions to isolation

4-67. Attacking commanders consider how the enemy leadership's subsequent actions affect the continuance of overall offensive operations. They deliberate many considerations, to include—

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

Civilian Reactions

4-68. Commanders consider the potential effects on (as well as reactions and perceptions of) certain populations. These populations live in the urban areas that friendly force isolate and bypass, either as a direct effect or as a response of the enemy force isolated. Isolation to reduce the enemy's ability to sustain itself will have similar (and worse) effects on civilians remaining in the isolated area. If food and water are in short supply, enemy forces take from noncombatants to satisfy their needs, leaving civilians to starve. Isolation also creates a collapse of civil authority within an urban area as it becomes apparent that the military arm of their government suffers defeat. Due to their isolation, elements of the population completely usurp the 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 and, in some instances, less willing to allow Army/*Marine Corps* forces to assume control since civilians may perceive the forces did nothing to earn that privilege. Alternatively, 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.

Direct Action by Special Operations Forces

4-69. In urban offensive operations, the commander considers direct action by special operations forces. Although special operations forces in urban offensive operations conduct essential reconnaissance to support special operations forces operations, they also have a direct action capability to shape the offensive operation. (See figure 4-11.) Special operations forces 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 electronic isolation. Direct action against command centers, logistics bases, and air defense assets contribute to the success of conventional attacks by destroying or disrupting key enemy capabilities. Direct action secures key targets such as airports, power stations, and television stations necessary for subsequent operations. Direct action (by special operations forces in these operations) achieves precision and reduces potential damage to the target or noncombatant casualties.

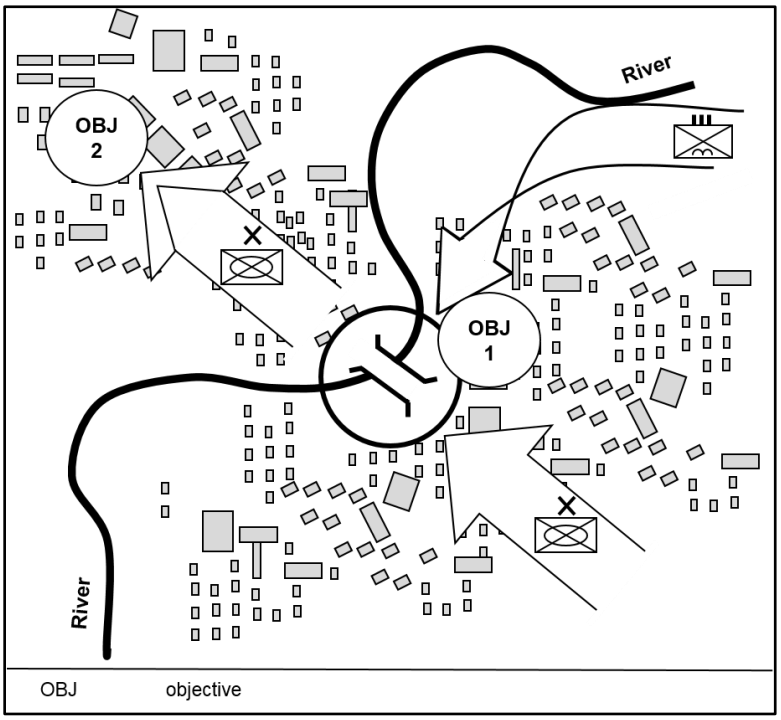

Figure 4-11. Coordination of special operations forces and conventional capabilities

INFORMATION OPERATIONS

4-70. In urban offensive operations, the commander considers information operations. Regardless of how Army/*Marine Corps* forces physically isolate the urban area, they combine physical isolation with information operations to isolate the enemy further and undermine the enemy's morale. For example, electronic isolation cuts off communications between forces in the urban area and their higher command to deny both from knowing the other's status. Information operations combined 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. Information operations also serve to reduce any loyalty the civilian population has to the enemy. Information operations ensure that civilians have the information that minimizes their exposure to combat and, as a result, reduce overall noncombatant casualties. In addition, information operations aim to deceive the enemy regarding the time and place of Army/*Marine Corps* forces operations and intentions.

DETAILED LEADER RECONNAISSANCE

4-71. The commander conducting urban offensive operations considers detailed leader reconnaissance. Effective Army/*Marine Corps* commanders conduct detailed leader reconnaissance of an area of operations. 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/*Marine*'s perspective. Commanders have a responsibility to know the conditions intimately so they

can allocate resources effectively to subordinate units. Often, particularly at battalion level and above, commanders will not be able 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 area of operations by commanders, their staff, and their subordinates before the mission compensate 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

4-72. Before contact, commanders consider mitigating some terrain challenges to effective mission command/*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

4-73. Commanders consider shaping urban offensive operations through effective and innovative task organization. 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*. Combat engineers provide route clearance, reconnaissance, and specialized breaching capability in support of urban operations. Field artillery provides the indirect (and if necessary, direct) firepower. Such mobility and firepower create the conditions necessary for the 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 anti-armor weapons, particularly when those weapons are in well-prepared positions in the urban area—especially on rooftops and in basements.

4-74. 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.

4-75. However, commanders must view artillery as not just a weapon but 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 just one gun to a company or other maneuver unit. Self-propelled artillery has some of the mobility characteristics of armor; however, 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.

4-76. Aviation supports urban operations with lift, attack, and reconnaissance capabilities. Tactical commanders down to company level use all 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 mission command/*command and control* by providing airborne retransmission capability, airborne command posts, 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. Soldiers/*Marines* reference ATP 3-06.1/*MCRP 3-20.4 (MCRP 3-35.3A)*/ NTTP 3-01.04/AFTTP 3-2.29 for employing aviation assets during urban operations.

ENGAGEMENT

4-77. In urban offensive operations, the commander considers engagement. Commanders decisively engage elements of the urban area during offensive operations. Commanders employ several methods to include—

- Rapid maneuver.
- An appropriate use of special operations forces.
- Precise application of fires and effects.
- A proper balance of speed and security.

4-78. None is unique to urban operations. 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, the commander's ability to engage is based on superior situational understanding and the correct application of unit strengths to the challenges found in the urban environment.

Rapid and Bold Maneuver

4-79. Commanders of major urban operations 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; however, the potential benefit of audacious offensive operations may be well worth possible losses. Three potential ways to accomplish such attacks and their combinations 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).

4-80. Commanders analyze all potential urban operations 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. Just 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.

4-81. 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

4-82. Sometimes Army/*Marine Corps* forces employ direct action instead of simply shaping the urban area using the direct action capability of special operations forces. When the enemy fails to develop a comprehensive defense and does not possess large, capable conventional forces, then Army/*Marine Corps* forces achieve operational surprise. Mission command/*command and control* of special operations forces should be executed within the special operations forces chain of command. Successful execution of special operations requires clear, responsive mission command/*command and control* by an appropriate special operations forces mission command/*command and control* element. In all cases, commanders exercising command authority over special operations forces—

- Provide for a clear and unambiguous chain of command.
- Avoid frequent transfer of special operations forces between commanders.
- Provide for sufficient staff experience and expertise to plan, execute, and support the operations.
- Integrate special operations forces in the planning process.
- Match unit capabilities with mission requirements.
- Maximize the use of liaison officers between the conventional and special operations forces.

4-83. Commanders, by synchronizing conventional and special operations forces effects, may actively control offensive operations to dominate the area. Importantly, however, conventional ground forces must be available to assume the mission because special operations forces units acting as the primary striking force have limited logistic capability to sustain long-term operations.

Precise Application of Fires and Effects

4-84. 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 urban operations.

Proper Balance of Speed and Security

4-85. 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.

4-86. 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 the 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. Soldiers/*Marines* reference ATP 3-06.1/*MCRP 3-20.4 (MCRP 3-35.3A)*/ NTTP 3-01.04/ AFTTP 3-2.29 for employing aviation assets during urban operations.

CONSOLIDATION

4-87. In urban offensive operations, the commander considers consolidation. Commanders at all levels consolidate to strengthen their position during urban offensive operations without loss of momentum. They take the steps necessary to make any temporary battlefield/*battlespace* successes permanent while maintaining relentless pressure on enemy forces. Consolidation repositions forces, allows forces to prepare for counterattack, eliminates pockets of resistance, and facilitates reorganization.

Repositioning of Forces

4-88. Following the seizure of the objective, commanders normally consolidate by adjusting and repositioning forces. While urban operations 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 mission command/*command and control* facilities to enable subsequent operations.

Preparing for Counterattack

4-89. Immediately after the conduct of successful urban operations, units remain alert to the potential for rapid and violent counterattacks. Defenders 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 urban operations, 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 it.

4-90. 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 for 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 the urban area may contribute to strengthening or reestablishing the 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

4-91. Commanders consolidate to strengthen their position during urban offensive operations by eliminating pockets of resistance. 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 forces. In their deliberations, commanders determine if remaining enemy forces are capable of consolidating and mounting effective counterattacks 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—

- The urban inhabitants.
- Lines of communications.
- Critical resources within the urban area necessary to support the inhabitants or subsequent operations.

Faciltating Reorganization

4-92. 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

4-93. In urban offensive operations, the commander considers transition. Effective transitioning allows commanders to continue unified land operations in the urban area and elsewhere in the area of operations without unnecessary delays. Commanders transition effectively with thorough planning including appropriate branches and sequels (revised as the situation changes) that gives 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

4-94. Commanders ensure smooth transitions of urban offensive operations by planning for post-offensive operations early. 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

4-95. 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 logistic 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

4-96. 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—will be required. However, the greatest modification required applies to each Soldier's/*Marine's* mental outlook. Forces that transition directly from combat to stability tasks may not be psychologically prepared 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 especially applies if the population is hostile to Army/*Marine Corps* forces. If possible, combat forces assisting in stability operations, particularly in hostile civilian situations, should not have had recent experience in high-intensity urban operations and they should have

trained for the mission. Likewise, commanders require their troops to conduct specific training when their Soldiers/*Marines* operate within the homeland, and among their own people, while conducting DSCA.

Return to Civilian Agencies

4-97. 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 is feasible quickly 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 urban operations, commanders closely synchronize these transition operations with the execution of the attack.

Transition to a New Mission

4-98. 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 urban operations. Transition to stability or DSCA tasks is often accompanied by a transition in roles from supported to supporting.

4-99. Even more challenging than transition at the end of the mission is transition during the conduct of the mission. Soldiers/*Marines* have a difficultly 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.

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Chapter 5
Urban Defensive Operations

This chapter provides a discussion of the purpose and characteristics of urban defensive operations. It also discusses the defensive battlefield/*battlespace* organization, types of urban defense, and considerations of the urban defense.

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 conditions for decisive offensive operations, and shaping conditions for executing tasks. During force projection operations, units use urban areas as initial lodgment areas that Army/*Marine Corps* commanders may need to defend at the outset until they build sufficient combat power. Usually two or more of these purposes apply to the urban defense. Urban defensive operations provide commanders great opportunities to turn the environment's characteristics to their advantage. Urban areas are ideal for defensive operations and greatly enhance the combat power of defending units.

CHARACTERISTICS OF DEFENSE

5-2. There are five general characteristics of the successful defense: preparation, security, disruption, massing effects, and flexibility. All apply to the successful urban defense and to the higher commander supporting a subordinate defending in the urban area.

PREPARATION

5-3. The urban area suits the defense since the area's physical characteristics enhance the combat power of defending units. These characteristics include protection/*force protection*, obstacles, and concealment. Urban terrain provides superb defensive positions with minimum preparation. With deliberate preparation, urban defensive positions become strong points.

5-4. One primary characteristic of the urban terrain that enhances the defense is protection/*force protection*. With little or no advance preparation, buildings, subsurface structures, and walls protect Soldiers/*Marines* from direct and indirect fire, interdict indirect fire, limit observation, and limit engagement ranges (requiring skill at combat in close quarters and 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 bomb. Minimal additional preparation turns these buildings into formidable defensive strong points.

5-5. Buildings in urban areas, because of their height and proximity, also protect Soldiers/*Marines* by masking them from indirect fire. The height of a building interdicts the flight path of an artillery round, rocket, missile, or bomb at a point short of the intended target. Masking protects static defending forces and protects forces moving along routes bordered with tall buildings that form urban canyons. Units use these protected routes for sustainment/*logistics*, counterattacks, and maneuver.

5-6. Structurally significant buildings in an urban area create major obstacles to maneuver. These obstacles immediately canalize maneuver into existing streets and routes without any preparation by the defense. These obstacles become kill zones for well-positioned and sited defensive forces. Minimal obstacle construction as point obstacles blocking streets and routes further restrict the maneuver options of the attacking force. Rubble from structures collapsing into streets after fires (intentional or unintentional) also blocks routes.

5-7. Buildings conceal the location, disposition, and intent of the defense. They 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. The physical aspect of the urban environment enhances the defense by degrading the opposition's ISR capabilities. Buildings conceal static defensive positions and the maneuver of defensive forces in the urban area. The environment constrains defensive mobility in much the same manner as offensive mobility. However, a defender with time has the opportunity to conduct careful reconnaissance, select routes, and prepare routes. This gives the 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.

SECURITY

5-8. The urban environment is an advantage or a disadvantage to the security of defending forces. This largely depends on the attitude of the civilians towards the forces. If the population is evacuated or supports multinational forces, then the environment helps the security of defending Army/*Marine Corps* forces. However, if the population is present and hostile, then security may prove difficult.

5-9. The physical aspects of the urban environment, not influenced by the human aspect, help defend Army/*Marine Corps* forces securely. The combat power of small security forces manning observation posts is greatly enhanced. Forces easily restrict and monitor avenues of approach for enemy reconnaissance. Defending forces positioned mostly in structures are difficult to locate.

5-10. Physical aspects of the environment also present some security challenges, primarily with observation. The compartmented terrain limits the field of observation from any one point. The 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. These forces gain numerous hide positions for small reconnaissance units in complex terrain. Additionally, the terrain can mask electronic signatures of those hidden units.

5-11. Friendly civilians in the urban area help identify enemy forces attempting to conduct reconnaissance. Civilian activity also helps mask defense preparations. However, hostile elements of the population pass intelligence information to the enemy. They can assist enemy reconnaissance to infiltrate the urban area or provide guides, manpower, or resource support for enemy forces. Commanders take measures to ensure strict control of hostile populations. If resources permit, commanders consider removing potentially hostile civilians from the area.

DISRUPTION

5-12. The urban environment's attributes assist defending Army/*Marine Corps* forces who disrupt the attacker. Its attributes disrupt by compartmentalizing forces and facilitating counterattacks.

5-13. The physical aspects of the 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 also proves difficult. Physically, the urban area disrupts tactical communications making synchronization of combat power difficult.

5-14. The urban terrain inhibits mission command/*command and control* in many ways, most noticeably within the mission command system and communications. However, it also degrades control measures and possibly increases the difficulty in safeguarding civilians and important infrastructure. The urban terrain may also limit the available support systems to include aviation assets, direct fire, indirect fire, and even resupply options.

5-15. The urban terrain facilitates counterattacks. The compartmented terrain hinders the mobility capabilities of the defense. However, careful planning, preparation, and rehearsals facilitate more rapid movement of larger forces. Defending forces assemble counterattacks undetected, move them along covered and concealed routes, and achieve surprise at the point of the counterattack. Attacking forces, using the compartmented terrain, often leave forward elements in position to be isolated or expose long and vulnerable flanks to friendly counterattack and interdiction.

MASSING EFFECTS

5-16. The urban environment allows defenders to protect their centers of gravity and decisive points. The restrictive terrain reduces the attacker's maneuver options. Defenders position forces in protected and mutually supportive positions oriented on deadly engagement areas. Relatively few well-positioned defenders generate significant combat power. Without the positional advantage and the corresponding protective effects of the terrain, attacking forces often mass numbers to achieve the necessary combat power.

5-17. Knowledge of the complex terrain permits defending forces to plan engagement areas that maximize the effects of their combat power. Defending forces remove fences, walls, rooftops, and even entire buildings to facilitate fields of fire and unmask indirect fire flight paths. Forces carefully choose firing positions for indirect fire systems so that flight paths travel between buildings into engagement areas. By leveraging this 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 in which fires can have the greatest effect.

FLEXIBILITY

5-18. 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 can quickly 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. The urban area permits rapid, covered movement on interior lines. This permits swift movement to and occupation of strong defensive positions with little or no preparation. 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, will know complex lines of sight and masking effects, and will best understand the ballistic characteristics of individual structures. The exception to this may be when the defense is hastily occupied or the amount of time the defense has been in place is not sufficient to garner the advantages in these areas.

5-19. Commanders find that the best urban defense is to defend outside the area. Such a defense mitigates the danger to the urban population and potentially reduces collateral damage. Defense from outside the urban area takes advantage of Army/*Marine Corps* long-range engagement capabilities, denies the enemy the opportunity to get close to Army/*Marine Corps* forces or noncombatants, and provides protection from fires. This defense is appropriate when Army/*Marine Corps* forces have enough resources to defend open terrain, when time permits deploying extensive obstacles and constructing protected positions, and when natural terrain such as river obstacles aids the defense.

DEFENSIVE BATTLEFIELD/*BATTLESPACE* ORGANIZATION

5-20. 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 each operation, but commanders must synchronize these simultaneous operations as one action. Sustaining operations in defensive urban operations ensure freedom of action. Critically, urban sustaining operations ensure security of lines of communications and establish effective movement control. Shaping operations in defensive urban operations create the 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. In contrast in an area defense, the fixed defense may be the decisive operation/*decisive action*. In the urban defense, decisive operations/ *decisive actions* focus on accomplishing the commander's mission. The decisive operation/*decisive action* may not defeat the enemy's main effort, and it may not prevent enemy occupation of large portions of the 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.

TYPES OF URBAN DEFENSE

5-21. Commanders view urban area defensive operations two ways: as conducting a major defensive operation with an urban area in their area of operations and as defending entirely in an urban area.

AREA DEFENSE

5-22. At the operational level, an area defense includes both urban areas and open maneuver areas. The most common defense in an urban area and the most suitable for the characteristics of this distinct environment is the area defense. The *area defense* is a defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADRP 3-90) or *as 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 (MCRP 1-10.2).* Although an area defense in an urban area does not directly seek to destroy or defeat attacking enemy forces, as an objective it does aim to force culmination of the enemy's attack. The urban area defense works effectively to exhaust enemy resources and shape conditions for a transition to offensive operations. The urban area is a strong point to force enemy movement in a different direction or to fix enemy forces as part of a large, mobile defense occurring in the area of operations outside the urban area.

MOBILE DEFENSE

5-23. A mobile defense can operate in an urban area but only under specific conditions. *Mobile defense* is a defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADRP 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 (MCRP 1-10.2).* It requires the defender to have greater mobility than the attacker. To shape a mobility advantage, the urban defender effectively uses the terrain and task-organizes the forces' mobility. The principles of applying the mobile defense in the 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 5-1.)

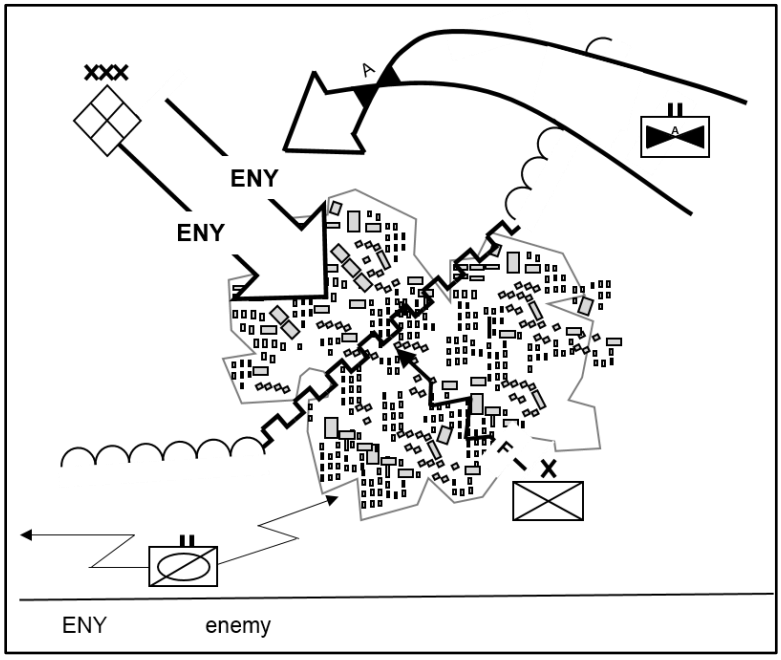

Figure 5-1. An urban area incorporated into a larger mobile defense

5-24. One key to executing a mobile defense in the urban area is to entice 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 man-made 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 decreases to less than that of dismounted infantry. In addition, if the attacking force's movement into the urban area is mounted and rapid, the 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 anti-armor weapons—firing from flanks and top down and having support from precision indirect fires from both organic and joint systems—rapidly destroys the enemy.

5-25. From the perspective of commanders of the major operation, the 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

5-26. 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 (ADRP 3-90). Retrograde operations include withdrawals, delays, and retirements. These defensive operations often occur in an urban environment. The urban environment enhances the defending force's ability to conduct retrograde operations successfully. (See figure 5-2.)

5-27. The cover and concealment afforded by the urban environment facilitates withdrawals where friendly forces attempt to break contact with the enemy and move away. The environment also restricts enemy reconnaissance, which is less able to detect friendly forces moving out of position, and presents excellent opportunities for deception actions. A small security force's ability to remain concealed until contact in the urban environment significantly slows enemy attempts to regain contact once Army/*Marine Corps* forces have broken contact and begun to move.

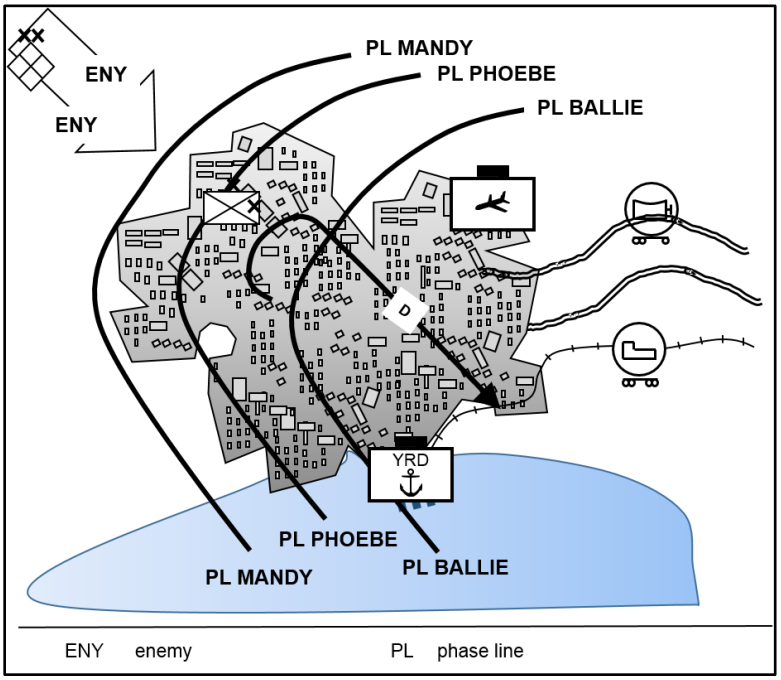

Figure 5-2. Retrograde through an urban area

5-28. The urban environment's natural cover and concealment, as well as the compartmented effects, facilitates delays. Delays can effectively draw the enemy into the urban area for subsequent counterattack or as an integral part of a withdrawal under enemy pressure. Delaying units quickly displace from one covered and concealed position to another position; the repositioning options are vast. Compartmented effects force the attacking enemy to move on well-defined and easily interdicted routes; these effects limit the enemy's ability to flank or bypass delaying positions.

5-29. The urban area's transportation and distribution network facilitates retiring forces that are not in contact. Properly used, the urban transportation system quickly moves large forces and associated resources using port facilities, airfields, railheads, and well-developed road networks.

CONSIDERATIONS OF URBAN DEFENSE

5-30. Defensive considerations vary depending on the level of war at which the operation is conducted, the type of defense, and the situation. Most issues discussed can, in the right circumstances, apply to both commanders conducting major urban operations and commanders at lower tactical levels of command.

UNDERSTAND

5-31. Commanders defending in the urban area assess many factors to clarify their understanding. Their mission statement and guidance from higher commanders help focus their assessments. If the mission is to deny an enemy access to port facilities in an urban area, then the commander's assessment focuses much differently 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

5-32. 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. Overall, the attacker takes one of two approaches. The most obvious would be a direct approach aimed at seizing the objectives in the area by a frontal attack. A more sophisticated approach would be indirect and begin by isolating Army/*Marine Corps* forces defending the urban area. Innumerable combinations of these two extremes exist but the enemy's intentions toward the urban area will favor one approach over another. The defending Army/*Marine Corps* commander (whose area of operations includes but is not limited to the urban area) conducts defensive planning, particularly allocation of forces, based on this initial assessment of enemy intentions. This assessment determines whether 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

5-33. A second key assessment in the urban defense is 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 chemical, biological, radiological, nuclear, 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 discussed in Chapter 1.

5-34. Generally, units occupy less terrain in urban areas than in more open areas. For example, an infantry company, which might occupy 1,500 to 2,000 meters (1,640 to 2,187 yards) in open terrain, usually occupies a frontage of 300 to 800 meters (328 to 874 yards) in urban areas. The density of buildings in the urban area, building sizes and heights, construction materials, rubble, and street patterns dictate the actual frontage of

units. However, for initial planning purposes, table 5-1 provides approximate frontages and depths for units defending in an urban area.

Table 5-1. 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)		

SHAPE

5-35. Commanders shape the urban operations 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. Important shaping actions that apply to all defensive urban operations include the following:

- 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

5-36. Failure to prevent isolation of the urban area rapidly leads to the failure of the entire urban defense. Its importance cannot be overstated. In planning the defense, commanders anticipate that the enemy will attempt to isolate the urban area. Defensive planning addresses in detail defeating enemy attacks aimed at isolation of the urban area. Commanders defeat this effort by allocating sufficient defending forces outside the urban area to prevent its isolation. 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.

5-37. 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. The passage of time also reduces the resources of defending forces and their ability to breakout. Therefore, commanders and staff of a major operation must vigilantly avoid isolation when Army/*Marine Corps* forces are defending urban areas in their area of operations.

Separating Attacking Forces from Supporting Resources

5-38. Commanders of the major operation primarily use fires and information operations for separating enemy forces attacking the urban area in space and time 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 information operations 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 decisive point in the close battle.

5-39. If the urban area is part of a major mobile defense operation, the urban defense becomes the fixing force. 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 portray 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 makes this commitment, the mobile defense striking force attacks and defeats the enemy outside the urban area. This isolates the enemy in the urban area and facilitates its destruction.

5-40. 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 critical to the urban defense include mobility and countermobility operations, offensive information operations, economy of force operations, and population management operations.

Creating a Mobility Advantage

5-41. In urban terrain, countermobility operations greatly influence bringing the enemy into the 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 urban operations, countermobility considers collateral damage and the second- and third-order effects of obstacle construction.

5-42. Well-conceived mobility operations in the urban terrain can provide defending forces mobility superiority over attacking forces. Army/*Marine Corps* forces achieve superiority by carefully selecting routes from primary, alternate, and subsequent positions, and moving reserves and counterattack forces. These routes are reconnoitered, cleared, and marked before the operation. Army/*Marine Corps* forces maximize the cover and concealment characteristics of the terrain. Using demolitions, lanes, and innovative obstacles denies the defense of these same routes.

Applying Economy of Force Measures

5-43. Economy of force is extremely important to an effective tactical urban defense. A 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, 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

5-44. Another way to shape urban defensive operations is population management. In most cases, defending force commanders arrive in the urban area before combat. This time 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.

5-45. Managing the 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 make up 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. It may prove impractical to evacuate an urban area's population. Commanders then attempt to create protected areas and move most 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

5-46. Counterattacks enable shaping the battlefield/*battlespace* for defensive success. Counterattacks as a shaping tool have two applications: retaining the initiative and separating forces. However, the opportunity for effective counterattacks is brief and, therefore, timing will be critical. If conducted too soon, the counterattack expends resources required later. If conducted too late, it may not be effective. Commanders understand the effect of the urban environment on time-distance relationships; otherwise, the timing of the attack may be upset and the operation desynchronized. Additionally, successful commanders develop plans beyond the counterattack to exploit potential success.

ENGAGE

5-47. Engaging the urban area in a defensive operation requires decisively defeating the enemy's attacks. Defensive forces use the terrain to their advantage, employ precision supporting fires, and use direct fire from protected positions aligned against carefully selected avenues of approaches and kill zones. The combat power of the defense, augmented by shaping actions and the characteristics of an urban terrain force, when overcome mark the 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 war. These actions include the following:

- Performing aggressive information collection.
- Creating depth.
- Executing an effective obstacle plan.
- Conducting coordinated counterattacks.

Performing Aggressive Information Collection

5-48. 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 command and control capability, difficulty providing logistic support, or the increasing time required to reorganize small units to attack. When commanders identify enemy culmination, friendly forces counterattack before the enemy has a chance to transition to a hasty defense.

Creating Depth

5-49. Depth in the defense is the key to forcing the enemy to culminate. The urban defense cannot allow the enemy to penetrate it or to destroy forward elements. 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 up against individual positions, subordinate leaders use of mission orders permits to disengage on their own initiative and move on preplanned routes to subsequent positions. Positions are mutually supporting, so units withdrawing from one position to a subsequent one have supporting positions covered by fires. Army/*Marine Corps* forces constantly force the attacking forces to deploy and reorganize without achieving decisive effects against the defending forces.

Executing an Effective Obstacle Plan

5-50. Obstacles in the urban defense canalize, interrupt, and delay enemy maneuver, thus giving the defender a significant advantage. Separating dismounted forces from mounted forces disrupts the cohesion of the attacker and reduces combat power. It also exposes 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 anti-armor attack by dismounted forces.

Conducting Coordinated Counterattacks

5-51. The counterattack is one of the key actions of the urban defense. However, commanders do not counterattack unless they have a reasonable chance of success. As the attacker moves into the depth of the 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 in urban terrain look for opportunities to counterattack. As the offensive force reaches the culmination point where it can no longer continue to attack with the available forces, the defensive commander executes a planned and coordinated 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 the skillful use of stay-behind forces permits attacking the enemy throughout the depth of its formations. Small-scale counterattacks enable commanders to exercise mission command/*command and control* and to apply sustainment/*logistics* capabilities. These counterattacks can set the conditions for a deliberate attack leading to the ultimate destruction of the attacking enemy force.

CONSOLIDATE

5-52. 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 the urban defense, the commander of the 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 any necessary reorganization actions that they were unable to accomplish during execution.

TRANSITION

5-53. 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 urban operations, 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. In terms of training, it is easier for follow-on missions to be 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, agencies that were operating alongside the units before and possibly during the defense. In defensive operations, regardless of the civilians' attitudes, policies regarding that population are established before the successful defense, and the command likely has experience executing operations with civil authorities and other agencies. Thus, these relationships are neither new nor as significant an issue as in offensive operations. Therefore, commanders prepare to execute various stability tasks or use a successful defense to springboard into more decisive offensive operations.

Transition Emphasis to Stability

5-54. At the end of a successful urban defense, operational commanders generally expect civil authority, control, and jurisdiction to increase. Additionally, the civilian population may be anxious to return to the urban area. Defensive combat requires virtually complete military control of the urban area; however, after the successful defense, a rapid transition occurs from military control to civilian or joint military and civilian control afterward. Important transition tasks include demilitarizing munitions, clearing obstacles, and searching for isolated enemy pockets of resistance. Conclusion of the defensive operations also require 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.

Transition to Offensive Operations

5-55. Units that have successfully defended the urban area transition to offensive operations or to 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.

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Chapter 6
Urban Stability Operations

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

PURPOSE OF URBAN STABILTY OPERATIONS

6-1. Army/*Marine Corps* forces conduct stability activities to deter war, resolve conflict, promote peace, strengthen democratic processes, and retain U.S. influence or access abroad. The primary contribution of military forces to stability operations is security. 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.

CHARACTERISTICS OF URBAN STABILTY OPERATIONS

6-2. Worldwide urbanization, migration trends from rural to urban areas, and more centralized populations in urban areas increase the chance that Army/*Marine Corps* forces will conduct stability tasks in or near urban areas. Since urban areas serve as economic centers, government centers, and embassy locations, many enemy activities often use them as a focal point. Repairing or restoring the infrastructure may be a critical task in an operation. Supported nongovernmental and governmental organizations and agencies are not as logistically self-sufficient as the Army/*Marine Corps*. As such, these agencies often need to center their operations in urban areas to use the area's infrastructure for support. These agencies may require military protection/*force protection* to accomplish their missions. Some defining 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.

6-3. 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 urban operations, they are usually joint. Unlike urban offensive and defensive operations, they are more often interagency operations and require 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 man-made 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 urban operations but characterized by additional complexity and importance in urban stability tasks. Finally, recognizing, defining, and achieving the desired end state is often more difficult than in offensive and defensive operations.

6-4. Commanders of major operations involving urban stability tasks should not expect clear guidance. They must learn, adapt, and live with ambiguity. 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 urban operations should not expect an easily identifiable enemy located across a clearly demarcated line. In fact, in many peace operations, they and their Soldiers/*Marines* resist the need to have an enemy—difficult at best when one side or another or both may be sniping at them. Commanders also 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. Finally, competent commanders show restraint with a keen sensitivity to political considerations and to alien cultures, either or both of which they might find confusing or even repugnant.

STABILITY TASKS BATTLEFIELD/*BATTLESPACE* ORGANIZATION

6-5. Each urban stability operation has distinct tasks. The stability activities involved with the operation differ even more 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. In most urban operations the terrain, the dense population (both military and civilian), and the participating organizations further complicate this arrangement.

6-6. The support and assistance that Army/*Marine Corps* forces provide during these operations is only 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 must envision and set the 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, in some cases, with little or no initial 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

6-7. Stability operations establish, sustain, and exploit security and control over foreign areas, populations, and resources. 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—enforcing peace in Bosnia for example—require interacting with, influencing, controlling, or protecting all or parts of the civilian population. Assessing, understanding, and gaining the support of civilians in key economic, cultural, or political urban areas influence surrounding regions—such as smaller urban areas and the rural countryside—and are decisive to achieving overall stability objectives.

6-8. Stability operations involve both coercive and cooperative actions. They are conducted in situations in which legitimate civil authority cannot provide the necessary security and control for the urban population as a result of—

- Deliberate operations to influence a regime change.
- Offensive or defensive operations or natural disasters resulting in ineffective civil authorities, conditions beyond the capabilities of the foreign urban government, or both.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR INCIDENTS

6-9. Chemical, biological, radiological, and nuclear (CBRN) incidents can be disastrous and are of particular concern during urban operations. 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—that adds a law enforcement dimension to the disaster—or from a TIM or TIC accident.

6-10. 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. 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 the urban terrain and 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.

6-11. Explosive events in urban areas have become commonplace throughout much of the world. During urban operations, terrorists use explosive devices, such as an improvised explosive device, 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.

6-12. 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 the infrastructure, the overall recovery time lengthens and areas beyond the urban area feel the effects.

DECISIVE, SHAPING, AND SUSTAINING OPERATIONS

6-13. Decisive, shaping, and sustaining 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.

Decisive Operations/*Decisive Actions*

6-14. In urban stability operations, decisive operations/*decisive actions* may take many years and include multiple actions before achieving the desired end state. This particularly applies to the strategic and operational levels. Any operation that attacks the underlying cause and seeks to prevent or relieve such conditions usually takes longer. In urban areas, establishing law and order to protect critical infrastructure and the inhabitants from lawlessness and violence is often critical and also the decisive operation/*decisive action*.

Shaping Operations

6-15. Shaping operations set and maintain the conditions for executing decisive operations/*decisive actions*. In urban stability or DSCA tasks, shaping operations always include information operations that influence perceptions and maintain legitimacy. Often, various participants, and their potentially divergent missions and methods, are involved. Army/*Marine Corps* commanders coordinate their planning and efforts early and continuously to ensure that their decisive, shaping, or sustaining operations are not working against other agencies' efforts and operations—agencies that may have the lead role in the operation. Thus, a critical shaping operation may be to establish the coordination to help develop a common purpose and direction among agencies, particularly those that may experience continuous personnel turnover during the conduct of a lengthy operation. In some instances and with some organizations and agencies (particularly NGOs), genuine unity of effort may prove elusive. 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.

Sustaining Operations

6-16. Sustaining operations enable decisive and shaping operations and include logistics, base security, movement control, terrain management, and infrastructure development. 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 lines of communications.

CONSIDERATIONS OF URBAN STABILITY

6-17. 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. Because the situations in which stability tasks normally occur share strong similarities with any urban environment, many of these considerations are closely linked to the urban fundamental tasks presented in Chapter 2. Taken together, commanders often find them useful in conducting urban operations throughout unified land operations.

UNDERSTAND

6-18. In urban activities, commanders carefully assess and understand the political dimension 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 activities directly link with political objectives. The relationship between the levels of war—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, to include security and protection/*force protection* measures, will 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—essential in many of these operations. Finally, commanders need a thorough assessment of nongovernmental and governmental organizations and agencies that will operate in or near urban areas that fall within their area of operations.

Political and Military Objectives

6-19. Commanders translate political objectives into military objectives that are clear and achievable with clear tasks and purposes and can lead to the desired end state. In many stability operations, defeat of an enemy is not the ultimate desired end state. Political objectives may be vague. This makes it difficult for commanders to conduct problem framing and mission analysis. 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 the specific tasks that will lead to mission success. Therefore, as commanders plan, they simultaneously establish assessment frameworks that aid in understanding and evaluating progress and help gauge mission accomplishment.

Note. Commanders should consult the United States Agency for International Development's (known as USAID) *Field Operations Guide for Disaster Assessment and Response* when conducting their assessments and developing measures of effectiveness for many urban relief operations.

6-20. Assessment frameworks, or plans, contain qualitative and quantitative criteria by which to measure progress toward objectives and the effects necessary to meet those objectives. 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 (are we doing things right?) and measures of effectiveness (are we doing the right things?). 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 the starving, 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. However, this measure correlates with the overarching measure of effectiveness: decline in the

mortality rate. If no significant decrease in deaths due to starvation occurs, they 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 can 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.

6-21. Commanders develop both measures of effectiveness and measures of performance to address establishing or restoring security and providing 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.

6-22. 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 to include from elements of the urban population. With such unclear lines of authority and areas of responsibility, commanders ensure that the 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. They 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, to include even the lead agency. When missions appear outside their scope, commanders quickly relay their assessment to their 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

6-23. 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 the urban environment. However, many such operations, particularly stability operations, require extra time to forge a lasting change. Over time, and particularly in peacetime when objectives center on helping others and avoiding violence, even the complex urban environment may seem benign. Without continued, aggressive command emphasis, Soldiers/*Marines* are lulled 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. It is usually then that Army/*Marine Corps* forces are most vulnerable to terrorist and insurgent tactics, such as bombings, kidnappings, ambushes, raids, and other forms of urban violence.

6-24. 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. For example, threats can seek to cause politically unacceptable casualties. An improper threat assessment and a lapse in security at the tactical level could result in casualties. That result could affect strategy by influencing domestic popular support and subsequently national leadership decisions and policy.

6-25. 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 the urban area provides the urban population a sense of security and allows Soldiers/*Marines* to develop a detailed knowledge of the patterns of life in their assigned area of operations. Armed with this knowledge, they can detect the absence of the normal or the presence of the 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

6-26. Across the range of urban operations, but more so in stability operations, numerous NGOs relieve adverse humanitarian conditions. Dense populations and infrastructure make an urban area a likely headquarters location for them. In 1994 during OPERATION UPHOLD DEMOCRACY, for example, over 400 civilian agencies and relief organizations were operating in Haiti. Therefore, 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.
- Logistic 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.

6-27. 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. 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 compromise the organization's appearance of neutrality (particularly threat perceptions) and adversely affect their ability to assist the population.

SHAPE

6-28. Commanders conduct many activities to shape conditions for successful operations. In urban stability tasks, two activities rise to the forefront of importance: information operations and security operations. In certain instances, either of these may themselves become decisive operations/*decisive actions*.

Conducting Information Operations

6-29. Conducting information operations is essential to shape the urban environment for the successful conduct of stability operations. Vigorous information operations 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 the commander's desired effects in and through the information environment. 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 information operations, misinformation, rumors, confusion, and apprehension. Developing an effective assessment plan is essential to ensuring information operations 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

6-30. 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 security or police forces. Some areas have nonexistent or incapacitated security or police forces. Other areas have undergone drastic changes as the result of a natural disaster. Those areas require additional security or police forces augmentation.

Preserving Resources Security Operations

6-31. Just as forces may be at risk during urban stability, 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 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. 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

6-32. 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 constantly 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 the disruption to the 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 for any participating organization is likely to be there is not enough 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 their Soldiers'/*Marines'* hard work and sacrifice and U.S. commitment to the operation.

Contributing to the Improvement of the Urban Economy

6-33. When conducting reconstruction and infrastructure repair, commanders consider using several activities to improve the urban economy. First, commanders consider contracting with indigenous businesses and organizations, normally through local elder community leaders, to conduct restoration of public services and key infrastructure. This activity significantly contributes to rapid restoration of the local economy and reduces civilians' dependence on the Army/*Marine Corps* and agency logistic resources. The hired contractors hire local civilians, and in particular military age males, helping to satisfy urban job requirements and possibly inspiring critical elements of the urban society to assume responsibility for the success or failure of urban restoration efforts. Contractors hiring local civilians potentially reduces enemy influence by diminishing their civilian sources of aid. Hiring indigenous personnel for short-term projects does not replace the need for long-term economic planning and the 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 area of operations.

ENGAGE

6-34. 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

6-35. Adaptability is particularly critical to urban stability tasks because these operations present complex challenges to commanders for which no prescribed solutions exist. 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 combat against the enemy, the challenge then is to adapt urban warfighting skills to the unique stability or DSCA situation.

6-36. 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 urban operations. 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 urban operations.

6-37. 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 not only to react more effectively, but also to be forward thinking and take actions that favorably steer the course of events.

Aggressive Coordination and Synchronization

6-38. 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. The success of urban operations often depends on establishing a successful working relationship with all groups operating in the urban area. The absence of unity of command among civil and military organizations does not prevent commanders from influencing other participants not under the commander's direct command through persuasion, good leadership, and innovative ideas.

6-39. Commanders consider establishing, as necessary, separate organizations for combat operations and for stability tasks to increase coordination and enhance local, NGOs, and international support. Further, aligning the unit or subordinate units with NGOs may contribute to establishing popular legitimacy for the operation and place greater pressure on enemy forces. In some instances, commanders consider organizing part of their staff around government, administrative, and infrastructure functions that mirror the urban area in which their forces are operating. Development of 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 consider establishing a civil-military operations center to coordinate and synchronize actions on a continuous basis between allies, NGOs, and host-nation agencies.

6-40. In 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. Importantly, they 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. 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 need to 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

6-41. The society is a major factor responsible for increasing the overall duration of urban operations. This applies to urban stability operations in which success often depends on changing people's fundamental beliefs and subsequent actions. Modifying behavior requires influence, sometimes with coercion or control, and perseverance. The urban population is convinced or persuaded to accept change. 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.

6-42. In most stability operations, success will not occur unless the host nation, not Army/*Marine Corps* forces, ultimately prevails. The host-nation urban administration addresses the underlying problem or revises its policies toward the disaffected portions of the urban population. Otherwise, apparent successes will be

short lived. The urban operations 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 overall planning and executing successful urban operations.

Reasonable Restraint

6-43. Unlike offensive and defensive operations where commanders seek to apply overwhelming combat power at decisive points, restraint is more essential to success in urban stability tasks. It involves employing combat power selectively, discriminately, and precisely yet still at decisive points in accordance with assigned missions and prescribed legal and policy limitations. Similar to the urban operations fundamentals of minimizing collateral damage and preserving critical infrastructure, restraint entails restrictions on using force. Commanders of major urban operations 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 the legitimacy and the urban population's sympathy and support for urban operations. 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 restrained in application. Undue force is counterproductive, resulting in the need for commanders to apply ever-increasing force to achieve the same results.

6-44. 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 urban operations 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 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 and accurate intelligence.

CONSOLIDATE

6-45. Since urban operations 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. Shifts can be 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

6-46. Following urban offensive or defensive operations, forces often 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 looting and destruction by the urban population and 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.

6-47. Alternatively, civilian security firms from inside or outside the urban area or country provide supplemental protection until indigenous police forces can function fully. 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 curfews help protect civilians (and NGOs) and infrastructure. Previous shaping operations aimed at improving the local economy also assist in this regard.

Resolute Legitimacy

6-48. Closely linked to the restraint described in paragraph 6-43 is legitimacy or the proper exercise of authority for reasonable purposes. Achieving or maintaining legitimacy during urban stability or DSCA tasks is essential in gaining and maintaining the 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 information can shape perceptions. 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 erodes legitimacy and generates resentment, resistance, and, in some situations, violent acts of revenge.

6-49. In stability operations against an elusive insurgent, commanders explain to urban residents why damage was necessary, apologize, or make near-instant restitution for some unsuccessful Army/*Marine Corps* operations that may have been planned based on inaccurate or incomplete intelligence. Soldiers/*Marines* may even make it a point to thank homeowners for allowing the search of their homes during cordon and search operations. During urban operations, a single Soldier's/*Marine's* misbehavior significantly degrades 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 the urban population's trust and confidence. In stability operations, the greater fight will often be to win the battle of perceptions and ideas instead of one to seize terrain and triumph over an enemy. Inconsistencies in message and behavior provide threats with raw material for their propaganda and precipitate doubt in the minds of the urban populace who might otherwise support Army/*Marine Corps* objectives.

TRANSITION

6-50. 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 urban operation, 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 urban operations 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 Legitimate and Capable Civilian Control

6-51. Commanders maintain or enhance the credibility and legitimacy of the government and police of the urban area 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 urban operations quickly and successfully, often so forces can use assets elsewhere in the area of operations. Transitioning control entails returning the control of the urban area back to civilian responsibility as soon as feasible. The host nation's military and the urban area's leadership and police 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. Effective transition to civilian

control and responsibility requires commanders at all echelons to understand the basic operation of civil governments and the administration and management of key urban infrastructure.

6-52. If the host nation's leadership, military, and police are not up to the task, 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. Sometimes, new leadership and a restructured police force may be required, particularly when 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 a speedy 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 urban civilian authorities.

Maintain the Focus

6-53. 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 area of operations to 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 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.

6-54. The commander of the major operation ensures that the incoming unit understands political and strategic objectives behind the tasks that it is required to accomplish. Otherwise, the new unit plans operations similar to those conducted by the previous unit without achieving the desired end state or accomplishing the mission.

Transition Trust

6-55. 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 area of operations 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. 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 as to allow the new unit immediate success. In other instances, the incumbent unit uses backward planning for projects or activities to ensure that the new unit can schedule a completion date soon after it arrives. 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.

Modify Objectives to Match the Current Environment

6-56. While it is important that incoming commanders create a seamless transition with their outgoing counterparts, they fully use the opportunity to review the current political, strategic, and local urban environment to determine potential modifications to lines of effort and unit objectives. Otherwise, units may fall into the trap of executing a 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 operations that involve longer-term commitments, the potential exists for the same unit to

conduct two or more rotations back into the same area of operations. 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.

Provide an End State Not an End Date

6-57. Military operations are conducted to achieve political objectives and commanders must focus on the end state to best achieve those objectives, all while doing so under restraints and constraints set by higher headquarters, civil authority, and the national caveats guiding coalition members. A commander finds the best accommodations for coalition members that maximize their contribution with respect for their limitations. While timetables 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 better than a calendar. Progress toward strategic and operational goals is susceptible to many changes and delay, particularly in multinational partnerships likely be a part of most future urban operations. As important, an inflexible timetable allows enemy forces to adjust their plans to their benefit and friendly forces' detriment.

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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 MCRP 1-10.2.* This publication contains complete definitions as well as addendums to the joint dictionary definitions.

SECTION I – ACRONYMS AND ABBREVIATIONS

ADP	Army doctrine publication
ADRP	Army doctrine reference publication
ATTP	Army tactics, techniques, and procedures
ATP	Army techniques publication
CAAF	contractors authorized to accompany the force
CBRN	chemical, biological, radiological, and nuclear
COA	course of action
DA	Department of the Army
DSCA	defense support of civil authorities
FM	field manual
GPS	Global Positioning System
HUMINT	human intelligence
IPB	intelligence preparation of the battlefield (Army)/intelligence preparation of the battlespace (Marine Corps)
ISR	intelligence, surveillance, and reconnaissance
JP	joint publication
MCDP	Marine Corps doctrinal publication
MCO	Marine Corps order
MCRP	Marine Corps reference publication
MCTP	Marine Corps techniques publication
MCWP	Marine Corps warfighting publication
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
MLRS	multiple launch rocket system
mm	millimeter
NGO	nongovernmental organization
ROE	rules of engagement
SOP	standard operating procedure (Army)/ *standing operating procedure (Marine Corps)*

TC	training circular
TIC	toxic industrial chemical
TIM	toxic industrial material
TM	technical manual
U.S.	United States
UAS	unmanned aircraft system
UNS	universal need statement

SECTION II – TERMS

area defense

A defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. (ADRP 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. (MCRP 1-10.2)*

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) 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. (MCRP 1-10.2)* [See also mission command.]

decisive action

(Marine Corps) Any action the commander deems fundamental to achieving mission success. (MCRP 1-10.2) [See also decisive operation.]

decisive operation

The operation that directly accomplishes the mission. (ADRP 3-0) [See also decisive action.]

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. (MCRP 1-10.2)*

fires warfighting function

The related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process. (ADRP 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) 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. (MCRP 1-10.2)*

human intelligence

(Army) The collection by a trained human intelligence collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities. (FM 2-22.3)

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. (MCRP 1-10.2)

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) Knowledge about the enemy or the surrounding environment needed to support decisionmaking. Intelligence is one of the six warfighting functions. (MCRP 1-10.2)*

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. (ADRP 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)

logistics

(Joint) Planning and executing the movement and support of forces. (JP 4-0) *(Marine Corps) All activities required to move and sustain military forces. Logistics is one of the six warfighting functions. (MCRP 1-10.2)*

maneuver

(Joint) Employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy. (JP 3-0) *(Marine Corps) The movement of forces for the purpose of gaining an advantage over the enemy. Maneuver is one of the six warfighting functions. (MCRP 1-10.2)*

mission command

(Army) The exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. (ADP 6-0) [See also *command and control*.]

mission command sysytem

The arrangement of personnel, networks, information systems, processes and procedures, and facilities and equipment that enable commanders to conduct operations. (ADP 6-0)

mission command warfighting function

The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0).

mobile defense

A defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force. (ADRP 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. (MCRP 1-10.2)*

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of advantage over the enemy and other threats. (ADRP 3-0)

protection warfighting function

The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. (ADRP 3-0)

retrograde

(Army) A defensive task that involves organized movement away from the enemy. (ADRP 3-90)

shaping operation

An operation that establishes conditions for the decisive operation through effects on the enemy, other actors, and the terrain. (ADRP 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. (ADRP 3-0)

tempo

The relative speed and rhythm of military operations over time with respect to the enemy. (ADRP 3-0/ *MCRP 1-10.2*)

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. (ADRP 3-0)

***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 man-made construction or the density of population are the dominant features. *(Marine Corps) A military operation conducted where manmade construction and high population density are the dominant feature. (MCRP 1-10.2)*

warfighting function

A group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives. (ADRP 3-0)

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