



U.S. AIR FORCE



S.A.M.E. Brief – 15 FEB 2024

JBLM Real Property

Master Planning

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Directorate of Public Works – Master Planning Division - Architect
U.S. Army Installation Management Command

- Referenced Information
- Introduction
- Regional Context
- Joint Land Use Study
- 13 Encroachment Challenge Areas
- Civilian-Military Guidebook
- AICUZ & IONMP
- JBLM RPMP
- JBLM AAPS
- Upcoming Projects

• Regional Planning Studies

- Joint Land Use Study:

<https://www.ssmcp.org/joint-land-use-study/>

- WA-Dept. of Commerce: Civilian and Military Compatibility Guidebook:

<https://deptofcommerce.app.box.com/s/fy5g46wo3hrdnverftgewvciytv9ds12>

• Referenced Data

- Air Operational Compatibility Use Zones
- Installation Operational Noise Management Plan
- DOD Office of Local Defense Community Cooperation 13 Encroachment Areas

<https://www.ridgecrest-ca.gov/DocumentCenter/View/6947/Grantee-Guide---Compatible-Use--Installation-Resilience-OLDCC>

- JBLM Master Plan
- JBLM Architectural Appearance Standards
- FY24 President's Budget [Department of Defense Releases the President's Fiscal Year 2024 Defense Budget](#)



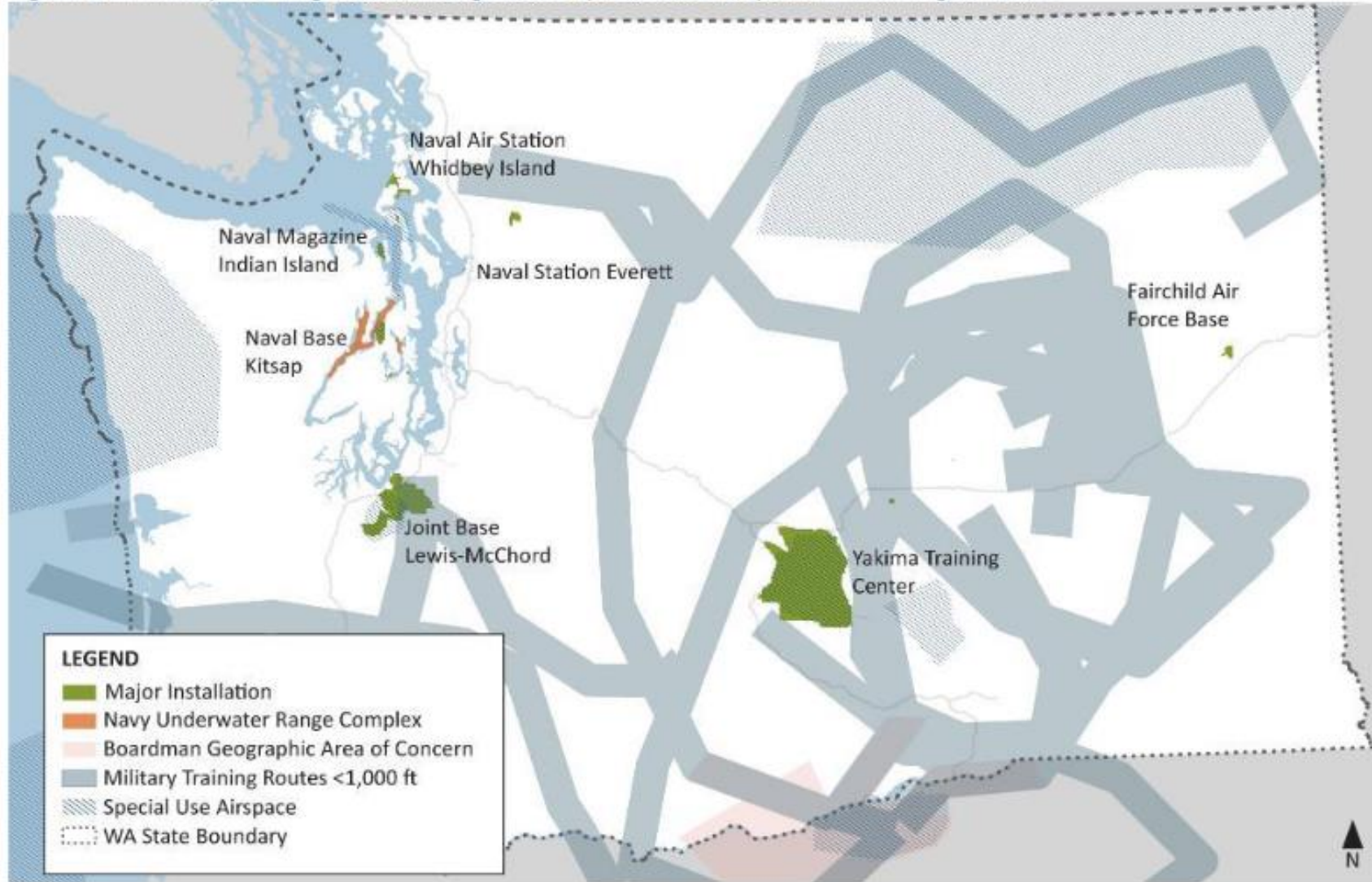
Jacob Gailey is a registered Architect who was licensed in 2020 and has been working in the South Puget Sound since 2009. In 2021 he joined the Washington Army Reserve National Guard and was commissioned as a 2nd Lieutenant in 2023 through the 2-205th RTI's Officer Candidate School. He started working for the Joint Base Lewis-McChord Garrison as the architect for the Directorate of Public works, Master Planning Division in 2023.

He has specialized in CAD and BIM management, focusing on residential and light commercial projects. Prior to earning his license and coming to JBLM he worked at a Seattle firm on large scale commercial and government projects, including work at Seattle-Tacoma International Airport. He lives in Lacey, WA with his wife and three elementary age children.

Civilian – Military Use Planning



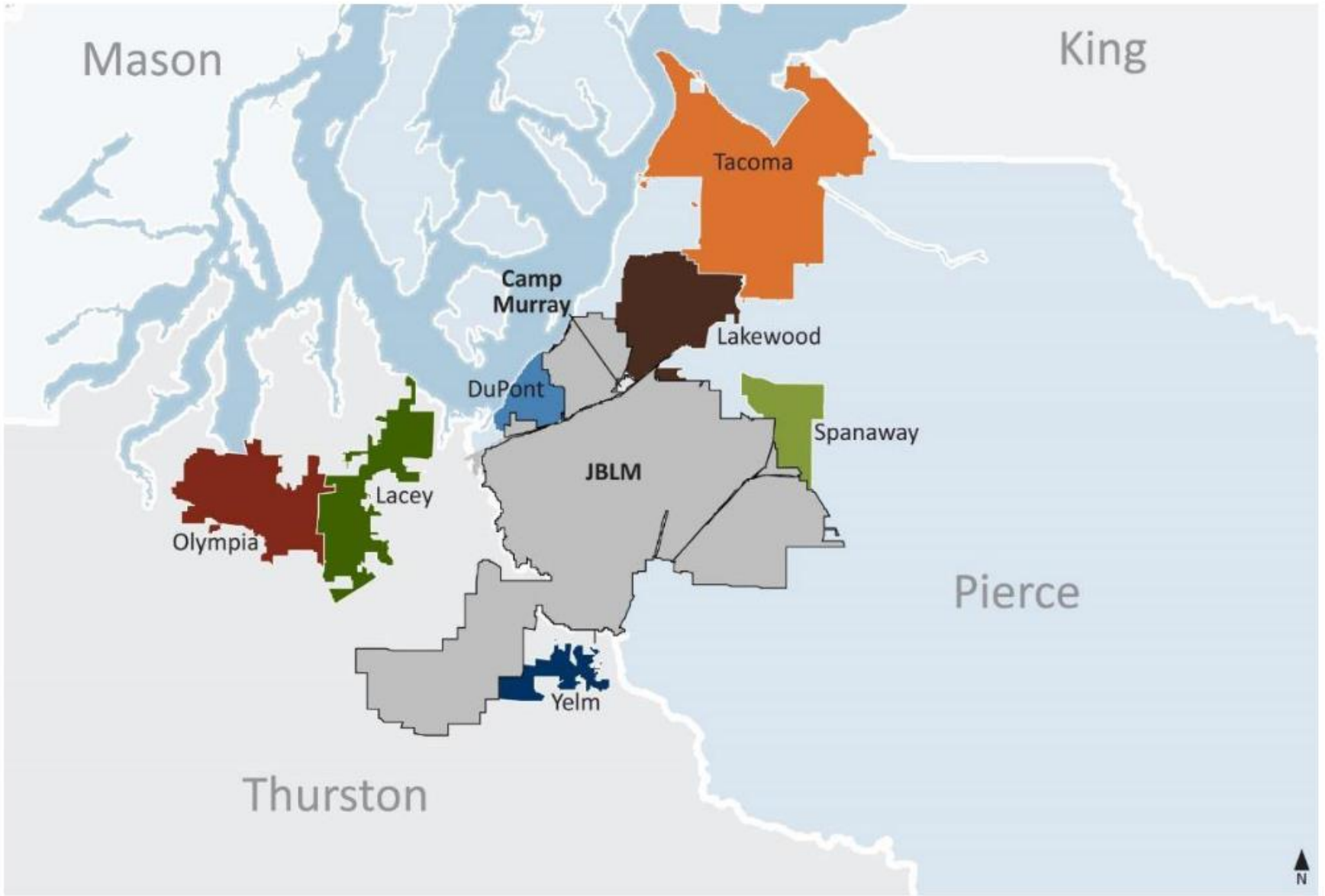
Figure 14: Military Training Routes, Ranges, and Special Use Airspace in Washington State



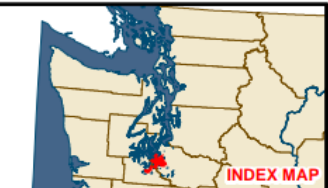
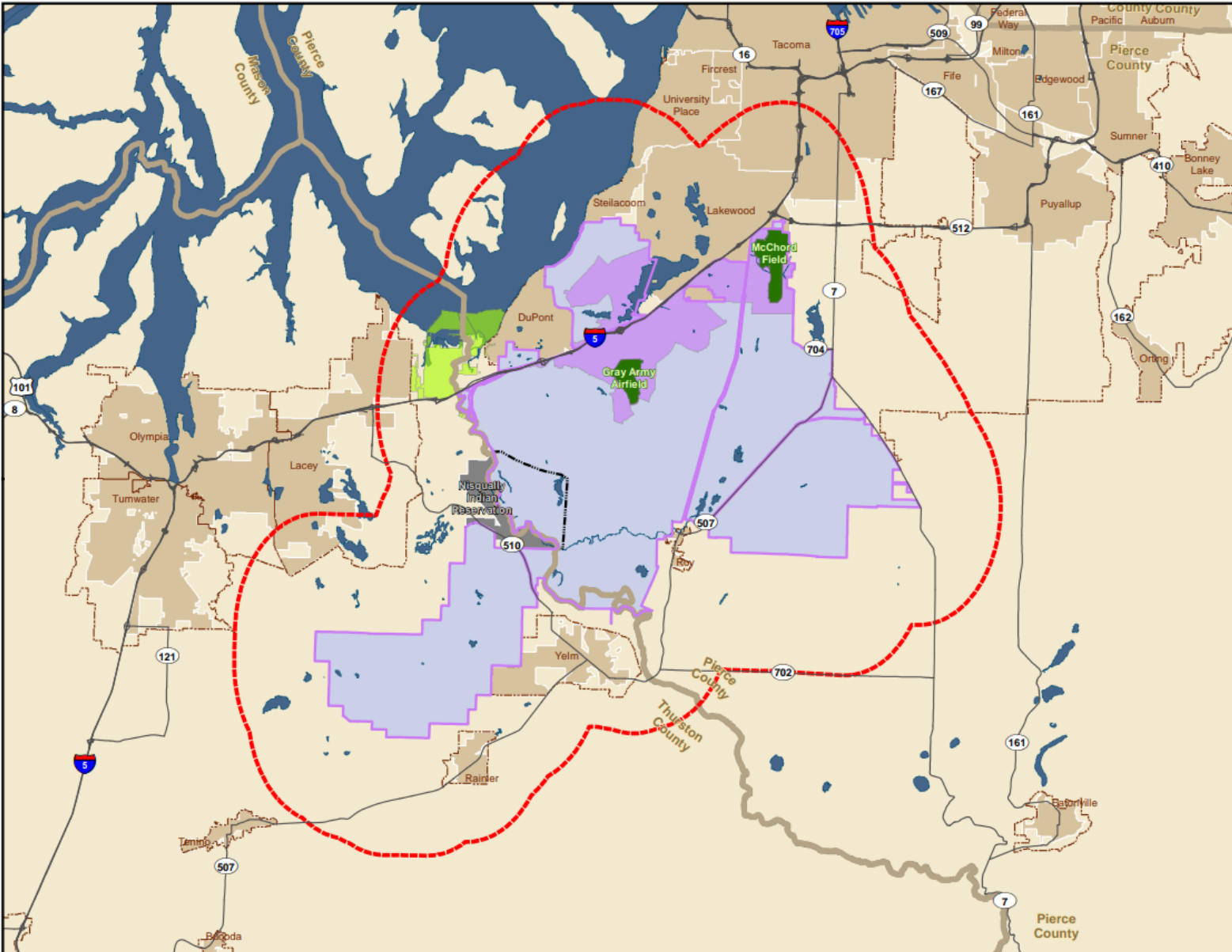
JBLM Regional Context



CE



Joint Land Use Study (JLUS)



Legend

- JLUS Study Area
- Joint Base Lewis-McChord
- Cantonment Area
- Training and Range Areas
- Military Airfield
- Nisqually National Wildlife Refuge Complex
- Nisqually Indian Reservation
- Tribal Land purchased by Government
- Water
- Urban Growth Areas
- Cities
- Counties

AECOM

1 inch = 17,063 feet

0 4,800 9,600 14,400 19,200 Feet

JBLM JLUS

**Figure 1
Study Area**

Ver. 01 | October 2015

Joint Land Use Study

"The Joint Base Lewis-McChord (JBLM) Joint Land Use Study (JLUS) is a collaborative process among local, state, and regional jurisdictions; the public; federal, state, and regional agencies; and military installations within the South Puget Sound region of the State of Washington. The JLUS presents recommendations for consideration by local and state governments that promote development compatible with military presence and protecting public health, safety, and welfare while also protecting the ability of the military to accomplish its vital training and operational missions presently and over the long-term. The study is designed to create dialogue around complex issues such as land use, economic development, infrastructure, environmental sustainability, and the operational demands and mission changes of military entities. The intent of the study is to highlight common interests such as economic growth, more efficient infrastructure, healthier environments, improved quality of life, and the protection of Department of Defense (DoD) and civilian investments and missions."

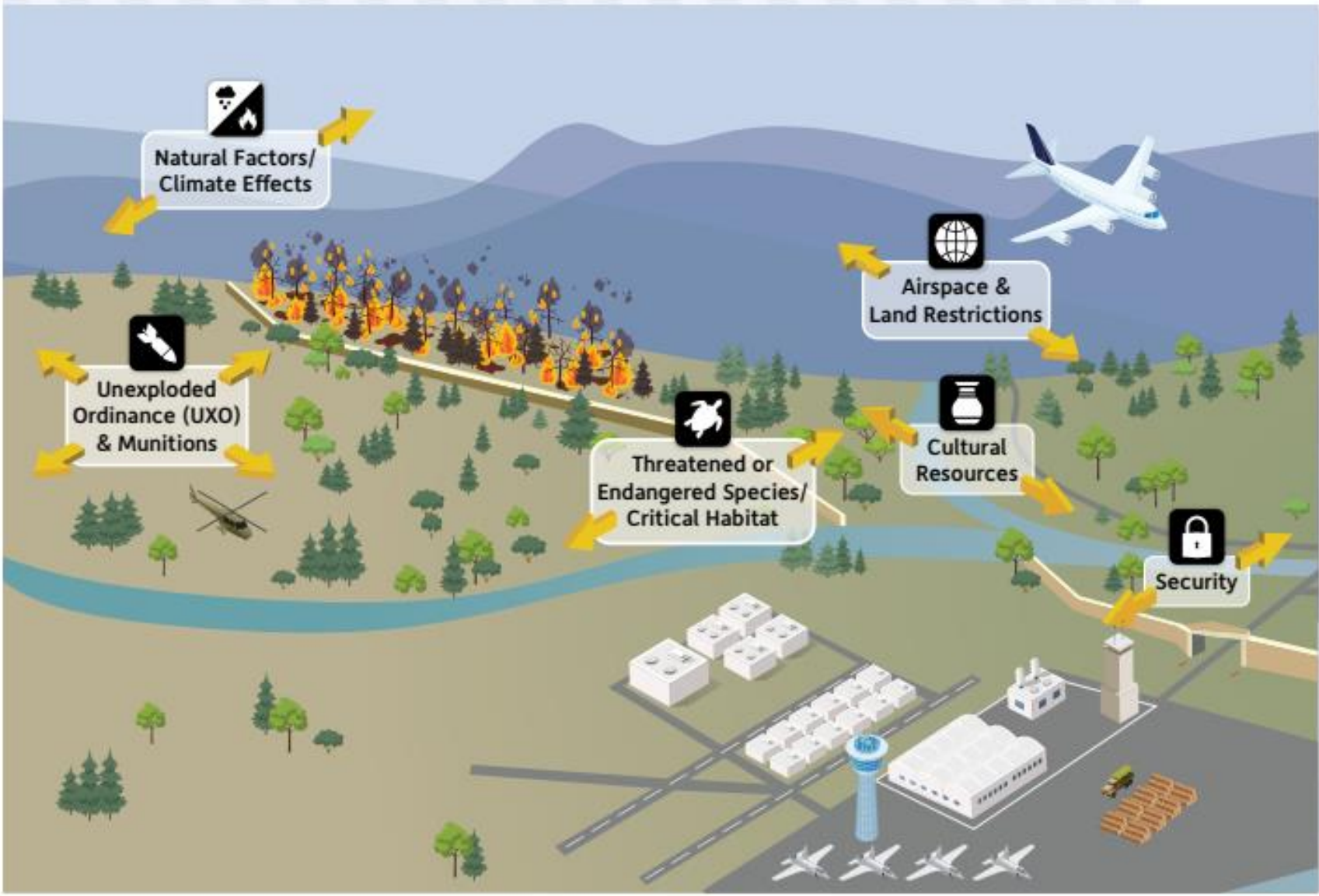
Data Feeding the JLUS

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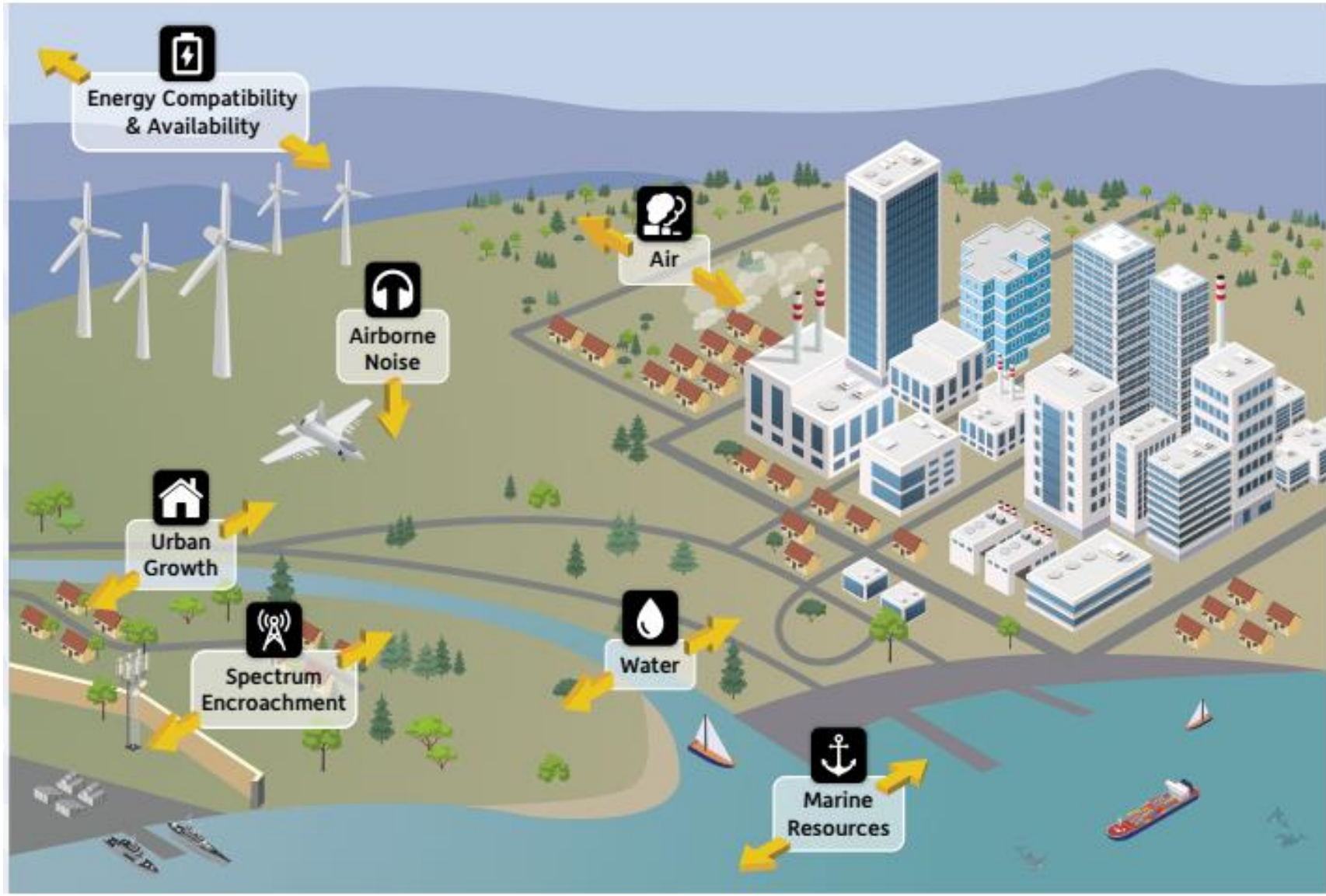
13 Encroachment Challenge Areas

<https://www.ridgecrest-ca.gov/DocumentCenter/View/6947/Grantee-Guide---Compatible-Use--Installation-Resilience-OLDCC>



13 Encroachment Challenge Areas

<https://www.ridgecrest-ca.gov/DocumentCenter/View/6947/Grantee-Guide---Compatible-Use--Installation-Resilience-OLDCC>



FAA Runway Surfaces (Spokane)

Figure 29: Zoning Code, Spokane (image modified from Chapter 14.70A.320 Height Restrictions)

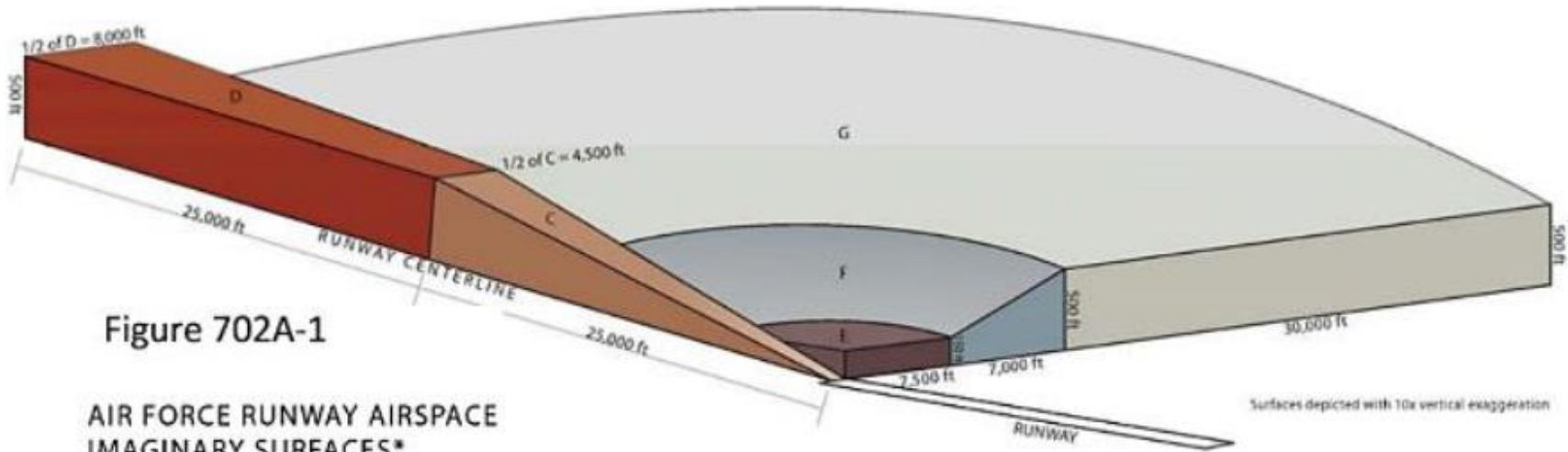


Figure 702A-1

AIR FORCE RUNWAY AIRSPACE IMAGINARY SURFACES*

- | | | | | | |
|---|---|---|---|---|---|
| A | Primary Surface (not shown) | E | Inner Horizontal Surface (150 ft Elevation) | H | Transitional Surface (not shown) |
| B | Clear Zone Surface (not shown) | F | Conical Surface (20:1 Slope Ratio) | I | Not used |
| C | Approach-Departure Clearance Surface (50:1 Slope Ratio) | G | Outer Horizontal Surface (500 ft Elevation) | J | Accident Potential Zone (APZ) (not shown) |
| D | Approach-Departure Clearance Surface (Horizontal) | | | | |

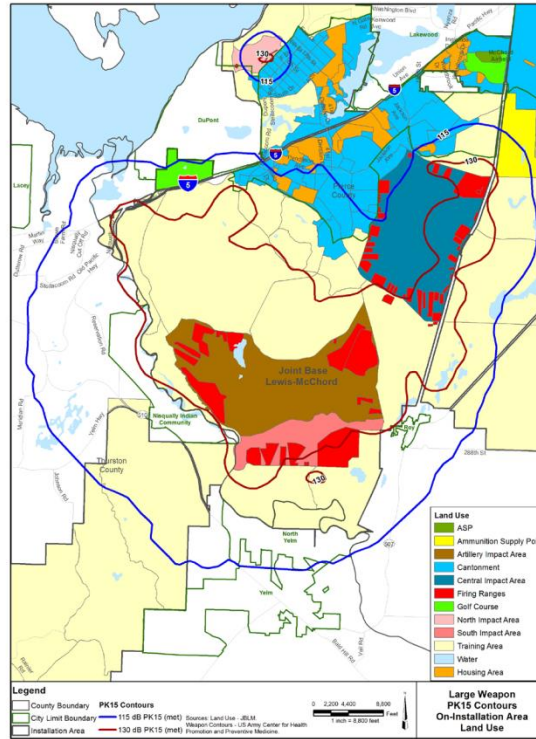
*Reference: Department of Defense (DoD) Unified Facilities Criteria (UFC) 3-260-01, Table 3-7, portion of Table related to a Class B Runway

AICUZ

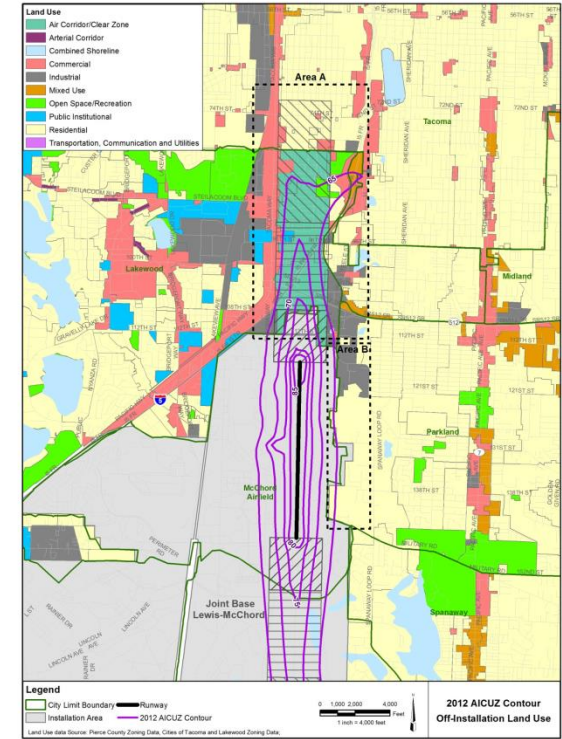
- Air Installation Compatible Use Zone
- Promotes compatible land use development in areas subject to aircraft noise and accident potential
- Protects JBLM aircraft mission from incompatible development off base

IONMP

- Installation Operational Noise Management Plan
- Analysis of exposure to noise and safety hazards with military operations
- Provides guidelines for achieving land use compatibility between JBLM and the surrounding communities



IONMP Large Weapons Contours



AICUZ Off Installation Land Use

JBLM Master Plan



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JBLM Real Property Master Plan (RPMP)

Regulating Plan



Regulating Plan Zones

-  Campus
-  Industrial_Admin
-  Non-Buildable
-  Parks and Open Space
-  Residential
-  Townhome

Planning Vision

In support of the **mission**, Service-members, families, civilians, and retirees, we will create a **sustainable community of walkable neighborhoods** with **identifiable town centers** connected by **complete streets**.

Goal 1: Mission Capable Environments: Recognizing the primacy of the Installation's mission. Mission sustainability is the key to operational success.

Goal 2: Sustainable Communities: Using compact development to minimize resource consumption and maximizing transportation options.

Goal 3: Walkable Neighborhoods: Support pedestrians as well as cars. They have safe, convenient, and comfortable sidewalks that connect every use.

Goal 4: Identifiable Town Centers: Are at the heart of each district. The planning principles to support the development of Town Centers encourage walkability and effective public spaces that can support vibrant community life.

Goal 5: Complete Streets: Provide safe, efficient passage for all forms of transportation, including through and local traffic, bicyclists, and pedestrians.

39 Planning Principles

Complete Streets

Multi-Way Boulevard
On-Street Parking
Street Cafes
Bulb-Outs
Street Trees
Parkways
Street Grid

Mission Capable Environments

Compact Development
Job and Housing Proximity
Efficient Transportation
Affordable Development
Visible Entries
Close In Training
Rangeland and Airspace Preservation
Mixed-Use

Sustainable Communities

LEED Facilities
Low-Impact Development
Linear Parks
Hidden Parking
Multi-Story Buildings

Public Transit
Bikeable/Bike Paths
Car Parks
Narrow Buildings

Walkable Neighborhoods

Planting Strips
Sidewalk Buildings
Connected Sidewalks
Five Minute Walk
Neighborhood Parks
Aligned Entries
Shop Fronts
Great Views

Identifiable Town Centers

Main Street
Clear Edges
Town Square
Regional Character
Large Park Blocks
Historic Preservation
Focal Points

Mission Capable Environments



Rangeland and Airspace Preservation

Training is the cornerstone of readiness, and the land on which training is performed is a crucial asset at JBLM. Greenfield development methods of the past have encroached on rangelands, which is not acceptable. The installation must focus on rangeland and airspace preservation and provide room for future training expansion. Both air and land encroachment should be minimized.

Compact Development

Planning facilities and infrastructure in a compact manner ensures that critical resources like land, money, and time are not used unnecessarily. Utility and road systems disturb vast quantities of land, and are costly to build and maintain. Sprawl has significant economic and development consequences and reduces the land available for training or for future mission growth. Compact development in the form of mixed-use, multi-story facilities and on-street parking, ensures that resources can be used for mission-enhancing pursuits. The use of compact development can also allow for increased family housing capacity on the installation, which creates a more lively and vibrant community.

Walkable Neighborhoods

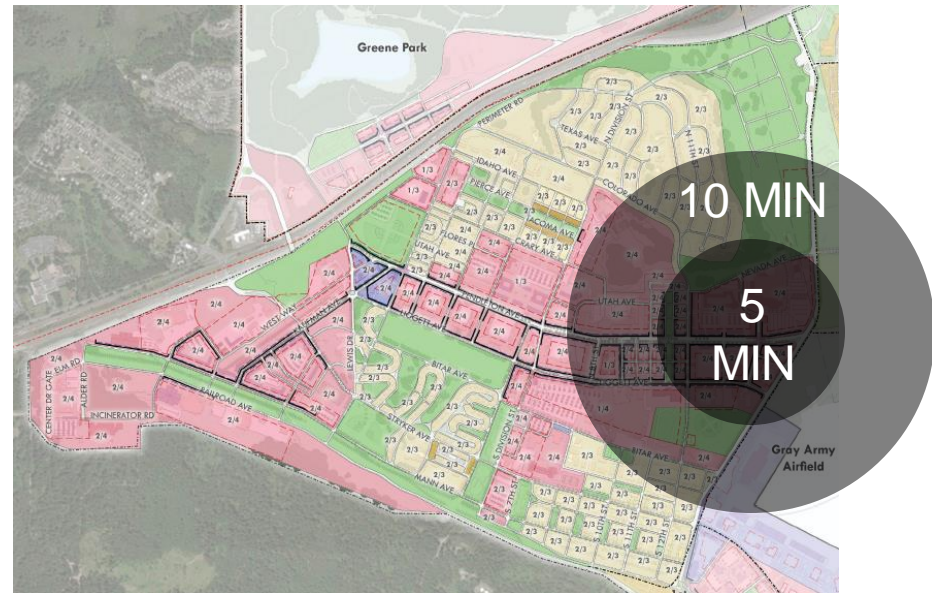


Connected Sidewalks

Residents want to be able to enjoy a walk that is safe, pleasant, directionally clear, and shopping-accessible. Sidewalks should be connected in order to enable wayfinding, and to provide a sense of direction and purpose to a destination. Sidewalks should be a minimum of five feet wide, shaded by street trees, and separated from the road with a planting strip at least eight feet wide when possible. Connected sidewalks are crucial to creating a pedestrian-friendly community, which will reduce environmental impacts, increase a sense of neighborhood cohesion, and provide positive health benefits. Finally, sidewalks should not meander artificially - they should align directly with building entries and other important elements in the landscape.

Five Minute Walk

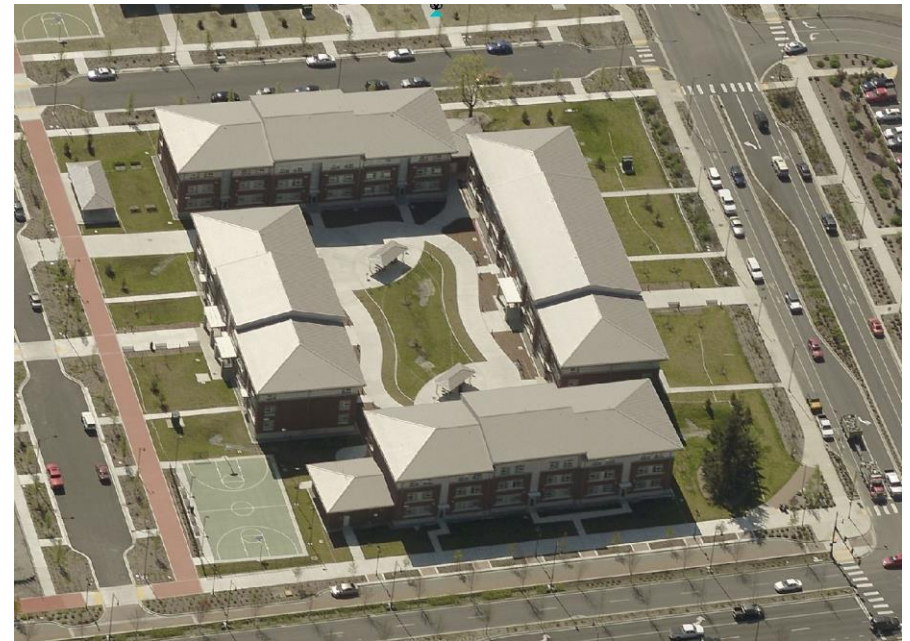
Many people are generally willing to walk five minutes (1/4 mile) to go to school or work and to access retail shops and services. Workplaces, schools, homes, and shopping located in mixed-use neighborhoods within a five-minute walking radius support a pedestrian-focused environment. People are less dependent on cars, which positively impacts the environment and creates opportunities for increased neighborhood cohesion.



Complete Streets

Street Grid

The traditional approach of designing local streets, collectors, and arterials funnels traffic from the former into the latter and contributes to congestion. Drivers rarely have options and are thus all forced onto the arterials. A well-planned street grid can reduce such congestion. Care should be given to design a grid of streets – a parallel and perpendicular network that provides multiple access points into and out of the neighborhood and contributes to safe, complete streets. The grid should conform to site requirements, overlay topographical variations, and can expand and contract to accommodate central park blocks, town squares, and parkways.



Street Trees

When people think of complete streets, trees are always an attribute. Trees create a pleasant focal point, provide shade, and lend shape to a street network. The rhythm of trunks slows traffic and can protect pedestrians from accidents. Street trees should be planted according to the JBLM Landscaping Guide, along as many streets on the installation as possible. For a cost of \$250 to \$600 (includes planting and three years of maintenance), one street tree can provide over \$90,000 of direct benefits during its lifetime. Trees absorb up to 60% of rainwater, which reduces stormwater costs, reduces adjacent building temperatures by 5 to 15 degrees, absorbs automobile exhaust pollutants, and extends pavement life 40 to 60 percent.

Form Based Code:

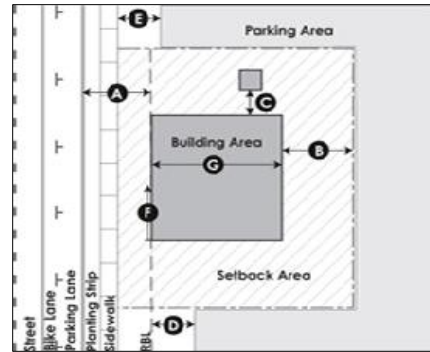
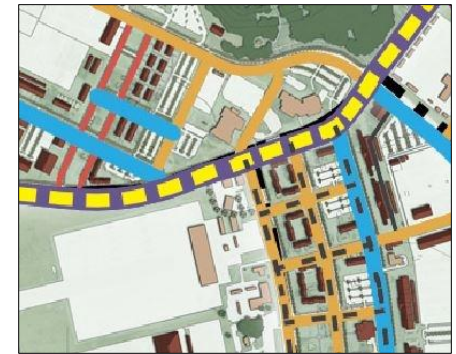
- Regulating Plan
- Street Standards
- Building Standards
- Transportation Plan
- Illustrative Plan

Form-Based Code shows the building types, and their relationship to public spaces. Identifies the street types, where they go, the location of parking and the size of blocks. Building orientation is a key requirement that specifies identifiable front entries that open up onto the public space, and parking located behind the building preferably, or to the side.

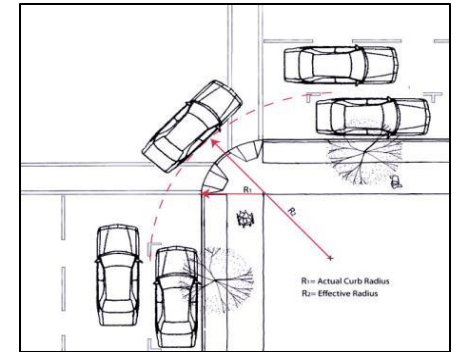
Regulating Plan



Illustrative Plan with overlaid Transportation Plan

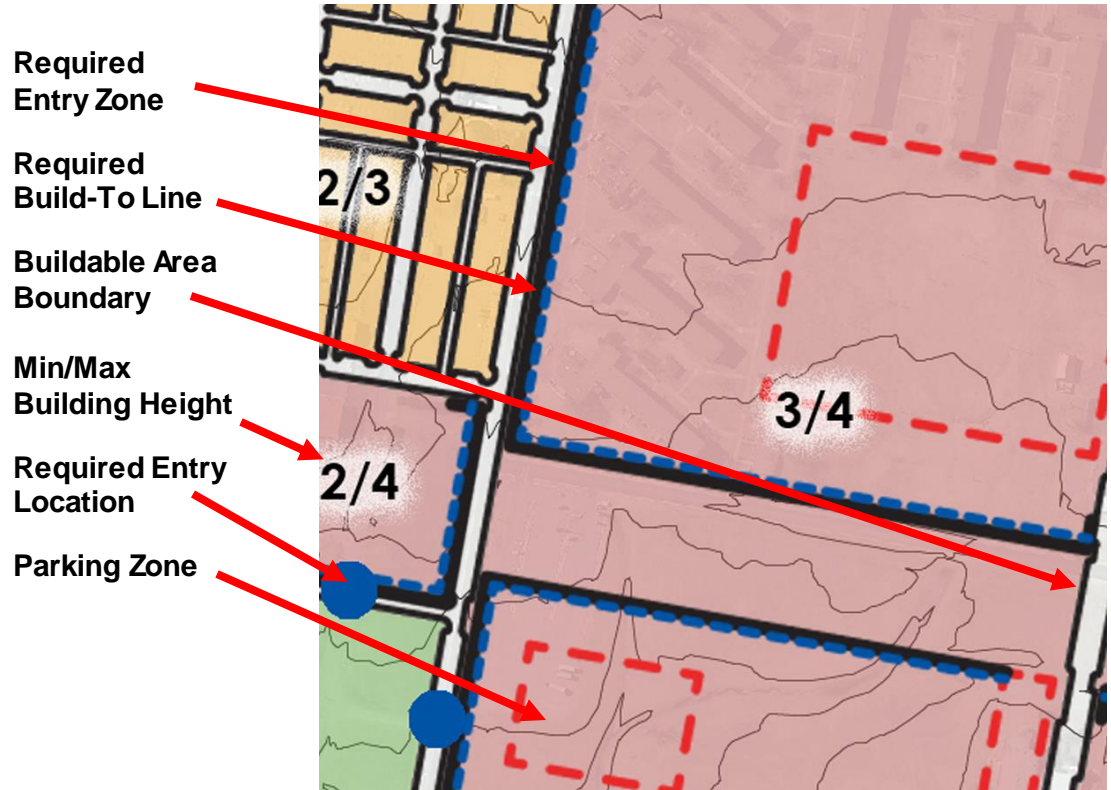


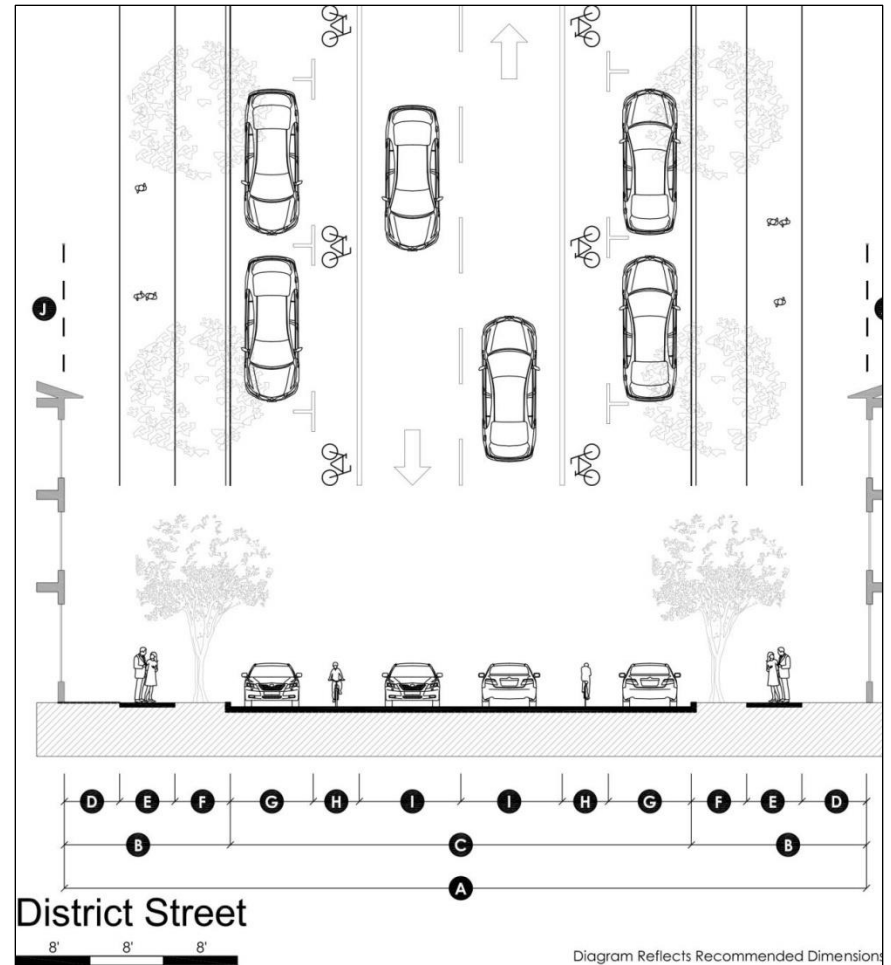
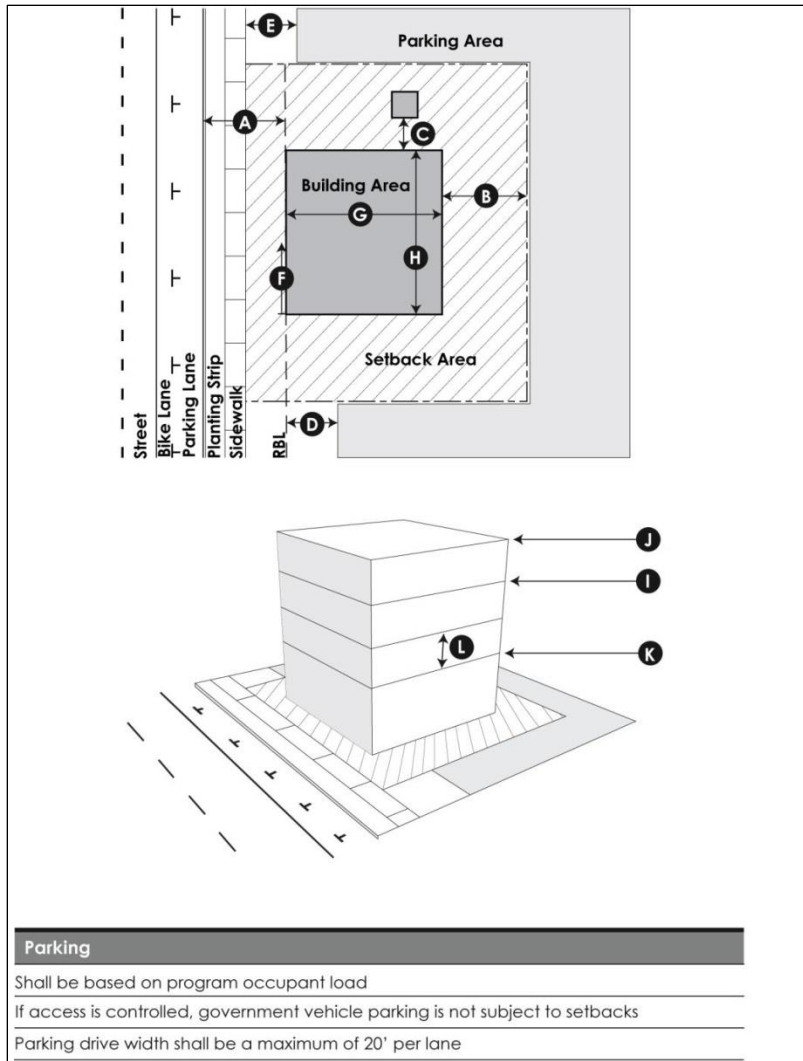
Building Standard



Street Standard

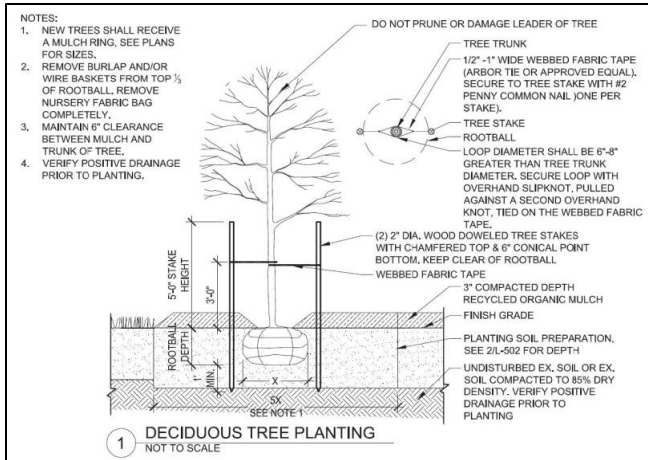
- **Required Entry Zone:** A blue dashed line indicating a facade that must include a building entry
- **Required Build-To Line:** A thick black line where a percentage of the building facade must be located
- **Buildable Area Boundary:** A highlighted area showing the maximum extent of buildable area on a parcel
- **Min/Max Building Height:** Two numbers indicating the minimum and maximum number of levels a building may have within the coordinating building area boundary
- **Required Entry Location:** A blue circle indicating a location where a building entry is required
- **Parking Zone:** A red dashed line indicating the maximum allowable area to be used for parking





Street Standard

- Brings cohesion to the landscape design across JBLM
- Provides for stormwater control
- Three historic districts on the Installation have their own landscape design standards
- The Guide provides general landscaping guidance and recommendations for street trees, parking areas, and streetscape features
- Streetscape landscaping hierarchy developed for street intersections types per Transportation Plan



Architectural Appearance Standards exist for each sub-area in order to unify the appearance of facilities constructed in that area. The standards include facility style details, materials, finishes, and colors appropriate to the area.

Typical Materials

| | |
|-------------|-----------------------|
| BASE | |
| Material | Concrete |
| Finish | Smooth / Board Formed |



FIELD MASONRY

| | |
|----------|---------------|
| Material | Brick |
| Finish | Rug |
| Color | Columbian Red |



HISTORIC / NEO-GEORGIAN/COLONIAL, RUSTIC



FIELD STUCCO

| | |
|----------|-----------------|
| Material | Stucco |
| Finish | As Pictured |
| Color | Classical White |



METAL TRIM

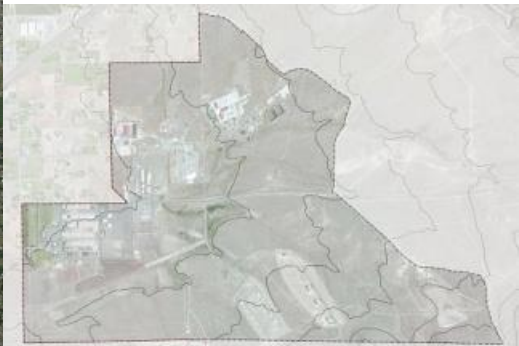
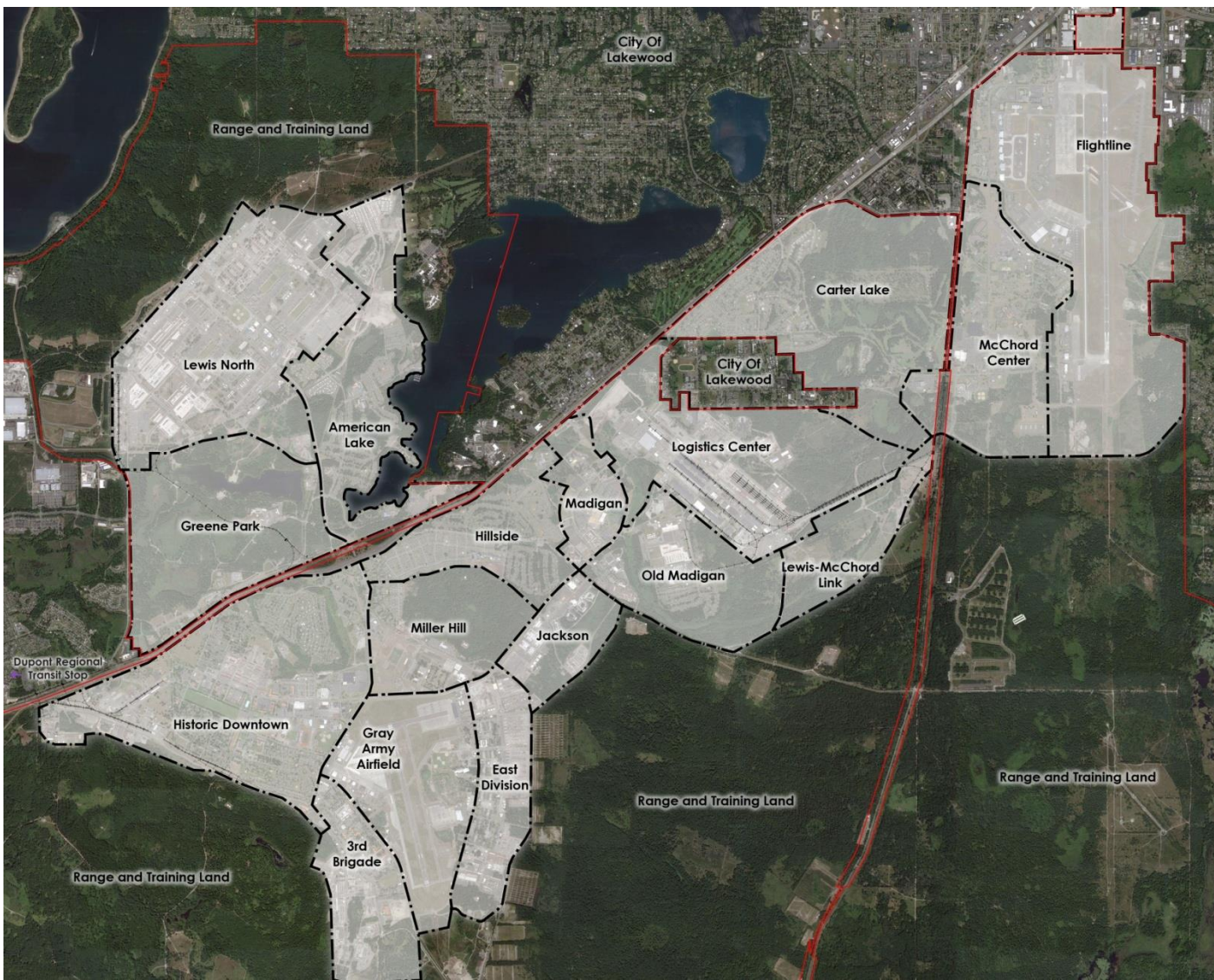
| | |
|----------|-----------------------|
| Material | Aluminum |
| Finish | Matte |
| Color | Cool Weathered Copper |



STREET LIGHTS

| | |
|----------|-------------|
| Material | Cast |
| Finish | Powder Coat |
| | 60% Gloss |
| Color | Black |



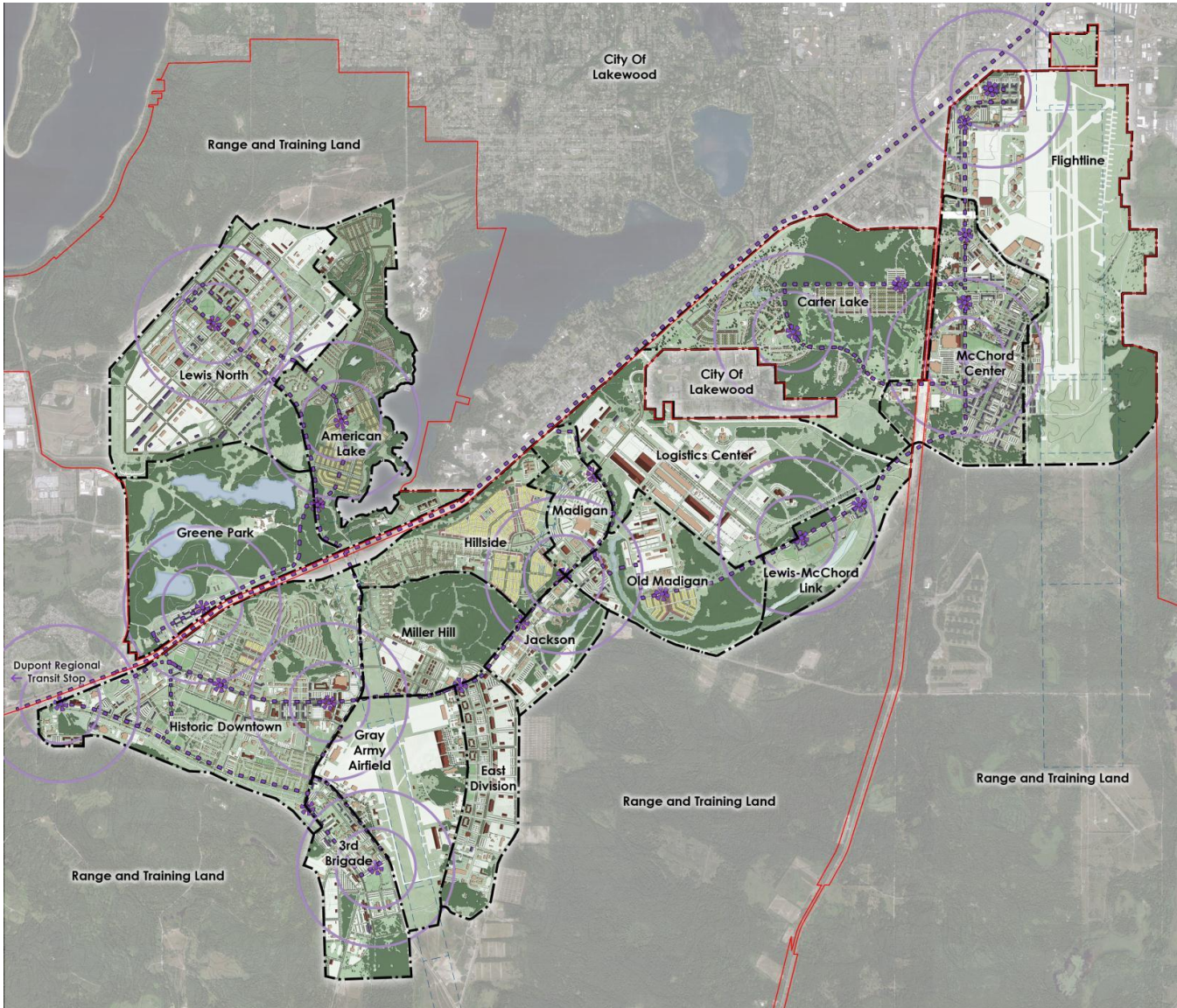


Yakima Training Center

- The Illustrative plan is conceptual by nature. It reflects the ultimate desired urban form for the installation
- Each ADP has an Illustrative Plan
- Buildings, streets, parks, and parking lots are illustrated on the plan. The ultimate dimensions and placement of these elements will vary once built
- What it isn't:
 - An absolute path to the future
- What it is:
 - One of many possible outcomes for the future of JBLM
 - A graphic, which consists of known projects, and future anticipated needs
 - A guide for future growth
 - Hedges the installation for future mission realignments and changes; illustrates maximum development capacity on JBLM



Illustrative Plan



Yakima Training Center



MILCON Process



MILCON process

Figure 16: Military Construction (MILCON)*



Planned Upcoming MILCON Projects FY24-28: ~\$450M

| Facilities | Type |
|------------|---------------------------|
| 3 | Barracks |
| 2 | Training Facilities |
| 2 | Administrative Facilities |
| 1 | Maintenance Facility |
| 2 | Utilities |



Potential Future Projects FY28-32: ~\$900M

| Facilities | Type |
|------------|---------------------------|
| 1 | Service Facility |
| 3 | Maintenance Facilities |
| 1 | Civil Projects |
| 1 | Barracks |
| 8 | Utilities |
| 4 | Administrative Facilities |



Future Projected Requirements: ~\$3,100M; 100 Facilities



JBLM Master Plan

Questions

