chaptertwo

Development Guide

CHAPTER 2:
DEVELOPMENT GUIDE

1.0 BIG IDEAS

The result of the extensive research, analysis, and public outreach summarized in Chapter 1 was seven "Big Ideas" that define the overall direction of planokc. These ideas are incorporated throughout the Land Use Plan and element chapters. The following is an explanation of each of these Big Ideas.

TRANSPORTATION CHOICE & MOBILITY

Develop a transportation system that works for everyone.

Our city and its economy depend on a transportation system that helps people of all capabilities move to their destinations efficiently and provides them with a choice of modes.

Improving the condition, function, and connectivity of our existing street network is a top priority for our citizens. We can also improve system capacity, land use efficiency, air quality, urban quality, and public health by providing better facilities for active transportation: transit, walking, bicycling, and combinations of modes.

HOUSING CHOICE

Increase housing choice and diversity for all lifestyles.

Residents want neighborhoods that offer a variety of housing types such as large and small-lot single-family homes, townhomes, condominiums, and urban apartments.

We must provide a range of housing choices in attractive neighborhoods. A full range of housing choices allows all different types of households to live close to work, shopping, schools, recreation, and other places that are important to them.

HEALTHY CITIZENS

Build an urban environment that facilitates health and wellness.

A community is built by people working together, and a healthy population is more likely to be energetic, active, productive, and generally happier. Health is an important aspect of life in our city and there is room for significant improvement.

We must create and maintain facilities, infrastructure, and land use patterns that make it easy for people to live actively and incorporate healthy choices into their lives and the lives of their families.

COMMUNITY ATTRACTIVENESS

Develop great places that attract people and catalyze development and innovation.

Civic investment and the creation of great places have been a tradition in Oklahoma City, from the Civic Center to Myriad Gardens to MAPS. We should continue to make places that through their special quality attract people and business.

We also need to understand that the idea of place-making is not limited to large-scale civic projects. We should also enhance corridors and design individual projects and new neighborhoods with an eye toward the experience that they offer to their customers and residents.

THRIVING NEIGHBORHOODS

Ensure stable, safe, attractive, and vibrant neighborhoods.

Stable and resilient neighborhoods are the building blocks of a great city. Better functioning, safer, and more attractive neighborhoods can contribute to achieving important community goals, including improved education for our children.

We should ensure thriving neighborhoods by building and maintaining high quality streets, infrastructure, and amenities; reducing the number of vacant and abandoned buildings; improving schools and neighborhood safety; and protecting historic buildings.

EFFICIENT DEVELOPMENT

Develop efficiently to achieve fiscal sustainability and improve our quality of life.

Our dispersed, low-density development pattern is expensive to maintain and diverts resources from more established areas in the city.

We can produce greater efficiency by developing vacant and under-utilized land in areas with existing infrastructure; building more small-lot homes, townhomes, and condos; building new subdivisions close to existing development; and encouraging vertical and horizontal integration of land uses. Savings can be used to improve our streets, infrastructure, and civic amenities and to improve the quality of our city.

NATURAL CHARACTER

Preserve rural character and natural resources.

Our rivers, watercourses, lakes, woodlands, prairies, and sky are major assets that are highly valued by citizens and vital to the environment and to our physical and mental health.

We need to recognize the importance of these resources and protect them as we develop. We should use regulations and incentives wisely to allow the city to grow without compromising the integrity of our natural and rural areas.

2.0 LAND USE PLAN

The Land Use Plan creates a vision for development throughout the city and establishes principles and policies applicable to all development. Its formulation was guided by varying types of public input and technical analysis regarding housing, transportation, environment, and the efficiency of providing public services. The Land Use Plan is made up of five primary sections:

Land Use Typology

Page 50

Seven "base" Land Use Typology Areas (LUTAs) and seven "layer" LUTAs make up the planokc Land Use Plan LUTA map. Each LUTA focuses on the appropriate intensity of development for each part of the city and identifies areas designated for the provision of urban services (water, sewer, etc.), concentrations of commercial and employment uses, and preservation of rural and natural areas. Each LUTA has a set of development and density policies to guide compatible development.

71% of residents support mixing uses to allow people to live, shop, and work in the same area, thereby reducing commute times.

- planokc *Citizen Survey* (2013)

Land Use Compatibility

Page 72

A central feature of the Land Use Plan is to guide how various land uses can be integrated while still being compatible with each other, as opposed to the conventional method of geographically separating uses into separate zones in an attempt to avoid conflict between uses. The Compatibility Matrix identifies when there are likely to be conflicts between uses of different operation, scale, and traffic generation, and provides measures to address or mitigate any potential problems so that each LUTA can achieve a successful mixture of land uses.

Service Efficiency & Availability

Page 82

The ability to provide efficient and cost-effective services is a central theme to the Land Use Plan. A detailed analysis of service efficiency as it relates to water, sanitary sewer, streets, solid waste, police, and fire services was conducted in order to identify locations within the city that can accommodate urbanized development. As the city grows, the ability of future development to be served efficiently through long-term maintenance of utilities—not just the up-front investment—will be a primary consideration for amendments to the Land Use Plan.

Environmentally Sensitive Areas

Page 88

70 percent of planokc survey respondents expressed support for protecting natural areas, including providing better regulations and incentives to protect environmental and natural resources. The Environmentally Sensitive Areas (ESA) section of planokc identifies policies related to three specific types of natural areas: 1) upland forests; 2) riparian area; and 3) aquifer vulnerability zones. These areas have special environmental attributes worthy of retention or special care, as they are critical for the maintenance of water quality, productive habitat, and stable soils.

Street Typology

Page 99

The Street Typology connects with Land Use Typology to form the framework for the built environment of Oklahoma City. The relationship between land use and streets is crucial to how people move and access destinations such as home, workplace, and everywhere in-between. The Land Use Plan identifies key features of each Street Typology as it relates to different LUTAs, and guides how investment in streets throughout the city can best accommodate existing and future development.

PRINCIPLES OF THE LAND USE PLAN

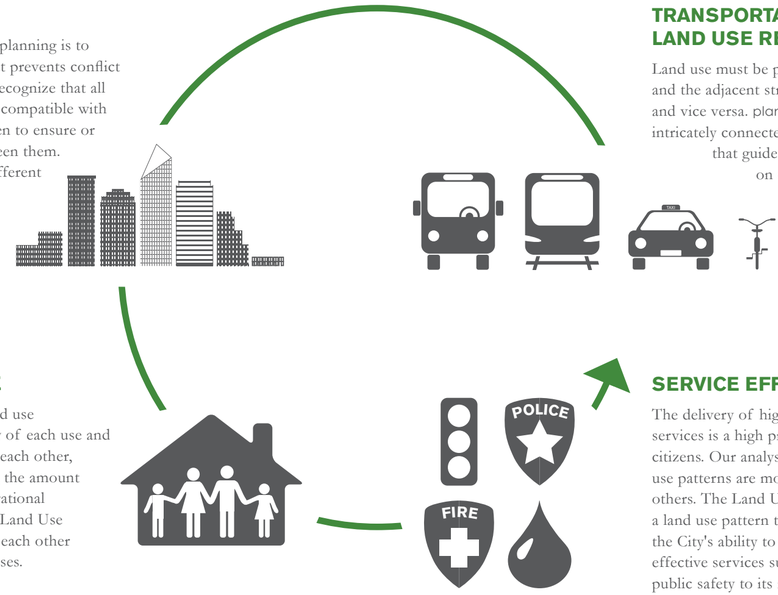
The concept of the Land Use Typology is to encourage a **mixture of uses** that work in harmony with each other within a particular area. It focuses on the relationship between **land use and the nearby transportation network**, considering the appropriate scale of existing and future development. The land use plan follows four key principles:

COMPATIBILITY

A key objective of land use planning is to create a land use pattern that prevents conflict between adjacent uses. We recognize that all land uses are not inherently compatible with others, but steps can be taken to ensure or improve compatibility between them. Successful integration of different land uses connects people to services and improves walkability and access to jobs, recreation, and other needs and amenities.

TRANSPORTATION SYSTEM & LAND USE RELATIONSHIP

Land use must be planned with transportation and the adjacent street network in mind, and vice versa. planokc's Land Use Plan is intricately connected with the Street Typology that guides how land use functions on certain streets, and how the City should invest in street infrastructure in the future.



INTENSITY OF USE

A central component of land use compatibility is the intensity of each use and how different uses relate to each other, whether it be building scale, the amount of traffic generated, or operational impacts. The LUTAs in the Land Use Plan are distinguished from each other based on intensity of land uses.

SERVICE EFFICIENCY

The delivery of high quality, cost effective services is a high priority for the City and its citizens. Our analysis shows that some land use patterns are more costly to serve than others. The Land Use Plan, therefore, reflects a land use pattern that is intended to maximize the City's ability to provide high quality, cost effective services such as water, sewer, and public safety to its residents and businesses.

Land Use Typology

BASE LAND USE TYPOLOGY AREAS

The core Land Use Typology Areas are oriented around a spectrum of development intensities – from undeveloped Open Space, to the high intensity of Downtown. Each encompasses development patterns designed to encourage connectivity and compatibility as appropriate to the intended level of intensity. The table at right shows the range of land use intensity from lowest to highest.

LAYER LAND USE TYPOLOGY AREAS

"Layer" Typology Areas are content-specific designations that adjust the purpose and function of the base LUTAs. The variations from the base LUTAs differ. Agricultural Preserve, Urban-Future, and Heavy Industrial narrow the range of land uses or densities to avoid incompatible land use patterns. Regional Districts and Employment layers encourage retail and industrial/employment uses in targeted areas, while Urban Commercial and Transit-Oriented districts encourage higher levels of intensity and connectivity.

LUTA DEVELOPMENT POLICIES

The Land Use Typology Areas map is shown at right. Land use policies are explained in detail for each LUTA on the following pages.

(Densities shown in the LUTA descriptions are expressed in gross terms unless otherwise indicated. Gross density is the sum of all residential units divided by the entire site area including all common areas, rights-of-way, etc. and is expressed in dwelling units per acre.)

BASE LUTAS

Open Space (OS)

Concentrations of publicly owned land that are intended to remain undeveloped and natural in character. Certain public uses may be appropriate.

Rural – Low Intensity (RL)

Large-lot residential (5 acres or more) plus related commercial services. No expectation of urbanization or provision of urban infrastructure such as water or sewer.

Rural – Medium Intensity (RM)

Large-lot residential (2 acres or more) plus related commercial services. No expectation of urbanization or provision of water or sewer.

Urban – Low Intensity (UL)

Applicable to the least intensely developed areas of the city that still receive urban water, sewer, police, park, and fire services.

Urban – Medium Intensity (UM)

Medium intensity urbanized area, reflective of the historic urban core, which balances small-and medium-lot housing and commercial districts.

Urban – High Intensity (UH)

Applies to the area surrounding the central business district. Developments are expected to have notably higher densities, scale, and mixture of uses than those found in UM.

Downtown (DT)

The city center, Oklahoma City's most intense development area, envisioned as a regional center for commerce and tourism.

LAYER LUTAS

Agricultural Preserve (AP)

Preserves large scale acreages used primarily for agricultural purposes as well as large floodplain areas. Existing development patterns are expected to remain unchanged for a long period of time.

Urban - Future (UF)

Reserves agricultural land and large acreage estates until the area is ready for urbanization. Maintains land to provide the most flexibility for future urban development and the ability to efficiently and sustainably deliver services.

Employment (EM)

Designates priority areas for large industrial and business development essential for the City's economic stability and future growth.

Urban Commercial (UC)

Encourages the concentration of small-scale retail, office, and service businesses in locations that serve as hubs for neighborhood and city-wide consumer activity.

Regional District (RD)

Designates areas that strategically prioritize the location and concentration of regionally serving retail and entertainment uses.

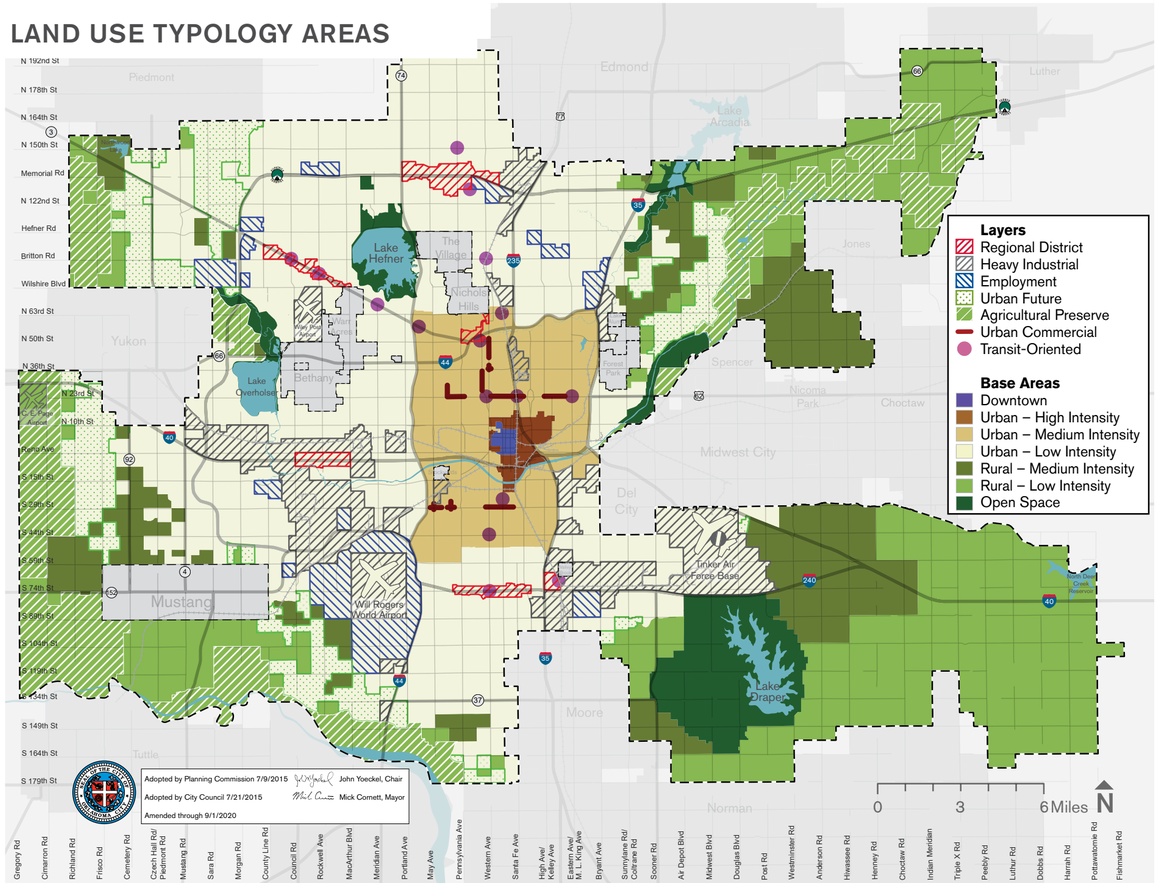
Transit-Oriented (TO)

Encourages mixed-use development and higher connectivity, density, and intensity, as well as concentrations of commercial activity around areas designated as important future mass transit stops.

Heavy Industrial (HI)

Intended to accommodate industrial uses that are difficult to integrate with less intense uses due to negative impacts from heavy traffic, noise, or odors.

LAND USE TYPOLOGY AREAS

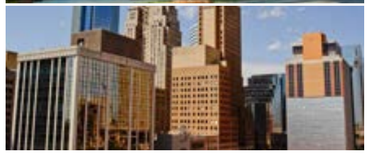












LAND USE INTENSITY

The plan**okc** Land Use Plan is designed to accommodate the wide variety of land use intensities found within Oklahoma City. The Land Use Plan applies appropriate ranges of intensity to each area of the city to establish a wide range of development options.

Levels of Service	POLICE	FIRE	WATER	SEWER	PARKS	SOLID WASTE
Measure	Response Time to Priority 1 Call for Service	Response Time to Priority 1 Call for Service	Source / Type	Type	Access	Type and Frequency
RM / RL / AP / UF	9.5 minutes	8.5 minutes	Well	On-Site	Local or Regional: 30-minute drive Trail: 15-mile drive	Weekly 'Big Blue' collection; No Recycling; No bulky waste
UL	9.5 minutes	7 minutes	City Water System	On System, Gravity Flow	Local or Regional: 1-mile walk Regional: 15-mile drive Trail: 5-mile drive	Weekly "Big Blue" and Recycling; Monthly bulky waste
UM / UH / DT	9.5 minutes	7 minutes	City Water System	On System, Gravity (any aid internal to site)	Local or Regional: ½-mile walk Regional: 5-mile drive Trail: 2½-mile drive	Weekly "Big Blue" and Recycling; Monthly bulky waste

LEVELS OF SERVICE EXPECTATIONS

In some cases, establishing level of service expectations can clarify responsibilities and reduce demands for service that individual departments cannot provide. This table illustrates level of service expectations for various Land Use Typology Areas.

OPEN SPACE LAND USE TYPOLOGY AREA (OS)

Open Space identifies concentrations of publicly owned land intended to remain undeveloped and natural in character. The purpose of this typology area is to preserve important naturalized areas for aesthetic, quality of life, and environmental purposes. Only certain uses managed by the public sector would be appropriate within an area designated as OS.

DENSITY RANGE

Gross Density	Density ranges are not applicable in the Open Space Typology Area.
Lot Sizes	
Non-residential Floor to Area Ratio (FAR) Range	

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid development within or modification of 100 year floodplains or floodways.
- Minimize visual, auditory, and other pollutants.
- Minimize use of impervious surfaces.
- Maximize the retention of natural areas and open space.

2.0 Automobile and Pedestrian Connectivity

2.1 PEDESTRIAN CONNECTIVITY

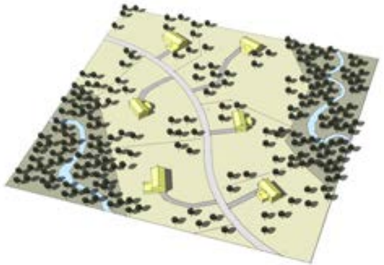
- Ensure public amenities within these areas can be accessed by the public via safe and efficient pedestrian and/or bicycle connections that do not compromise sensitive environmental features.

OPEN SPACE CHARACTER

OS is intended to remain as largely undeveloped, preserved natural areas primarily around Lakes Hefner, Draper, Overholser and Arcadia.

RURAL – LOW INTENSITY LAND USE TYPOLOGY AREA (RL)

Rural – Low Intensity applies to areas where large-lot neighborhoods and residential acreages/estates may remain with no expectation of urbanization or provision of urban infrastructure such as water or sewer. RL areas are predominantly composed of residential and agricultural uses but may support commercial and light industrial uses provided they do not negatively impact the rural character.



DENSITY RANGE

Gross Density	0.2 du/acre minimum
Lot Sizes	5 acres or larger
Non-residential Floor to Area Ratio (FAR) Range	n/a

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid development within or modification of 100 year floodplains or floodways.
- Design buildings and sites to complement the character of surrounding areas and not detract from the open character of the landscape.
- Utilize Best Management Practices (BMP) for stormwater.

1.2 LOCATION

- Support limited amounts of commercial in rural areas appropriate to the needs of rural residents and passersby. Commercial uses in rural areas should be located in small clusters either on uninterrupted arterials or at freeway interchanges.

2.0 Automobile and Pedestrian Connectivity

2.1 PEDESTRIAN CONNECTIVITY

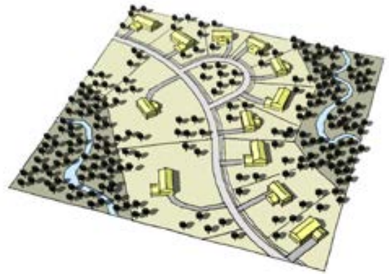
- Provide connectivity in the form of sidewalks or trails to existing public trails and parks that are adjacent to proposed development.

RURAL – LOW INTENSITY CHARACTER

RL areas include a variety of low-density, large-lot housing and services, ranging from small, large-lot subdivisions to large estate and ranch properties.

RURAL – MEDIUM INTENSITY LAND USE TYPOLOGY AREA (RM)

Rural – Medium is similar to the Rural – Low Typology Area except that it allows higher housing densities. RM areas typically have lot sizes between 2 and 5 acres. These areas are usually located near a fire station, or at least have rural levels of fire service. RM areas are typically located adjacent to Urban – Low and Urban Future typologies, which are areas intended to urbanize in the future. While there is no expectation for urban services, RM areas may have City water or have limited potential to connect to City water or sewer service, and may become more integrated into the urbanized area in the distant future. Commercial and light industrial uses may be appropriate provided they do not negatively impact the rural residential character.



DENSITY RANGE

Gross Density	<0.5 du/acre*
Lot Sizes	2 acre minimum*
Non-residential Floor to Area Ratio (FAR) Range	n/a

** Smaller lots (1 – 2 acres) may be allowed in cluster developments (see below) provided the maximum gross density of the project is maintained.*

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid development within or modification of 100 year floodplains or floodways.
- Design buildings and sites to complement the character of surrounding areas and not detract from the open character of the landscape.
- Utilize Best Management Practices (BMP) for stormwater.
- Cluster development may be appropriate provided it maintains rural character by preserving open space and/or Environmentally Sensitive Areas by clustering lots, and maximum gross density requirements are not exceeded. Open space and/or ESAs should be permanently protected through mechanisms such as conservation easements, dedicated zoning tracts, deed restriction, etc.

1.2 LOCATION

- Support limited amounts of commercial in rural areas appropriate to the needs of rural residents and passersby. Commercial uses in rural areas should be located in small clusters either on uninterrupted arterials or at freeway interchanges.

2.0 Automobile and Pedestrian Connectivity

2.1 PEDESTRIAN CONNECTIVITY

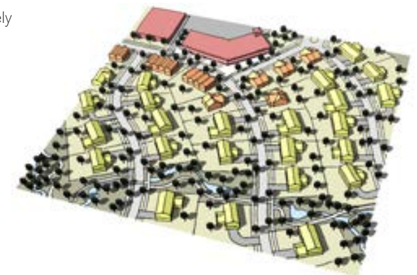
- Provide connectivity in the form of sidewalks or trails, to existing public trails and parks that are adjacent to development.

RURAL – MEDIUM INTENSITY CHARACTER

RM areas include a variety of low density, large lot housing and services, ranging from small, large-lot subdivisions to large estate and ranch properties.

URBAN – LOW INTENSITY LAND USE TYPOLOGY AREA (UL)

Urban – Low Intensity applies to the least intensively developed areas of the city that still receive urban water, sewer, police, park and fire services. Development in this area should provide horizontal integration of land uses, connectivity within and between individual developments, and design that facilitates pedestrian and bicycle transportation.



DENSITY RANGE

Gross Density	4 – 8 du/acre for single family*, 15 – 30 du/acre for multifamily
Lot Sizes	vary
Non-Residential Floor to Area Ratio (FAR) Range	0.2 – 1.0, (typical FAR of 0.3)

**Gross density may be allowed to decrease to 1 du/acre if a project: 1) is adjacent to rural densities; 2) will preserve designated Environmentally Sensitive Areas through policies included in this plan; or, 3) creates a significant community amenity (parks, golf courses, etc.)*

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid developing within or modification of 100 year floodplains or floodways.
- Large-scale (20+ acres or 50 or more single family units) residential subdivisions should provide a diversity of home sizes, lot sizes, price points, architectural styles, and density ranges.
- Where possible, provide a continuous system of open space along stream corridors or other appropriate areas that link neighborhoods and park lands.
- Utilize Best Management Practices (BMP) for stormwater whenever possible.
- Design buildings to include facades, storefront windows, and attractive signage and lighting to create pedestrian-scale visual interest.
- Developments should be served by urban water and sewer utility systems.

1.2 LOCATION

- Focus regionally serving retail development within commercial nodes and corridors identified in the Retail Nodes & Corridors map.
- Large-scale retail projects (300,000+ square feet) proposed outside of the nodes or corridors identified in the Retail Nodes & Corridors map should provide evidence showing that they will not negatively impact sales in existing Nodes & Corridors.
- Locate uses that generate high traffic volumes along arterial streets, frontage roads, and interstates.
- Avoid concentrations of apartment complexes. Instead, integrate multifamily units into neighborhoods with mixes of housing types or in mixed-use developments.
- Higher density multifamily development should be located in areas near employment or educational centers where street and transit systems have, or will soon have capacity to support the added trips.

URBAN – LOW INTENSITY CHARACTER

UL development primarily consists of single family homes, with some apartment complexes, auto-oriented retail centers, and suburban office parks. It is the lowest level of intensity that receives urban services such as water and sewer.

DEVELOPMENT POLICIES

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

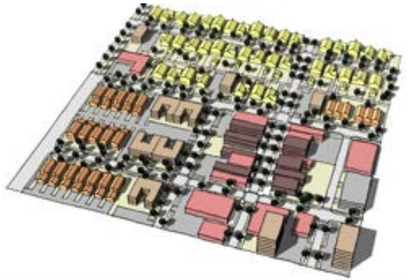
- Maintain, create, and enhance a street network that is highly connected to increase number of viable commercial locations and the effectiveness of the transportation system.
- Limit number of dead end streets and cul-de-sacs.
- Protect existing traditional street grid and reconnect it where possible.
- Limit curb cuts on arterial streets, and where possible concentrate access at shared entrance points. (See page 120.)
- Development fronting arterials should take access from intersecting streets where possible. (See page 120.)
- Primary entrance points should be aligned with access points immediately across the street. (See page 120.)
- Discourage widening of neighborhood streets and increasing curb radii.
- Retail developments should provide an internal vehicle and pedestrian circulation system between new and existing centers and individual stores.
- Provide vehicular connectivity between adjacent developments.
- Keep existing alleys open and functional.
- Subdivisions with more than 50 units should have at least two points of entrance / egress at least 300 feet apart.
- Horizontally mixed-use developments should have connectivity between land uses.

2.2 PEDESTRIAN CONNECTIVITY

- Provide sidewalk connections to adjacent development.
- Within parking lots, provide pedestrian access ways separated from vehicle aisles.
- Horizontally mixed-use developments should have public sidewalk connectivity between land uses.

URBAN – MEDIUM INTENSITY LAND USE TYPOLOGY AREA (UM)

UM applies to fully urbanized areas of the city, most of which were built prior to the 1960s. Developments are expected to be larger in scale and have greater intensity and mixture of uses than developments found in UL. Development within UM areas should support efficient transit usage and provide pedestrian and bicycle access to retail, services, parks, and other destinations. Priorities for the UM areas include "infill" development on vacant lots, rehabilitation of underutilized property, and development that supports revitalization of distressed neighborhoods.



DENSITY RANGE

Gross Density	10 – 40 du/acre
Lot Sizes	vary
Non-residential Floor to Area Ratio (FAR) Range	0.40 – 1.20, typical FAR of 1.0

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid developing within 100 year floodplains or floodways.
- Maintain historical lot and block sizes where possible and appropriate.
- Utilize Best Management Practices (BMP) for stormwater.
- Structured parking may be appropriate to achieve desired intensity levels.
- Incorporate commercial uses at street level to maintain an active, pedestrian friendly streetscape.
- Design buildings to include facades, storefront windows, and attractive signage and lighting to create pedestrian-scale visual interest.

1.2 LOCATION

- Locate large-scale commercial and office development on arterial streets.
- Mixture of density, lot size and building scale is appropriate as long as land use compatibility is achieved.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Maintain and enhance the connectivity of the street network.
- For projects that propose new public or private streets, maintain, create, and enhance an overall network that is highly connected, and avoid dead end streets and cul-de-sacs.
- Protect existing traditional street grid and reconnect it where possible.
- Keep alleys open and functional.
- Limit curb cuts on arterial streets and where possible, concentrate access for retail development at shared entrance points.
- Development fronting arterials should take access from intersecting streets where possible.
- Primary entrance points should be aligned with access points immediately across the street.

2.2 PEDESTRIAN CONNECTIVITY

- Provide sidewalk connections to nearby uses.
- Discourage widening of neighborhood streets and increasing curb radii.

URBAN – MEDIUM INTENSITY CHARACTER

Small lot single family, multifamily buildings, and urban commercial districts are representative of the UM Typology.

URBAN – HIGH INTENSITY LAND USE TYPOLOGY AREA (UH)

UH applies to densely built urban areas, including regional attractors with major employment concentrations, high density residential living, and related commercial and service uses. UH areas have the highest mixture and intensity of land uses and development activity outside of the Downtown core.

The development intensity of UH supports various types of mass transit, from bus to rail, and is an ideal setting for large and small office buildings due to close proximity to other businesses and transportation networks.

DENSITY RANGE

Gross Density	40 – 100 du/acre
Lot Sizes	vary
Non-residential Floor to Area (FAR) Range	0.80+, typical FAR of 1.5

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid developing within 100 year floodplains or floodways.
- Maintain historical lot and block sizes where possible and appropriate.
- Provide parking in structured garages, decks, or parking lots set to the side or rear of a property.
- Incorporate commercial uses at street level to maintain an active, pedestrian friendly streetscape.
- Utilize Best Management Practices (BMP) for stormwater.
- Design buildings to include facades, storefront windows, and attractive signage and lighting to create pedestrian-scale visual interest.

1.2 LOCATION

- Locate higher intensity developments adjacent to major public amenities (parks, waterways, etc.).

1.3 BUILDING FORM

- Avoid unbroken stretches of blank walls.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Maintain and enhance the connectivity of the street network.
- Avoid dead-end streets.
- Protect and reconnect the traditional street grid.
- Keep alleys open and functional.
- Limit curb cuts on arterial streets and concentrate access at shared entrance points.

2.2 PEDESTRIAN CONNECTIVITY

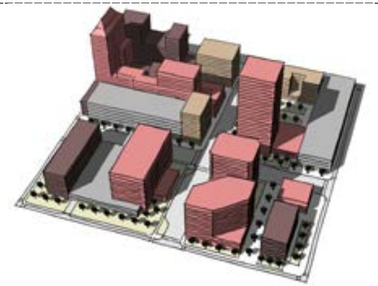
- Provide sidewalk connections between all uses.
- Preserve and expand the pedestrian and bicycle networks.
- For large-scale, block sized developments, provide public connectivity via alley or internal sidewalks and streets.
- Discourage widening of neighborhood streets and increasing curb radii.

URBAN – HIGH INTENSITY CHARACTER

Clusters of office, housing,and retail, often vertically mixed and at least 3 stories tall. The UH Typology represents what most people would consider "urban".

DOWNTOWN LAND USE TYPOLOGY AREAS (DT)

DT applies to the city center, Oklahoma City's most intense development area, envisioned as a regional center for commerce and tourism. Urban experience, interaction, creativity and knowledge exchange, and economic dynamism are guiding objectives that necessitate high intensity and extremely close proximity among businesses, residents, destinations, and amenities.



DENSITY RANGE

Gross Density	50 –125+ du/acre
Lot Sizes	vary
Non-residential Floor to Area Ratio (FAR) Range	1.0+, typical FAR in excess of 2.0

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid developing within 100 year floodplains or floodways.
- Utilize Best Management Practices (BMP) for stormwater.
- Provide parking in structured garages or decks.
- Incorporate commercial uses at street level to maintain an active, pedestrian friendly streetscape.
- Align walls of new construction with prevailing facades of adjacent buildings, unless doing so results in substandard sidewalks.
- Design buildings to include facades, storefront windows, and attractive signage and lighting to create pedestrian-scale visual interest.

1.2 BUILDING FORM

- Avoid unbroken stretches of blank walls.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Protect existing traditional street grid and reconnect it where possible.
- Keep alleys open and functional.

2.2 PEDESTRIAN CONNECTIVITY

- Preserve and expand the pedestrian and bicycle networks.
- Provide sidewalk connections between all uses.
- Provide public connectivity through blocks via alley or internal access for large-scale, block sized developments.

DOWNTOWN CHARACTER

High density office, hotel, and residential towers that collectively create the most intensity developed area of Oklahoma City.

AGRICULTURAL PRESERVE LAND USE TYPOLOGY LAYER (AP)

AP preserves large scale acreages used primarily for agricultural purposes that are within the municipal boundaries. A large portion of the AP area consists of undevelopable floodplains. Existing development patterns are expected to remain unchanged for a long period of time, allowing agricultural operations to exist and thrive at different scales. Commercial and light industrial uses may be appropriate provided they do not negatively impact agricultural operations and character.

DENSITY RANGE

Gross Density	n/a
Lot Sizes	n/a
Non-residential Floor to Area Ratio (FAR) Range	n/a

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Minimize potential conflicts between development and agricultural operations, placing emphasis on supporting the economic viability of agricultural operations.
- Protect rural character by designing buildings and sites to complement the scale, character, and size of surrounding uses and structures.
- Utilize Best Management Practices for managing stormwater runoff to protect water quality and viability of agricultural operations.
- Protect soils classified by the USDA as "Prime Farmland" by minimizing impermeable surfaces and keeping at least 95 percent of the land free from restrictions (e.g., conservation easements) that would prevent land from being easily converted back to farmland.
- Avoid developing within 100 year floodplains or floodways.

AGRICULTURAL CHARACTER

Farms and other agricultural operations, mixed with very large lot estate style housing and undeveloped floodplain / open space.

URBAN - FUTURE LAND USE TYPOLOGY LAYER (UF)

The Urban - Future layer maintains agricultural land and large acreage estates until the area is ready for urbanization. The purpose of this designation is to retain land in a condition that provides the most flexibility for developing at urban densities in the future and ensures the most efficient, sustainable delivery of services. Land assembly is one of the most difficult tasks associated with effective land development. To the extent parcels become fragmented, the potential to efficiently urbanize these areas is compromised due to the challenges of land assembly.

Urban - Future areas may have access to the City's public water supply or sanitary sewer systems but not both, and typically don't have urban levels of fire service. These areas present opportunities to increase service levels over time and responsibly manage the public costs of growth. **Urban services, including City water and sewer, are not intended to be provided to UF areas until the designation is removed through an amendment to** plan**okc**. Commercial and light industrial uses may be appropriate provided they do not negatively impact agricultural operations and character or the potential to eventually urbanize.

DENSITY RANGE

Gross Density	n/a
Lot Sizes	n/a
Non-residential Floor to Area Ratio (FAR) Range	n/a

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

- When the Urban - Future layer is removed for new development, UL policies will apply.

2.0 Automobile and Pedestrian Connectivity

- When the Urban - Future layer is removed for new development, UL policies will apply.

EMPLOYMENT LAND USE TYPOLOGY LAYER (EM)

The Employment layer designates priority areas within the city for large industrial and business development essential for Oklahoma City's economic stability and future growth. The EM designation provides a competitive advantage for attracting new companies and retaining existing companies that need to expand.

This designation maintains large acreages (typically 25 acres or above) to maximize clustering for specialization, synergy, transportation efficiency, and knowledge exchange. Appropriate uses within EM include those that generate employment, such as manufacturing, office parks, and office/industrial flex space uses as well as industrial uses such as warehousing or distribution. Multifamily is also appropriate when integrated as part of a holistic development that incorporates the aforementioned uses.

Land uses such as single-family residential, service-related retail, K-12 schools or other civic uses, unless proven to support the primary activity or use, are not appropriate within this area.

DENSITY RANGE

Gross Density	n/a
Lot Sizes	n/a
Non-residential Floor to Area Ratio (FAR) Range	n/a

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Small-scale industrial, office, or retail development is appropriate provided that it supports / strengthens major employment uses and does not restrict future large-scale development by fragmenting parcels or impeding internal circulation.
- Ensure development adjacent to Employment areas is compatible and will not compromise viability of employment lands.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Development is encouraged to be designed to accommodate future development's access needs, including partial connector construction, where appropriate.

2.2 PEDESTRIAN CONNECTIVITY

- Provide sidewalk connections to adjacent development.
- Horizontally mixed-use developments should have public sidewalk connectivity between land uses.

URBAN COMMERCIAL LAND USE TYPOLOGY LAYER (UC)

The UC layer encourages the concentration of small-scale retail, office and service businesses in locations that serve as hubs for neighborhood and city-wide consumer activity. The UC designation applies to development within one block of the designated corridor. UC designates strategic areas where the creation or revitalization of a commercial district will drive revitalization and an increase in property value in surrounding neighborhoods. Office and multifamily residential uses are highly desirable uses within UC areas, as they generate market demand for retail, incorporate walkable environments, and create synergies that encourage full utilization of land. Heavy industrial uses are not compatible with the character and purpose of the UC designation.

URBAN COMMERCIAL CHARACTER

Clusters of single and multi-story commercial buildings with ground floor retail, office and services, often co-mingled with multifamily housing.

DENSITY RANGE

Gross Density	20 – 75 du/acre
Lot Sizes	vary
Non-residential Floor to Area Ratio (FAR) Range	Minimum of 0.5, may exceed 1.2

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Building setbacks, access points, and other criteria as defined in the Street Typology section are to be applied as appropriate.
- Encourage all buildings fronting a designated corridor or node to have ground floor space for retail or service businesses.
- All signage should be designed to provide visual coherency, which includes a consistent and cohesive pattern of materials, lighting, and height.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Limit curb cuts and automobile accessibility off of the primary commercial street.
- Reduce the size of private parking lots through shared parking agreements.
- Customer-oriented uses are encouraged to take access off of Connector and Neighborhood streets that intersect with Major or Minor Arterials.

2.2 PEDESTRIAN CONNECTIVITY

- For multi-tenant properties, include an internal pedestrian system that allows customers to park once and conveniently walk to several destinations.
- Provide safe and direct pedestrian and bicycle access from adjacent public streets and trails.

REGIONAL DISTRICT LAND USE TYPOLOGY LAYER (RD)

The RD layer designates areas that strategically prioritize the location and concentration of regionally serving retail and entertainment uses. This includes major national retailers that have a regional draw, as well as concentrations of retail that draw visitors from outside of the city.

Uses that generate sales-tax are a priority within RD areas. Complementary uses such as office, entertainment, high density housing, and services may be appropriate as limited secondary uses, provided they are inter-connected to create mixed-use urban centers.

REGIONAL DISTRICT CHARACTER

Large scale retail destinations, accessed off of major arterials, often co-mingled with office, hotel and multifamily development.

DENSITY RANGE

Gross Density	12 – 20 du/acre for SFA; 20 – 30 du/acre for MF*
Lot Sizes	vary
Non-residential Floor to Area Ratio (FAR) Range	Same as base LUTA

** SFA = Single Family Attached*
MF = Multifamily

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Provide heavy landscaping along all frontages.
- Allow customer-oriented development to exceed the traffic compatibility range, provided mitigation strategies contained in the compatibility matrix are employed.
- All signage should be designed to provide visual coherency, which includes a consistent and cohesive pattern of materials, lighting, and height. No more than two primary centralized signs per center should be allowed.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Provide cross access to connect the vehicular and pedestrian networks between individual retail, commercial and housing developments.
- Development should take access off of streets intersecting arterials. Mid-block development should use shared access points.

2.2 PEDESTRIAN CONNECTIVITY

- Include an internal pedestrian system that allows customers to park once and conveniently walk to several destinations within a retail center.
- Provide safe and direct pedestrian and bicycle access from adjacent public streets and trails.

TRANSIT-ORIENTED LAND USE TYPOLOGY LAYER (TO)

The TO layer encourages higher density development, higher levels of transportation system connectivity, and concentrations of housing and commercial activity around areas designated as mass transit stops. The intent is to create unique, mixed-use districts with housing and employment opportunities around the City's future transit network. TO areas are characterized by a walkable environment, close proximity of buildings, and minimal land used for parking. These nodes of high intensity may be located within lower-intensity areas. Construction at higher intensity maximizes efficiency of the current and future transit system and minimizes reliance on private automobiles. The TO layer is applied within 1/4 mile of a node identified on the Land Use Plan.

DENSITY RANGE

UM	
Gross Density	15 – 60 du/acre
Lot Sizes	vary
Non-Residential Floor to Area Ratio (FAR) Range	Minimum of 0.5, typical of 1.5
UL	
Gross Density	7 – 40 du/acre
Lot Sizes	vary
Non-residential Floor to Area Ratio (FAR) Range	Minimum of 0.4, typical of 1.2

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN AND BUILDING FORM

- Project design should accommodate easy travel by walking, biking, and transit to the transit stop.
- Uses should share parking to minimize land area used for parking.
- Development should complement the goal of a mixed-use "village" environment around major stops or stations to provide easy access to multiple destinations including jobs, shopping, entertainment, and recreation.
- Incorporate shallow building setbacks and wide sidewalks to accommodate pedestrian activity.
- Customer-oriented development that exceeds traffic compatibility ranges may be allowed, provided that the impacts are mitigated using strategies contained in the compatibility matrix.
- Developments should have direct pedestrian access on each block face that they occupy.
- Create and maintain small block sizes.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Protect or establish a functioning and dense street grid.
- Connect the vehicular and pedestrian networks between individual developments.
- Limit curb cuts and automobile accessibility off of the primary commercial street.

2.2 PEDESTRIAN CONNECTIVITY

- Multi-building developments should include internal pedestrian systems to encourage customers to park once for several destinations.
- Provide safe and direct pedestrian and bicycle access from adjacent public streets and trails.

TRANSIT-ORIENTED CHARACTER

Higher relative commercial and residential density within a quarter mile radius of a mass transit stop, with a highly connected pedestrian and bicycle network extending from the station to adjacent developments.

HEAVY INDUSTRIAL LAND USE TYPOLOGY LAYER (HI)

The HI layer is intended to accommodate industrial uses that are difficult to integrate with less intense uses due to negative impacts from heavy traffic, noise, or odors. This designation simultaneously concentrates heavy industrial users away from existing or future neighborhoods while preserving prime land that has attributes crucial to industrial businesses, such as proximity to highway and rail access. Small-scale industrial, office, or commercial development may be appropriate provided that it supports or buffers industrial uses and does not restrict future industrial development by fragmenting parcels.

DENSITY RANGE

Gross Density	not applicable
Lot Sizes	
Non-residential Floor to Area Ratio (FAR) Range	

DEVELOPMENT POLICIES

1.0 Site Design, Building Form, and Location

1.1 SITE DESIGN

- Avoid developing within 100 year floodplains or floodways.
- Major and Minor Arterial frontages should be heavily landscaped.
- Utilize Best Management Practices (BMP) for stormwater.
- Buildings along Major and Minor Arterials should be held to a higher design standard.

2.0 Automobile and Pedestrian Connectivity

2.1 AUTOMOBILE CONNECTIVITY

- Limit number of dead end streets and cul-de-sacs.
- Limit curb cuts on arterial streets, and where possible concentrate access at shared entrance points.
- Development fronting arterials should take access from intersecting streets where possible.
- Primary entrance points should be aligned with access points immediately across the street.

2.2 PEDESTRIAN CONNECTIVITY

- Provide sidewalk connections to adjacent development.

HEAVY INDUSTRIAL CHARACTER

Concentrating high-intensity uses in areas with good proximity to necessary infrastructure but away from uses like schools and homes.

Additional Development Review Policies

The policies listed in this section are a subset of those in the Implementation Guide and are duplicated here for ease-of-use. These policies are generally applicable throughout Oklahoma City and are used to review proposed development projects for conformance with planokc.

Sustain- Future Land Use

- Encourage the integration and mixing of land uses in urban areas. (SU-1)
- Encourage the integration of different land uses in urban areas [by preventing] large areas of concentration of any particular land use such as multi-family or commercial. (SU-2)
- Support diversity and integration of housing unit types and sizes in all land use typology areas in order to meet the diverse needs of households of different sizes, generational needs, incomes, and preferences. New residential subdivisions should achieve a mixture of housing types within a unified development. (SU-4)
- Prioritize and concentrate development where facilities, infrastructure, and services have capacity and in areas where the Police and Fire Departments are best able to respond. Guide the location and timing of development through the proactive and strategic installation of infrastructure. (SU-14)
- For development proposed in areas not currently within a sanitary sewer drainage basin, a drainage basin study should first be completed to determine the best method for sanitary sewer service. (SU-16)
- Encourage redevelopment and infill development on vacant, underutilized, and brownfield sites in urbanized areas. (SU-19)
- Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods. (SU-21)
- Prioritize maintaining the strength of existing commercial nodes and corridors over providing new areas for commercial development. (SU-23)
- Continue promoting the re-use, redevelopment, and revitalization of low-performing or declining commercial areas. (SU-24)
- Favor commercial development clustered in nodes at arterial or collector intersections or along brief "main street" style corridors over commercial development extending in a linear pattern for long distances along highway, arterial, or collector corridors. (SU-25)
- Incentives for new regional retail development should only be considered if the proposed project truly creates a new regional destination for the city and does not significantly cannibalize sales from existing Regional Districts. (SU-26)
- Regional-, community-, and neighborhood-scale retail developments should provide an internal vehicle and pedestrian circulation system between new and existing centers and individual stores that draws on the following principles:
  - Concentrate access for new retail development at shared primary entrance points. Primary entrance points should be aligned with access points immediately across intersecting roads. Limit curb cuts on primary highways and arterials.
  - Provide pedestrian circulation, including sidewalks and median breaks along interior and exterior fronting roads and within parking lots.
  - Encourage coordinated development of retail centers in order to facilitate internal pedestrian and vehicle circulation and optimal center performance. (SU-27)
- Commercial buildings should be built at the street rather than behind a parking lot in order to promote pedestrian circulation, multipurpose shopping trips, and walkable and attractive streetscapes. Large-scale commercial buildings with parking in front should screen parking lots with the coordinated development of out-parcels (pad sites) and with landscaping. (SU-28)
- New neighborhood-scale retail should be located within new residential growth areas to serve daily shopping needs and limit trip distances. In newly developing areas, this retail format is preferred to the existing linear development patterns along arterials. (SU-30)
- Neighborhood-scale retail should be developed at the median breaks or intersections of major or minor connectors. (SU-31)
- Wayfinding mechanisms and other place-making features should be strongly encouraged in new and existing commercial districts. (SU-32)
- Avoid placing heavy industrial uses on borders of industrial areas to avoid conflicts with adjacent development. (SU-35)
- Direct oil drilling in industrial areas to locate equipment and facilities near major streets so as to keep interior areas free of obstructions that could hinder industrial development. (SU-36)
- Enhance Downtown Oklahoma City's prominence by maintaining and increasing its role as the major business center, establishing it as a major urban residential center, and focusing on developing retail, office, entertainment, and arts and cultural uses. (SU-37)
- Encourage development of new educational and childcare facilities downtown to accommodate families with children that work and/or live downtown. (SU-42)
- Preserve existing rural residential character while pursuing optimal use of existing infrastructure in rural areas. (SU-44)
- Ensure that development in rural areas is consistent with local design and scale and does not detract from the open character of the landscape. (SU-45)
- Support limited amounts of commercial in rural areas appropriate to the needs of rural residents and passersby. Commercial uses in rural areas should be located in small clusters either on uninterrupted arterials or at freeway interchanges.(SU-46)
- Encourage unified planning for all adjoining land owned or controlled by a project's developer to ensure proper circulation and land use relationships. (SU-47)
- Higher density multifamily development should be located in areas near employment or educational centers where street and transit systems have, or will soon have capacity to support the added trips. (SU-48)
- Avoid concentrations of apartment complexes. Instead, integrate multifamily units into neighborhoods with mixes of housing types or in mixed-use developments. (SU-49)

Connect- Transportation

- Require sidewalks on both sides of all streets in urban LUTAs and in the Rural LUTAs for subdivisions with densities greater than 1 unit per acre. (C-7)
- Maintain existing alleys or construct new alleys where feasible to provide trash collection service and parking behind primary buildings and minimize curb cuts along the primary street frontage. (C-8)
- Maintain historical lot and block sizes where possible and appropriate. (C-9)
- Maintain the traditional grid street pattern where it currently exists, reconnect it where possible, and keep alleys open and functioning. When improving older streets in neighborhoods, maintain original street widths and curb radii. (C-10)
- Improve the functionality and efficiency of the street network by:
  - Providing direct connections from residential developments to nearby places and to each other.
  - Providing street and sidewalk stubs to adjacent vacant land in anticipation of future development.
  - Connecting new development to existing street and sidewalk stubs, and to existing trail, open space, and bicycle networks.
  - Reducing block sizes and use of dead-end streets.
  - Maintaining the existing street grid to preserve connectivity and mobility options. (C-11)
- Require the placement of secure, properly positioned bicycle parking within multi-family and commercial development, and in all public parking garages. (C-25)
- Limit driveways on arterials and collectors and increase connections

Additional Development Review Policies (continued)

between uses to improve safety and traffic efficiency. (C-30)

- Share parking among contiguous developments. (C-31)
- Ensure proper access to and between subdivisions in order to offer a choice in routes for residents, multiple access points for emergency responders, and to reduce vehicle congestion at arterial intersections. Contiguous developments should share access whenever feasible. (C-32)

Green- Environment & Natural Resources

- Preserve overall landscape character and natural landforms (rolling hills, native vegetation, etc.) to the greatest extent possible. (G-4)
- Strive to preserve natural open spaces, including native prairies, and re-plant native vegetation to take advantage of their drought tolerance and deep root structures that slow and adsorb stormwater runoff and reduce erosion by anchoring the soil. (G-6)
- Identify and protect critical habitats for state and federally listed threatened or endangered species. (G-7)
- Identify migratory birds and their nesting sites prior to construction. Protect migratory birds and their nesting sites throughout the construction process and refrain from construction near nesting sites until migratory birds are no longer actively nesting and have moved on from the site. Verify compliance with Migratory Bird Treaty Act. (G-8) Establish strategies, procedures and policies that prevent degradation or loss of critical habitat and sensitive areas, such as Cross Timbers, upland forests, wetlands, wildlife corridors, groundwater recharge zones, and riparian areas. Protection methods should ensure that placement of lots, alignment of roads, and installation of structures and infrastructure minimize disturbance of the environmentally sensitive areas using tools such as:
  - Directing development to appropriate locations;
  - Greenbelt preservation;
  - Assurance of no development in protected open space;
  - Clustering / conservation subdivisions;
  - Pervious surface treatments;
  - Density transfers; and/or
  - Conservation easements.
  - Ensure that strategies, procedures, and policies incorporate principles of connectivity, minimal fragmentation, representativeness, and heterogeneity. (G-9)
- Support and incentivize the adaptive use of existing buildings, infill development, and brownfield development. (G-10)
- Avoid under-grounding streams to the greatest extent possible. Where feasible, encourage the re-surfacing of buried streams. Limit the use of culverts or other structures that alter natural streams, and require designs that minimize impacts to stream health and function. (G-11)
- In areas where standard on-site wastewater systems are not feasible (such as in areas with shallow or poor soils), require very low-density development or development that utilizes conservation design and a centralized treatment facility or other environmentally sensitive systems for wastewater treatment. (G-20)
- Preserve natural habitat, maintain wildlife food sources, and reduce the risk of propagating invasive plant species by utilizing vegetation native to Oklahoma, preferably central Oklahoma, for all mitigation and habitat restoration efforts associated with new development and redevelopment projects, public and private, to the greatest extent possible. (G-23)
- Preserve mature, healthy trees and incorporate them into the design of new development or redevelopment projects to the greatest extent possible. Include provisions and best management practices to ensure proper tree protection throughout the construction process. Best management practices include but are not limited to:
  - The use of proper pruning techniques;
  - Appropriate watering;
  - Installation of protective fencing at the drip lines of trees or groups of trees;
  - Designated material storage areas; and
  - Approved equipment and vehicle parking and maintenance areas. (G-26)
- …[Promote] the use of building and roofing materials that reduce heat island effects. (G-29)

Live- Communities

- Ensure that safety is factored into the design of neighborhoods through the following policies:
  - Incorporate development standards and guidelines into the Subdivision Regulations that integrate the principles of Crime Prevention Through Environmental Design (CPTED) and increase safety and social interaction.
  - Create a pre-development checklist with criteria to evaluate how safety is designed into a project.
  - Establish a pre-development process wherein safety is considered in the design of projects.
  - Involve the Fire and Police Departments in reviewing proposed development and redevelopment to provide input on any safety-related design concerns. (L-7)

Enrich- Preservation, Appearence, & Culture

- Protect the unique character of National Register-listed properties or districts and local Historic Districts and ensure that development and redevelopment is compatible with historic resources and character. (E-29)
- Incorporate natural features (such as ponds, lakes, streams, rock outcroppings, stands of mature trees, and/or sizable individual trees) into the design of all residential, commercial, and industrial projects rather than eliminating, hiding, or limiting access to those features. (E-31)

Play- Parks & Recreation

- Acquire easements in new and existing developments to develop and connect trails. (P-16)
- Require that new development tie into the park and trail system by providing linkages to existing parks or dedicating new park land. Connect existing parks and neighborhoods to create a continuous system of open spaces, for example along stream corridors. (P-18)
- Establish criteria for locating, designing, and improving public and private parks to enhance safety and security, including:
  - Locating new parks in areas that are highly visible and accessible from surrounding residential streets and utilize trails to increase activity and visibility in parks.
  - Utilizing Crime Prevention Through Environmental Design principles, which includes controlled access, visibility, lighting, etc. for new parks and retrofitting/redesign of existing parks. (P-22)

Strengthen- Economic Development

- Increase land use diversity in Bricktown to attract and retain visitors and development momentum. Specifically, encourage more retail, office, and recreational uses rather than additional bars and restaurants, so that visitors of all ages and interests will be motivated to visit and stay longer. (ST-16)
- Reduce crime and improve feelings of safety [by] encouraging more compact development to increase effectiveness of individual officers by ensuring less travel time and more engagement. (ST-25)

Serve- Public Services

- Evaluate development proposals to assess design components that contribute to or detract from safety and analyze emergency response capacity and capability. (SE-3)

Land Use Compatibility

planokc focuses on the compatibility of different land uses, as opposed to the appropriateness of land uses in general categories. Most land uses are appropriate within the different Land Use Typology Areas, provided a site's zoning permits the use and the development is designed in context with the surrounding environment. New development should be compatible with surrounding uses, or, when surrounding land is undeveloped, compatible with potential uses, based on zoning or Land Use Typology Area designation. New development should also be compatible with the purpose and character of each LUTA.

To help determine compatibility between uses, planokc contains a Land Use Compatibility Matrix that can be used to assess if the intensity and design of a proposed development is appropriate to surrounding uses and will complement and enhance the character of each LUTA. This section helps identify compatibility issues, and offers potential mitigation techniques to address them.

OVERVIEW OF LAND USE COMPATIBILITY

Step 1: Assess compatibility with Land Use Typology Area

Projects should comply with LUTA descriptions and policies in order to be determined to be in conformance with planokc. LUTAs provide guidance on the density, intensity and character of development, including residential densities and Floor to Area Ratio (FAR) ranges as shown on the LUTA Compatibility charts starting on page 74.

Step 2: Assess Gross Land Use Compatibility

Refer to the Land Use Compatibility Matrix on page 76 to determine whether a proposed project may have a conflict with existing uses, or when surrounding land is undeveloped, conflict with potential uses, based on zoning or Land Use Typology Area designation. Gross Compatibility is measured by: (1) Traffic – Differences in the amount of traffic generated between the proposed project and existing uses; (2) Building Scale and Site Design – Significant difference between height and scale of proposed projects and adjacent properties; and (3) Operational Impact – Operational necessities or by-products like noise, odors, light, etc. that will negatively impact adjacent occupants.

If potential incompatibilities are identified in the Land Use Compatibility Matrix, proceed to Step 3.

Step 3: Determine whether proposed use trips a compatibility "trigger" (pages 76-79)

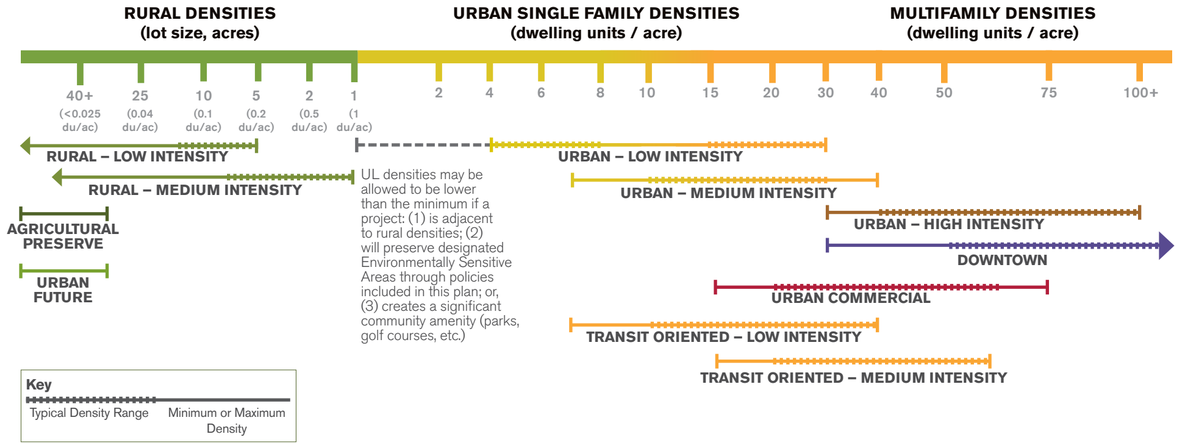
Compatible	Proposed use is the same or complementary to surrounding uses in scale, traffic impact and/or operational impact.
Somewhat Compatible ***Minor Modification Required***	Proposed use has potential conflicts with adjacent uses that can be remedied or minimized through project design, such as traffic mitigation and/or building design and scale.
Potentially Compatible ***Significant Mitigation Required***	Proposed use may have significant conflicts with adjacent uses, and may require significant mitigation to reduce impacts, and may not achieve full compatibility.
Incompatible	Proposed use deviates significantly in density, intensity, scale, form, or activity causing negative impacts on, or being negatively impacted by, surrounding land uses. Project should not be supported unless extraordinary measures can be taken to offset the impacts.

Step 4: Incorporate appropriate mitigation measures (pages 77-81)

LUTA COMPATIBILITY

RESIDENTIAL GROSS DENSITY CHART

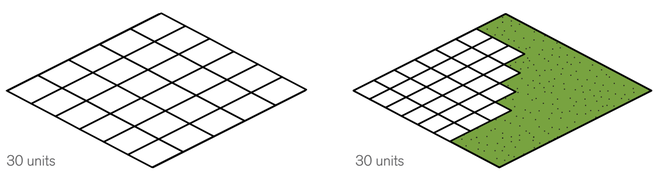
Illustration of the applicable residential densities for each Land Use Typology Area (LUTA).



Gross Density

Gross Density is the total number of residential units divided by the total land area.

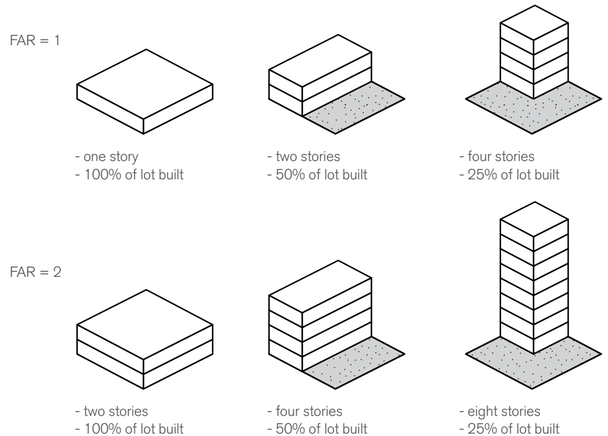
As shown at right, two very different developments may have the same gross density. In this case, the "cluster" development pictured on the far right has the same gross density as the more conventional development pictured because it has the same number of units, and the total land area is the same due to the shaded area being permanently preserved in its undeveloped state.



FLOOR TO AREA RATIO (FAR)

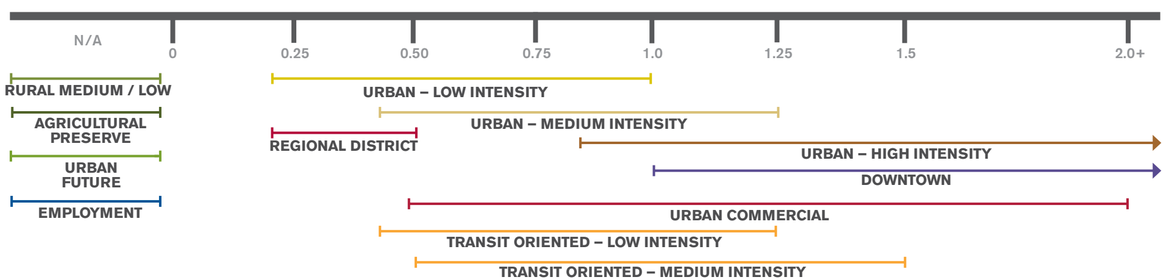
FAR Definition

FAR is the ratio between a building's total floor area and its site coverage. To calculate FAR, the gross square footage of a building is divided by the total area of its lot. FAR conveys a sense of the bulk or mass of a structure, and is useful in measuring non-residential and mixed-use density.



FAR Ranges

Illustration of the applicable Floor to Area Ratio ranges appropriate for each Land Use Typology Area (LUTA).



GROSS LAND USE COMPATIBILITY

LAND USE COMPATIBILITY MATRIX

Review chart for potential conflicts between major land use categories.

B: Building Scale & Site Design T: Traffic O: Operational Impact		EXISTING USE*											
			RESIDENTIAL			OFFICE			RETAIL			INDUSTRIAL	
		Ag	Low Intensity	Medium Intensity	High Intensity	Low Intensity	Medium Intensity	High Intensity	Low Intensity	Medium Intensity	High Intensity	Low Intensity	High Intensity
PROPOSED USE	Agriculture												
	Residential: Low Intensity	B	B									O	O
	Residential: Medium Intensity	T, B	B									O	O
	Residential: High Intensity	B, T, O	B, T	B								O	O
	Office: Low Intensity		B, T										
	Office: Medium Intensity	B, T, O	B, T	B, T									
	Office: High Intensity	B, T, O	B, T	B, T									
	Retail: Low Intensity	T, O	B, T, O	B, T, O									
	Retail: Medium Intensity	T, O	B, T, O	B, T, O	T, O								
	Retail: High Intensity	T, O	B, T, O	B, T, O	T, O								
	Industrial: Low Intensity	T, O	B, T, O	B, T, O	O	B, O	B, O		B, O	B, O			
	Industrial: High Intensity	B, T, O	B, T, O	B, T, O	B, T, O	B, T, O	B, T, O		B, T, O	B, O	B, O		

*or, if undeveloped, use allowed by existing zoning or LUTA designation

DEFINITIONS	
Agriculture	Farming or other agricultural operations
Residential: Low Intensity	Density levels of 0.2–6 du/acre (lot sizes of 5 acres – 6,000 square feet, mostly single-family detached)
Residential: Medium Intensity	Density levels of 6–25 du/acre (lot sizes of 6,000 – 2000 sq. feet, ranges between single-family detached, single-family attached, & multifamily)
Residential: High Intensity	Density levels of 25+ du/acre (primarily multifamily)
Office: Low Intensity	1–2 stories, 1–50 employees, mostly office, institutional, and non-service businesses, surface parking
Office: Medium Intensity	2–5 stories, 25–200 employees, professional office, institutional, or service businesses, surface parking
Office: High Intensity	5+ stories, 100+ employees, professional office, institutional, or high concentration of service businesses, surface or structured parking
Retail: Low Intensity	Single structure development, 2,000 – 50,000 sf
Retail: Medium Intensity	Neighborhood center or small community center, or single story "box" structure (40,000 – 150,000 square feet)
Retail: High Intensity	Community or large-scale retail center typically 150,000+ square feet
Industrial: Low Intensity	Warehousing and minor manufacturing, 5,000 – 75,000 square feet
Industrial: High Intensity	Manufacturing and activities that generate undesirable operational impacts, typically 75,000+ square feet

COMPATIBILITY TRIGGERS & MITIGATION MEASURES

(B) BUILDING SCALE AND SITE DESIGN

This factor relates to how an entire site is developed in relationship to neighboring uses, paying particular attention to building height and scale, orientation, and layout. The presence of these triggers in higher intensity LUTAs (UM, UH, DT, UC, RD, and TOD) may not indicate a compatibility concern because larger differences in scale and massing are expected and appropriate in these more urban areas.

TRIGGERS	MITIGATION MEASURES
Projects that meet the criteria below must use mitigation measures to mitigate compatibility issues.	List of potential measures to mitigate issues of compatibility. The list is not exhaustive. Developers are encouraged to propose their own solutions.
1. Residential lot sizes in UL that are less than 60% of directly adjacent residential lots. 2. Residential lot sizes in RM that are less than 40% of directly adjacent residential lots. 3. Setback is significantly deeper or more shallow than predominant pattern of adjacent development. 4. Building's orientation to the street differs from predominant character of adjacent development. 5. Buildings within 40ft of a single-family residential structure that exceed a 3:1 ratio in height from the top of the highest building to the base of the residential structure. 6. Building size or street frontage dramatically differs from that of adjacent uses. 7. Lot coverage (including buildings and paved areas) dramatically exceeds that of adjacent uses.	▪ Provide gradual transition between smaller and larger residential lots through the arrangement and scale of lots and/or by providing appropriately scaled buffers. ▪ Minimize the mass of buildings that directly face smaller, pre-existing buildings by: 1) reducing the visual impact with larger setbacks than those prevailing on the street; 2) incorporating design and elevation features that complement adjacent lower-density development; 3) stepping buildings down to a scale (building bulk, footprint size, and height) complementing adjacent development; and/or 4) breaking up massing of buildings. ▪ Design structures in a manner that provides a visual or height transition and complements the scale and form of adjacent development. This can be done through reducing building height, providing step-backs, varying massing, increasing set-backs, and other techniques. ▪ Alternating/undulating facades, especially for buildings longer than a standard block. ▪ Adjust yards, landscaping, and building setbacks to reflect patterns in adjacent, lower-intensity residential areas. ▪ Use drainageways and swales, mature trees, wetlands, prairies, and grassland areas to improve compatibility in building scale. ▪ Locate, design, and manage stormwater management features (including retention and detention basins, swales, surface drainageways, constructed wetlands, and greenways) to provide visual amenities or entryways, or to provide opportunities for passive recreation. ▪ Provide most parking in the interior of multifamily residential projects rather than between buildings and the street, using residential buildings to define the street edge. ▪ Use landscape, pedestrian ways, bioswales, and parking design to divide large parking lots into smaller blocks. ▪ Use landscaped buffers and screening to reduce the visual impact of parking facilities on adjacent residential areas. ▪ Place parking lots between taller commercial buildings and single family homes.

(O) OPERATIONAL IMPACT

These potential conflicts are caused by operational characteristics such as noise, light, hours of operation, emissions, and odors. Typically operational impact concerns arise when a project is proposed next to a less intense use. However, in some cases the proposed project may need to take measures to reduce the impact of an existing use, such as a residential use proposed next to an existing industrial use.

TRIGGERS	MITIGATION MEASURES
Projects that meet the criteria below must use mitigation measures to address compatibility concerns.	List of potential measures to mitigate issues of compatibility. The list is not exhaustive – developers are encouraged to propose their own solutions.
1. Noise levels above those found in typical residential settings; 2. Any detectable odors; 3. Spill light above that found in typical residential settings; or, 4. Hours of operation before 6 am or after 10 pm of businesses within proximity to residential uses.	▪ Contain operating effects (including noise and odors) within building walls to the maximum degree possible and at least within site boundaries. ▪ Use vertical screening to block visual effects of high-impact components such as mechanical equipment and service areas. ▪ Direct light generated by higher intensity uses, including direct illumination of parking and service areas, signs, and structures, away from adjacent residential areas and public streets. ▪ Screen drive-through services and integrate screening into the overall design of buildings and landscaping. Contain the visual impact of these service functions from adjacent public streets and neighboring residential properties. ▪ Reduce noise through additional wall insulation, plantings, fences and walls, and strategic placement of doors and windows.

(T) TRAFFIC

In auto-oriented settings, the amount, timing, and routing of traffic generated by the use can produce impacts on the surrounding area. This measure focuses on the differences in the amount of traffic generated between a proposed project and existing uses. Issues of traffic compatibility may be less of a concern in UC, TOD, UH and DT LUTAs.

TRIGGERS	MITIGATION MEASURES
Projects that meet the criteria below must go through mitigation measures to address compatibility problems.	List of potential measure to mitigate issues of compatibility. The list is not exhaustive – developers are encouraged to propose their own solutions.
1. Inconsistent with the Roadway Compatibility Chart on the following page. 2. Average daily traffic substantially exceeds that of existing, adjacent uses.	▪ Coordinate with the City to construct improvements necessary to mitigate the project's impact on the subject street or intersection. Enter into a development agreement with the City to jointly upgrade intersections or networks over time. ▪ Utilize site designs, building groupings, and site features that accommodate and encourage the use of transportation alternatives, including pedestrian, bicycle, and public transportation. Examples of techniques include continuous walkways from public sidewalks, transit stops, and multi-use paths and trails to building entrances; use of durable surface materials to define pedestrian routes and crossings; and visible and convenient bicycle parking facilities. ▪ Increase the connectivity of the street network to reduce reliance on single routes for access. ▪ Design connections to avoid channeling traffic generated by higher-intensity uses onto Neighborhood streets except as part of comprehensively planned, mixed-use projects. Provide means of access to residential areas that avoids requiring residents to use Arterial streets for short-distance trips. ▪ Connect buildings on the site with internal streets and drives, and pedestrian connections and pathways to prevent unnecessary local traffic in adjacent areas. ▪ Make maximum use of internal cross-easements and shared access points between or within individual projects. ▪ Use traffic calming techniques to reduce speeds between adjacent properties.

Roadway Compatibility

The Roadway Compatibility Chart links the intensity of any activity to the road type that is most appropriate for that intensity. The intent is to fit developments and roads together by ensuring that the activity creating trips is located on a roadway designed to handle the impact. It also strives to make efficient use of public investment by not overcrowding or underutilizing roadways.

Examples:

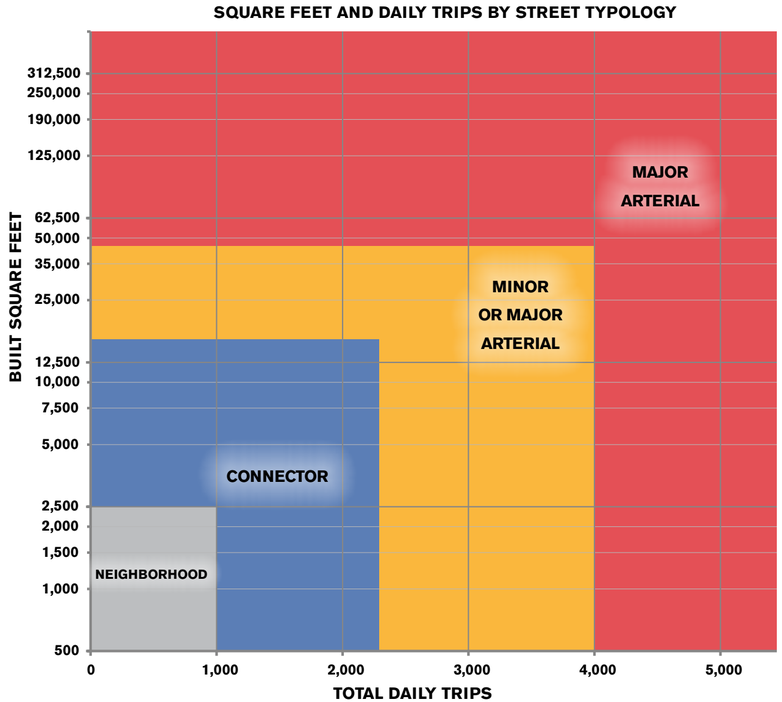
- A 2,500 square foot fast food restaurant with a drive through is expected to create 1,240 daily trips. This would mean the access to the site should be taken from a Connector or larger street.
- A 40,000 square foot supermarket is expected to create 5,100 daily trips. This would mean the access to the site should be taken from a Major Arterial.
- A 100,000 square foot warehouse is expected to create 350 daily trips. While the trips generated are not significant, the scale of the project would mean the access should be taken from an Arterial.

For the base LUTAs, it would be acceptable to move up one classification to a street able to handle more intensity. In the case of the fast food restaurant, it could take access to a connector, or the next higher classification of a minor/major arterial.

For the Urban Commercial, Regional District, and Employment Layers, it is expected that more intense uses can take access to lower classified roadways. A shopping center may fall in the traffic compatibility range of a minor/major arterial, but the best way for it to take access is directly from a neighborhood or connector street that intersects the arterial at a controlled intersection. This would be dependent on the center having good internal circulation and providing those access points in the half of the block nearest the arterial.

ROADWAY COMPATIBILITY CHART

Links the intensity of any use to the street type that is most appropriate.



The chart utilizes the Institute of Transportation Engineers (ITE) Trip Generation charts to project trips for a use based on the proposed square footage of the proposed development.

Service Efficiency & Availability

LAND SUPPLY AND EFFICIENCY OF SERVICES

The Land Use Plan utilizes a detailed analysis of service efficiency to determine where urbanized Typology Areas should be designated. The Urban Low Intensity LUTA (UL) was applied through an analysis of three primary utilities and services – sanitary sewer, water, and fire, as illustrated on pages 85 – 87. Urban Low Intensity is applied to areas that already have good access to these core services. Areas that do not have good access were designated as Urban Future (areas that may be appropriate for future urban development); RL and RM (areas that should remain at a density lower than what is efficient to provide urban services to; and Agricultural Preserve (active or potential agricultural land).

The goal of the Land Use Plan as it relates to the area designated for urbanization is two-fold: (1) direct urban development into areas that are most efficient for the City to serve; and (2) ensure that there is enough land supply within the designated area so that affordability is not compromised due to a lack of developable land. The latter goal is called "market choice".

LAND SUPPLY IN URBANIZED AREAS

The map to the right illustrates the total amount of developable land within typology areas designated for "urban" development. This includes total buildable acreage (excluding undevelopable land) that is served by utilities (red), total acreage that is buildable, served by utilities, and urban zoned (dark grey) and acreage that is buildable, served, zoned, and platted (black).

As described in the charts below, the land supply for urbanized development in the Land Use Plan consists of:

- over 56,000 acres of land for new development that is both buildable and currently served by water and sewer;
- 25,000 acres of land already zoned for development;
- 31,700 acres of buildable, served land that is currently in large 20 acre+ tracts available for sub-division;

The distribution of land supply by city sub-areas is found in the chart to the right.

MARKET CHOICE

The population forecast used in plan**okc** called for approximately 39,000 new residential units to be built in Oklahoma City in both urban and rural areas over the next 10 years. 37,500 – 96% – of this growth will be built in urban areas.

Over the next 10 years, if Oklahoma City were to grow the way it has over the past two decades, market choice will be 3.75 within urban LUTAs. In other words, there will be 3.75 times more land than is needed to serve demand. plan**okc** expects and facilitates a more compact development pattern than past trends, meaning for anticipated future demand, the land supply is 6.73 times the amount of projected growth.

BUILDABLE* URBAN LAND SUPPLY BY SUB-AREA (acres)

	Core	NW	NE	SE	SW
UL	-	16,028	6,170	1,795	11,866
UM	604	222	1,174	38	1,081
UH	261	-	158	-	16
DT	67	-	-	-	-

**Does not include existing rights-of-way or floodplain*

LAND SUPPLY

Sum of Gross Buildable Acreage	
Buildable citywide	168,908
Buildable and served by water and sewer*	56,740
Buildable, served & urban zoned	25,001
Buildable, served, urban zoned, & platted	2,000

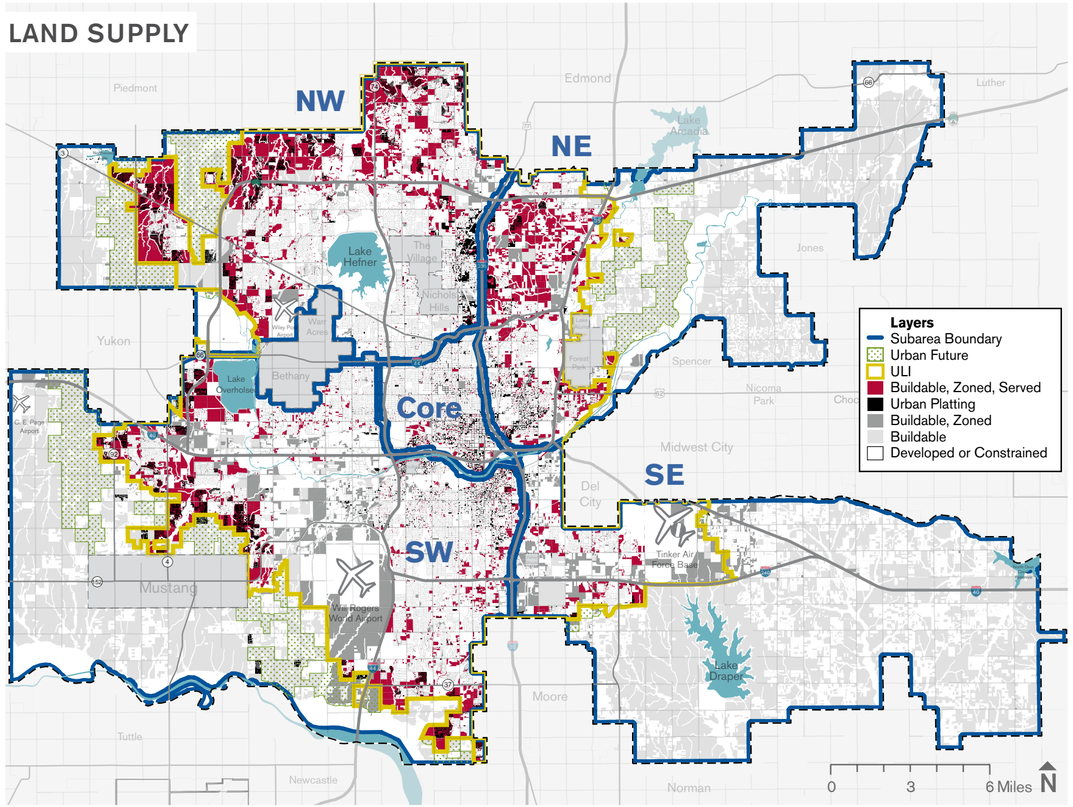
**18,191 acres exist in Heavy Industrial or Employment LUTAs. The remaining 38,549 acres exist in Urban LUTAs.*

LAND SUPPLY: 20+ ACRE SITES

Sum of Gross Buildable Acreage	
Buildable citywide	118,769
Buildable and served	31,740
Buildable, served & urban zoned	14,914

LAND SUPPLY SUMMARY

Market Choice: Past vs. Future	
Urban housing demand to 2024	37,851 new units
Acreage needed (past trends)	15,140 new acres
Acreage remaining	41,600 acres
Market choice	3.75
Acreage needed (plan**okc**)	8,432 new acres
Acreage remaining	48,307 acres
Market choice	6.73



SERVICE PROVISION

Each city service can be provided more effectively and with lower cost if the major factors influencing service are given a leading position in determining how that service will be provided. For efficiency it is most desirable to use any extra capacity in these systems that we have now, and then grow them in a way that generates the least new cost. For example, sewerage can be pressurized and pushed uphill or over long distances, but it requires additional facilities and large and constant expenditures of energy. A more efficient method is to use gravity flow by strategically opening new sewersheds at the appropriate time. Fire, water, and sewer services are impacted by location much more than other City services:

Fire Service: Most calls for emergency service need quick response so the travel distance to any point from a fire station becomes the controlling feature of how well fire services can be provided to that point.

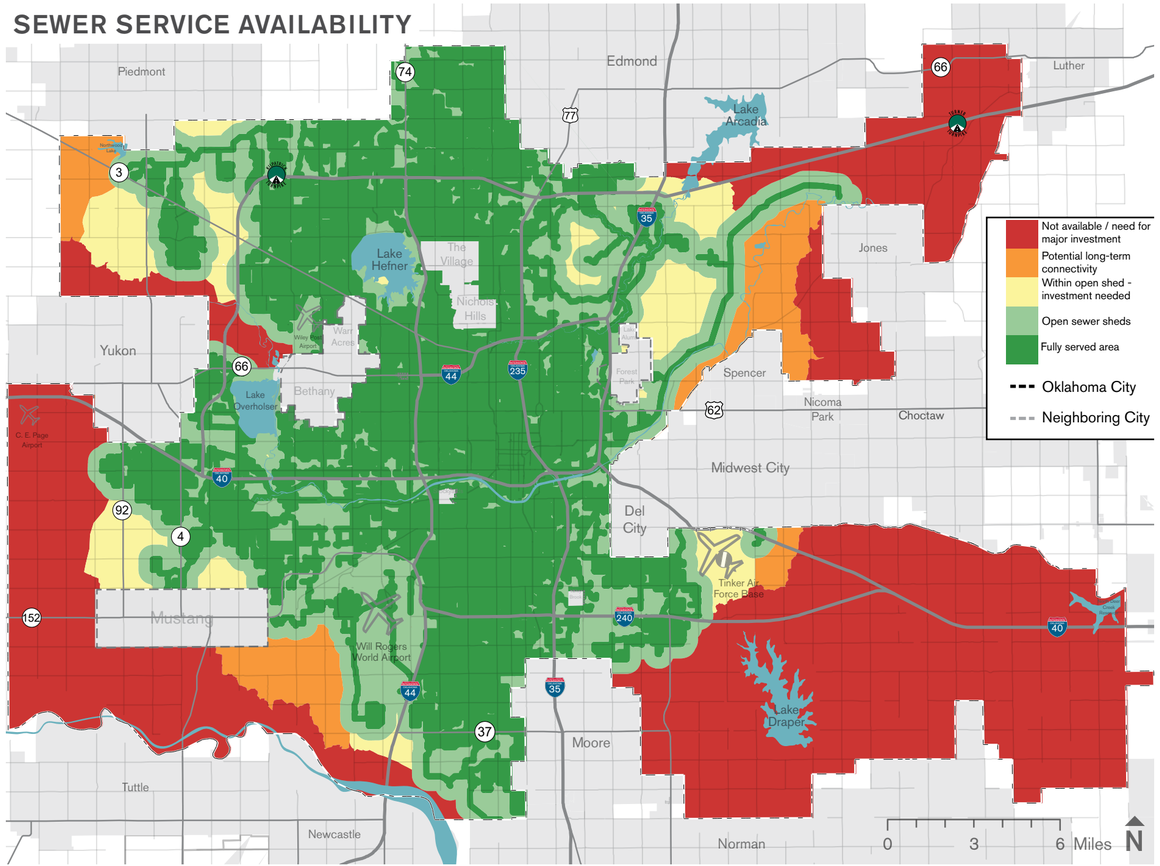
Water Service: Water is delivered through pressurized pipes, so the further away from treatment plants or the higher up water must be pushed, the more energy will be used. It is also much less expensive to connect to pipes that are already in place than to extend new pipes into new areas and skip past those pipes that are in place but underutilized.

Sewer Service: The sewer system is heavily reliant on gravity flow and does everything possible to avoid costly pumping and lifting, making natural topography of greatest importance to the system. Development is most efficient where pipes already exist or are close-by and lead down to an existing treatment plant.

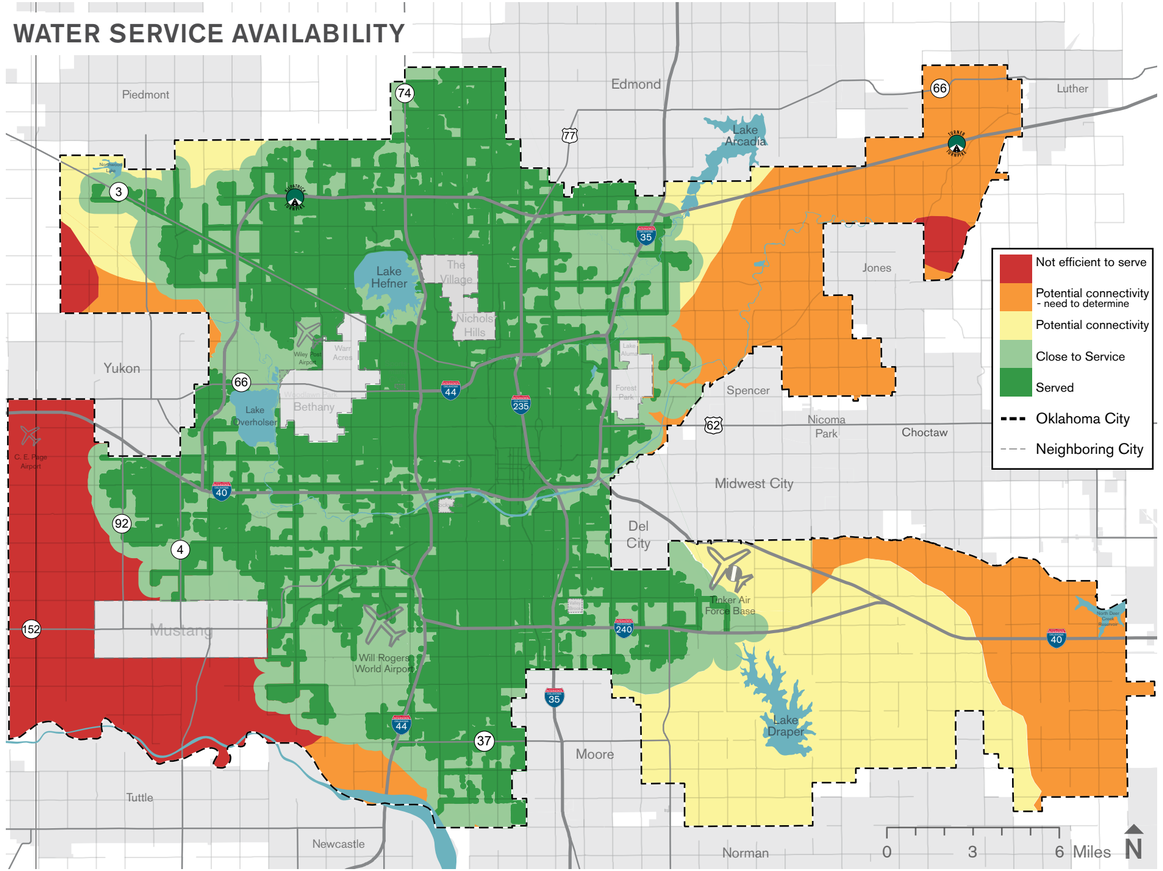
On the table below and the maps that follow, green indicates areas that are currently served, some available capacity, and could therefore support more development efficiently; yellow shows areas where expansion of urban services would be least costly; red shows areas that would be difficult and costly to provide with urban services. The confluence of good service for all three categories indicates readiness for urban development.

	SEWER SERVICE AVAILABILITY	WATER SERVICE AVAILABILITY	FIRE SERVICE AVAILABILITY
	Fully served areas (within 1/8th of a mile of a sewer line).	Currently served.	Less than 300 seconds of travel time (target urban service level) from a station in an urban LUTA.
	Within 1/2 mile of a downstream main; or within sewer sheds that are efficient to serve.	Close proximity to fully looped, well-connected portions of water network	n/a
	Within open shed or partially open shed. Need for new capital investment to open entirely to new development.	Potential connectivity – likelihood of good pressure without substantial boosting.	Less than 390 seconds of travel time (target rural service level) from a station.
	Potential long-term connectivity to the system based on significant capital investment required to expand infrastructure.	Potential connectivity – need to determine if pressure will be sufficient or whether a booster station is required.	n/a
	Need for major investment on the scale of lift stations or a new wastewater treatment plant.	Not efficient to serve based on distance from water source and the number of areas of the city that have better connectivity and service potential.	Longer travel times than urban or rural targets.

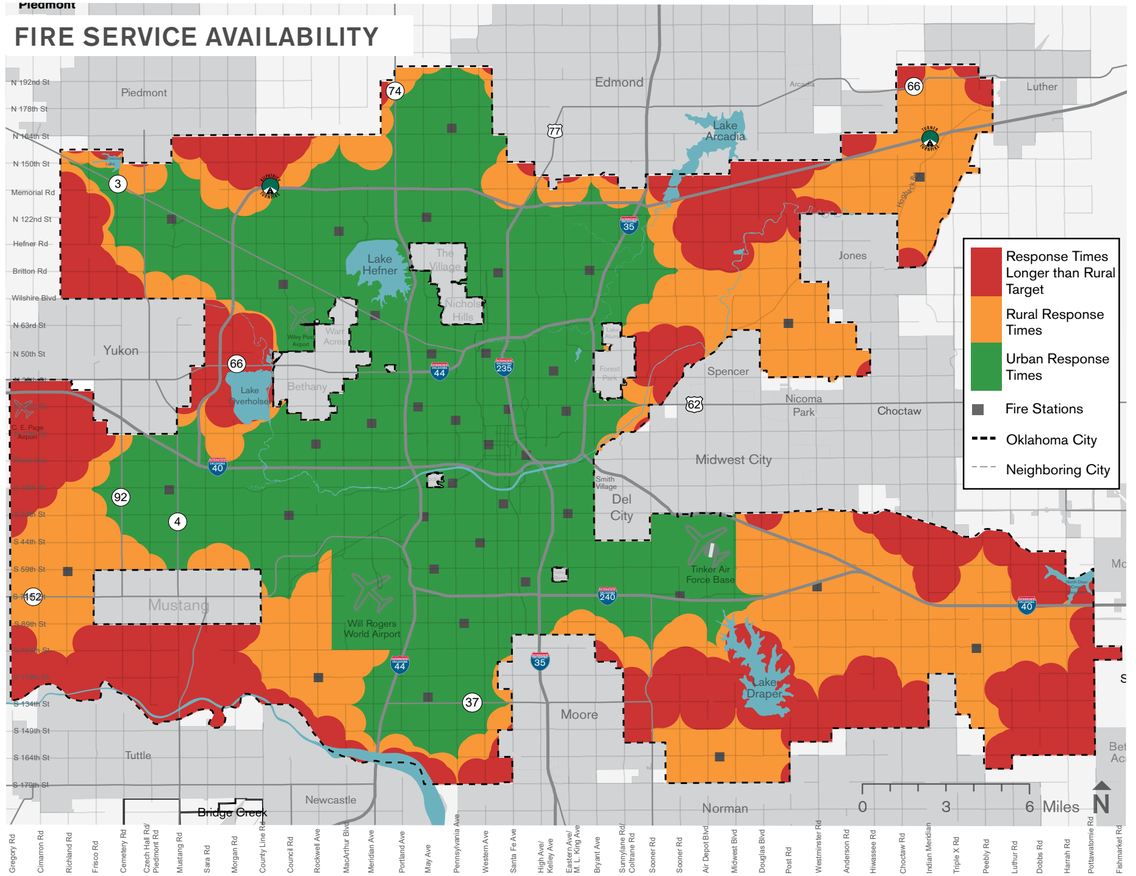
SEWER SERVICE AVAILABILITY



WATER SERVICE AVAILABILITY



FIRE SERVICE AVAILABILITY



Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) have special environmental attributes worthy of retention or special care in order to:

1. Maintain habitat, open space and wildlife corridors;
2. Provide stormwater management, filtration, flood and erosion control benefits; and
3. Protect surface and ground water quality.

WHY DO ENVIRONMENTALLY SENSITIVE AREAS MATTER?

During the "Issue Identification" phase of planokc, City staff, citizens, and stakeholders representing various environmental agencies and groups identified the following issues and trends related to impacts of development on Environmentally Sensitive Areas:

- Declining surface water quality (increasing number of impaired streams and water bodies);
- Increasing threat to groundwater quality and quantity;
- Increasing potential for flooding;
- Decreasing biological diversity and abundance;
- Increasing fragmentation of habitat and open space (including reduction and fragmentation of historic natural resources such as the Cross Timbers, and native prairies;
- Loss of critical habitat;
- Loss of ecosystem services;
- Loss of overall tree canopy;
- Increasing threat of invasive species;
- Declining air quality; and
- Lack of public awareness regarding impacts of development on environmentally sensitive areas.

WHAT AREAS ARE IDENTIFIED AS "ENVIRONMENTALLY SENSITIVE"?

The following maps illustrate the types of natural features and/or habitat types that may be considered environmentally sensitive, including 1) riparian areas, 2) upland forests and 3) vulnerable aquifers.

1. **Riparian areas** are vegetated areas adjacent to streams, lakes, ponds, and wetlands that are composed of a mixture of trees, shrubs, and grasses.
2. **Upland forests** are forested lands primarily found in higher elevations outside of the floodplain and riparian/streamside corridors. Upland forests are dominated by species that prefer well-drained soils, or soils that do not become saturated for extended periods of time. In Oklahoma City, upland forests are made up of two forest groups: the Cross Timbers forest (historic forest) composed primarily of old-growth post oak and blackjack oak trees, and younger re-growth forests that may contain a broader mixture of tree species in addition to re-growth post oak and blackjack oak trees.
3. **Vulnerable aquifers** are groundwater recharge zones that are vulnerable to pollution from the surface, including both point and non-point sources, as water moves downward from the surface to become groundwater. Aquifer vulnerability is directly related to the location, depth, and composition of the aquifer as well as the recharge rate of the aquifer. These areas are important for maintaining groundwater quantity and quality.

HOW CAN DEVELOPMENT IMPROVE ESAs?

Development may occur in areas where different types of Environmentally Sensitive Areas exist, each potentially having different degrees of functionality and health. If Environmentally Sensitive Areas exist on a site, development should strive to meet the objectives in this plan by customizing engineering and design techniques to the functionality and health of the natural resources found on the site. The following recommendations outline some methods and best practices to protect ESAs, based on a mitigation hierarchy. The mitigation hierarchy includes the following actions, in order of priority:

1. Avoidance
2. Minimization
3. Restoration
4. Simulation
5. Offset

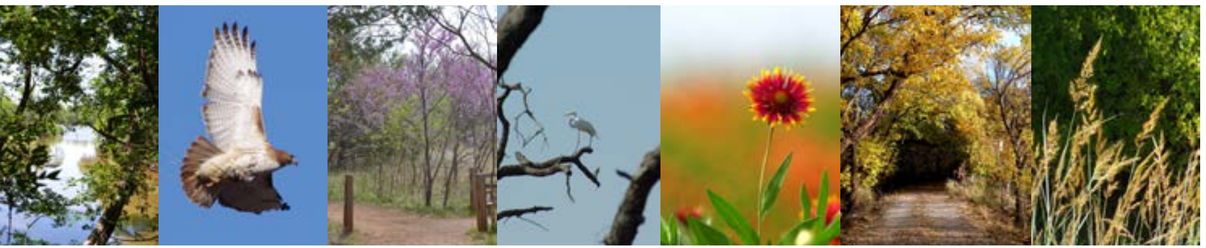
The following examples of actions are recommended due to broad applicability in our area; however, a developer may propose alternative design or engineering techniques that achieve the same or better outcomes for a site. The Oklahoma Department of Environmental Quality, the Oklahoma Water Resources Board, and the Oklahoma Department of Agriculture may be able to provide additional information regarding riparian buffer design, stream restoration techniques and native vegetation selection.

ESA PROCESS

Step 1: Determine if Environmentally Sensitive Areas exist on a proposed development site.

Step 2: Assess any potential impacts the proposed development may have on environmental attributes, such as: habitat, open space and wildlife corridors; filtration, flood and erosion control; and surface or groundwater quality.

Step 3: Customize the design and engineering of the development to include appropriate preservation and restoration methods, techniques designed to mimic natural systems, or any combination thereof to offset impacts to the ESAs on the site. The following guidelines and best practices are recommended approaches; however, other design and engineering solutions may be proposed that achieve the same or better results.



UPLAND FORESTS

OBJECTIVE

Preserve historic Cross Timbers and other upland forests to the maximum extent practical to maintain the following benefits:

- Ecosystem services
- Habitat preservation and connectivity
- Air quality
- Stormwater management
- Mitigation of the heat island effect
- Preservation of natural heritage

GUIDELINES AND BEST PRACTICES

Development in areas where upland forests are indicated on the following map should strive to achieve the objectives outlined above by following the guidelines and best practices to the greatest extent possible. If guidelines and best practices cannot be achieved, different preservation or mitigation alternatives should demonstrate how the proposed development will achieve the objectives of this section.

Avoidance and Minimization

- Strive to maintain as much native Cross Timbers tree cover as possible, including the native understory, based on the following preservation goals. These goals may be reduced if a Certified Arborist determines that the health of the tree canopy is considered poor or diseased, or the canopy consists of predominantly invasive species. Presence of non-native, non-invasive species is insufficient to justify removal unless such species are replaced with native species.

Percentage of Existing Upland Forest Cover on Entire Site	Preservation Goal (% of Forest Cover)
90-100%	60%
80-90%	70%
70-80%	80%
60-70%	90%
60% or less	100%

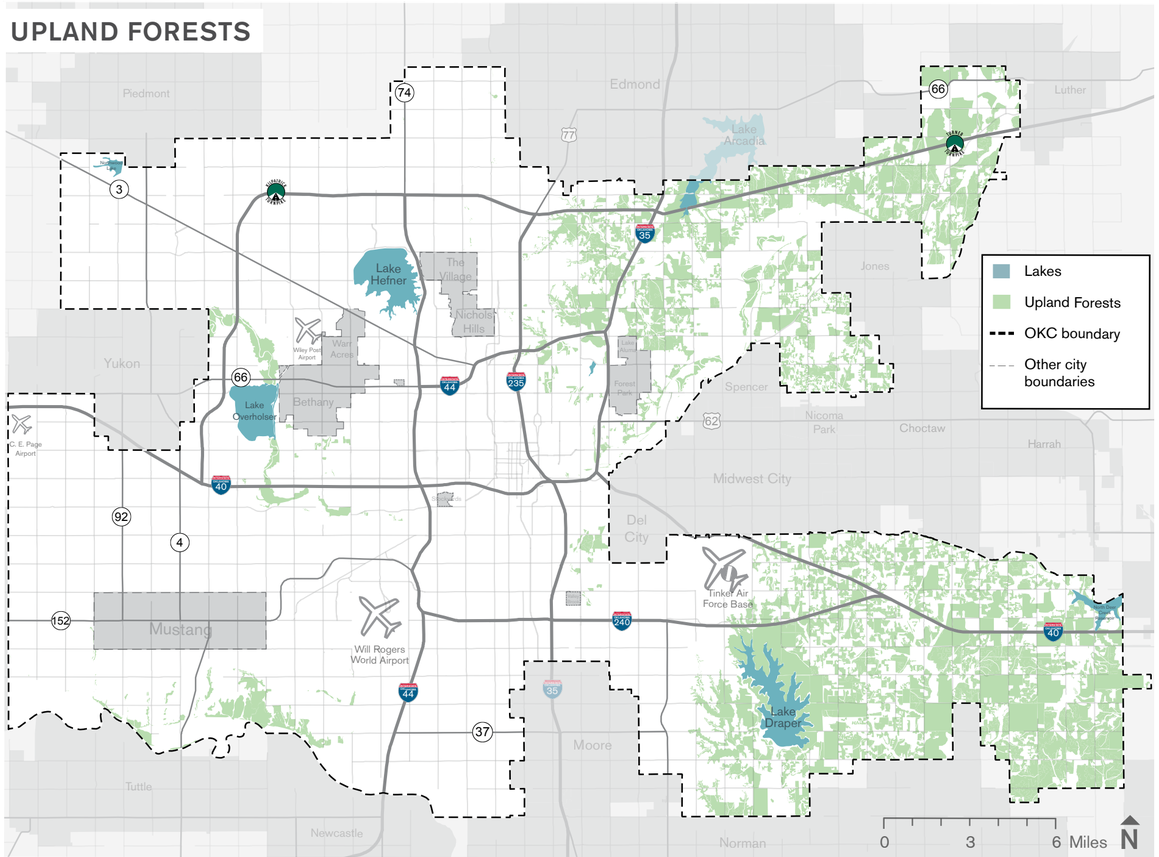
- Reduce fragmentation of habitat and forests by preserving existing forest connectivity within the property and between adjacent properties. Often this is accomplished by retaining large blocks of Upland Forests under common ownership or easements.

Restoration

- Where new-growth or re-growth upland forest trees are removed during construction, replant trees and other native plants on-site. New trees should be planted in clusters that mimic the original tree canopy.

Offset

- Where new-growth or re-growth upland forest is removed during construction, offset losses by replanting a native forest in an off-site location in need of restoration that provides similar ecological benefits.



VULNERABLE AQUIFERS

OBJECTIVES

Protect vulnerable aquifers from pollution and depletion to ensure a continued supply of clean, accessible groundwater for residents not served by the municipal water system. Preserve groundwater recharge zones from which water can percolate and infiltrate.

GUIDELINES AND BEST PRACTICES

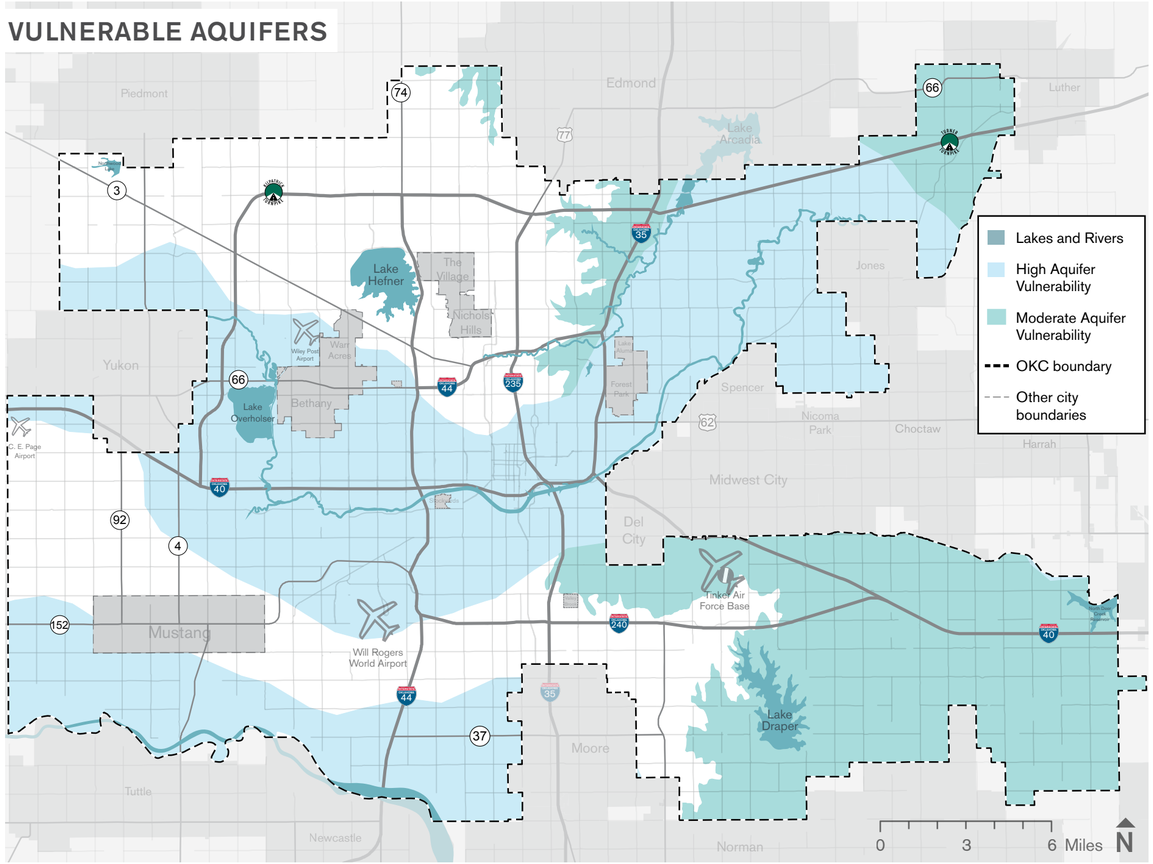
When proposing a development project within an area of high to moderate aquifer vulnerability as shown in the following map, strive to meet objectives by utilizing the following guidelines and best practices.

Avoidance

- Preserve natural open spaces, including native prairies wherever possible. Native plants are drought tolerant and have deep root structures that slow stormwater runoff and increase ground water retention.

Minimization

- Utilize low impact development techniques, to minimize disruption to water percolation and infiltration, including but not limited to:
  - Pervious surface materials wherever possible for the construction of driveways, parking areas, sidewalks, patios, etc., in order to promote increased water percolation and infiltration.
  - Bioswales and rain gardens to capture stormwater and allow it to slowly infiltrate instead of running off.



RIPARIAN AREAS

OBJECTIVES

Preserve riparian areas to maintain:

- Habitat preservation and connectivity;
- Short and long term water quality; and,
- Stormwater management, flood, and erosion control

STREAM CORRIDORS

Top: A concrete-lined stream channel with riparian vegetation removed. Bottom: A natural-bottom stream channel bordered by a vegetated riparian buffer. This buffer provides multiple benefits related to stream flow and movement, pollution filtration, erosion control, flood control, stormwater infiltration, and enhanced natural habitat.

GUIDELINES AND BEST PRACTICES

Avoidance and Minimization

- Strive to preserve riparian habitat for all intermittent and perennial streams as shown on the USGS 7.5 minute quadrangles, and when possible, maintain or preserve the natural area within the FEMA 100-year floodplain.
- Best practices show that a minimum total buffer width of 100 feet is necessary to achieve the objectives outlined above. Healthy stream bank buffers provide for future stream movement, and support different ecosystem services or environmental benefits through characteristics that can be described in three types of zones:

Zone 1: Protect and preserve existing vegetation and habitat immediately adjacent to the stream.

Zone 2: Retain a transition area of grass and lower vegetation beyond the protected vegetation or tree line adjacent to the stream.

Zone 3: Maintain turf or other pervious materials to allow for filtration of sediment and pollutants from runoff beyond the protected vegetated area.

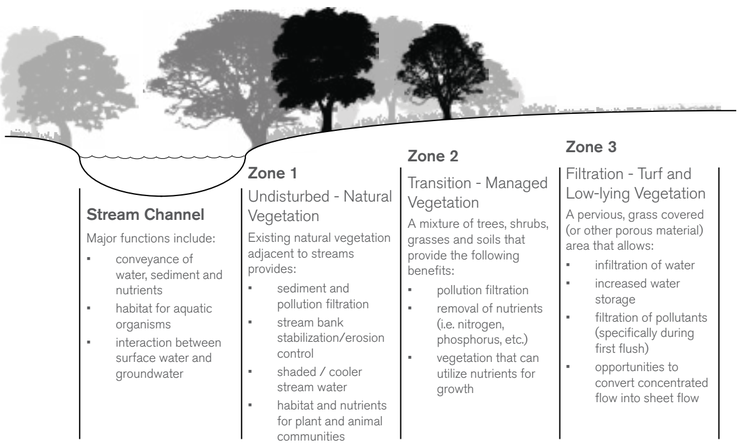


Diagram adapted from: Maryland Cooperative Extension, University of Maryland

- Maintain stream bank buffers in a natural or enhanced state, and keep all structures and impervious paving at least 100 feet from the stream bank. The buffer width should accommodate future stream movement, mitigate against erosion and flooding issues, and preserve the greatest extent of existing habitat possible. If less than a 100 feet buffer is proposed, the development should demonstrate that the objectives of habitat preservation and connectivity, stormwater management and flood control, erosion control, and filtration and water quality are being achieved through alternative means.
- In Urban LUTAs, the width of the buffer may vary based on the quality and condition of vegetation, animal and plant species, watershed level issues and adjacent land use. The buffer may extend into private property, provided easements or agreements are stipulated to ensure that obstructions such as fences do not disrupt water flow or natural systems that are being preserved within the buffer area.

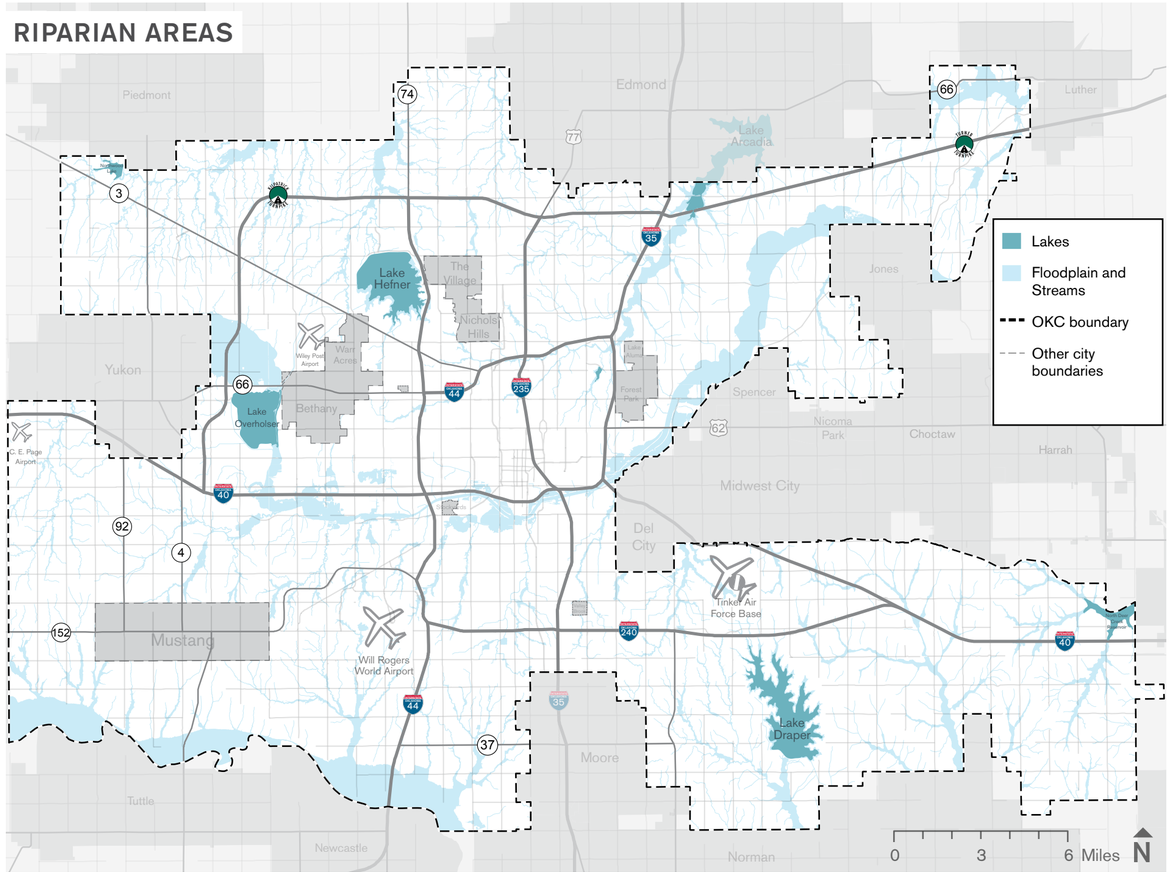
Restoration

- Streams that have been impacted due to previous development, agricultural activities, or upstream/downstream activities may have absent or sparse vegetation that does not provide desired benefits and ecosystem services. A developer may supplement existing vegetation by integrating appropriate new species, or plant new vegetation consistent with the zones depicted in the graphic above to restore natural systems and habitat typical of healthy functioning streams and lakes.

Simulation

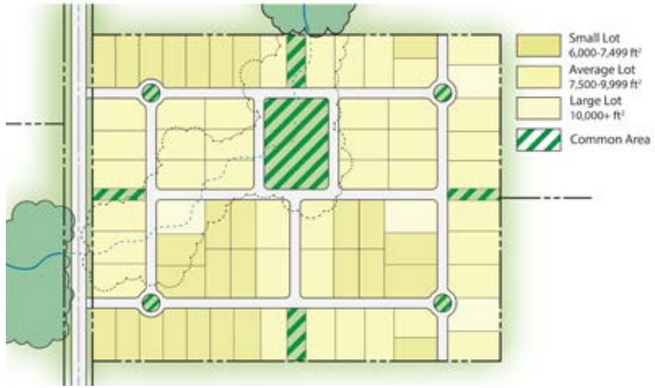
- A developer may use green infrastructure or low impact development techniques to mimic natural systems in areas where streams and riparian areas have been channelized or developed, primarily in the Downtown, UHI, and UMI LUTAs. Low impact development techniques include but are not limited to:
  - Treating or filtering of stormwater contaminants on site.
  - Creating opportunities to discharge run-off as sheet-flow after passing through grassy or vegetated open space areas, rather than discharging run-off through concentrated outfalls.
  - Creating attractive open space amenities that double as stormwater detention, retention, and / or filtering systems.
  - Utilizing rooftop collection systems and green roofs to capture first-flush run-off.
  - Utilizing pervious pavement or pavers in appropriate locations (i.e. sidewalks, parking spaces, trails, patios, etc.).
  - Utilizing at-grade or raised planters, vegetated landscape strips adjacent to roads and parking areas, and alternative curbing designs that allow stormwater to easily move from impervious areas to pervious areas.

RIPARIAN AREAS



SUBDIVISION LAYOUT EXAMPLES WITH ESAs

These two images show examples highlighting a few key differences in subdivision design as described in plan**okc**, especially those relating to Environmentally Sensitive Areas and housing variety.



Example 1: Significant modification of riparian corridor

- Site size: 19.88 acres
- Lots/Homes: 72
- Gross Density: 3.62 units/acre
- Stream corridor and riparian habitat highly modified
- Common area is stand-alone space, may include a small neighborhood park

Example 2: Preservation of riparian corridor and buffer

- Site size: 19.88 acres
- Lots/Homes: 82
- Gross Density: 4.12 units/acre
- Stream corridor and riparian habitat relatively intact (~100 foot buffer each side)
- Common area used as connection throughout the neighborhood and to nearby places, may include a small trail network.

3.0 INFRASTRUCTURE & INVESTMENT

One of the most important functions of the City is to build and maintain our infrastructure, including the transportation network, parks, and other facilities. This function has a profound influence on land use and place-making. The following sections (Livable Streets Principles, Street Typology, Access Management, and Retail Nodes and Corridors) are designed to provide clear direction to the City and the community about appropriate locations and types of infrastructure.

Livable Streets Principles

The Livable Streets concept is a design approach for streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation. The City Council has established priorities for guiding decisions and investments to improve the quality of life of our residents. One of these priorities, which is also reflected as one of plan**okc**'s Big Ideas, is to develop a transportation system that works for all residents.

Implementation of this goal requires a consistent and thoughtful approach to making investments in our multi-modal transportation network incrementally over time. City departments or City entities (Committees and Commissions) should consult this plan when creating or modifying ordinances, programs, and projects that affect the design of streets.

This chapter defines guiding principles and ideal standards for Livable Streets, but recognizes that physical constraints, context, and character of the surrounding built and natural environment require flexibility in application and implementation. The overarching goal is to ensure all users of the transportation network can travel safely, reliably, and independently, while also having adequate access to all transportation modes. Where accommodations for all users cannot be made, reasonable effort should be made to identify adjacent alternative routes and/or methods of travel.

Guiding Principles:

- Recognize the inextricable relationship of streets and the adjacent land uses, integrating existing and future land uses to design appropriate streets, and vice versa;
- Ensure the needs of all users are balanced;
- Integrate all modes of transportation, including walking, cycling, and public transit;
- Improve safety for all users, regardless of mode;
- Improve connectivity and circulation; and
- Provide adequate facilities for active transportation to improve public health throughout the city.

Street Typology

Previous functional classifications of streets provided a hierarchy that correlated traffic flow to land access. Traffic volume, speed, and level of service provided the basis for design criteria. This classification system fell short in the consideration of other users of the public right of way (pedestrians, bicyclists, and transit users), and was void of context for how adjacent land uses impacted the street and vice-versa. When designing roads, focusing only on traffic volume and speed is less productive than a contextual approach that considers nearby land uses, multiple user groups, and the creation of a sense of place.

The Street Typology augments the previous classification method with new, user-oriented considerations moving beyond considering the street system as a mere conveyor of automobiles. While the Street Typology is the City's new set of guidelines for street design, the functional classification system will continue to be used for federal purposes and where City code requires its usage. The Street Typology provides ranges of acceptable design parameters, but all designs are subject to engineering review to ensure safety and functionality of the system.

The maps and tables that follow include guidelines for accommodating elements within the public right-of-way. Elements vary, depending on LUTA, the expected intensity of development, and physical conditions and constraints.

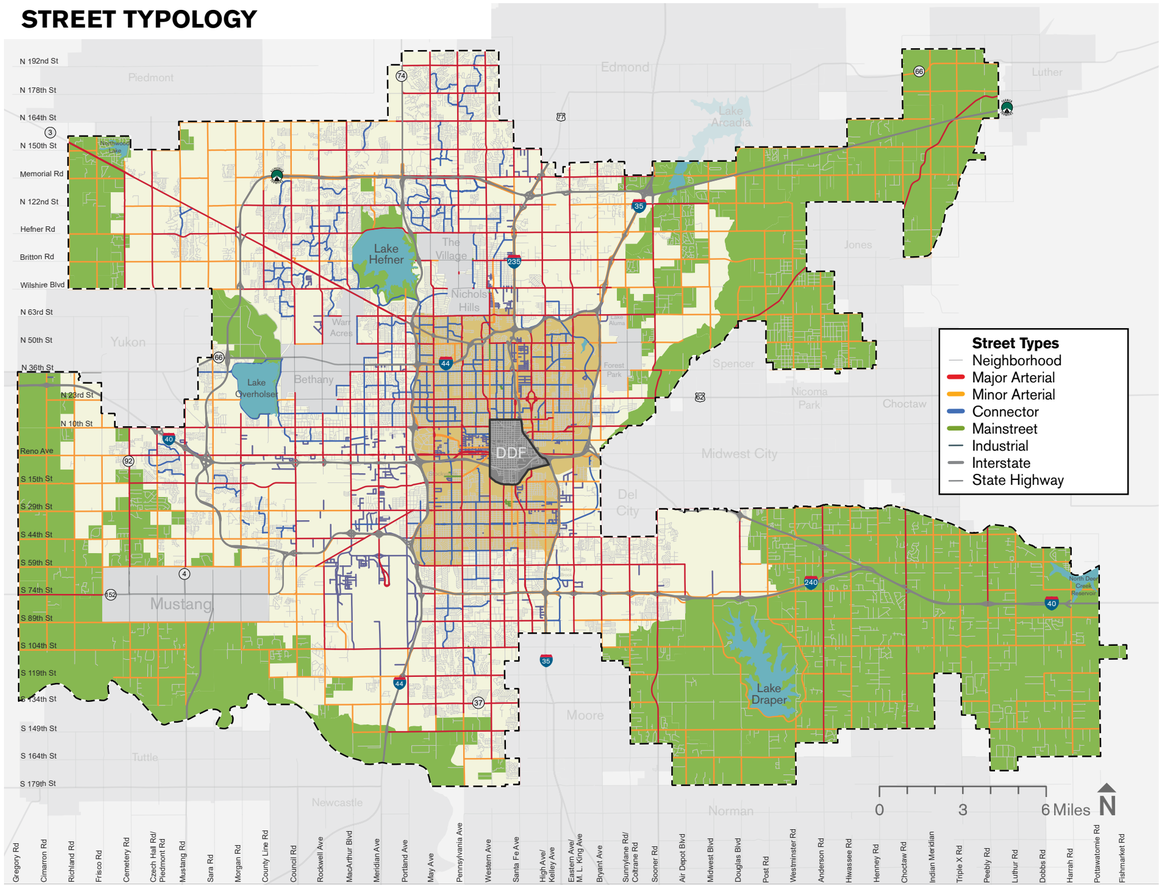
Street Types:

1. Major or Minor Arterial
2. Connector
3. Neighborhood
4. Main Street
5. Industrial
6. Downtown

BALANCE OF USERS

One of the guiding principles of the Street Typology is to ensure that the needs of all users are balanced, including automobiles, pedestrians, bicyclists, and transit-riders.

STREET TYPOLOGY



MAJOR OR MINOR ARTERIAL

LUTAs: UL, UM, UH, DT, EM, UF, HI

Description: Moving people across the city is the priority of the arterial system. Arterial streets need to accommodate through traffic, access to adjacent uses, and connections to the highway system. At the same time pedestrians, bicyclists, and transit users must be considered. Good access management needs to be utilized to protect traffic flow and increase safety. The interaction between the arterial and the abutting lower intensity districts will be determined by how other street types connect to the arterial system. How this interaction is achieved is key to ensuring land uses work together.

Priority Design User: Traffic flow and connectivity are the primary functions of the Arterial. Sidewalks should be separated from the roadway to the greatest degree possible. Bicycles should be accommodated with dedicated space such as cycle tracks or trails, or provided for on alternative routes. Cyclists can be accommodated on rural arterials with the use of wide shoulders.

Access Management: Access management techniques that improve the function of intersections (eliminating driveways from the functional portion of the intersection, median-controlled left hand turns, adequate throat lengths into parking lots, etc.) should be utilized. Where possible, driveways should be shared to reduce the number of collision points and reduce potential congestion problems.

CONNECTOR

LUTAs: UL, UM, UH, DT, EM, UF

Description: Connectors are the streets that move people through and between their neighborhoods. They connect to surrounding areas and uses, and become a secondary network of streets to the arterial system. Connectivity is important for all street types, but imperative for the Connector as it creates an opportunity for pedestrians and bicyclists to use a corridor separate from higher volume streets.

Priority Design User: Pedestrians and cyclists should be accommodated by creating slow vehicular travel speeds. Bike infrastructure could include lanes or sharrows. Safe pedestrian crossings should be achieved through well demarcated crosswalks, bulb-outs, and signage. Intersections with arterials need to be designed for safe pedestrian and bicycle traffic.

Access Management: Driveway cuts should be kept to a minimum while allowing local access to adjacent residential, commercial, or industrial development.

NEIGHBORHOOD

LUTAs: UL, UM, UH, , DT, RM, RL

Description: These streets primarily serve residential uses. However, street and neighborhood character can vary dramatically between urban (Urban High/ Downtown), suburban (Urban Low), and rural contexts. For example, neighborhood streets in UH and DT LUTAs may function at an increased capacity due to shortened block lengths and more efficient dispersal of traffic through a grid network, while neighborhood streets in UL may have longer block lengths, lower intensities, and less connectivity.

Regardless of the context, neighborhood streets are meant to move people to and from the places they live. But more than that, they are the public realm in which the social interactions occur that make a neighborhood more than a collection of houses. Efforts should be made to ensure that traffic moves at a slow pace, that connectivity is promoted, and the character of the street is a noticeable benefit to the people who live there.

Priority Design User: Pedestrians should be accommodated by creating slow vehicular travel speeds. Safe pedestrian crossings should be achieved through well demarcated crosswalks, bulb-outs, and signage. Bicycles can be accommodated in the travel way intermixed with slow moving traffic.

Access Management: Local access should be provided to adjacent residential, commercial, or industrial development.

MAIN STREET

LUTAs: UM, UH, TO, RD

Description: Main Streets contain a mix of activities and are defined by the character of the district surrounding them. Generally they are the streets on which a person could live, work, and shop. Because they touch so many varied uses they have to comfortably accommodate a multitude of users, including pedestrians bicyclists, transit riders, and drivers.

Priority Design User: The priority consideration in design should be pedestrians. As such, blocks should be shorter and there should be a high level of connectivity. The pedestrian zone should be generous containing safe and inviting sidewalks with emphasis placed on safe crossings when traversing from one side of the streets to the other. Street design that accommodates low-speed traffic through the use of bulb-outs, reduced curb returns and narrow widths on the vehicle travelway should be the norm.

Access Management: High level of access management required to preserve the pedestrian environment and maintain reasonable traffic flow.

INDUSTRIAL

LUTAs: UL, UM, UH, UF, EM

Description: Uses along industrial streets are unique. Streets associated with this use must move goods and materials on large vehicles while being connected to the arterial and highway systems. Design considerations include larger curb radii and wider lane widths.

DOWNTOWN

LUTAs: UH, DT

Description: Downtown Oklahoma City requires a special Street Typology that accommodates high volumes of pedestrian and transit activity. For the appropriate typologies related to Downtown, refer to the *Downtown Development Framework* document.

ACCESS MANAGEMENT

Access management is the systematic control of the location, spacing, design, and operations of driveways, median openings, interchanges, and street connections to a roadway.

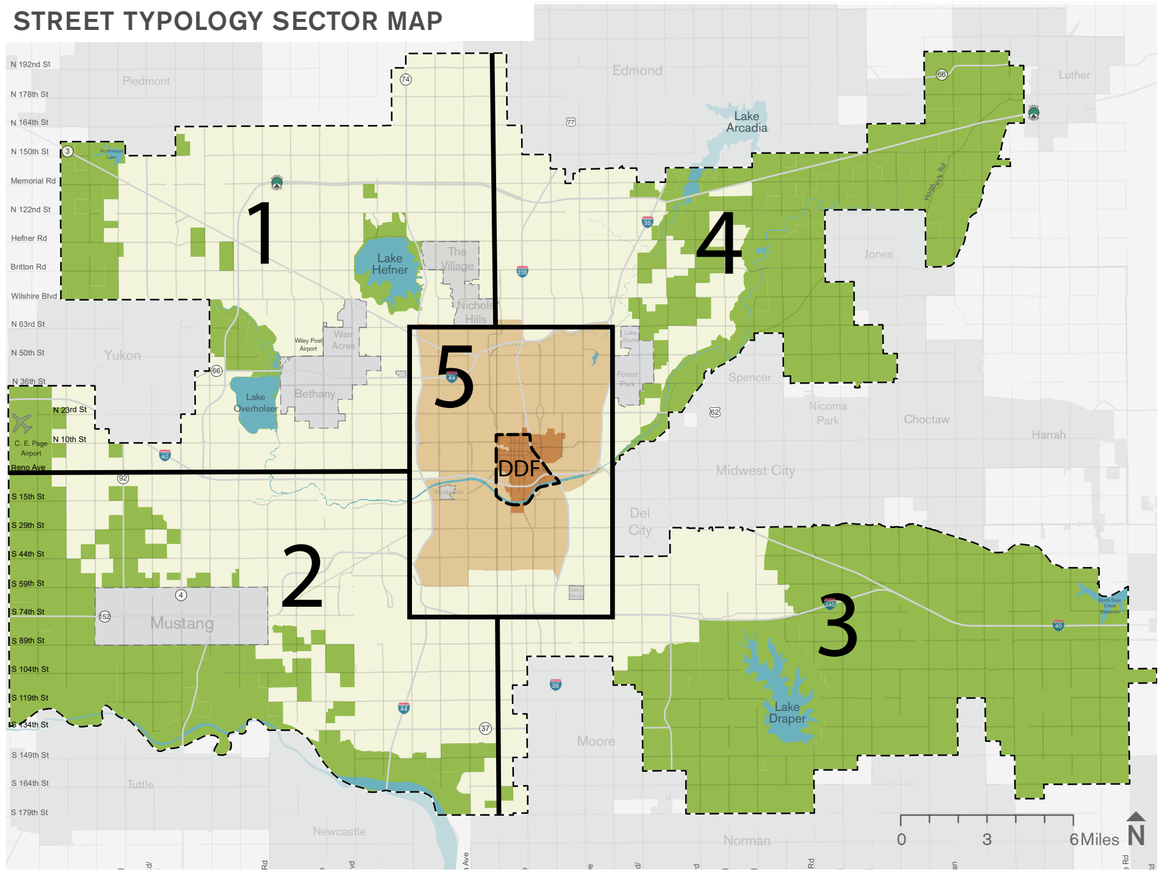
The purpose of access management is to provide vehicular access to developed land in a manner that preserves the safety and efficiency of the transportation system.

Within the context of street typologies, access management should be a guiding principle, the details of which will be addressed as a roadway is built, reconstructed, or otherwise improved. The land use context, the functional intent of the road, and the engineering constraints of each project influence the specific access management techniques for any given project. Some areas of Oklahoma City have been prioritized for access management improvements as described in the Access Management Focus Areas section.

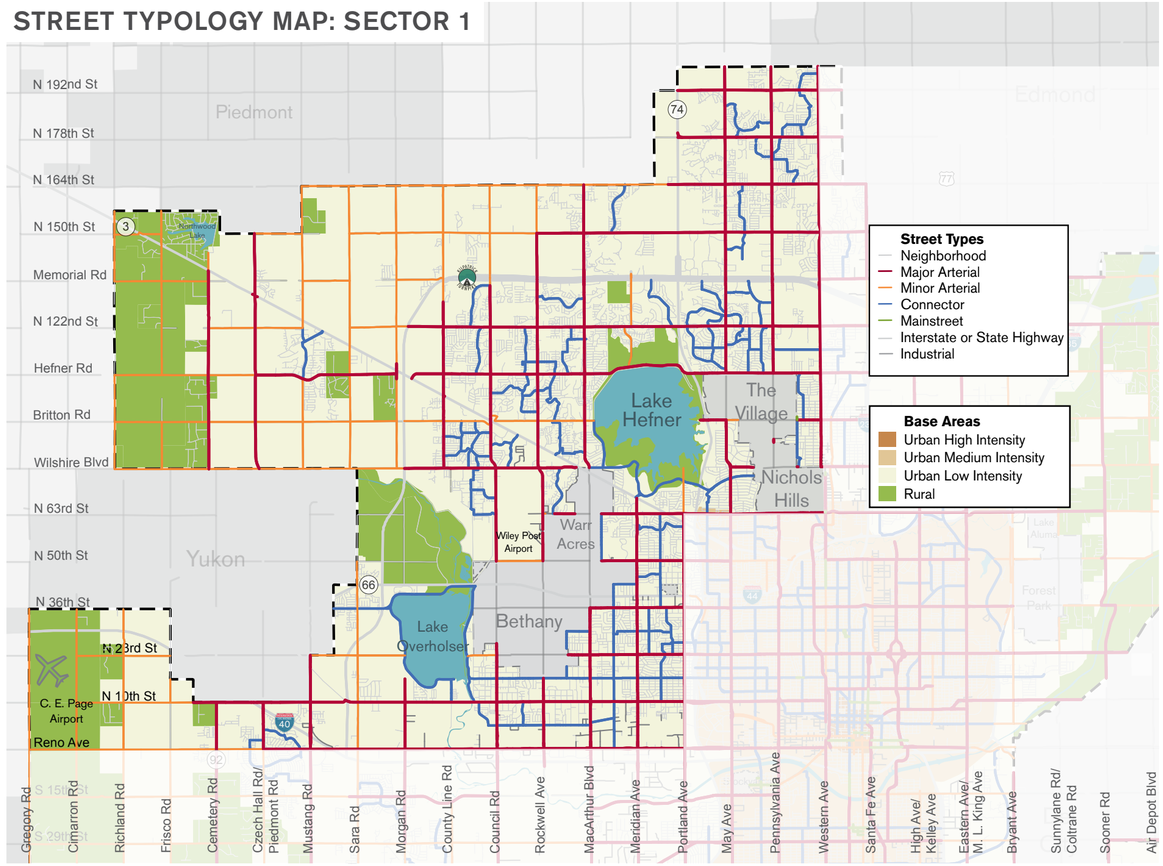
STREET TYPOLOGY DIAGRAMS

The diagrams and tables that follow indicate how different users of the public right of way can be accommodated. Elements vary depending on LUTA and the expected intensity of development.

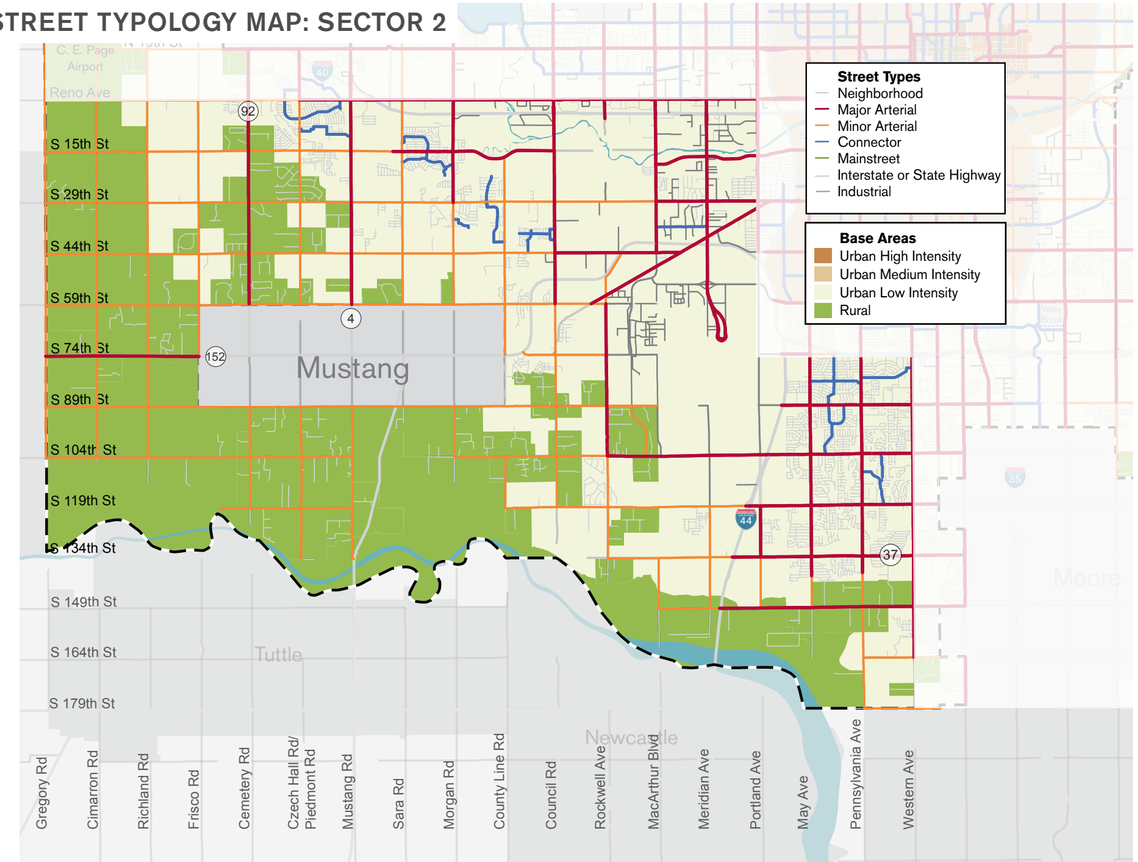
STREET TYPOLOGY SECTOR MAP



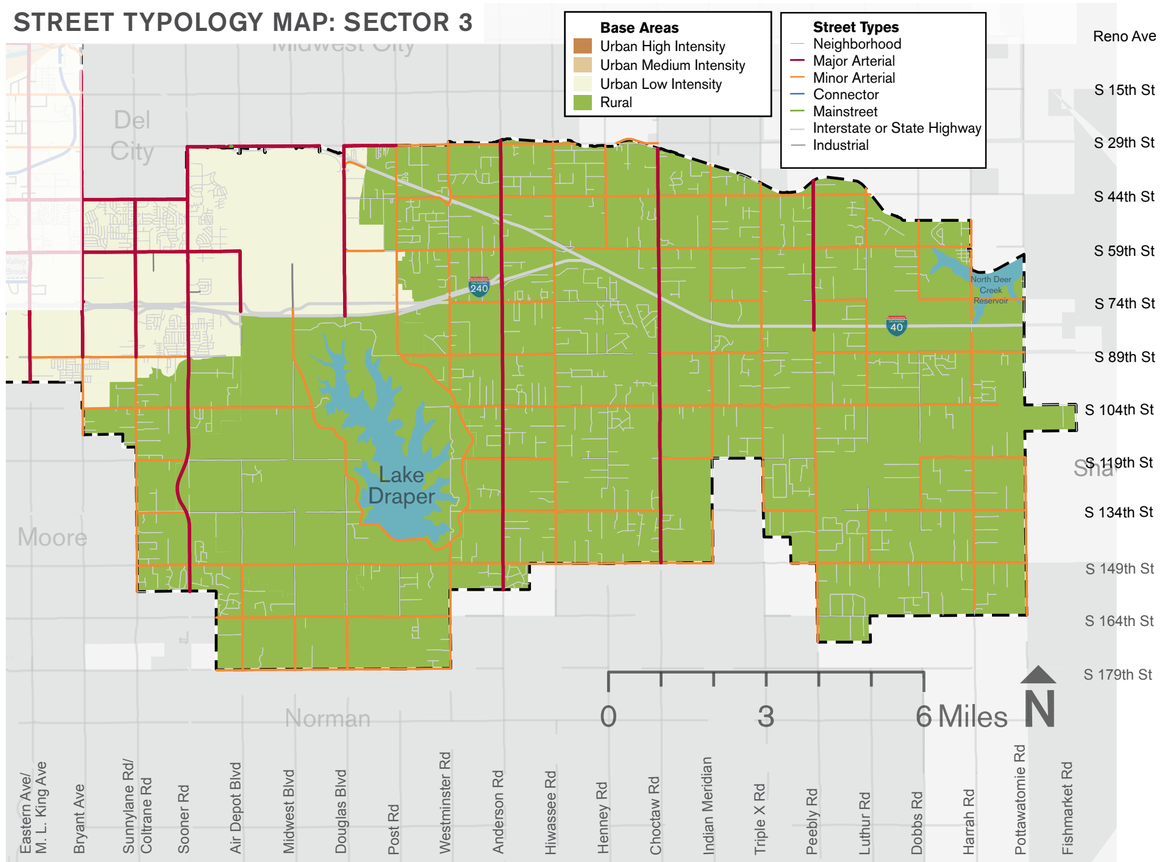
STREET TYPOLOGY MAP: SECTOR 1



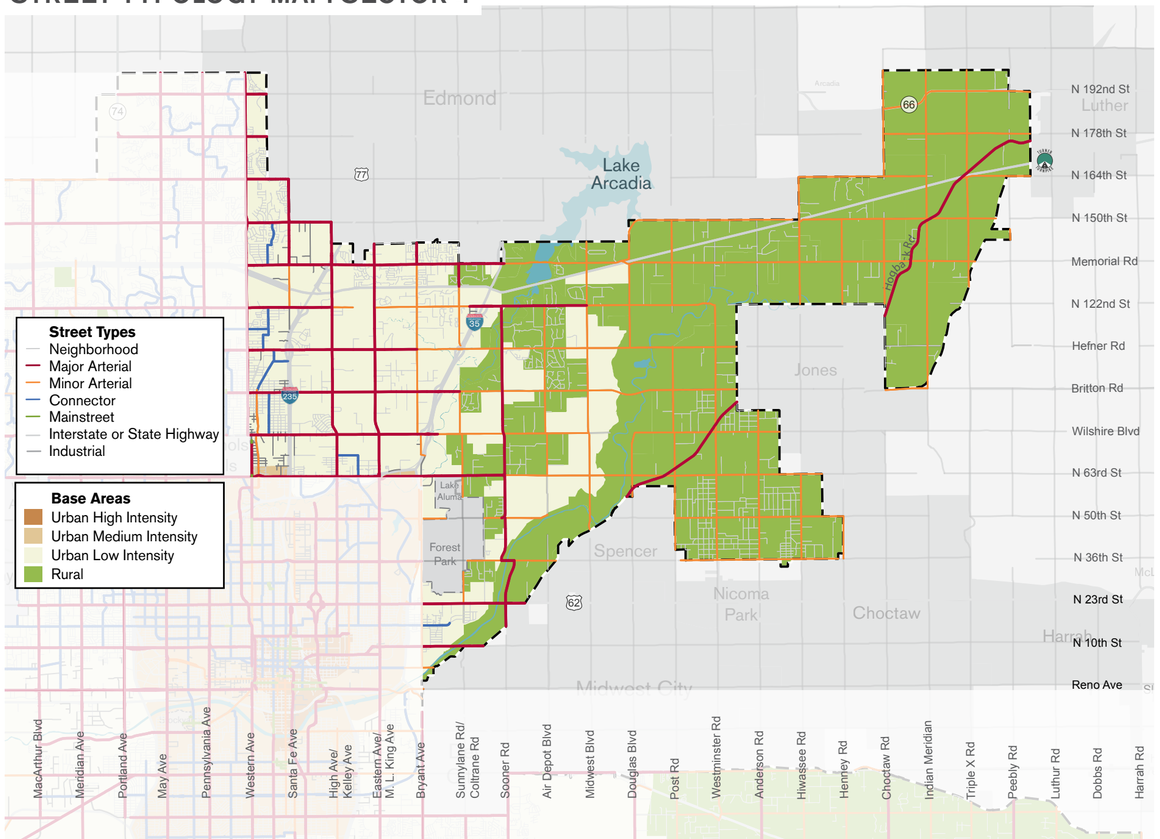
STREET TYPOLOGY MAP: SECTOR 2



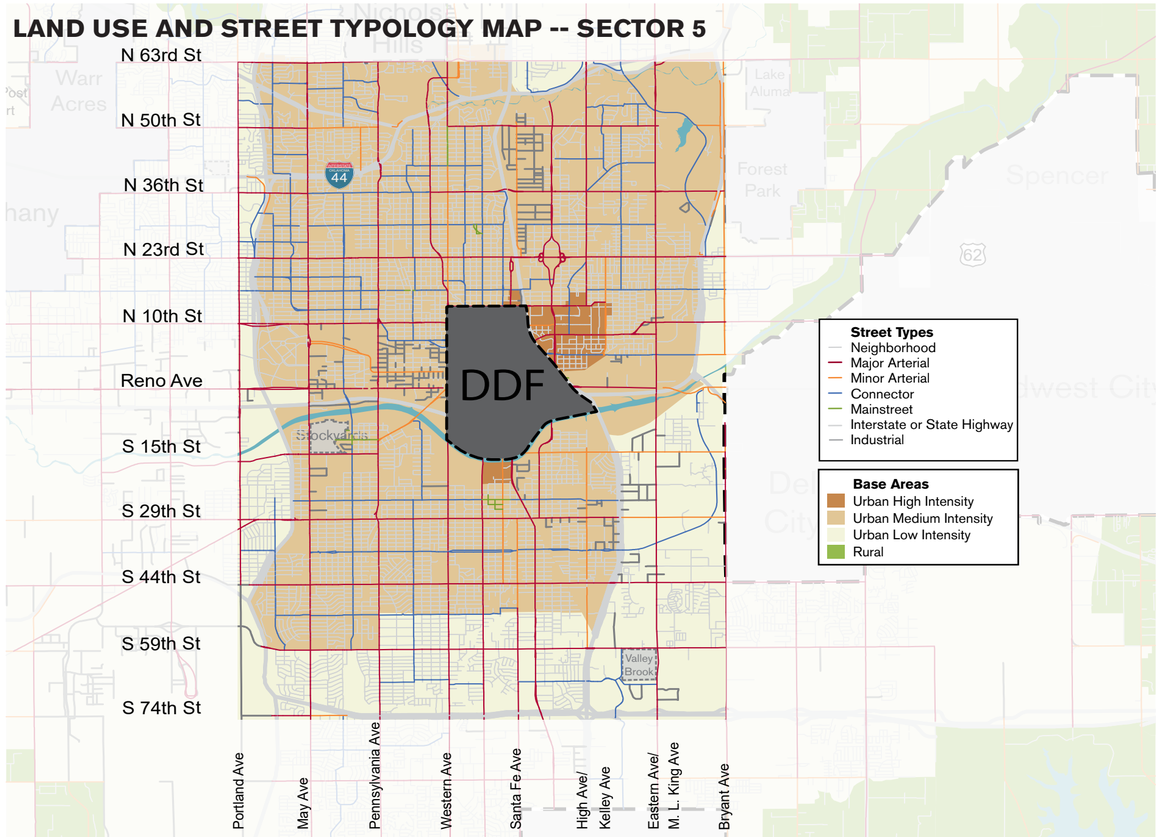
STREET TYPOLOGY MAP: SECTOR 3



STREET TYPOLOGY MAP: SECTOR 4

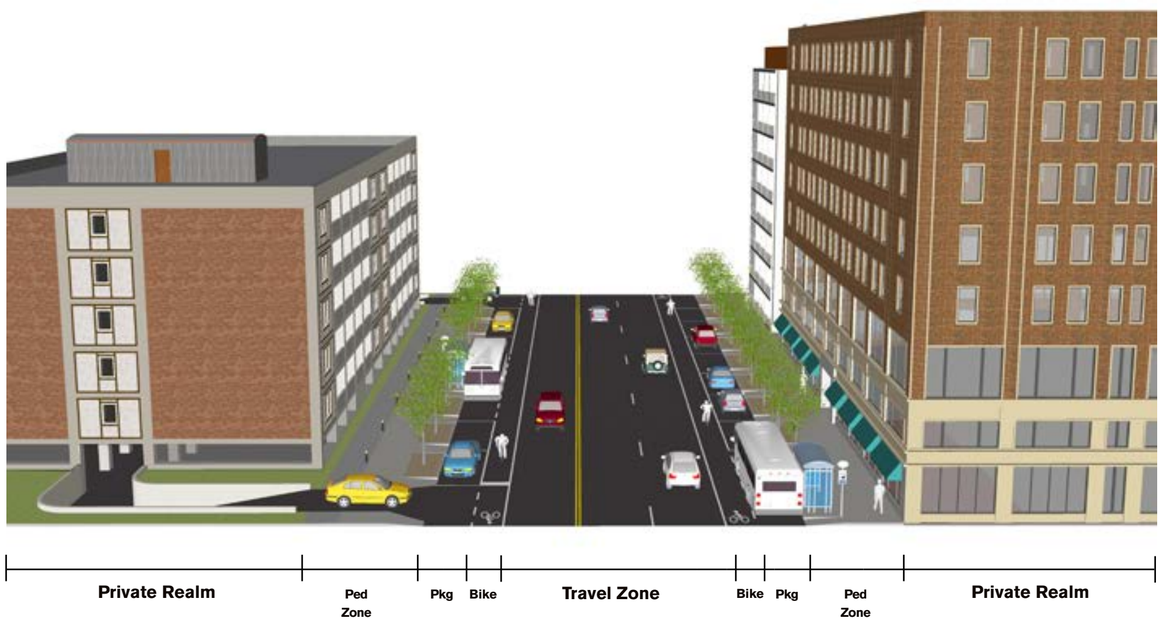


LAND USE AND STREET TYPOLOGY MAP -- SECTOR 5



URBAN HIGH INTENSITY (UH)

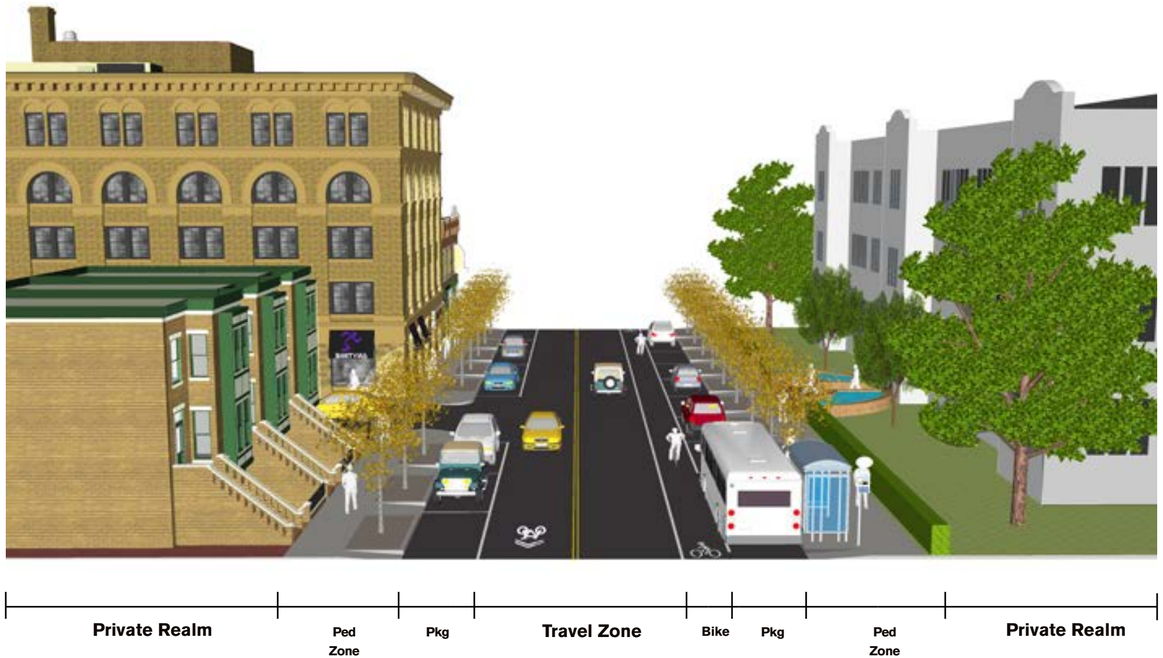
Minor Arterial | Major Arterial



	UH Minor Arterial		UH Major Arterial	
Travel Zone				
Travel Lanes:	Typically 2 to 4		Typically 2 to 5	
Width:	10 to 12 feet		10 to 12 feet	
Median:	Optional	Minimum 8 feet wide, can be used to control left turn movements.	Optional	Minimum 14 feet wide, can be used to control left turn movements.
Pedestrian Zone				
Total Width:	12 to 15 feet		12 to 20 feet	
Sidewalk Width:	Minimum 5 feet	Preferred placement at the property line.	Minimum 5 feet	Preferred placement at the property line.
Bicycle Facilities				
Separated Facility:	Minimum 5 feet	Cycle track preferred when limited commercial drive crossings exist.	Minimum 5 feet	Cycle track preferred when limited commercial drive crossings exist.
Bike Lane:	Minimum 5 feet	Bike lanes should be buffered when space allows.	Minimum 5 feet	Bike lanes should be buffered when space allows.
Bike Route / Sharrow:		May be used on streets with insufficient ROW and posted speeds less than 35 mph.		May be used on streets with insufficient ROW and posted speeds less than 35 mph.
Parking				
On-Street Parking:	Should be allowed		Should be allowed	
Transit				
Bus Stops:	Bus shelters are preferred. Signed stops may be adequate in low use areas.		Bus shelter preferred.	
Access Management				
Driveways:	Should not be allowed in intersection functional area.		Should not be allowed in intersection functional area.	
	Adequate commercial driveway throat length required to allow traffic to move off the roadway.		Adequate commercial driveway throat length should allow traffic to move off the roadway.	
	Shared driveways should be used to reduce curb-cuts.		Shared driveways should be used to reduce curb-cuts.	
Land Use				
Primary:	Retail, Office, Residential		Residential, Office, Retail	
Secondary:	Industrial		Industrial	
Building Orientation:	To the street or side		To the street	
Setbacks:	Typically 20 feet or greater from back of curb		Typically 20 feet or greater from back of curb	

URBAN HIGH INTENSITY (UH)

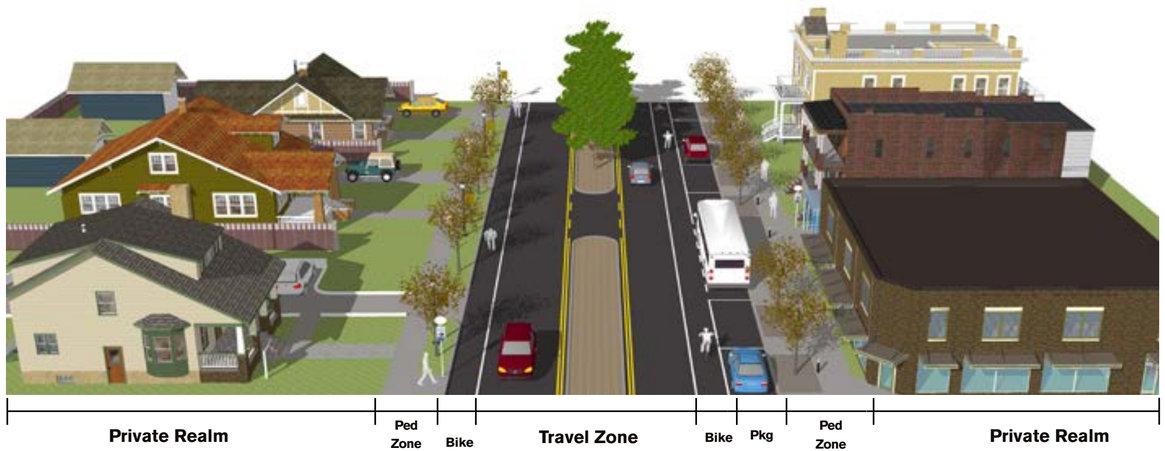
Neighborhood | Connector



	UH Neighborhood		UH Connector	
Travel Zone				
Travel Lanes:	Typically 2		Typically 2	
Width:	10 to 11 feet		10 to 12 feet	
Median:	Optional		Optional	Minimum 8 feet wide, can be used to control left turn movements.
Pedestrian Zone				
Total Width:	10 to 15 feet		12 to 20 feet	
Sidewalk Width:	Minimum 4 feet	Preferred placement at the property line.	Minimum 5 feet	Preferred placement at the property line.
Bicycle Facilities				
Bike Lane:	N/A		Minimum 5 feet	Bike lanes preferred; buffered when space allows.
Bike Route / Sharrow:	N/A	May be used to direct cyclists through neighborhoods.		May be used on streets with insufficient ROW and posted speeds less than 35 mph.
Parking				
On-Street Parking:	Preferred-both sides		Preferred	
Transit				
Bus Stops:	N/A		Bus shelter preferred. Signed stops are allowed in low use areas.	
Access Management				
Driveways:	Should not be allowed in intersection functional area. Shared driveways and alleys should be used to reduce curb cuts.		Should not be allowed in intersection functional area. Adequate commercial driveway throat length should allow traffic to move off the roadway. Shared driveways and alleys should be used to reduce curb cuts.	
Land Use				
Primary:	Residential		Residential, Office, Retail	
Secondary:	Retail, Office		Industrial	
Building Orientation:	To the street		To the street or side	
Setbacks:	Typically 15 feet or greater from back of curb		Typically 25 feet or greater from back of curb	

CONNECTOR

Urban **Low** Intensity (UL) | Urban **Medium** Intensity (UM)



	Urban **Low** Connector		Urban **Medium** Connector	
Travel Zone				
Travel Lanes:	Typically 2		Typically 2	
Width:	10 to 12 feet		10 to 12 feet	
Median:	Optional	Minimum 8 feet wide, can be used to control left turn movements.	Optional	Minimum 8 feet wide, can be used to control left turn movements.
Pedestrian Zone				
Total Width:	10 to 12 feet		10 to 12 feet	
Sidewalk Width:	Minimum 5 feet	Preferred placement at the property line.	Minimum 5 feet	Preferred placement at the property line.
Bicycle Facilities				
Bike Lane:	Minimum 5 feet	Buffered lanes preferred where space allows.	Minimum 5 feet	Buffered lanes preferred where space allows.
Bike Route / Sharrow:		May be used on streets with insufficient ROW and posted speeds less than 35 mph.		May be used on streets with insufficient ROW and posted speeds less than 35 mph.
Parking				
On-Street Parking:	Should be allowed	Limited to one side of the street.	Should be allowed	Limited to one side of the street.
Transit				
Bus Stops:	Signed bus stops are sufficient		Bus shelter preferred at high-use stops. Signed bus stops allowed in low use areas.	
Access Management				
Driveways:	Should not be allowed in intersection functional area.		Should not be allowed in intersection functional area.	
	Adequate commercial driveway throat length should allow traffic to move off the roadway.		Adequate commercial driveway throat length should allow traffic to move off the roadway.	
	Shared driveways should be used to reduce curb-cuts.		Shared driveways should be used to reduce curb-cuts.	
Land Use				
Primary:	Residential, Office		Residential, Office	
Secondary:	Retail, Industrial		Retail, Industrial	
Building Orientation:	To the street or side		To the street	
Setbacks:	Typically 25 feet or greater from back of curb		Typically 25 feet or greater from back of curb	

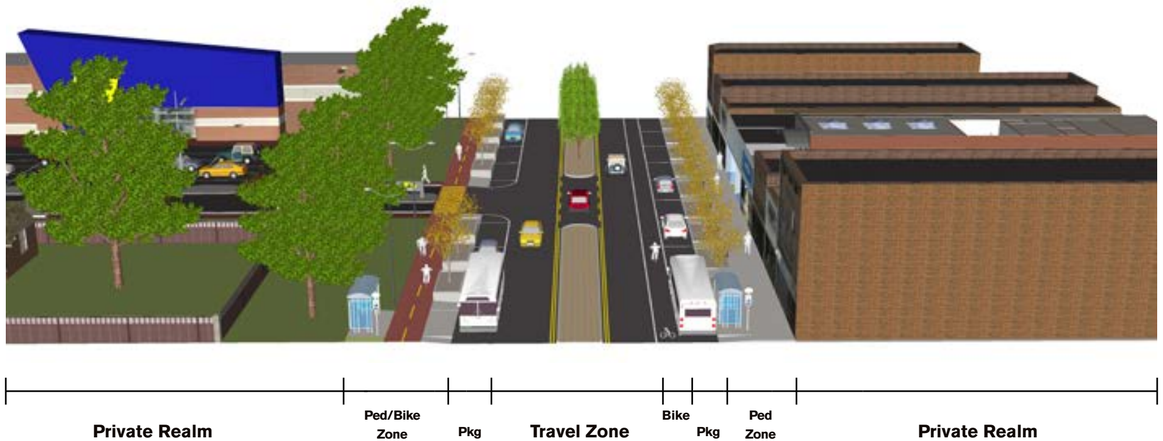
MAJOR ARTERIAL

Urban **Low** Intensity (UL) | Urban **Medium** Intensity (UM)

	Urban **Low** Major Arterial		Urban **Medium** Major Arterial	
Travel Zone				
Travel Lanes:	Typically 3 to 5		Typically 3 to 4	
Width:	10 to 13 feet		10 to 12 feet	
Median:	Optional	Minimum 14 feet wide, can be used to control left turn movements.	Optional	Minimum 14 feet wide, can be used to control left turn movements.
Pedestrian Zone				
Total Width:	14 to 20 feet		10 to 16 feet	
Sidewalk Width:	Minimum 5 feet	Preferred placement at the property line.	Minimum 5 feet	Preferred placement at the property line.
Bicycle Facilities				
Separated Facility:	8 to 12 feet	Multi-use path preferred when limited commercial drive crossings exist.	8 to 12 feet	Multi-use path preferred when limited commercial drive crossings exist.
Bike Lane:	not appropriate		Minimum 5 feet	Bike lanes preferred; buffered when space allows.
Bike Route / Sharrow:	not appropriate			May be used on streets with insufficient ROW and posted speeds less than 35 mph.
Parking				
On-Street Parking:	No		Appropriate	May be used, to be limited to one side of the street.
Transit				
Bus Stops:	Signed bus stops are sufficient. Bus shelters may be needed in high use areas near employment centers or high density housing.		Bus shelter preferred at high-use stops. Signed bus stops allowed in low use areas.	
Access Management				
Driveways:	Should not be allowed in intersection functional area.		Should not be allowed in intersection functional area.	
	Adequate commercial driveway throat length needed to allow traffic to move off the roadway.		Adequate commercial driveway throat length needed to allow traffic to move off the roadway.	
	Shared driveways should be used to reduce curb-cuts.		Shared driveways should be used to reduce curb-cuts.	
Land Use				
Primary:	Retail, Office		Residential, Office, Retail	
Secondary:	Industrial		Industrial	
Building Orientation:	To the street or side		To the street	
Setbacks:	Typically 30 feet or greater from back of curb		Typically 20 feet or greater from back of curb	

MINOR ARTERIAL

Urban **Low** Intensity (UL) | Urban **Medium** Intensity (UM)



	Urban **Low** Minor Arterial		Urban **Medium** Minor Arterial	
Travel Zone				
Travel Lanes:	Typically 2 to 5		Typically 2 to 3	
Width:	10 to 13 feet		10 to 12 feet wide	
Median:	Optional	Minimum 8 feet wide, can be used to control left turn movements.	Optional	Minimum 8 feet wide, can be used to control left turn movements.
Pedestrian Zone				
Total Width:	12 to 15 feet		12 to 15 feet	
Sidewalk Width:	Minimum 5 feet.	Preferred placement at the property line.	Minimum 5 feet.	Preferred placement at the property line.
Bicycle Facilities				
Separated Facility:	8 to 12 feet	Multi-use path preferred when limited commercial drive crossings exist.	8 to 12 feet	Multi-use path preferred when limited commercial drive crossings exist.
Bike Lane:	Minimum 5 feet	Bike lanes should be buffered when space allows.	Minimum 5 feet	Bike lanes preferred; buffered when space allows.
Bike Route / Sharrow;	Not appropriate			May be used on streets with insufficient ROW and posted speeds less than 35 mph.
Parking				
On-Street Parking:	Appropriate	Should be limited to low volume streets.	Appropriate	
Transit				
Bus Stops:	Signed bus stops are sufficient. Bus shelters may be needed in high use areas near employment centers or high density residential.		Bus shelter preferred.	
Access Management				
Driveways:	Should not be allowed in intersection functional area. Adequate commercial driveway throat length needed to allow traffic to move off the roadway. Shared driveways should be used to reduce curb-cuts.		Should not be allowed in intersection functional area. Adequate commercial driveway throat length needed to allow traffic to move off the roadway. Shared driveways should be used to reduce curb-cuts.	
Land Use				
Primary:	Retail, Office		Residential, Office, Retail	
Secondary:	Industrial		Industrial	
Building Orientation:	To the street or side		To the street	
Setbacks:	Typically 30 feet or greater from back of curb		Typically 20 feet or greater from back of curb	

NEIGHBORHOOD

Urban **Low** Intensity (UL) | Urban **Medium** Intensity (UM)

	Urban **Low** Neighborhood Street		Urban **Medium** Neighborhood Street	
Travel Zone				
Travel Lanes:	Typically 2 lanes		Typically 2 lanes	
Width:	10 to 13 feet		10 to 12 feet	
Median:	Optional		Optional	
Pedestrian Zone				
Total Width:	10 to 12 feet		10 to 12 feet	
Sidewalk Width:	Minimum 4 feet	Preferred placement at the property line.	Minimum 4 feet	Preferred placement at the property line.
Bicycle Facilities				
Separated Facility:	N/A		N/A	
Bike Lane:	N/A		N/A	
Bike Route / Sharrow:	Appropriate	May be used to direct cyclists through neighborhoods.	Appropriate	May be used to direct cyclists through neighborhoods.
Parking				
On-Street Parking:	Appropriate		Preferred	
Transit				
Bus Stops:	N/A		N/A	
Access Management				
Driveways:	Should not be allowed in intersection functional area.		Should not be allowed in intersection functional area. Adequate commercial driveway throat length should allow traffic to move off the roadway. Shared driveways should be used to reduce curb-cuts.	
Land Use				
Primary:	Residential		Residential, Office, Retail	
Secondary:	Office		Industrial	
Building Orientation:	To the street or side		To the street or side	
Setbacks:	Typically 25 feet or greater from back of curb		Typically 20 feet or greater from back of curb	

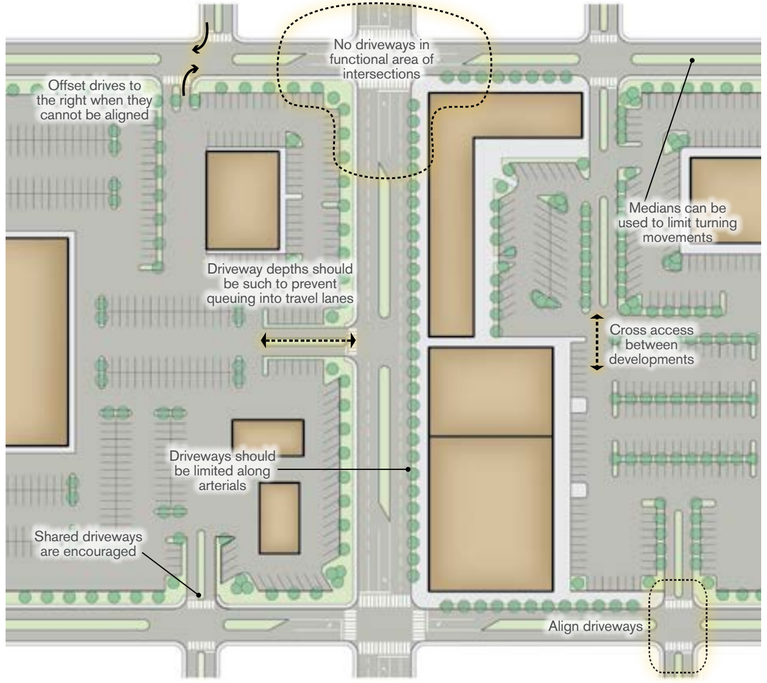
Access Management Focus Areas

The purpose of access management is to provide vehicular access to developed land in a manner that preserves the safety and efficiency of the transportation system. The land use context, the functional intent of the road, and the engineering constraints of each project influence the specific access management techniques for any given project.

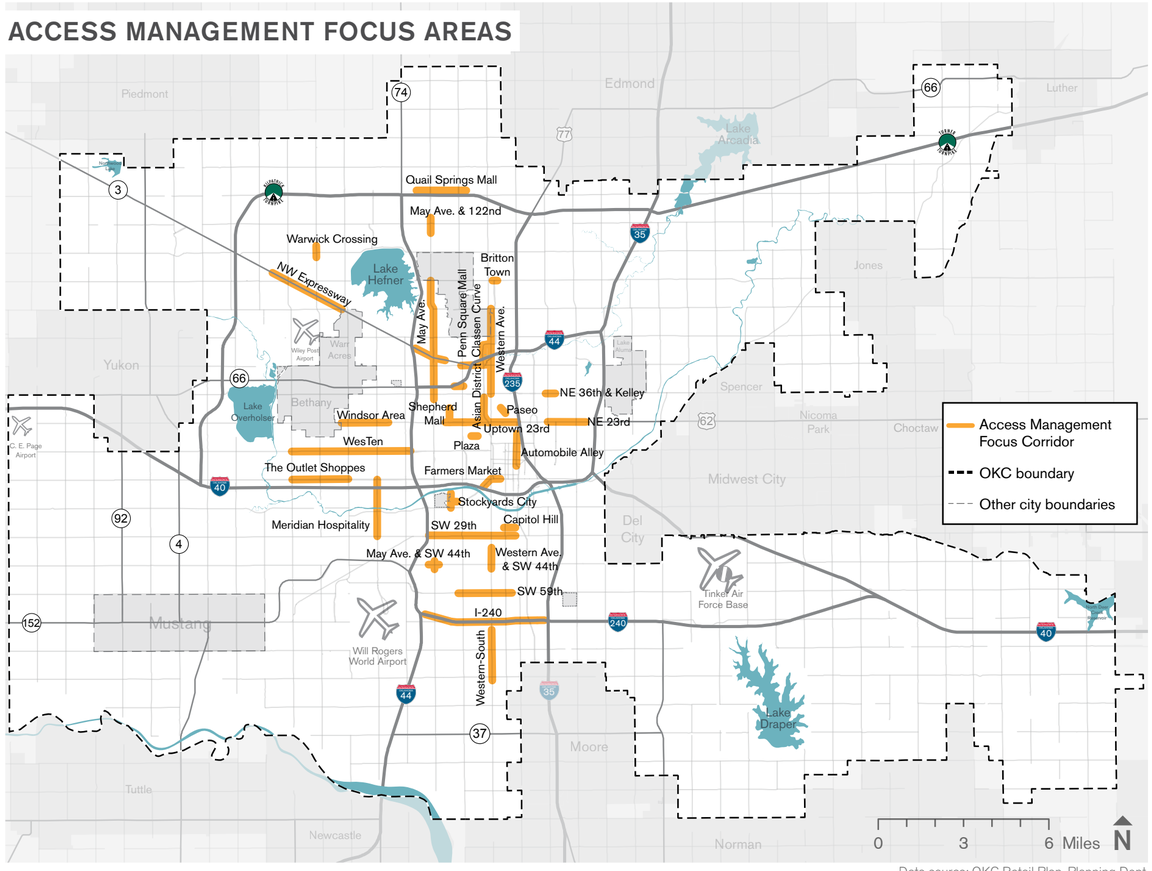
In the areas indicated on the map it is anticipated that retail uses will be increased. Good access management is important across the city, but even more so in these commercial areas of high activity where vehicle and pedestrian safety, comfort, and circulation are crucial. Access should be taken from the intersecting Connector and Neighborhood streets. Cross access connections between uses are encouraged. When developments mid-block have to access the arterial, long shared-drives should be used. These reduce the number of places that traffic must slow for turning and allows multiple cars to safely exit the roadway into the parking lot before becoming backed up by turning movements in the parking lot.

ACCESS MANAGEMENT DIAGRAM

Example highlighting access management techniques which will help maintain traffic flow and increase safety.



ACCESS MANAGEMENT FOCUS AREAS



Data source: OKC Retail Plan, Planning Dept.

Retail Nodes & Corridors

Oklahoma City seeks to develop a robust retail sector to generate the sales tax levels and growth needed to fund quality services for its residents and businesses for years to come. In addition, residents and businesses need healthy retail nodes and corridors to meet their needs for goods and services and to enhance the quality of surrounding neighborhoods. The following goals and policies are applicable to existing retail nodes and corridors within Oklahoma City. They will serve to maintain, and in many cases, revitalize important retail concentrations over the long term.

Key Land Use Goals

The following are the City's main land use goals related to the city's retail nodes and corridors:

- Develop Downtown as a regional retail center.
- New regional retail should be clustered in existing regional nodes, which are immediately accessible by major highway interchanges. These nodes are identified on the Land Use Typology Area map as Regional Districts.
- New community-scale retail should be concentrated in nodes rather than in a linear pattern along highway or arterial corridors.
- The oversupply of older retail space should be reduced by re-purposing space for new retail opportunities or for other uses.

Policy Frameworks

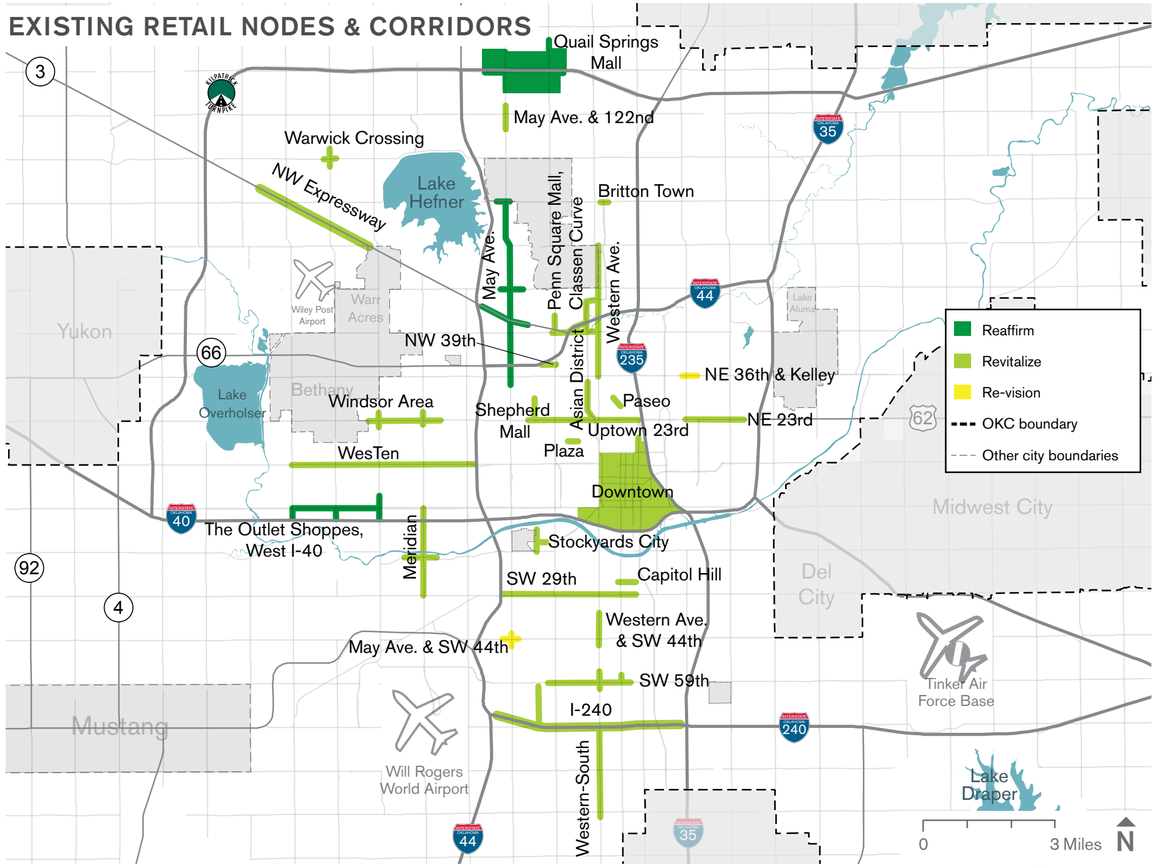
Major nodes and corridors are categorized into one of three possible policy frameworks: **re-vision**, **revitalize**, or **reaffirm**. These were developed to provide context and guide retail policy and implementation tools. Proposals for investment in retail nodes and corridors should receive greater weight, as these areas are critical for the health of surrounding neighborhoods and the City's fiscal health. Investment could be in the form of infrastructure, amenities, further planning, or other technical assistance/capacity building.

- **Re-vision:** These nodes or corridors have significant challenges related to transportation and physical building quality and perform lowest on a sales per square foot basis. They require significant replacement of outmoded retail into other land uses to reduce the oversupply of retail space in these areas and provide additional demand for remaining retail. Based on the physical obsolescence of many of these areas, the focus should be on redevelopment.
- **Revitalize:** These areas generally do not require wholesale changes in uses, but rather, help strengthening existing retail uses through re-tenanting of vacant space, the elimination of retail space to "right size" the node or corridor, landscape and beautification efforts, façade programs, business coordination, and the introduction of new complementary land uses.
- **Reaffirm:** These nodes and corridors perform at the high end of the sales per square foot range and generally feature well-maintained retail centers and commercial property. The goal for these nodes and corridors is to maintain relevance over the long-term in an increasingly competitive retail environment. Actions to maintain and enhance performance in these areas include attracting new or "one-in-the-market" tenants, assembling under-utilized land to open up expansion opportunities, establishing land use controls to restrict further expansion of linear "strip" development along corridors, and general landscape and beautification efforts.

The table below displays the general policies applicable to each of the frameworks described above. The table indicates what policies are most appropriate or may be most effective in areas needing either re-visioning, revitalization, or reaffirmation.

POLICIES FOR EXISTING RETAIL NODES & CORRIDORS

Policy	Re-vision	Revitalize	Reaffirm
Facilitate expansion opportunities for new retail.			■
Integrate complementary uses such as office and multifamily housing.		■	■
Reinforce, change, or create branding as appropriate.		■	■
Maintain community scale retail in nodes rather than allowing linear expansion.		■	■
Upgrade streetscapes for visual coherency and place quality.		■	■
Re-tenant viable, vacant space.		■	■
Ensure good street connectivity between and within existing and future centers, and retrofit for connectivity as appropriate.	■	■	■
Create or enhance pedestrian connections between buildings and centers.	■	■	■
Undertake landscaping and beautification efforts to enhance the customer experience.	■	■	■
Improve facades and design quality.	■	■	
Create or enhance visual coherency through signage.	■	■	
Seek redevelopment of non-viable space.	■	■	
Limit or reduce curb cuts by encouraging shared entrances.	■	■	
Create small area plans.	■	■	
Replace outmoded retail with other land uses.	■		
Consolidate retail into cohesive centers.	■		



Data source: OKC Retail Plan, Planning Dept.

Capital Improvement Planning

The City uses the data presented in this section to inform decisions about allocation of resources to improve infrastructure and fixed assets. The policy of the City is to guide the location and timing of development through the proactive and strategic installation of infrastructure in order to ensure an efficient development pattern. The materials in this section help create consistency between the City's Capital Improvement Plan (CIP) and plan**okc**. The following table summarizes both the Current Conditions and the Criteria for Prioritization decisions about capital improvement projects in six major areas: sanitary sewer; water; fire; parks; streets; and sidewalks. The Current Conditions column acts as a legend for the maps that follow, which display the availability of major infrastructure. The Criteria for Prioritization column is used in the process of evaluating projects and allocating funding to match infrastructure with needs.

64% of residents support focusing City resources on developing areas where infrastructure already exists.

- plan**okc** ***Citizen Survey*** (2013)

	CURRENT CONDITIONS	CRITERIA FOR PRIORITIZATION (Ranked by Priority, 1 being highest priority)
Sanitary Sewer	The analysis of sanitary sewer need is illustrated on page .8 It includes the following categories: **Dark Green** = Fully served areas (within 1/8th of a mile of a sewer line). **Light Green** = Within 1/2 mile of a downstream main; or within sewer sheds that are efficient to serve. **Yellow** = Within open shed or partially open shed. Need for new capital investment to open entirely to new development. **Orange** = Potential long-term connectivity to the overall system based on significant capital investment to expand infrastructure. **Red** = Need for major investment on the scale of lift stations or a new wastewater treatment plant.	1. **Coordination with other Primary Services** – If sewer is preventing urbanized development in areas already serviced by fire or water, then expand to provide efficiencies between all utilities. 2. **Urban Growth Areas** – Prioritize areas designated for urban growth as defined by the Urban – Low Intensity and Urban Future land use typology areas (Urban Future to open to urban development only through amendment to plan**okc**). 3. **Development Velocity** – Prioritize areas where expansion of services will serve many potential new developments in the short-term as opposed to a single development.
Water	The analysis of water service need is illustrated on page 86. It includes the following categories: **Dark Green** = Served. **Light Green** = Close proximity to fully looped, well-connected portions of water network **Yellow** = Potential connectivity – likelihood of good pressure without substantial boosting. **Orange** = Potential connectivity – need to determine if pressure will be sufficient or whether a booster station is required. **Red** = Not efficient to serve based on distance from water source and the number of areas of the city that have better connectivity and service potential.	1. **Coordination with other Primary Services** – If water is preventing urbanized development in areas already serviced by fire or sewer, then expand to provide efficiencies between all utilities. 2. **Low Pressure Urbanized Areas** – Areas with lower pressure that are targeted for infill growth that may stress overall capacity of the network. 3. **Development Velocity** – Prioritize areas where expansion of services will serve many potential new developments in the short-term as opposed to a single development. 4. **Urban Growth Areas** – Prioritize areas designated for urban growth as defined by the Urban – Low Intensity and Urban Future land use typology areas (Urban Future to open to urban development only through amendment to plan**okc**.)
Fire	The analysis of fire service need is illustrated on page 87. It includes the following categories: **Green** = Less than 300 seconds of travel time (target urban service level) from a station in an urban LUTA. **Yellow** = Less than 390 seconds of travel time (target rural service level) from a station. **Red** = Longer service times than urban or rural targets.	1. **Coordination with other Primary Services** – Prioritize expanding where fire service lags other urbanized services. 2. **Urban Growth Areas** – Prioritize areas designated for urban growth as defined by the land use plan. 3. **Development Velocity** – Prioritize areas where expansion of services will serve many potential new developments in the short-term as opposed to a single development.
Streets Capacity	The analysis of street service is illustrated on page 129. It includes the following categories based on modeled existing traffic: **Dark Green** = Most unused existing capacity. **Light Green** = Progressively less extra capacity as the green lightens. **Yellow** = Small amounts of unused capacity. **White** = Undeveloped or rural areas where the scale and quality of street service is not well described by urban capacity measures.	1. **"Easy" Fixes** – Streets where only minor improvements are required to achieve necessary capacity improvements. 2. **Network Impact** – Prioritize streets that create the greatest improvement in overall connectivity and service to the largest number of people. 3. **Development Responsive** – Prioritize projects that create necessary capacity expansion in response to ongoing and planned development.
Parks	Refer to Oklahoma City Parks Master Plan.	
Sidewalks	Refer to bikewalk**okc** for sidewalk infrastructure and improvements.	
Streets Projects	Refer to bikewalk**okc** for multimodal facilities including infrastructure and improvements for bicycles and pedestrians.	

STREETS CAPACITY AVAILABILITY