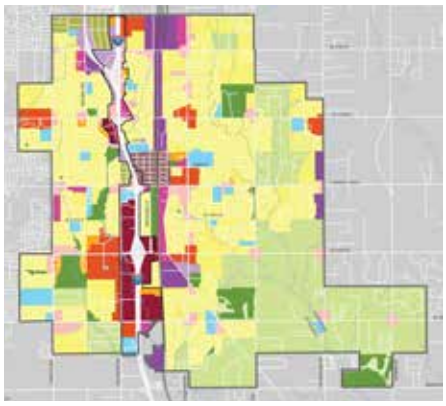

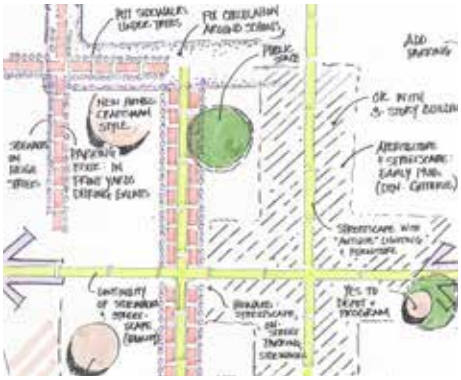

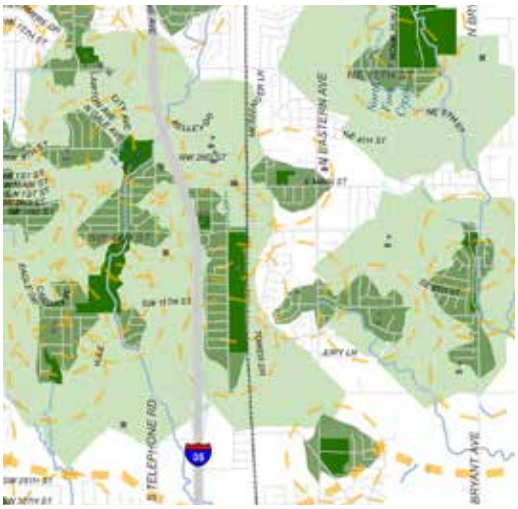

ADOPTED MAY 15, 2017

ENVISION MOORE PLAN 2040

COMPREHENSIVE PLAN

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ENVISION MOORE PLAN 2040

COMPREHENSIVE PLAN

PREPARED FOR

City of Moore, Oklahoma

PREPARED BY

Guernsey

LandDesign

IN ASSOCIATION WITH

BAU Butzer Architects and Urbanism

Sedgwick Consulting Group, LLC

Duncan Associates

ADOPTED

MAY 15, 2017

ACKNOWLEDGEMENTS

Thank you to all the organizations and individuals who committed their time, energy and resources to this effort. This Plan would not have been possible without the support of many throughout the process.

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TABLE OF CONTENTS

1. INTRODUCTION

ABOUT THE PLAN

Envision Moore Plan 2040 is the vision for the future of Moore. It includes an assessment of current conditions and trends, and recommendations for achieving community goals.

This Comprehensive Plan (the Plan) is the result of a community conversation about where the city is and its future direction.

Envision Moore Plan 2040 is meant to update and replace the Moore Vision 20/20 Plan completed in 2006. The Plan will provide guidance to government staff, elected and appointed officials, businesses, civic organizations and its citizens on how to address existing issues and position the city for future success.

Moore is located between Oklahoma City (OKC), the state capitol, and Norman, the home to the University of Oklahoma. Major tornadoes struck the city in 1999, 2003, and 2013. With Federal assistance, Moore has been able to recover from these natural disasters, rebuild neighborhoods, and restore its sense of community. Moore is ideally situated for additional growth. Families and retirees are drawn to this city that offers low cost of living, a family-friendly environment, great schools, and easy access to employment and the OKC region. As Moore continues to grow, the city is faced with the challenges of providing infrastructure and services in a fiscally responsible way. Such growth also presents opportunities for enhancements along with increased resiliency and preparedness.

The Plan outlines strategies to achieve community goals. It promotes quality development with a mix of uses, including some that maximize sales tax generation, the primary source of revenue for the City. Job-generating uses are among the uses encouraged to reduce work commutes, which in turn reduces traffic congestion and retail leakage. The Plan also addresses transportation issues, parks and recreation needs, aesthetic concerns and the need to protect natural resources and improve water quality.

A focus of the Plan is a study of Old Town. As the heart of the community, Old Town is critical to the long-term viability of the city. The Plan provides a multi-faceted vision for the revitalization of Old Town—as a neighborhood, as a shopping and entertainment destination, as a central gathering place, as a transit station area, and as a civic and cultural hub—that will set it apart from other communities in the region.

> **"If you don't know where you are going, you might wind up someplace else."**
>
> -Yogi Berra

THE PLANNING PROCESS

City staff worked with citizens and consultants over a period of approximately 14 months to develop a plan to set forth a vision for the future of the community. City leaders, key stakeholders, and citizens were engaged to help clarify the issues and opportunities. The planning process involved three major phases described below. The Plan is organized in accordance with the phases. See the Appendix for more information from different stages of the planning process.

THE THREE PHASES

1 THE BIG PICTURE

- Project initiation: stakeholder interviews, study area tour, data collection, plan review
- City Assessment: inventory of existing conditions, identification of issues and opportunities

Public Meeting #1

Community Survey #1

2 ENVISION MOORE

- Plan goals
- Land use, parks and recreation, and transportation concepts
- Development of policy recommendations

Public Meeting #2

Community Survey #2

3 REALIZING THE VISION

- Action items to support the plan
- Plan documentation

Stakeholders Survey

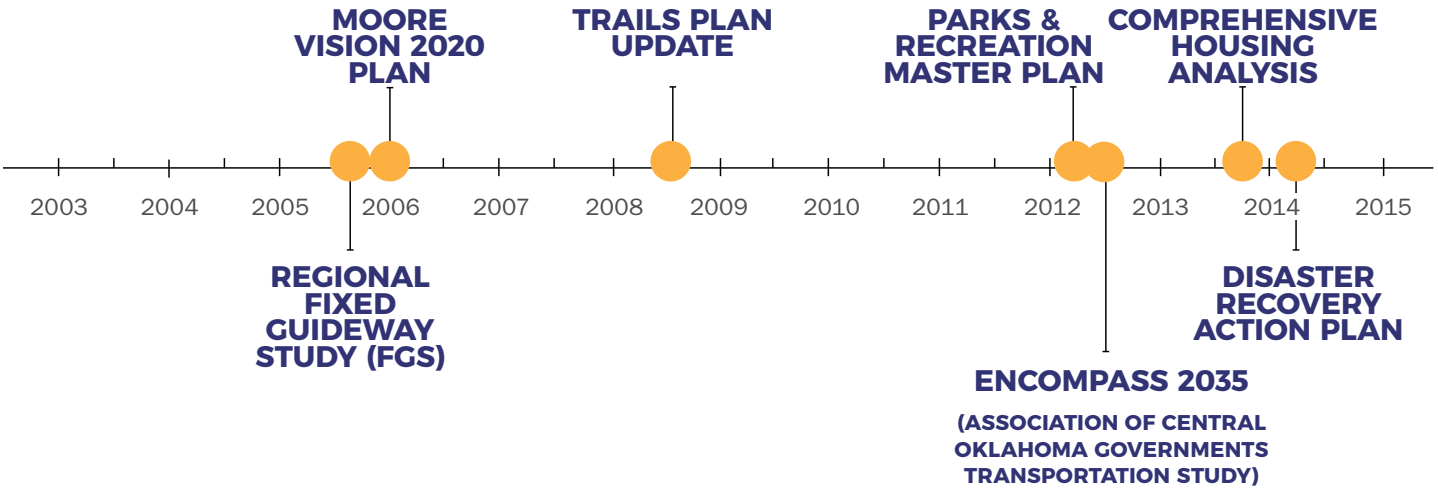
Old Town Neighborhood Meeting

Public Meeting #3

THE BIG PICTURE

The key to a successful planning process is a solid foundation of information about the city's evolution and the current conditions, particularly the issues to be addressed and circumstances that indicate what opportunities may lie ahead. An examination of previous efforts and the resulting policies that have guided recent decisions was part of the early stages of the Envision Moore planning process. Moore has a history of planning. The Moore Vision 20/20 Plan, adopted in 2006 has served the city well and guided growth, investment and land use decisions for the last 10 years. More recently, the Disaster Recovery Action Plan provided a blueprint for recovery efforts following the 2013 tornado. The Plan builds on these efforts.

Stakeholders that have intimate knowledge of the city's pressing issues and needs were convened for interviews during the spring of 2016. During the initial community meeting, participants provided input on issues and opportunities that needed to be addressed in the comprehensive plan. The City Assessment that was presented at the meeting was subsequently revised based on input received and is included in the Appendix.



ENVISION MOORE

Planning for the future is, at the most basic level, a proactive approach to managing change. Change is inevitable, and positive change is necessary for long-term economic and community stability. The development of a vision that represents the community's expectations about the future is the crux of the planning process. The vision helps community leaders facilitate change for desired outcomes.

At this stage, the community worked with the project team to establish long-term goals. These will serve as guideposts when setting a course toward a desired future (developing the vision) and aid with making decisions over the next two decades (plan implementation).

Mindful of the issues and opportunities articulated in the first phase, this phase included the presentation of preliminary concepts and policy ideas at a second community meeting. Here, citizens and other stakeholders helped craft a vision plan, one that depicts a future development pattern and describes infrastructure improvements; the integration of parks, greenways, open space, and natural features; and the level of quality to be accomplished through better design.

The vision plan is responsive to the goals and aspirational in nature. As such, the resulting plan—Envision Moore—was named for this second phase.

REALIZING THE VISION

The third phase in the process was focused on putting the plan into action. Based on the goals, concepts and policy recommendations, concrete strategies and action items were identified, The third and final community meeting occurred during this phase. At this meeting, attendees prioritized action items in support of the vision. During this phase there was also an Old Town neighborhood meeting, held in advance of the third community meeting, specifically focused on refining the vision for Old Town.

PUBLIC INPUT PROCESS

In addition to the three community meetings held throughout the process, a website was developed to provide meetings materials, information on schedule, and access to two online surveys. For the first survey, participants were asked to provide input on what they like about the city, what they would change, and which goals from the previous plan are most relevant. The second survey asked more about citizens' vision for the future and specifics related to transportation issues, and parks and recreation needs. In total there were over 620 responses to the surveys.

The Envision Moore planning process also included outreach via social media. The @EnvisionMoore Twitter account and other social media outlets were used by City staff for outreach to advertise meetings and provide background information.


HERITAGE TRAILS

2. THE BIG PICTURE

ISSUES + OPPORTUNITIES

The Envision Moore process started with meeting citizens and stakeholders to document the issues that need to be addressed by governmental and non-governmental actions and decisions in the coming years. This section of the Plan highlights topics discussed during these meetings and additional research and analysis conducted as part of the planning process.

The Oklahoma City Metropolitan Region grew by over 150,000 people from 2000 to 2010. The City of Moore grew by almost 15,000 people over this same period. Moore has grown by 47% since 1990. This growth is expected to continue due to Moore's prime location in the region, great schools and relatively low cost of living.

Growth has brought challenges, including increased traffic and demand for city services such as parks and recreation facilities and programs, road maintenance, utility system expansions, and increased emergency response capacity. Other challenges include the need to continue the rebuilding efforts from the 2013 tornado.

Among these challenges also lies opportunity. Citizens and business owners are engaged and interested in building a stronger city. There is renewed interest in Old Town, and the city has made strides toward improving service delivery and overall quality of life.

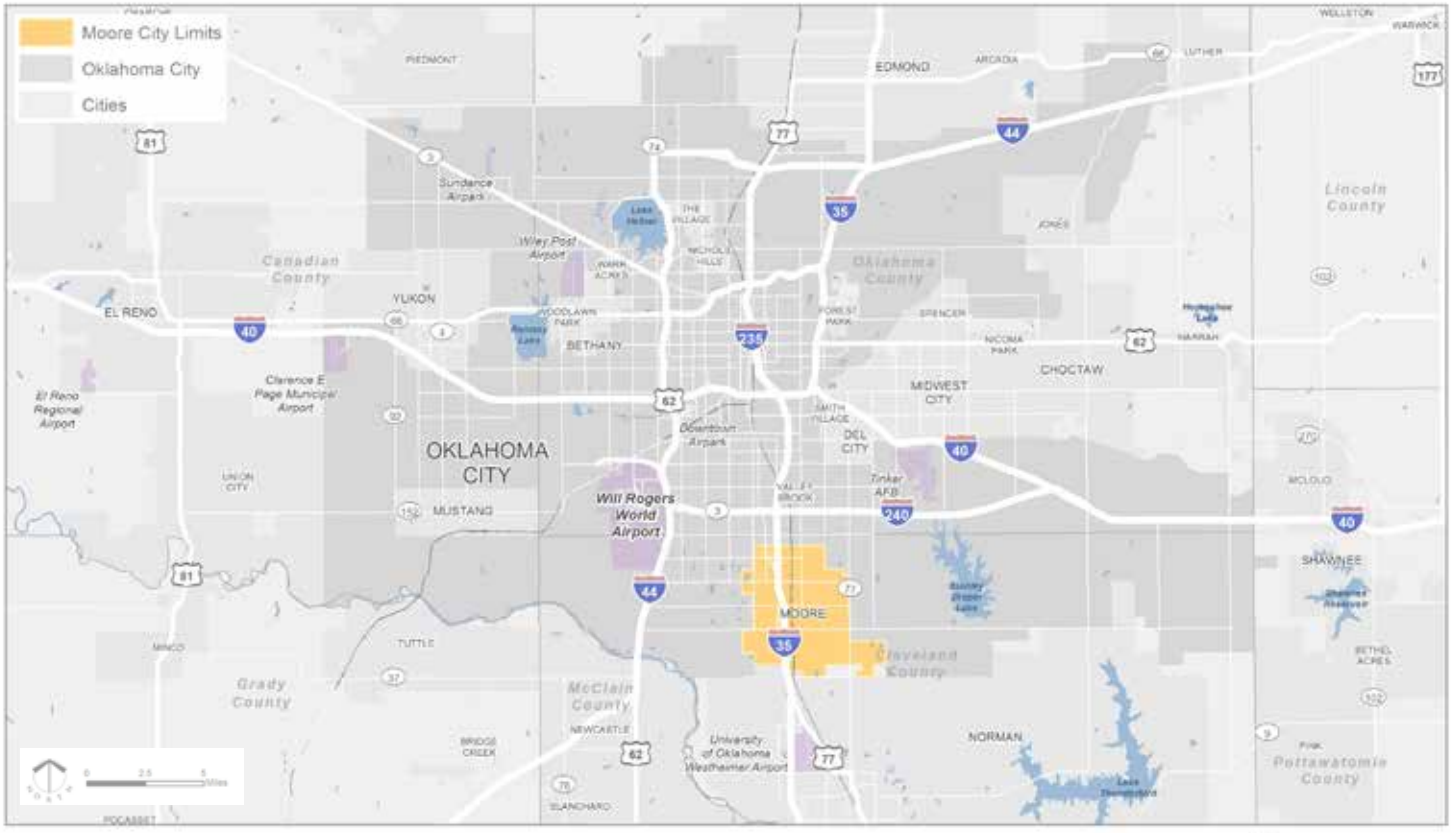


FIGURE 2.1: CONTEXT MAP

RESILIENCY

Resiliency is defined as the ability to be prepared for short and long term stresses with a plan that proactively defines strategies which ensure a community can function during and after a hazardous event. The Plan incorporates resiliency throughout its strategic goals to weave a cohesive effort for a resilient community.

The Plan enables the city to create opportunities to overcome these natural disasters, short and long term stresses, and other disruptive events in the community through preparedness, adaptation, and strength. This document proactively integrates resiliency into other community goals as described throughout the Plan. It is an effort that identifies an understanding of Moore's social, political and economic systems as supported by larger goals such as land use, growth, economic development, open space and natural resources, housing, and neighborhoods. Moreover, this document incorporates detailed input by a broad cross-section of stakeholders and leaders in both the public and private sectors which effectively assist in developing resiliency efforts highlighting the desired and anticipated performance of the built environment.

Often it is critical to ask through a planning process like the Plan: "when and how does the built environment affect a community's ability to serve its residents?" With the Plan, resiliency can be improved by the community because it is a tool that addresses preparedness, planning and development for prosperity.

While communities face hazardous events, such as infrastructure failures, cyber attacks, environmental changes and economic downturns, disruption from weather and natural disasters are a part of Moore's history and will remain a large part of its future. To increase resiliency, Moore can work through and overcome the effects of these events by the implementation of strategies identified in this document. These strategies are supportive of the Infrastructure Recovery and Implementation Plan (IRIP), an outcome of the City of Moore Disaster Recovery Action Plan.

Overview of Tornado Recovery Efforts

Following the destructive tornado on May 20, 2013, an Infrastructure Recovery and Implementation Plan (IRIP) was prepared to further refine infrastructure-related data described in the City of Moore Disaster Recovery Program Action Plan (Action Plan). The IRIP prioritized and coordinated public infrastructure improvements in the Action Plan and developed a funding strategy and implementation schedule for these projects.

Prioritization of projects in the built environment enables a community like Moore to address the functionality of time to recovery. This becomes a measure of how well the built environment can operate to deliver services to its community, and return to its intended purpose.

The city is the first in the United States to adopt tornado-specific building code wind resistance standards. The city continuously seeks to protect its residents and infrastructure via review and adoption of appropriate building standards.

MOORE'S EMERGENCY OPERATIONS CENTER

DISASTER RECOVERY PROJECTS
PROJECT
Kings Manor Street Repairs
Plaza Towers Street Repair North
Little River Park Sewer Interceptor
Telephone Road Resurfacing South
SE 4th St Pedestrian Trail and Traffic Signals
Telephone Road Resurfacing North
Baer's Westmoore Sidewalk
J.D. Estates Street Panels Repairs
Eastmoore Street Panels Repairs
Southmoore Street, Waterline and Storm Sewer Improvements
South Broadway Street, Trail and Drainage Channel Improvements
Little River Park Channel and Pond
Eagle Drive Street Repairs
Plaza Towers Streetscape & Bridge Box
Master Drainage Plan
Infrastructure Recovery and Implementation Plan
Neighborhood Gateway Designs
SW 17th/Janeway Redevelopment Plan
Comprehensive Plan Update

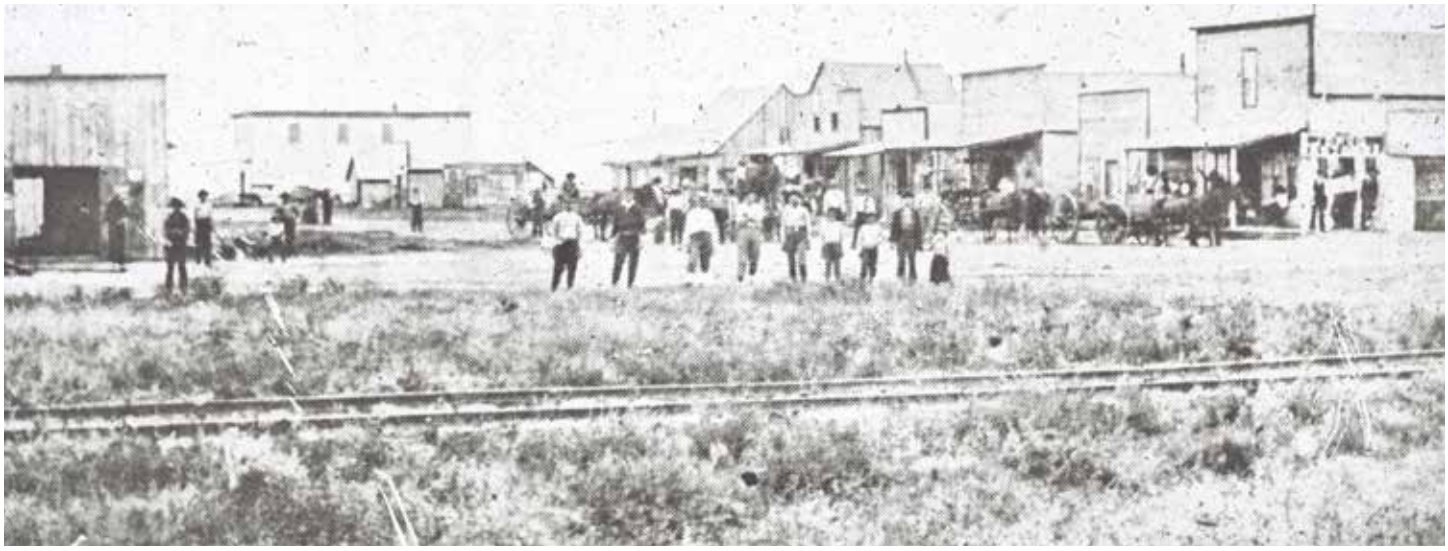
TABLE 2.1: DISASTER RECOVERY PROJECTS

PLAZA TOWERS STREETSCAPE & BRIDGE BOX IMPROVEMENTS

POPULATION AND DEMOGRAPHICS

HISTORY

The City of Moore began as a small railroad outpost in the 1800s. Very little changed until 1960. Between 1960 and 1980 the city experienced rapid growth as the highway expansions in the Oklahoma City region fueled suburbanization. Much of the development in the northwestern area and many of the older commercial areas of the city were developed during this period. Growth rates slowed between 1980 and 2000, but have increased since 2000.



HISTORIC PHOTO OF DOWNTOWN MOORE

DECADE	POPULATION	% CHANGE FROM PREVIOUS DECADE
1900	129	-
1910	225	74%
1920	254	13%
1930	538	112%
1940	499	-7%
1950	942	89%
1960	1,763	87%
1970	18,791	964%
1980	35,063	87%
1990	40,318	15%
2000	41,138	2%
2010	55,081	34%

TABLE 2.2: HISTORICAL POPULATION GROWTH FOR MOORE, OK (SOURCE: U.S. CENSUS)

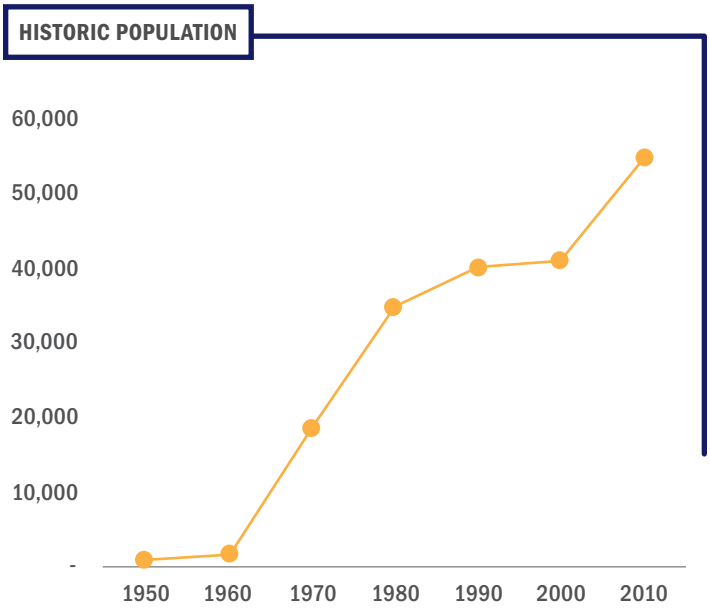


FIGURE 2.2: HISTORICAL POPULATION GROWTH FOR MOORE, OK (SOURCE: U.S. CENSUS)

DEVELOPMENT ACTIVITY

The population growth rate in the City of Moore has been among the fastest in Oklahoma during the past decade. According to the Census the annual growth rate for the city was 2.6% between 2000 and 2014. This is higher than Norman (1.5%), Oklahoma City (1.2%), Edmond (1.9%) and Broken Arrow (2.4%).

Figure 2.4 shows building permits since the year 2000. A large portion of the recent new development has occurred in the East and South portions of the city (see Built Year Map in Appendix A). The exceptions are two swaths of redevelopment that have occurred as the result of the two F5 tornadoes in 1999 and 2013.

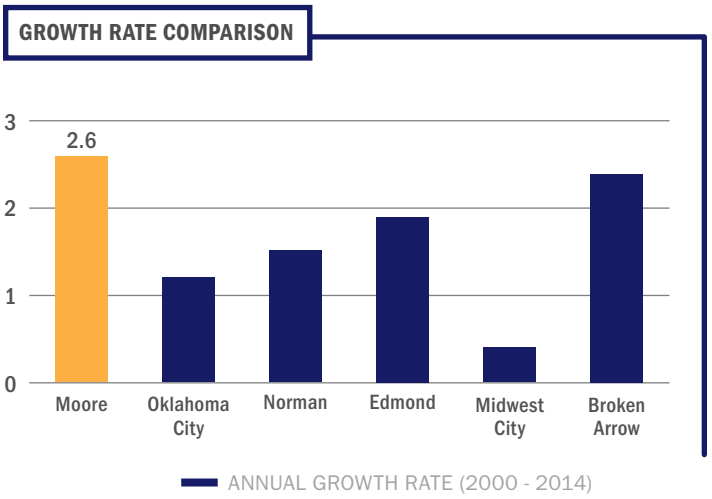


FIGURE 2.3: GROWTH RATER COMPARISON (SOURCE: U.S. CENSUS)

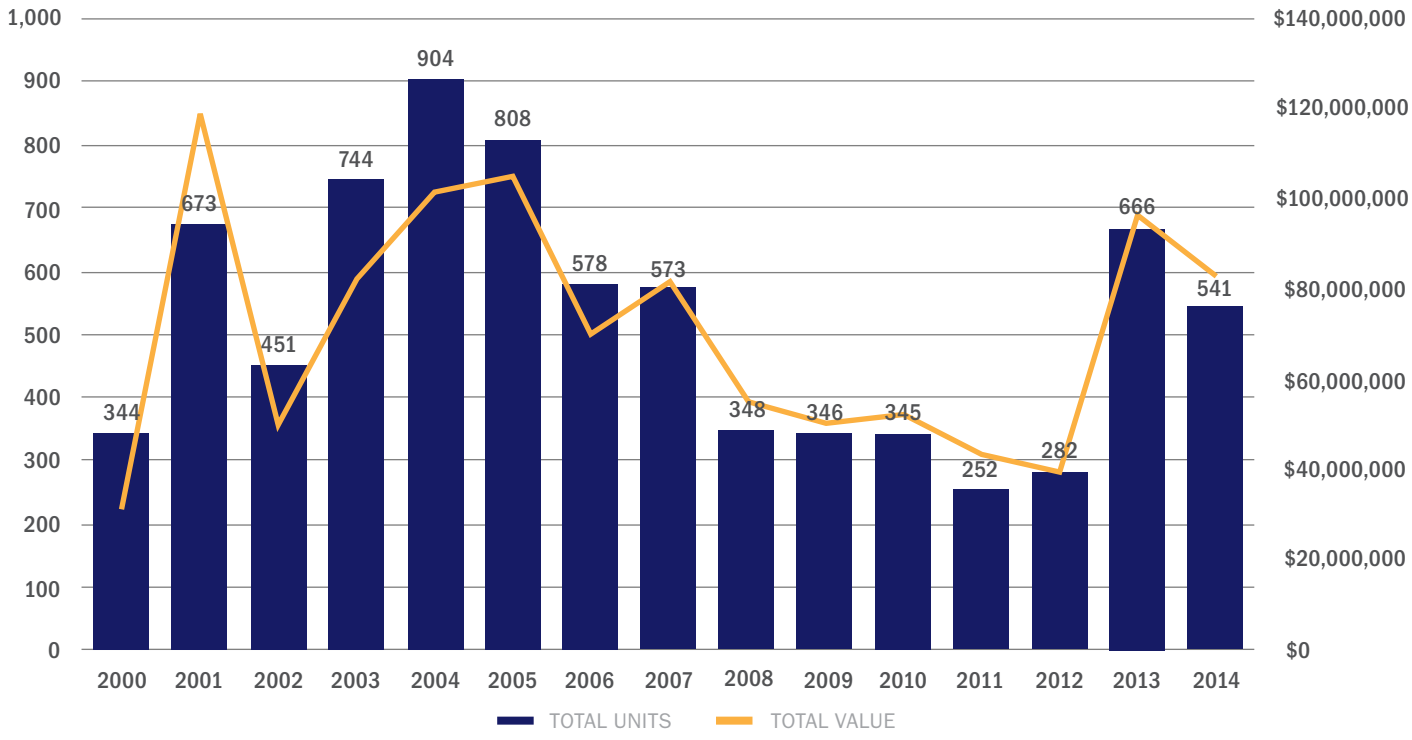


FIGURE 2.4: BUILDING PERMITS 2000-2014 (SOURCE: U.S. CENSUS)

RESIDENTIAL GROWTH PROJECTIONS

Due to Moore's location within the OKC Metropolitan Region, its proximity to jobs, relatively low cost of living and historic trends, it is expected that growth will continue. For planning purposes, population projections were produced based on a linear rate of population growth experienced between 1990 and 2015. These projections indicate that the city may grow by over 19,000 people in the next 25 years. This represents a growth of 33% and could translate into a demand for an additional 7,900 housing units.

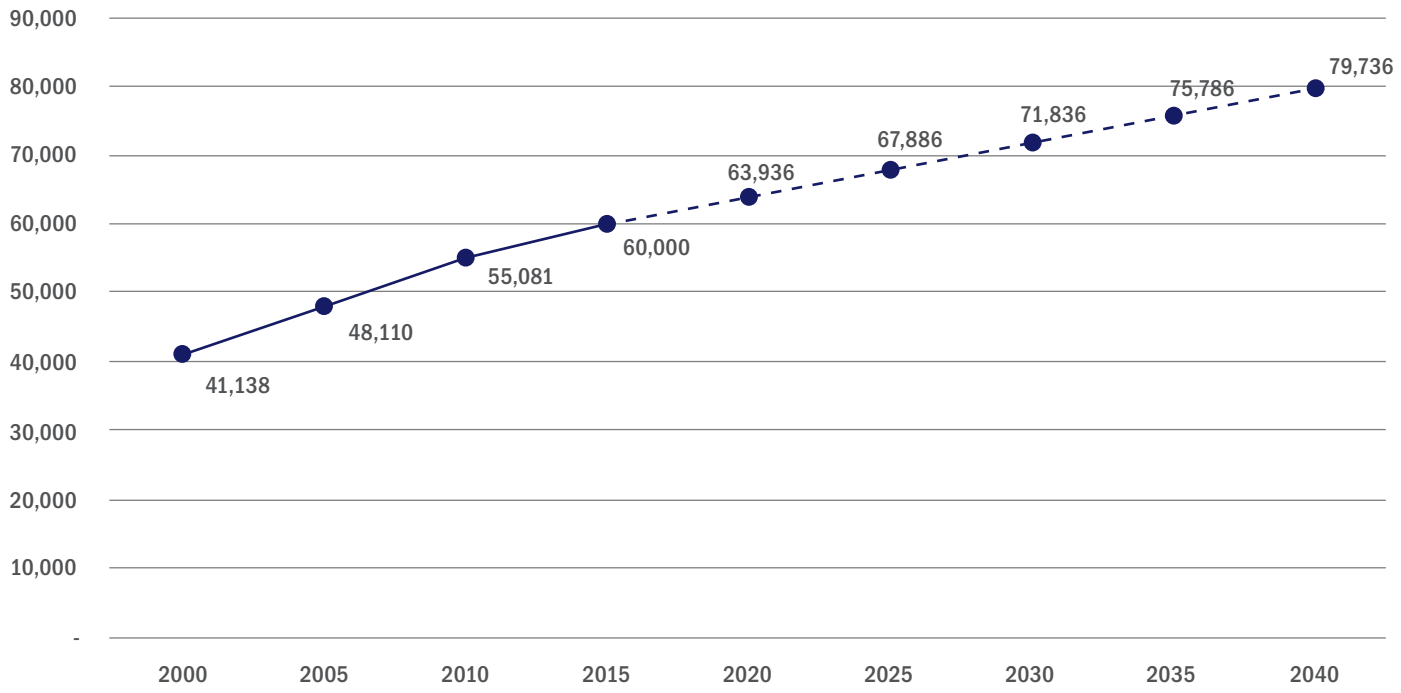


FIGURE 2.5: FORECASTED POPULATION GROWTH FOR MOORE, OKLAHOMA

HOUSING STATISTICS AND PRODUCT DIVERSITY

There are currently 22,762 housing units in Moore with an average home value of $168,803 (Source: Esri). The Census blocks with the highest median housing values (~$200-250,000) are in the east and southwest parts of the city. The areas of the lowest median housing value ($~$80,000) are areas with the oldest housing stock, including just east of Old Town, and the west-central part of the city. There has been a 44% increase in housing units between 2000 and 2015 (an addition of 6,961 units).

The great majority (86%) of housing units in the city are single family homes. Approximately 12.5% of the housing stock is attached product including duplexes, townhomes and apartments (Census American Community Survey, 2015). Demand for rentals are up and rental of single family homes exceed apartments (Comprehensive Housing Market Analysis, 2014). A significantly underrepresented part of the housing stock is attached product in the form of townhomes and duplexes, since apartments with 3 or more units make up close to 80% of the attached product.

Increasingly, Millennials and Baby Boomers will drive more of the housing demand. In Moore, residents from 5 to 35 years of age make up 55% of the population and seniors (55+) make up 20% of the population.

The senior population in the city is likely to increase in the coming years, due to the youngest of the baby boomers reaching their golden years. Research has shown that Millennials and Boomers have a stronger preference for lower maintenance yards and smaller housing types than other age groups. Making accommodations for the housing preferences of these two age groups by providing opportunities for well-located housing products such as cottage and patio homes, townhomes, condos may help Moore remain an attractive housing choice in the future.

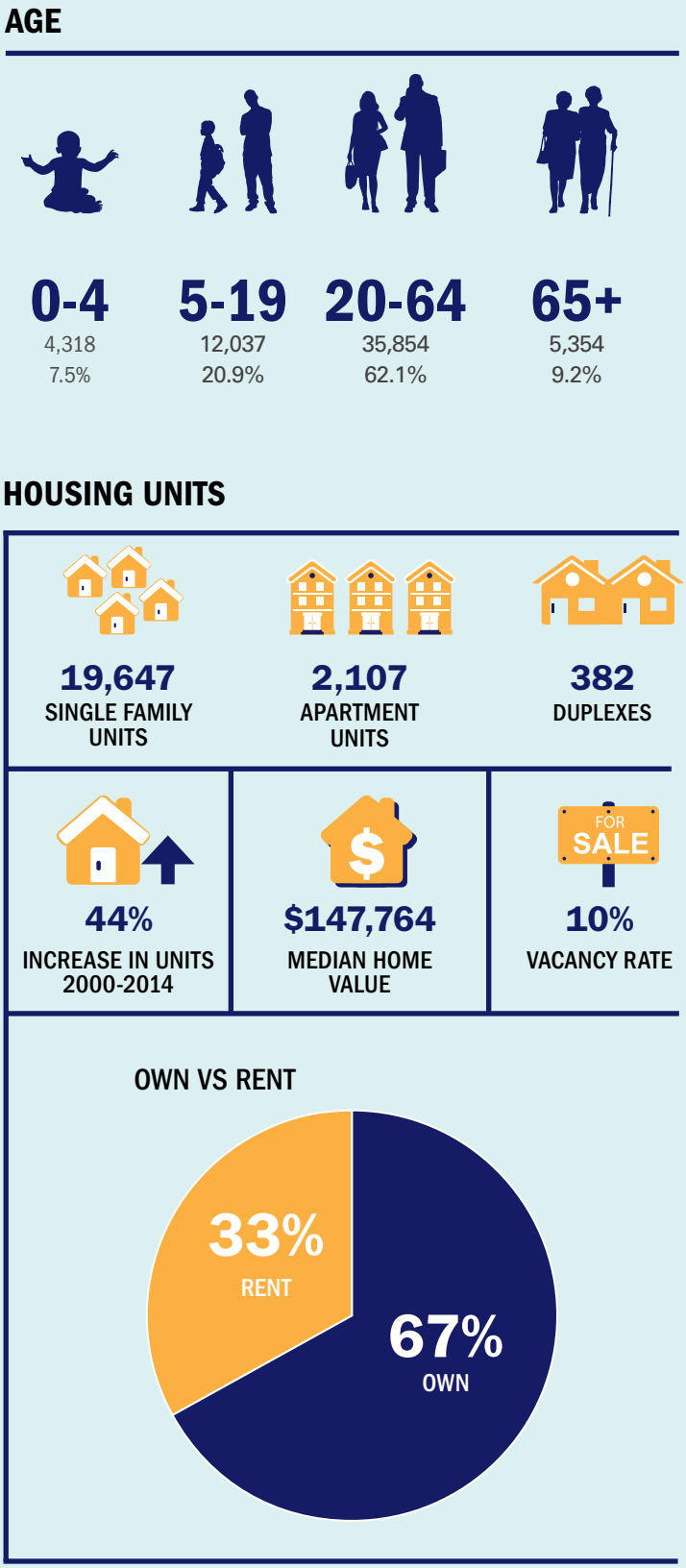


FIGURE 2.6: HOUSING STATISTICS & PRODUCT DIVERSITY (SOURCE: CENSUS (2014 ACS)

LAND USE AND AVAILABILITY

The majority of the city is composed of residential land uses (52%). Commercial, office, institutional and industrial land uses account for only 15% of the land area. Most of the land area in the City of Moore is developed in some form. Only 28% of land is vacant or used for agriculture. The chart below shows a summary of existing land use in the city.

Of the vacant land, a significant portion is located within the floodplain (15%). In the Southeast quadrant of Moore, the area constrained by floodplains is especially pronounced with 24% of the vacant land being located within the floodplain.

The traditional growth pattern of the city has been outward and has been characterized by "green field" development—best described as urban or suburban development that occurs on lands previously undeveloped or used for agriculture or forestry.

It is likely that in the next 25 years growth within the City of Moore will not occur solely on the undeveloped outskirts of town, but also as redevelopment in areas where older buildings have reached the end of their useful age and are replaced with new development.

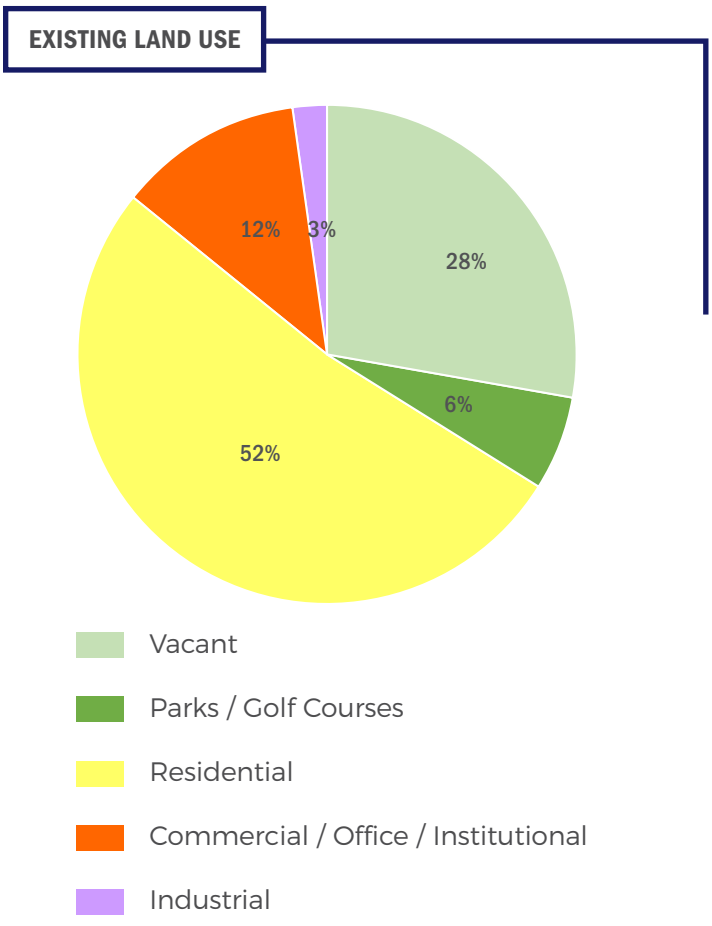


FIGURE 2.7: EXISTING LAND USE

EXISTING LAND USE CLASS	ACRES	% OF LAND
Vacant	3,464	28%
Parks / Golf Courses	729	6%
Residential	6,518	52%
Commercial / Office / Institutional	1,445	12%
Industrial	321	3%
Total	12,478	100%

TABLE 2.3: EXISTING LAND USE CLASS

NEED FOR BALANCED GROWTH

Despite only 15% of the land area being devoted to non-residential uses and only 5% of the land area being used for commercial land uses, the City of Moore has emerged as a regional commercial and entertainment center. Visitors from the southern part of the OKC metropolitan area are drawn to Moore to watch a movie at the theater, attend events in Old Town and at the Station at Central Park, and shop and dine in the Fritts Farm mixed-use area, which includes retail, restaurants, office and residential areas.

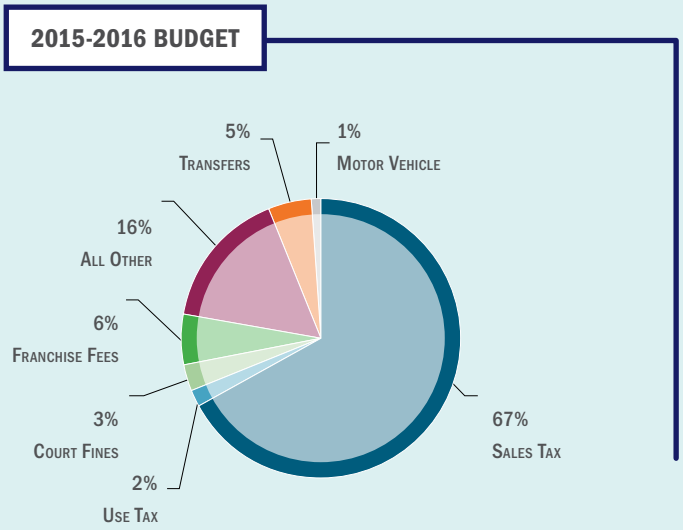
Commercial development is important because it not only provides local shopping options to residents, but also drives the primary revenue source for the City. Sales tax made up 67% of revenue for the City of Moore in FY 2015-2016. This amounted to $27,390,000 in FY 2015-2016. These funds help pay for police and fire protection, road maintenance, government administration and parks and recreation facilities and associated programs.

In the coming years, it is important for the city to balance existing commercial development in southwest Moore with new and renovated commercial areas in other parts of Moore. This will help better distribute traffic and serve new residents by providing more options to existing residents as well.

Many opportunities exist on the east side of I-35. Encouraging redevelopment and revitalization of well-located aging shopping centers, as well as planning for new neighborhood commercial and mixed-use centers will be an important part of assuring fiscal resiliency.

REVENUE SOURCES

Sales tax makes up the majority of the revenue for the city.



SOURCE: CITY OF MOORE

RETAIL LEAKAGE

According to 2015 Retail Marketplace Data, Moore loses potential sales in a variety of categories including the following:

FIGURE 2.8: EXISTING REVENUE SOURCES & RETAIL LEAKAGE

ECONOMIC DEVELOPMENT

Although commute times in Moore are comparable to state and regional averages, the majority of residents commute to other areas in the Oklahoma City metro to work. Additional jobs in Moore will help provide local options for employment. Local jobs would also be beneficial to local businesses by increasing the daytime population. This could lead to more retail and restaurant sales thereby effecting sales tax revenue.

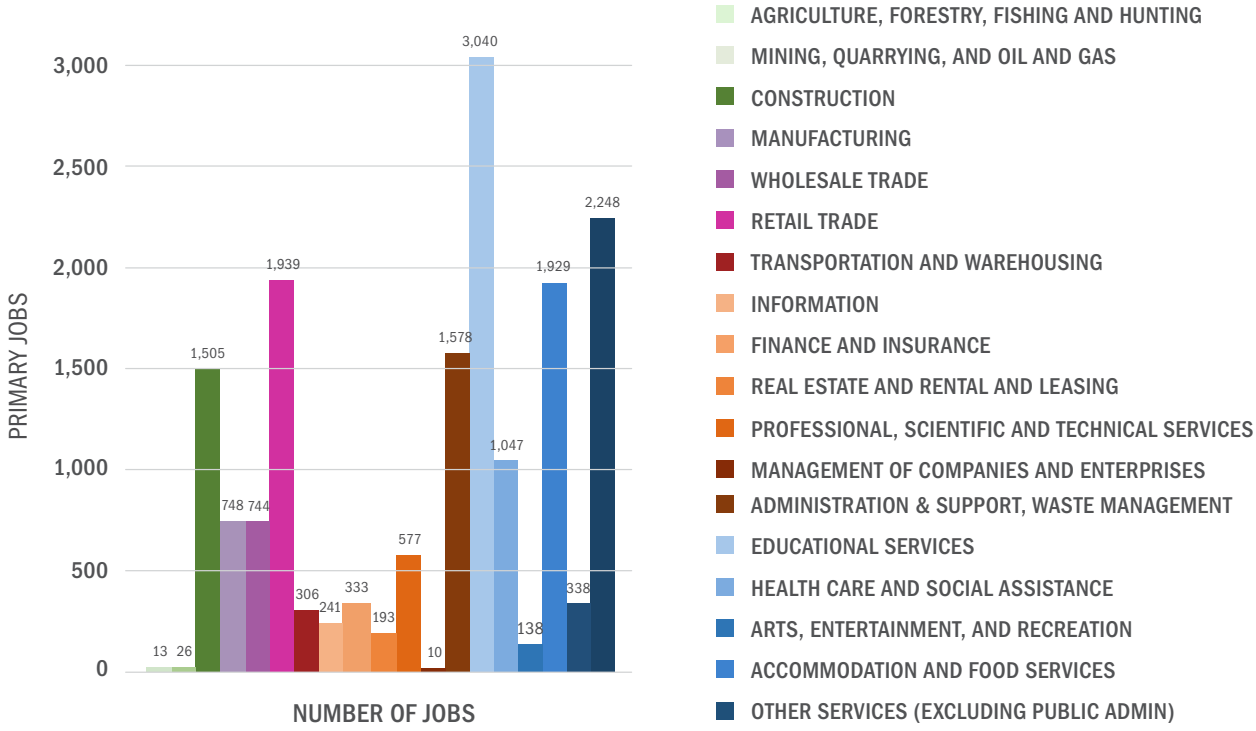


FIGURE 2.9: EXISTING EMPLOYMENT (SOURCE: US CENSUS (2014)

WARREN THEATER

SITE DESIGN AND AESTHETICS

During all phases of the Plan process, extensive input was provided through stakeholder interviews, public meetings and online surveys. One of the themes that emerged was improved site design and aesthetics, which included emphasis on the I-35 corridor. This area acts as the "front door" to the city, as it is the primary corridor through which residents and visitors enter and experience Moore. There was also a desire for enhanced landscaping and more pedestrian-oriented design to preserve the small town feel of the city. Maintenance issues and the need for code enforcement and beautification efforts were also topics of concern.

HOUSING AND NEIGHBORHOODS

The importance of safety and affordability was mentioned frequently by citizens during the planning process. Affordability of housing and activities for families and youth was a concern. Increasing the safety in areas with crime through improved lighting and community policing was a priority for others. Distressed neighborhoods, including those with high rates of underutilized and vacant properties, as well as those with high concentrations of rental single family units are concerns.

Improved connections between neighborhoods and destinations is needed. Many citizens mentioned a lack of sidewalks and/or difficulty biking or walking safely to parks.

Commercial encroachment in established neighborhoods was mentioned as a concern of some participants. This was also a concern in the Vision 20/20 Plan, which was adopted in 2006 and serves as the current comprehensive plan for the City.

"Require businesses to install and maintain **attractive landscaping** like other surrounding cities."

"Improve the image [of Moore] by creating **more natural space** and having stronger restrictions on retail. There are far too many strip malls going in with very little appeal. The facades need to be improved for a nicer look."

"A **small town feel** would be nice. Possibly, some areas where parking is behind the businesses and front areas have covered walkways for pedestrian strolling with lots of shade and a park like feel."

"I would really like to see **Old Town revived** with Mom and Pop shops, a park, and some street art. I'd also like to see more landscaping in retail areas."

- Citizen Responses to "What would you like to CHANGE about Moore?" Public Survey #2

OLD TOWN

Old Town is the historical center of the city. Many business owners have maintained businesses here for decades. Neighbors still stop and talk on the sidewalk. It is the location of the original railroad stop which gave the city its name. It serves as the civic center of the city, home to local government offices and churches. Community events such as Haunt Old Town and the Christmas in Old Town celebration reinforce Old Town as the heart of the City. Residential homes on narrow streets flanked by mature elm trees occupy some blocks. Other blocks are majority commercial uses.

Recently there has been considerable public and private investment in Old Town. Recent public investment includes the Public Safety Center, streetscape improvements near the intersection of Main Street and Broadway Avenue, and Central Park and The Station, which are located just south of Old Town. This public investment has been complemented by private investment in the form of new businesses and building renovations, as well as new residential demand. Young people (with and without families) and older adults have a renewed interest in living close to Old Town.

It will be critical to build on recent investment and balance preservation and progress in Old Town in the coming years. Preserving the qualities that make Old Town unique while addressing some of the issues that exist can help make Old Town more useable. Some of the issues that need to be addressed and opportunities that exist are shown in Figure 2.11 on page 27 and include:

- **Urban form:** Old Town was laid out in a grid pattern with 400 by 300 ft. blocks. The majority of the blocks are "alley loaded," meaning they are actually split in the middle by an alley which provides access to garages and/or back of buildings via a narrow alley. This block structure is very flexible and conducive to a walkable environment. The short block lengths reduce distance needed to travel and the alleys allow for buildings to be brought close to the street and parking to be accessed via the rear of the block.
- **Right-of-way:** Existing roadway and railroad right-of-way in Old Town is an asset. Over ⅓ of the land area in Old Town is located in right-of-way. There is ample room for street upgrades that could improve the aesthetics, on-street parking options and bicycle and pedestrian safety on roads that serve as the "front door" to Old Town. In addition, the railroad right-of-way (nearly 300 ft. wide in some areas) presents an issue and an opportunity. Fencing and/or plantings may be needed to improve safety. Other cities have converted portions of unused railroad right-of-way to linear parks and trails.

THE OLD SCHOOL IS LISTED ON THE NATIONAL HISTORIC REGISTER AND IS LOCATED JUST NORTH OF MAIN STREET AND BROADWAY

EXISTING RAILROAD RIGHT-OF-WAY AND STREET RIGHT OF WAY MAKE UP OVER 1/3 OF THE LAND AREA IN OLD TOWN AND PRESENT OPPORTUNITIES FOR PUBLIC SPACES AND IMPROVED STREETS

FIGURE 2.10: GROUND MAP OF OLD TOWN

- **Vacant properties:** Vacant storefronts act as dead spaces that could otherwise be generating sales tax revenue to the city and increasing retail traffic for adjacent businesses. Vacant and underutilized parcels could house new businesses or accommodate new residents.
- **Barriers:** Physical and perceived barriers prevent visitation and mobility in Old Town. Many streets that enter Old Town lack adequate bicycle and pedestrian accommodations. Within Old Town many key side streets do not have sidewalks. I-35 presents a significant barrier between neighborhoods to the west and Old Town. For instance, no sidewalks exist on the 4th Street bridge and though there are sidewalks beneath the I-35 bridge, there are no sidewalks along Main Street extending to Telephone Road to the west. The railroad presents a significant barrier to the east. No sidewalks exist east of the railroad track on Main Street nor along 4th Street between Broadway Street and Turner Avenue.
- **Parking:** Lack of parking is an issue, especially during special events. Parking requirements may also be a barrier to redevelopment and reinvestment.
- **Identity/Culture:** Improved signage, wayfinding and consistent lighting fixtures and/or street furniture could help "brand" Old Town.
- **Public Space:** Central Park anchors the southern end of Old Town, but additional, smaller scale public spaces, and quasi-public spaces like patio dining or plazas would provide more opportunity for leisure activities in Old Town.
- **New Residential:** The key to a vibrant downtown is people. Increasing the number of people that live within walking distance to downtown presents an opportunity. Location and design will be important. Participants in the Old Town meeting expressed approval of the design of a new craftsman style home recently built that features a large front porch and a recessed garage. Comments were also made that higher density residential could occur above commercial or on the edges of Old Town.
- **Commuter Rail and Transit Oriented Development**: A planned commuter rail line could present opportunities for Transit Oriented Development (TOD) in the future. This type of development has a vertical mix of uses and is typically located within a half mile of public transportation.
- **New and Diverse Commercial Tenants:** Increasing retail and dining options can reinforce Old Town as a unique destination and help existing businesses be more successful.

LACK OF SIDEWALKS ON ROADWAYS ON THE EDGES OF OLD TOWN CREATE BARRIERS

EXAMPLE OF INFILL RESIDENTIAL IN THE OLD TOWN AREA

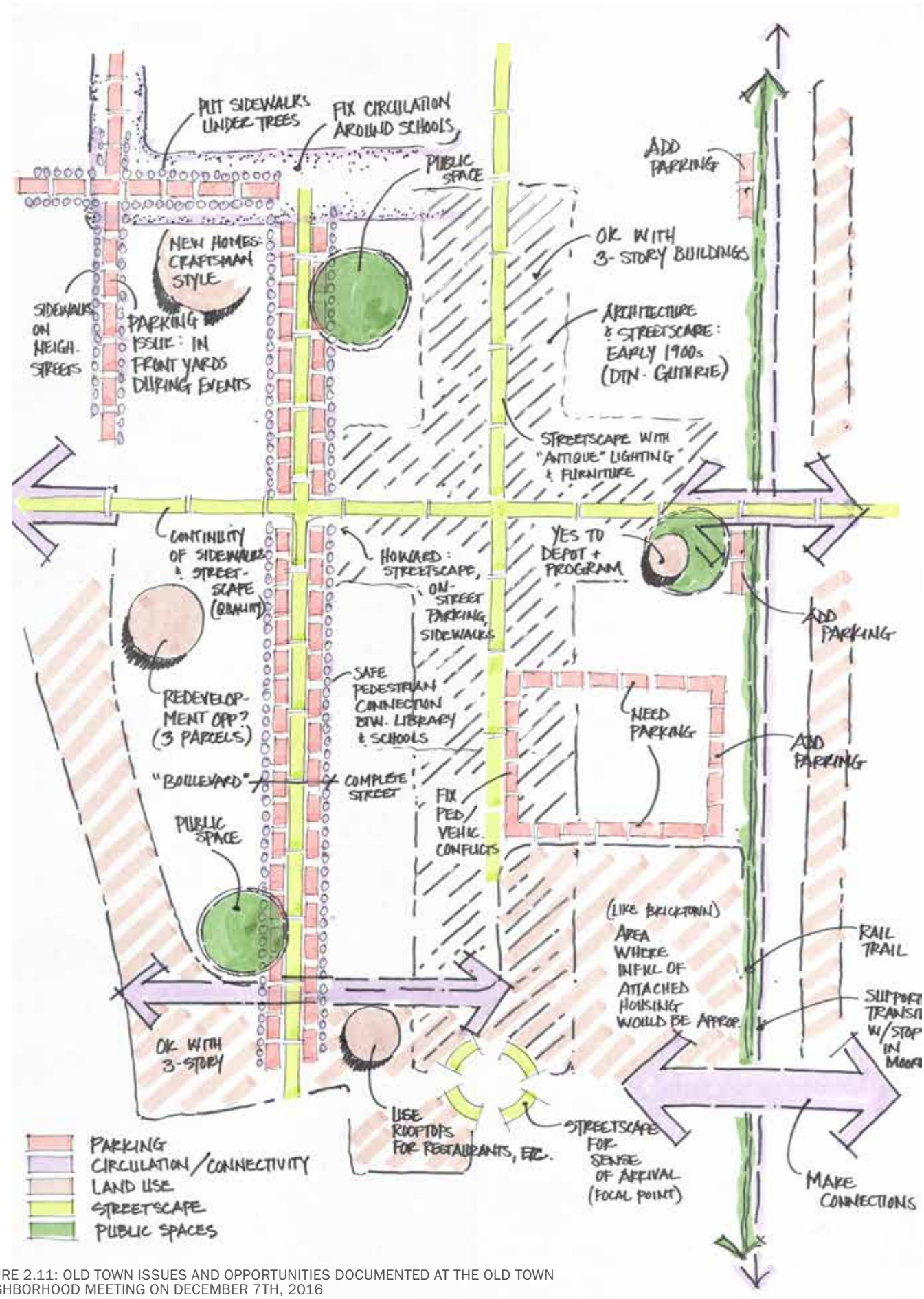


FIGURE 2.11: OLD TOWN ISSUES AND OPPORTUNITIES DOCUMENTED AT THE OLD TOWN NEIGHBORHOOD MEETING ON DECEMBER 7TH, 2016

TRANSPORTATION

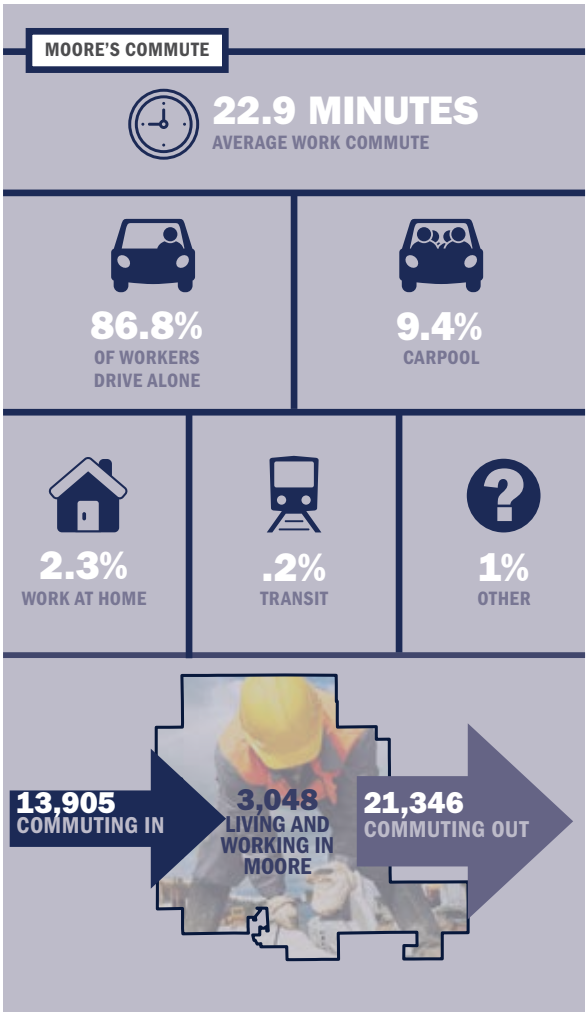


FIGURE 2.12: EXISTING COMMUTE (SOURCE: ACS 2004 – 2015)

COMMUTING TRENDS

In suburban settings like Moore, people own more vehicles and drive further distances for daily activities; both of those factors increase the cost of living. The majority of residents currently travel outside the city for employment.

CURRENT TRANSPORTATION CONDITIONS

A well planned and coordinated transportation system will enhance mobility and facilitate the movement of people and goods in a safe and efficient manner. One of the key issues of the Plan is to ensure that the city has adequate facilities to accommodate not only existing but future traffic needs as well. Moore continues to face pressures of increased growth and development which results in traffic and congestion problems. The majority of commercial growth in the community is occurring along SW 19th Street and I-35 while the majority of residential growth is occurring in the far southwest and southeast portions of the city. Future growth is projected and its impact on the transportation system is evaluated and used to help determine mobility needs in the area.

The city currently has 463.46 miles of existing roadway and 44 signalized intersections within the city limits. Traffic counts conducted by the Association of Central Oklahoma Governments (ACOG), from 2010 to 2015, revealed that the highest traveled roadways are SW 4th Street and SW 19th Street from I-35 to the western city boundary. Collision data, from the year 2010 to the year 2015, collected by the Oklahoma Department of Transportation was also analyzed to determine transportation safety concern areas. The areas showing the highest need of improvement are listed below:

- SW 19th Street from S Santa Fe Avenue to Eastern Avenue
- SW 4th Street and railroad intersection
- NW 27th Street and Pole Road intersection

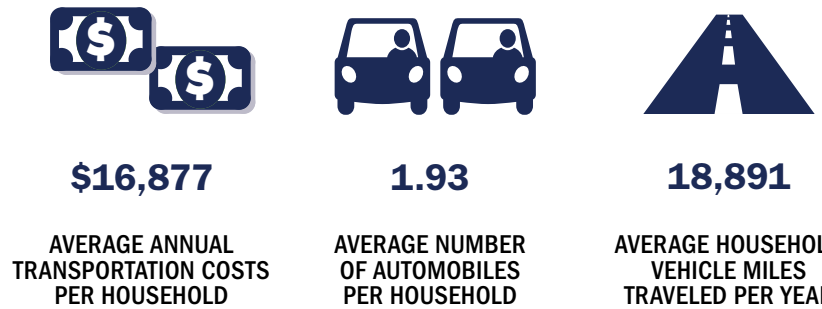


FIGURE 2.13: EXISTING HOUSEHOLD TRANSPORTATION RESPONSIBILITY (SOURCE: ACS 2004 – 2015)

"**Sidewalks are incredibly vital** to our city. We need to help people who have to walk {to} places and those who choose to walk. Let's get outside and meet our neighbors and create positive community interactions!"

- Citizen Response to "Is there a particular transportation issue that you would like to see addressed?" Public Survey #2

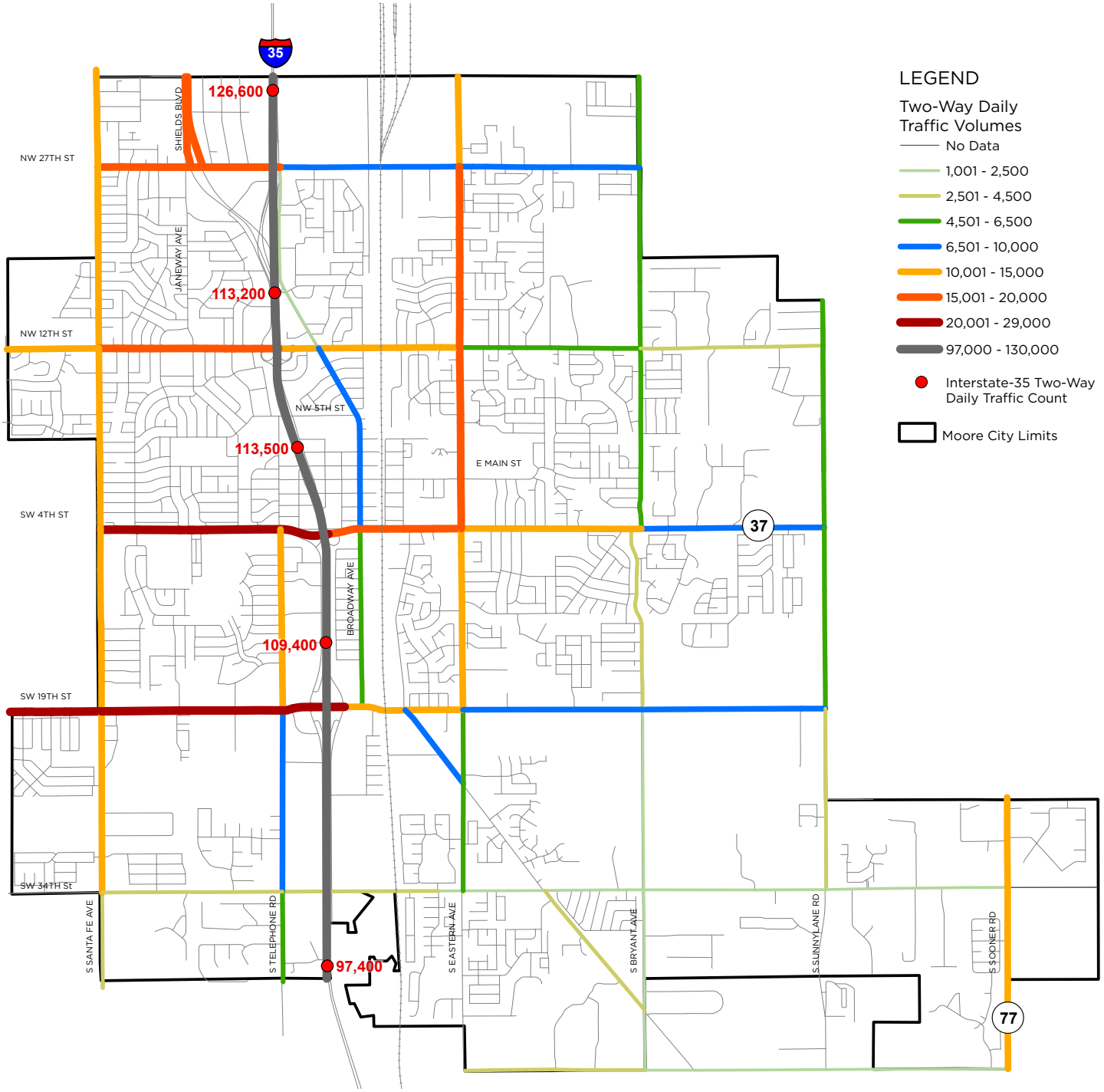


FIGURE 2.14 : EXISTING TRAFFIC VOLUMES

TRANSPORTATION AND LAND USE

Coordinating land use and transportation decisions serves an important role in improving mobility needs, promoting economic development, and enhancing quality of life. Recommended future roadway alignments, street cross sections, and the location and design of major intersections will influence future development patterns in a community and potentially benefit or adversely impact existing neighborhoods and developed areas. Transportation improvements require careful consideration of impacts to:

- Neighborhood quality and integrity
- Pedestrian and bicycle mobility and safety
- Community aesthetics
- Corridor quality
- Accessibility to shopping and entertainment districts
- Accessibility to major public facilities including linear park and trail opportunities coordinated with the roadway network

The basic aim of thoroughfare planning is to ensure the orderly and progressive development of roadways to serve mobility and access needs. This type of planning is also critical to future land use, housing, environmental protection, public utilities management, and other key components of urban and regional planning. Roadway functional classifications, design, and access management strategies must all be directed toward the prospective development and associated development regulations for the area to be served. This ranges from high-capacity, controlled access facilities for longer distances to local streets, possibly with sidewalks, trails or bike-ways, accommodating limited vehicular traffic and encouraging safe, enjoyable short-distance trips close to home or work.

Significant progress has been made to improve the roadway system in Moore since 2006. Voters passed five major street projects in the general election on November 2008 and the I-35 overpass improvements on SW 34th Street in the general election in November 2014. (Source: City of Moore Fiscal Year 2015-2016 Budget).

BICYCLE AND PEDESTRIAN ROUTES

Bicycle and pedestrian facilities are important components of the city's transportation system. They serve as alternative modes of travel and provide for recreational opportunities for local residents. Bicycle and pedestrian planning should be highly coordinated with thoroughfare planning to ensure bicycle and pedestrian routes are safe and efficient and serve the varying needs of the community. The city should utilize opportunities to improve bicycle facilities in areas that are developing or redeveloping, or where roadway improvements are occurring. Future opportunities for bicycle and pedestrian improvements should therefore identified in conjunction with the recommended thoroughfare improvements in the Plan.

Existing pedestrian and bicycle facilities along major and minor throughways comprise 6 percent of existing roadway. The current barriers to functioning bicycle and pedestrian facilities are overpasses along I-35 and incomplete bike routes and sidewalks connections.

TYPE	LENGTH
Signed Bike Route	5.0 miles
Striped Bike Lane	0.5 miles
Multi-Use Trail	1.7 miles
Pedestrian Sidewalk	23.2 miles

TABLE 2.4: EXISTING PEDESTRIAN/BIKE FACILITIES

TRANSIT

Expansion of public transportation, as a percentage of total trips, will decrease the projected traffic volumes on some street segments. Investment in on-demand bus transit and other rubber to street transportation is a viable option for Moore during the life of the Plan.

The City of Moore does not currently have fixed guide-way transit within the city, such as scheduled bus routes, streetcar and light rail, The existing service is a demand response curb-to-curb service provided by Metro Transit, the Brand Center and SoonerRide.

An 18-month study, known as ACOG Central OK!go, provided an in-depth analysis of previously identified corridors within the OKC Metro area for a regional commuter rail. The CentralOK!go Steering Committee has formalized a conceptual plan to create a north-south Commuter Rail service. The route will run between Edmond and Norman with a stop within Moore's Central Park.

2016 BIKE MOORE EVENT

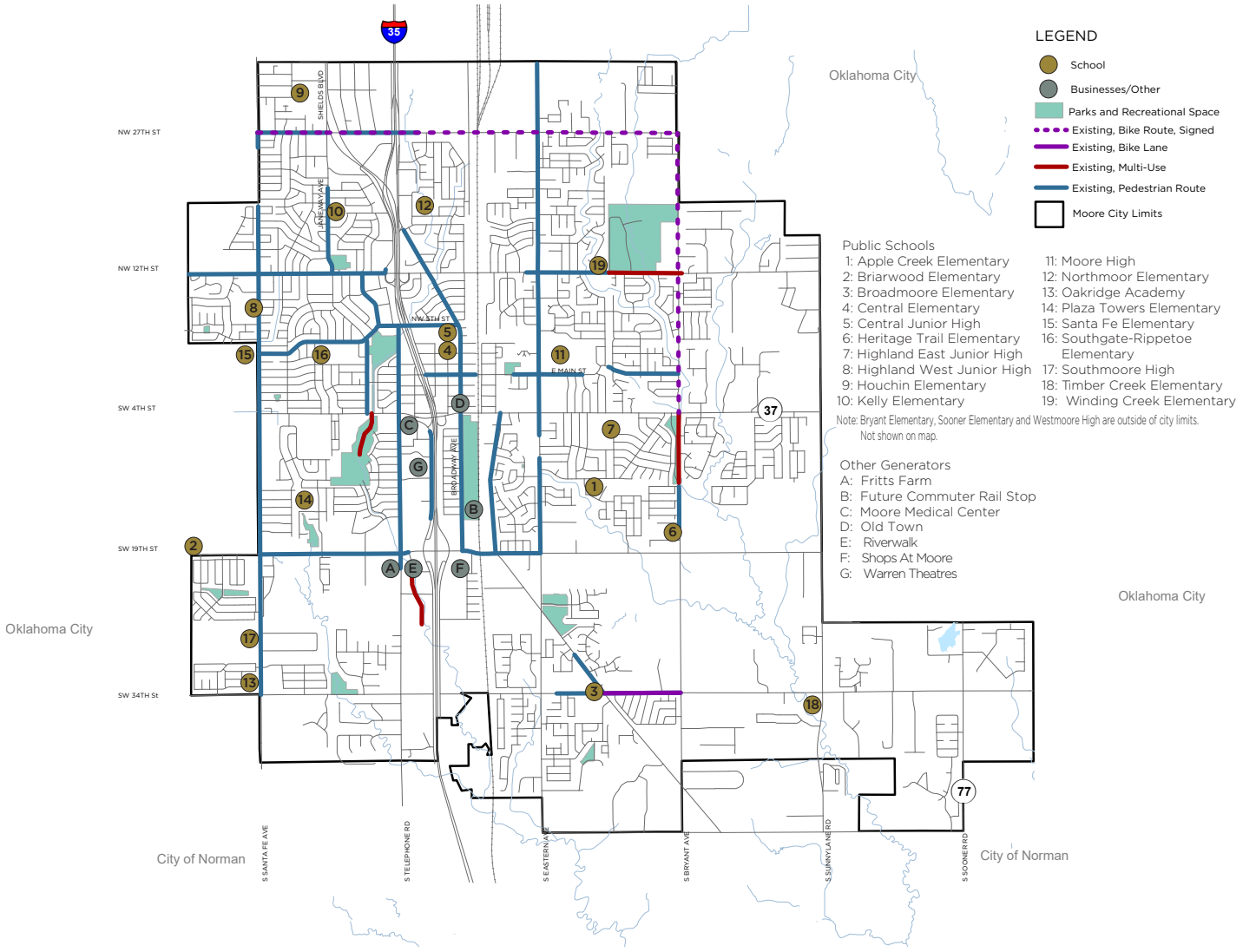


FIGURE 2.15: EXISTING PEDESTRIAN/BIKE FACILITIES AND GENERATORS

PUBLIC SERVICES

WATER SYSTEM

Potable water is supplied across nearly the entire city, both for drinking and also fire protection. Serving the entire city enables the Fire Department to provide thorough coverage with fire hydrants, helping to reduce home insurance costs in the city.

Treated surface water purchased from Oklahoma City is the primary water source (around 80%) for the city. The city's secondary source of water (about 20%) is from groundwater, drawn through 28 City-owned wells (11 of which are currently out of service). The city does not have a water treatment plant, but does treat its well water at each individual well. Peak usage per day is about 17 million gallons; the current well system can only supply 6 to 7 million gallons per day when fully functional.

WASTEWATER SYSTEM

Most of the city is served by a wastewater sewer system and a City-owned wastewater treatment plant. The plant was recently upgraded and has the ability to meet current and future needs based on calculated population growth. The city sells some treated wastewater to OG&E for reuse in power plant cooling.

STORMWATER SYSTEM

The city's stormwater system is separated from the wastewater system, and most stormwater eventually flows into Lake Thunderbird via the Little River. The system is focused on stormwater quantity/volume—handling the amount of stormwater produced in a storm. It is not currently effective at improving stormwater quality before it flows into Lake Thunderbird, the water supply source for Norman, Midwest City and Del City.

PUBLIC SAFETY

The city is served by a central police station with dedicated dispatch and emergency management space. The city is covered by four fire stations staffed with full-time firefighters.

CURRENT ISSUES

The city has experienced a consistent increase in water rates due to price increases for water purchased from Oklahoma City.

The wastewater system in the southeast quadrant of the city is constrained by the design of a lift station in the area. The city's utility operator has proposed plans to increase capacity of the primary lift station by upgrading pipe at the station. Additionally, the wastewater that is pumped out of this station is constrained by small pipes further west.

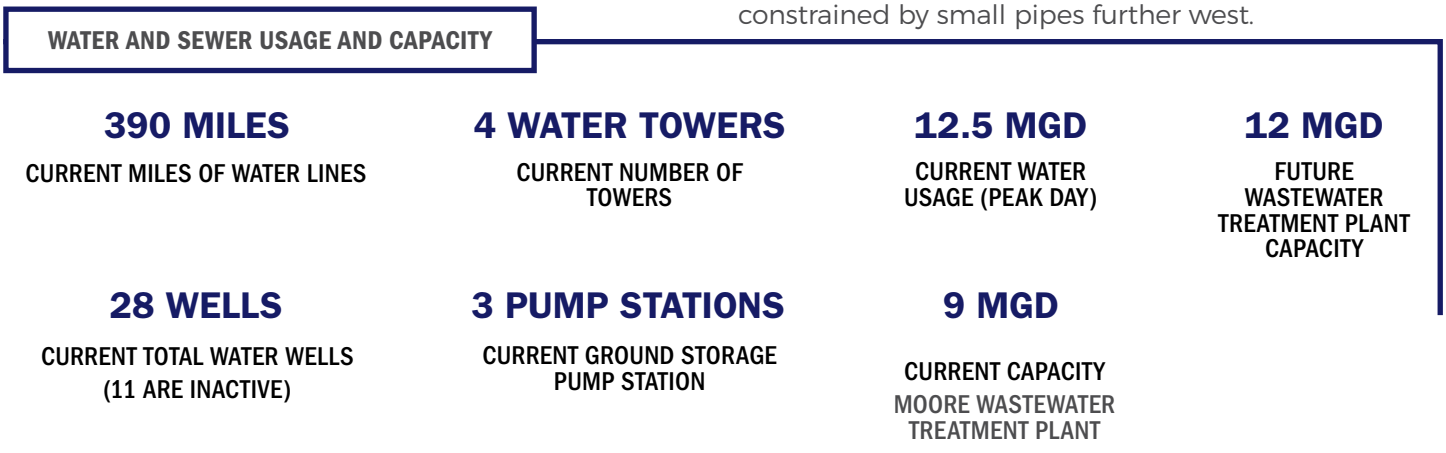


FIGURE 2.16: WATER & SEWER USAGE & CAPACITY (SOURCE: THE CITY OF MOORE)

Various areas of concern are recognized where stormwater quantity causes flooding, erosion, and other problems. The recently completed Stormwater Master Plan has identified these areas of concern and provided a list of remedies for some of the issues.

FUTURE ISSUES

The cost to secure and provide water will be a primary concern for Moore's utility system in the future. With Oklahoma City providing the majority of water to Moore, the city is unable to manage and control the largest cost of water in its system. Further rate increases will be likely.

Most of the city appears to be well-served by existing wastewater infrastructure, and the city's recently upgraded and expanded wastewater treatment plant will likely have capacity to handle additonal development. However, various individual problem areas exist where lift stations or existing pipes may not be able to handle future flows. As the northeast and southeast areas in particular are built out, the existing system may need targeted upgrades to handle the increase in wastewater flow.

Potential increased stormwater quality regulation may require Moore to spend more time, effort, and funds, to keep stormwater runoff from impacting Lake Thunderbird. The city may be required to implement techniques to ensure that this impact is limited.

An increase in population will eventually require the addition of police officers and firefighters, and potentially an additional fire station and/or re-allocation of station assets.

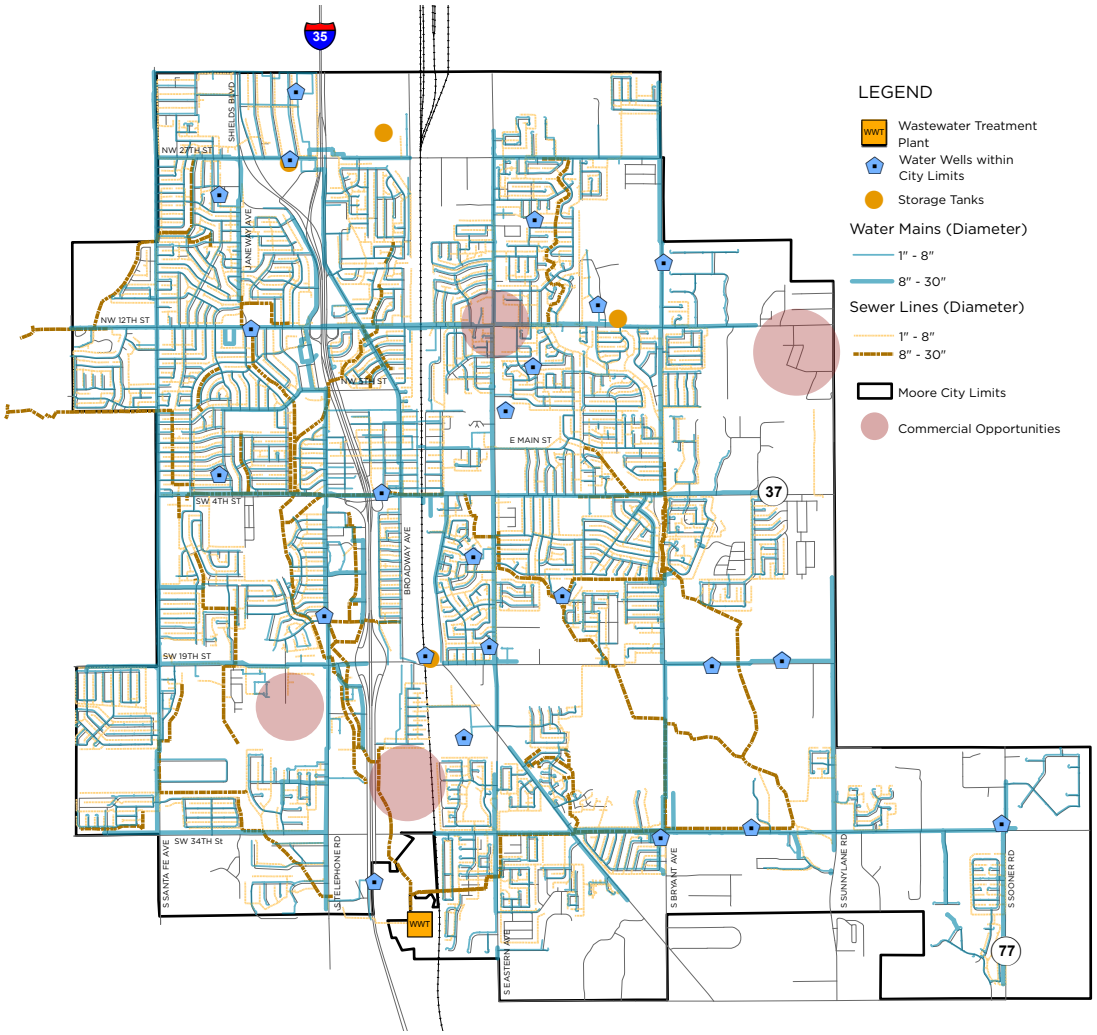


FIGURE 2.17: EXISTING UTILITY INFRASTRUCTURE

OPEN SPACE AND NATURAL RESOURCES

Protecting the environment and maintaining the natural beauty of parks, rivers and other natural resources has been a goal of previous planning efforts (2012 Parks and Recreation Master Plan, Vision 20/20). Understanding how to maintain and improve water quality, increase access to open space and protect unique natural features as amenities in new development are key issues that participants desire to address with Envision Moore.

ECOREGION AND CLIMATE

Moore is located in the Cross Timbers Transition ecoregion (defined by the EPA). This area is marked as a transition zone between the flatter Central Great Plains region to the west and the Cross Timbers region to the east. Native vegetation includes grassy prairies, hilly oak savannahs and forests of red cedar, oak and elm. Winters are relatively mild, but summers can be hot, with over 90 days exceeding 86 degrees Fahrenheit. Native plants and climate should influence landscaping and planting choices in order to ensure longevity of plant selections.

Many areas in the city have been developed for housing or commercial uses, but tracts of farmland and forest remain, particularly in the east and southeast. According to data available from the city, there is less than 7% tree canopy. In general, the densest tree canopies exist near Old Town and in undeveloped areas along streams (riparian forests).

Floodplains account for over 1,300 acres in the city. Slopes are generally gradual throughout the city, but there are some steeper slopes adjacent to drainages, especially in the North Fork subwatershed.

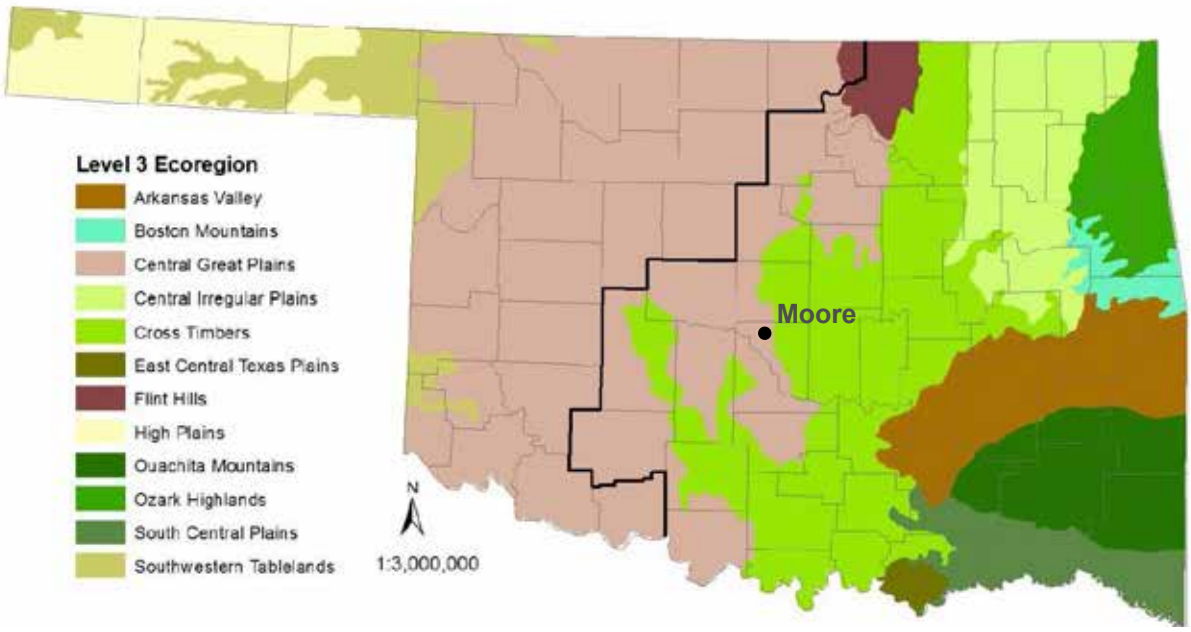


FIGURE 2.18: ECOREGIONS MAP

THE LITTLE RIVER EAST OF TELEPHONE ROAD

WATERSHEDS

The majority of the city is located in two subwatersheds. The North Fork of the Little River drains most of the city east of the railroad and east of South Broadway Street. Most of the western side of the city drains to the mainstem of the Little River. Both of these subwatersheds drain to the south and east in the Little River watershed and eventually to Lake Thunderbird.

Although a small portion of the northwestern part of the city is located in the Canadian River watershed, most of the city forms the headwaters of the Little River. As a result, urban growth, site design and stormwater management practices in the city have a significant impact on the water quality of the Little River and Lake Thunderbird.

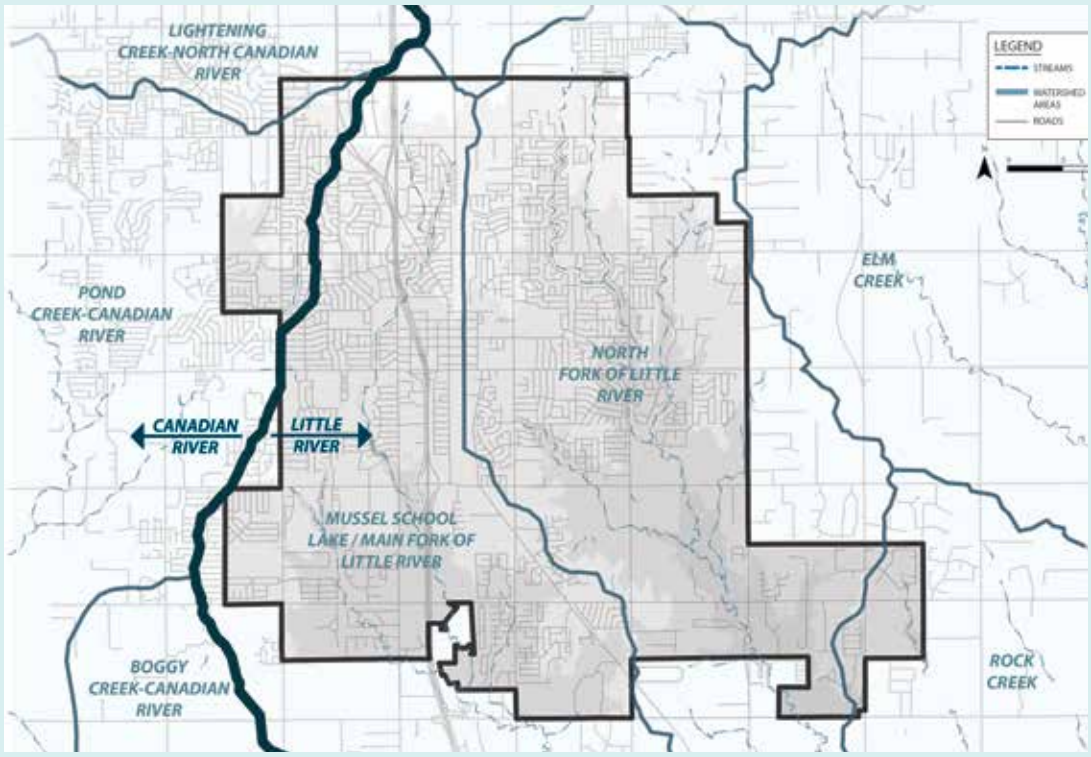


FIGURE 2.19: WATERSHEDS MAP

STORMWATER, FLOODING AND WATER QUALITY

Increases in impervious surfaces (roofs, roads, parking lots and other hard surfaces) have led to increases in runoff. Unlike natural ground covers, impervious surfaces do not allow for absorption and infiltration.

Stormwater storage and transmission facilities (i.e. stormwater detention and retention ponds, storm sewers, and drainage channels) help to regulate the flow of runoff and are intended to reduce the risk of flooding downstream. Many structures and neighborhoods were built without regard for natural drainage courses and without on-site detention. Consideration of flooding risks and retrofitting areas with stormwater infrastructure may be necessary as these areas redevelop.

As stormwater traverses developed areas such as pavement and lawns, it collects contaminants and carries them into the streams and rivers downstream. This can have a negative impact on water qualities and aquatic life and can make them unsafe for recreation.

Traditional "gray" stormwater infrastructure, such as detention ponds, can help reduce pollutants. Low impact development (LID) site design techniques such as preserving vegetation in riparian buffers (areas adjacent to streams) can be effective as well. Innovative stormwater management techniques now include "green stormwater infrastructure" (GSI) such as filter strips, rain gardens, bioswales, pervious pavements and constructed wetlands. When incorporated into new development or built as stand-alone retrofit projects in existing developed areas, these techniques have shown to improve water quality and reduce the costs of infrastructure downstream.

LAKE THUNDERBIRD TMDL

Lake Thunderbird is a popular recreational lake and water supply reservoir located south of Moore in the City of Norman. Urban development in the watershed that drains to Lake Thunderbird has led to excessive nutrient loading. Non-point source pollution from commercial and residential development in Moore, Oklahoma City and Norman contributes to the problem[1]. The Oklahoma Department of Environmental Quality Water Quality Division has produced a Total Maximum Daily Load (TMDL) report that specifies a need for a 35% reduction of suspended solids, total nitrogen and phosphorus in the watershed to meet water quality standards.

A recent study conducted by ACOG, Canadian River Waste Load Allocation Study (WLAS) established effluent limitations for Oklahoma City, Norman, Moore and several other communities. In order to maintain compliance, the City of Moore must reduce total nitrogen, phosphorus and suspended solids by 26, 29 and 22% respectively. There are many techniques that can be used to reduce the overall pollutant loads that existing development within the city contributes to Lake Thunderbird. These include the employment of best management practices for gray and green stormwater infrastructure retrofits, as well as riparian buffer and stream restoration. Adoption of low impact development design principles in new development will also be essential in reducing new non-point source pollution.

PREFERENCE

Survey Results indicate that preserving the natural environment is a priority for the citizens of Moore. Open ended responses included concerns over flooding and water quality.

Previous surveys of resident's opinions indicate a strong preference for incorporating more green infrastructure over solely relying on gray infrastructure (a recent visual preference survey showed 85% of respondents preferred natural, planted drainage channels to concrete lined channels).

1 The TMDL estimates that the City of Moore contributes approximately 25% of the nitrogen pollution, 28% of the phosphorus pollution, and 21% of the sediment to the Lake Thunderbird Watershed.

GREEN INFRASTRUCTURE

DEFINITION

Green infrastructure is a term used to describe a broad array of natural and man-made systems that improve water quality and enable functioning ecosystems. Landscape level green infrastructure includes swaths of forests, prairies, floodplains and wetlands that provide ecosystem improvements such as protecting water quality, stabilizing soils and providing wildlife habitat. Site level green infrastructure includes rain gardens, green roofs, pervious pavements, infiltration trenches, filter strips and other measures that reduce and treat stormwater close to its source in a cost-effective manner.

BENEFITS

Green infrastructure is meant to complement traditional gray infrastructure projects by reducing maintenance and expansion costs. In built-up areas green stormwater infrastructure retrofits can be an attractive option to improve water quality due to their relatively small footprint. It has also been shown that investing in green infrastructure can have secondary benefits of reduced crime in the vicinity of projects.

1 GREEN STREETS

A Green Street is a street right-of-way that, through a variety of design and operational treatments, gives priority to bicycles, pedestrian circulation and stormwater treatment. The improvements may include sidewalk widening, bike lanes, landscaping, traffic calming, and stormwater planters.

2 RAIN BARREL

A rain barrel or cistern is a structure that collects and stores stormwater runoff from rooftops. The collected rain water can be used for irrigation to water lawns, gardens, window boxes or street trees. By temporarily holding the stormwater runoff during a rain event, more capacity can be added to the city's sewer system. However, rain barrels and cisterns only serve an effective stormwater control function if the stored water is used or emptied between most storms so that there is free storage volume for the next storm. Rain barrels are designed to overflow into the sewer system through the existing downspout connection in large storm events. Although these systems store only a small volume of stormwater, collectively they can be effective at preventing large volumes of runoff from entering the sewer system.

3 RAIN GARDEN

A rain garden is a garden designed to collect runoff from impervious surfaces such as roofs, walkways, and parking lots, allowing water to infiltrate the ground. The garden is normally moderately depressed (lower than the surrounding ground level), with the bottom layer filled with stone so runoff can collect and pond within it. The site is graded appropriately to cause stormwater to flow into the rain garden area from the nearby impervious area. The water ponds on the surface, is used by the vegetation in evapotranspiration, and infiltrates into the subsurface stone storage and soil. Rain gardens can be connected to sewer systems through an overflow structure, but usually they are sized to infiltrate the collected stormwater runoff within 72 hours. Flexible and easy to incorporate into landscaped areas, rain gardens are suitable for many types and sizes of development and retrofits. Rain gardens are effective at removing pollutants and reducing stormwater runoff volume.

4 GREEN ROOF

A green roof is a roof or section of roof that is vegetated. Its system is composed of multiple layers including waterproofing, a drainage layer, an engineered planting media, and specially selected plants. They can be installed on many types of roofs, from small slanting roofs to large commercial flat roofs. Two basic types of green roofs have been developed: extensive and intensive. An extensive green roof system is a thin (usually less than 6 inches), lighter-weight system planted predominantly with drought-tolerant succulent plants and grasses. An intensive green roof is a deeper, heavier system designed to sustain more complex landscapes. A green roof is effective in reducing the volume and velocity of stormwater runoff from roofs by temporarily storing stormwater, slowing excess stormwater release into the combined sewer system, and promoting evapotranspiration.

5 RIPARIAN BUFFERS

A riparian buffer is a vegetated area (a "buffer strip") near a stream, usually forested, which helps shade and partially protect a stream from the impact of adjacent land uses. It plays a key role in increasing water quality in associated streams, rivers, and lakes, thus providing environmental benefits.

6 PERVIOUS PAVEMENT

Pervious pavement is a specially designed pavement system that allows water to infiltrate through the pavement and never become runoff. This system provides the structural support of conventional pavement but is made up of a porous surface and an underground stone reservoir. The stone reservoir provides temporary storage before the water infiltrates the soil. There are many different types of porous surfaces, including pervious asphalt, pervious concrete, and interlocking pavers. Interlocking pavers function slightly differently than pervious concrete and asphalt. Rather than allowing the water to penetrate through the paving, pavers are spaced apart with gravel or grass in between to allow for infiltration.

For more information on Green Infrastructure, see the Open Space and Natural Resources Recommendations and Appendix E.

PARKS, RECREATION AND HEALTH

FACILITIES

The City of Moore owns and maintains 13 parks that comprise 301 acres of public parkland. The following is a list of parks and facilities:

- Central Park (inc. The Station Recreation Center and Aquatic Center)
- Parmele Park
- Buck Thomas Park
- Tom Strouhal / Little River Park
- Veteran's Memorial Park
- Greenbriar Park
- Apple Valley Park
- Fairmoore Park
- Madison Place Park
- Westmoore Trails Park
- Kiwanis Park
- Cottonwood Park
- Arbor Gardens

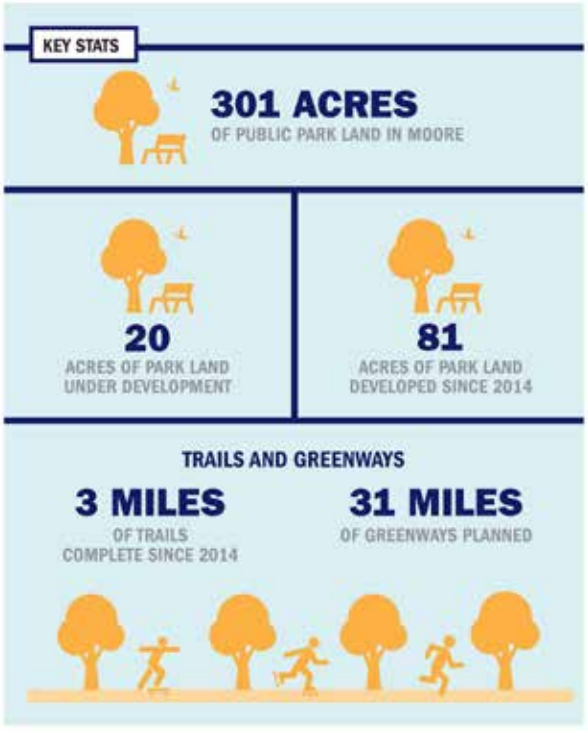


FIGURE 2.20: CURRENT PARK & RECREATION STATS (SOURCE: FY 2015-2016 BUDGET, CITY OF MOORE)

RECENT PLANNING AND INVESTMENT

The 2012 Parks Plan included a number of recommendations to improve existing parks. Many of these improvements have been made since the plan was adopted. In addition, the following recommendations called for new park space:

- Central Park (50 acres)
- Greenways (60 acres)
- SE Park (s) (80 acres)

In November 2012, a parks bond and 1/4 cent sales tax was passed that enabled the acquisition and construction of Central Park and The Station Recreation and Aquatic Center. In November 2016, voters approved an extension of an existing quarter-cent sales tax for four years. Proceeds will be used to construct a new fire station, improve 8 parks and construct a new park in Old Town.

PRIORITIES

Natural areas and trails were top priorities expressed by participants in the Envision Moore planning process. Additionally, comments were received regarding the need for safe bicycle and pedestrian connections from neighborhoods to parks and increased parks, open space and amenities in new developments.

Did you know?

28% of Adults in Cleveland County are obese. The percentage of obese adults is one indicator of the overall health and lifestyle of a community.

SOURCE: CLEVELAND COUNTY HEALTH IMPROVEMENT PLAN (2012)

CONNECTION TO HEALTH AND QUALITY OF LIFE

Lack of access to parks, open space, and fresh healthy food has been shown to be a determinant of physical health. In addition, the provision of parks and recreational programs can improve the quality of life enjoyed by residents and the competitiveness of the city.

POPULATION-BASED PARKLAND DEMAND

According to the Vision 20/20 Plan the level of service standard of 6 acres per 1,000 population was used as a benchmark for determining demand for parkland. If this same standard is applied to today's population and forecasted population the existing and future needs for parkland are detailed in the table below.

	POPULATION	EXISTING PARKLAND (ACRES)	PARKLAND DEMAND (ACRES)	PARKLAND DEFICIT (ACRES)
EXISTING	60,000	301	360	59
FUTURE (2040)	79,736	301	478	177

TABLE 2.5: POPULATION-BASED LEVEL OF SERVICE ANALYSIS FOR PARKS

SUMMARY

- Recent park acquisitions have kept pace with population growth, but there is a slight deficit in parklands.
- Based on growth trends there will be a deficit in the future.
- If recommendations from the 2012 Park Plan are implemented then the population-based level of service standard would be met. This does not take into account access to parks. For this reason it is important to review areas of the city that may be underserved.

ACCESS-BASED LEVEL OF SERVICE

According to the 2012 Parks & Recreation Master Plan neighborhood parks are meant to serve a 1/3 mile radius and community parks are meant to serve a 1-mile radius. An analysis was conducted that factored in gaps in the sidewalk network to determine what percentage of residential parcels could easily access a park within the defined service areas. For this analysis, elementary schools with playgrounds and other park facilities, were included as parks. It is also important to note that it was assumed that Central Park, Buck Thomas Park, Little River Park, Fairmoore Park and Veterans Park will function as community parks.

The results of the analysis are shown below and in the map on the next page.

	% BASED ON BUFFER (AS THE CROW FLIES DISTANCE)	% BASED ON NETWORK DISTANCE (WITH BARRIERS AND SIDEWALK GAPS FACTORED IN)
RESIDENTIAL PARCELS WITHIN 1/3 MILE OF NEIGHBORHOOD PARK OR COMMUNITY PARK	50%	30%
RESIDENTIAL PARCELS WITHIN 1/3 MILE OF NEIGHBORHOOD PARK OR 1 MILE OF COMMUNITY PARK	81%	60%

TABLE 2.6: ACCESS-BASED LEVEL OF SERVICE ANALYSIS FOR PARKS

MAJOR ISSUES AND OPPORTUNITIES

- Level of service (LOS) gaps exist in the North and Southeast part of town.
- Access to recreational facilities can be improved significantly if pedestrian and/or bicycling barriers are addressed.
- Home Owner Association private recreation facilities and open space could help address LOS gaps.
- Note: an inventory of private/HOA parks could be created and the LOS could be adjusted based on this data.

CONNECTIONS

Public input included preference for improving connections to parks. Connections can be made a variety of ways including provision of bicycle and pedestrian facilities. Facilities needed include sidewalks, greenways and on-road bicycle facility types. Addressing missing gaps in the existing sidewalk network, planning new facilities as part of street improvements, and updating policies to encourage that sidewalks and planned greenways are part of new development are opportunities for improving connections and increasing access to parks facilities and recreation programs.

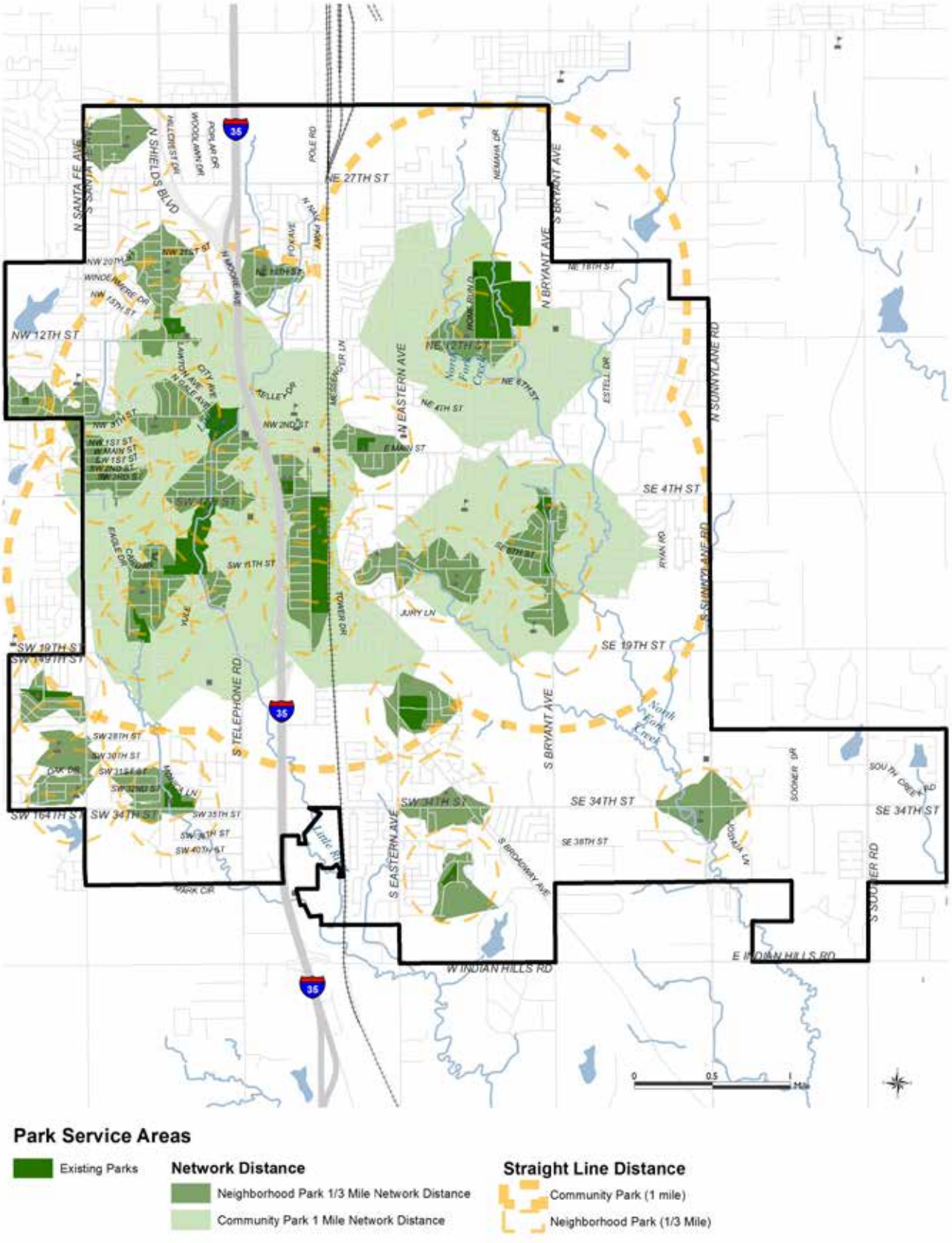
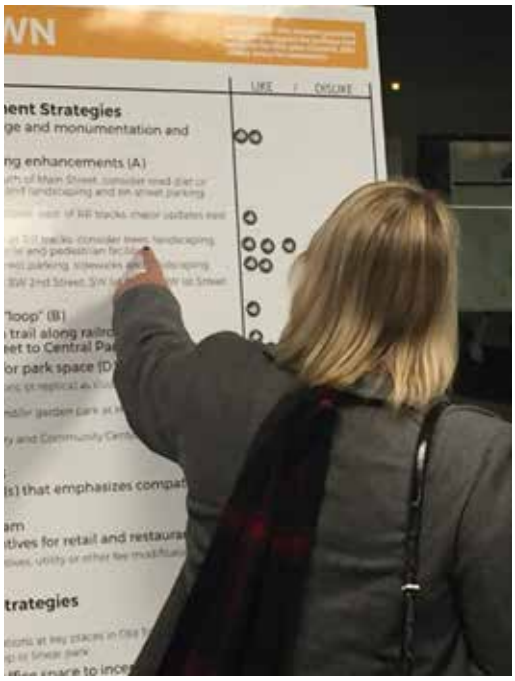


FIGURE 2.21: PARKS LEVEL OF SERVICE (ACCESS) MAP



ENVISION MOORE PLAN 2040

COMPREHENSIVE PLAN

3. ENVISION MOORE

"Envision Moore" is a vision plan and policy document intended to guide development of the city. It envisions a city with strong and healthy neighborhoods, vibrant places, and attractive, balanced growth. It outlines a direction for public and private sector investment, government programs and citizen actions that will address the goals.

GOALS

1. **Strengthen neighborhoods.**
2. Plan for a **healthy community.**
3. Promote quality, affordable **housing options.**
4. Attract and sustain balanced growth and **economic development.**
5. **Protect the natural environment and restore water quality.**
6. Create a **vibrant Old Town.**
7. Promote **development that is attractive in appearance** and reflects Moore's character.
8. **Employ Best Transportation Practices** by recognizing that the transportation system are community facilities and must be developed and maintained to serve the entire community.
9. **Become resilient** by anticipating, preparing for, recovering from, and adapting to disruptions.
10. **Efficiently deliver adequate infrastructure and services.**

THEMES

The vision for Moore conveys four overarching themes: Protect, Connect, Restore, and Reimagine. These themes are described in more detail in the Realizing the Vision Section.

PROTECT

CONNECT

RESTORE

REIMAGINE

FUTURE LAND USE PLAN

- Park / Golf Course
- Open Space Residential
- Neighborhood Preservation
- Urban Residential
- Multi-Family Residential
- Neighborhood Commercial
- Community Commercial
- Regional Center
- Old Town
- Institutional
- Employment Mixed-Use
- Transitional Commerce
- Light Industrial
- I-35 Corridor

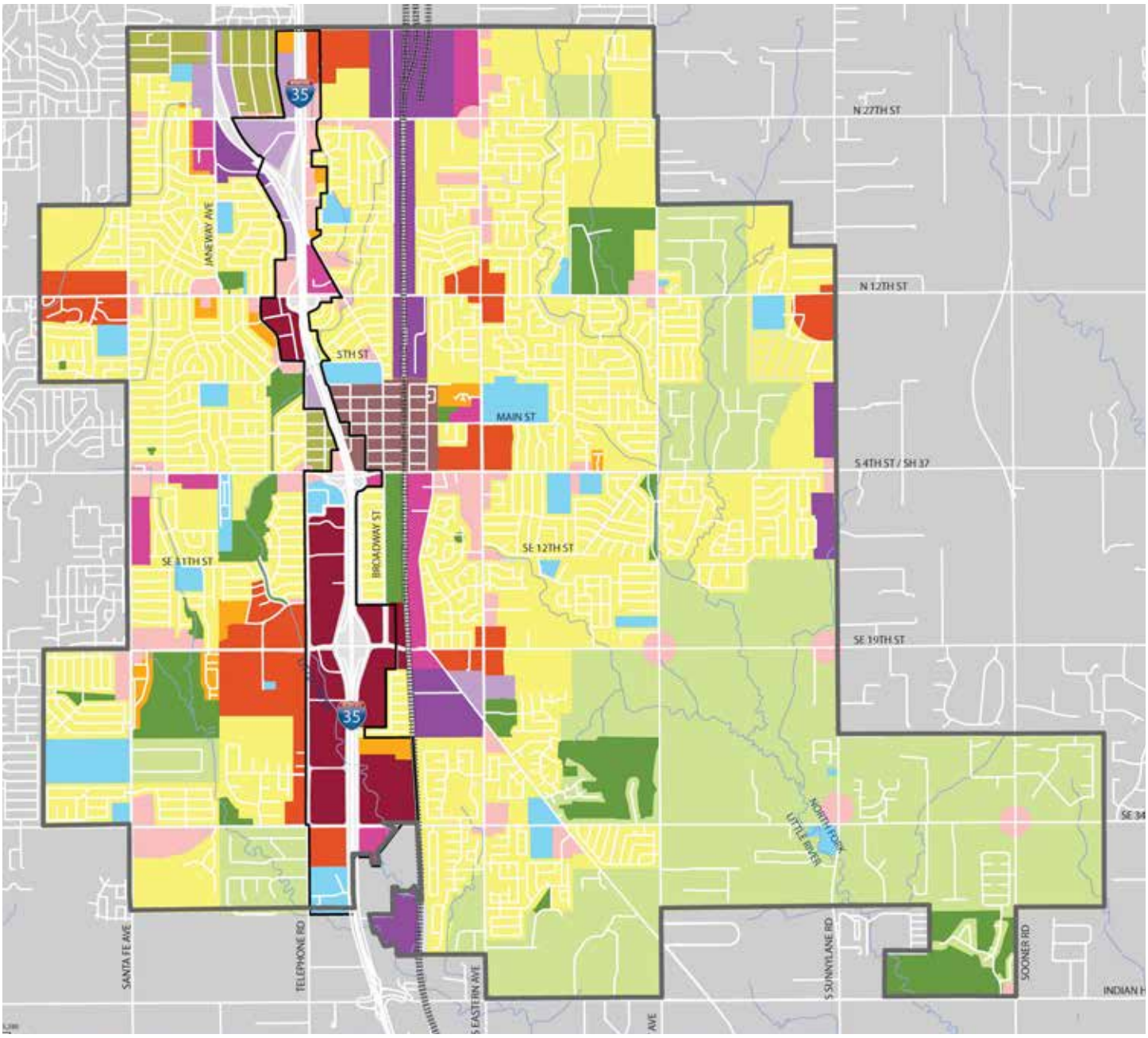


FIGURE 3.1: FUTURE LAND USE MAP

FUTURE LAND USE PLAN HIGHLIGHTS

The Future Land Use Plan, descriptions and associated policies are meant to create a strong core, conserve and enhance existing development, encourage quality, balanced and diversified growth. The plan is meant to be descriptive, not prescriptive. The land use descriptions summarize the predominant land use types intended for different areas, however, some flexibility may be needed to accommodate innovative design.

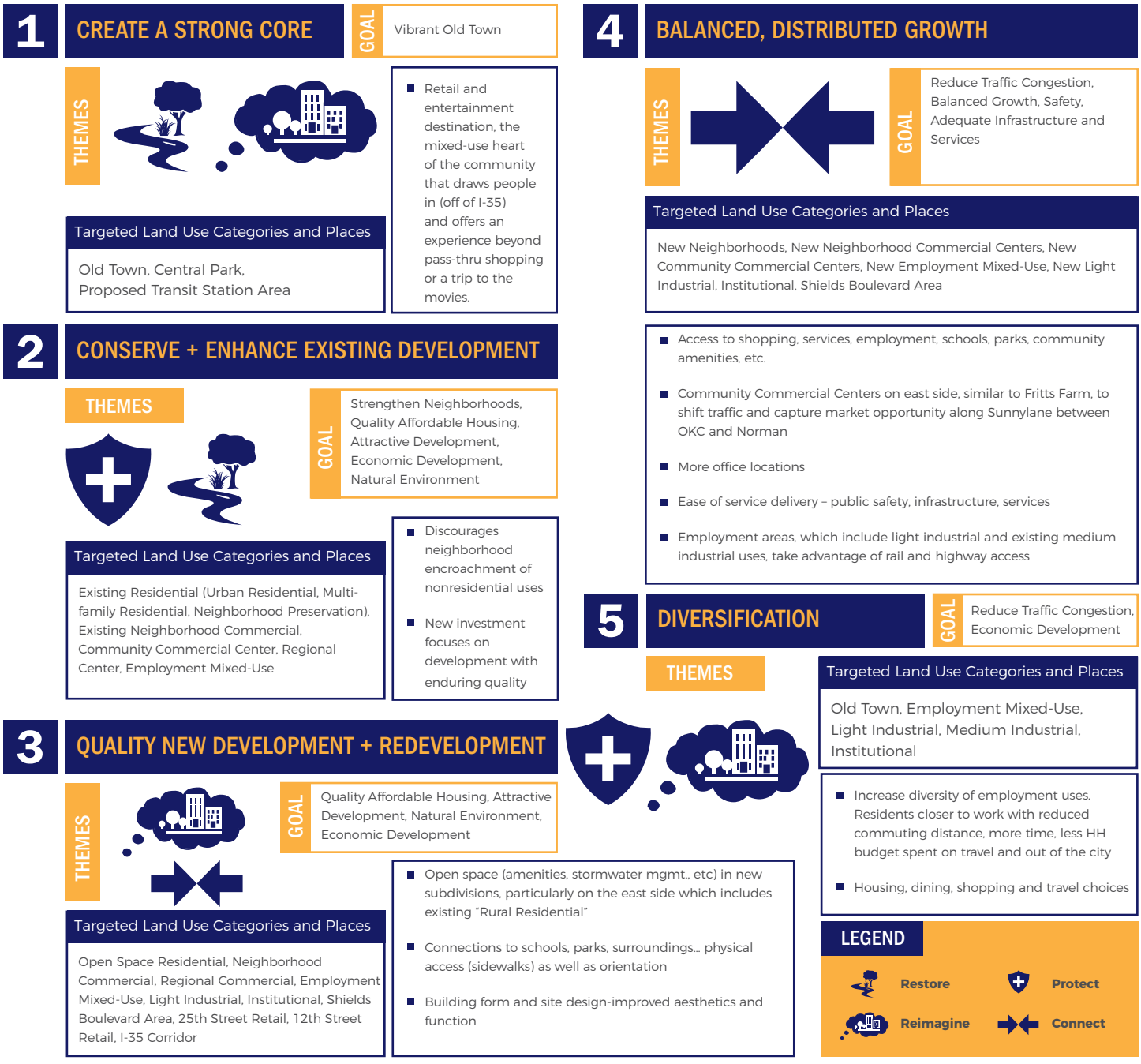


FIGURE 3.2: FUTURE LAND USE PLAN HIGHLIGHTS

FUTURE LAND USE DESCRIPTIONS

OLD TOWN

The heart of the community, this area of Moore is and should remain unique. Having the greatest mixture of uses and a wide range of community activities, this area functions as the central gathering place for Moore. Shops, restaurants, and other businesses are complemented by office, civic, residential and recreational uses. Increased daytime and nighttime populations and activity, as well as pedestrian-oriented design, is key in this area.

URBAN RESIDENTIAL

These residential neighborhoods include a mix of single family detached units up to 7 dwelling units per acre (DUA) and attached units (up to 20%) up to 15 DUA, including duplexes and townhomes. They are connected and enhanced with the presence of churches as well as parks, schools, and other community facilities that bring neighbors together and improve the residents' quality of life. Small-scale, neighborhood-serving retail and service uses may be appropriate in a few highly accessible locations that, combined, utilize a maximum of 10% of the total land area encompassed by this land use category or up to 30,000 square feet of building space, whichever is less. Complementary non-residential uses are only permitted to the degree that the scale, specific location, and design do not detract from the residential character of the area. Patio homes and attached housing (i.e. duplexes or townhomes) should be located in close proximity (¼ mile) to Neighborhood Commercial or Community Commercial Centers.

NEIGHBORHOOD PRESERVATION

These neighborhoods are four of the oldest in Moore and contain a mixture of commercial and residential uses. Like the other neighborhoods, these areas are also connected and enhanced with the presence

INFILL DEVELOPMENT, BUILDING REUSE. PEDESTRIAN ORIENTED DESIGN AND STREETSCAPE IMPROVEMENTS COULD CREATE A MORE WALKABLE AND VIBRANT OLD TOWN (PHOTO LOCATION: SHERIDAN AVENUE, OKC)

of churches as well as parks, schools, and other community facilities. These areas are to remain residential in nature, while maintaining the existing businesses that might already be in place.

Commercial expansion in these neighborhoods is discouraged. Any future commercial development must include sufficient buffering to protect the integrity of abutting residential uses, and the architecture should complement homes by mimicking the scale (up to 5,000 square feet of total floor area per building) and some of the features of single family detached residential structures, such as roof lines. Only light commercial (up to 4,500 square feet of heated floor area in any single-tenant space, and up to 25 trips per day based on rates in ITE Trip Generation Manual) should be allowed in these neighborhoods and should be located on the periphery. Traffic impacts from commercial uses should be minimal as should noise and odor emissions. There should be no commercial activity after dark. Commercial outdoor storage should be prohibited.

OPEN SPACE RESIDENTIAL

This area encompasses existing "rural" residential home sites, neighborhoods where homes have been developed on large lots, and large tracts of undeveloped land. Typical existing lots are ¾ acre and above. Undeveloped areas are made up of farms, pastures and some have significant development constraints such as the wide floodplains adjacent to the North Fork of the Little River and its tributaries. In some areas the floodplain is 2,000ft wide. These floodplains and associated streamside "riparian" areas contain nearly half of the forest cover in the city (42%). This maturing forest assists with erosion control and helps to maintain water quality. These natural features also present opportunities for greenways and open space amenities in new development.

This area presents one of the greatest opportunities for new development in the city, however, new subdivisions need to be designed to reduce conflict with existing residences and to take advantage of the unique landscape.

- New residential development without access to sewer should be a minimum of ¾ acre.
- New neighborhoods with access to sewer could include smaller lots (gross density of 3 DUA) if complemented by significant open space set asides (i.e. 30%) consisting of high value natural resources, buffers and amenities within each neighborhood.
- Higher density (gross density of 4 DUA) may be appropriate if development is clustered and provides 40% to 50% open space and demonstrates quality of place.

SUBDIVISIONS THAT INCORPORATE OPEN SPACE, GREENWAYS AND OTHER AMENITIES ARE APPROPRIATE IN THE OPEN SPACE RESIDENTIAL AREAS (PHOTO LOCATION: COLVARD FARMS A CONSERVATION SUBDIVISION IN CHATHAM COUNTY, NC)

MULTI-FAMILY RESIDENTIAL

Multi-family residential areas consist of apartments and condos, typically over 15 DUA, and provide a housing option for various segments of the population. Higher density residential developments provide conveniently located, low-maintenance living opportunities to those who prefer such a lifestyle. Sites appropriate for this use will provide convenient access to retail, employment, transportation routes, and professional services.

Acceptable locations will typically be central to the urbanized portion of Moore. Locations adjacent to the outlying commercial centers and neighborhood centers may also be appropriate. Multi-family development should not be located or designed in such a way as to cause a substantial increase in traffic through residential areas of lower density. In general, multi-family developments are similar in traffic and parking impacts to medium scale commercial uses. Therefore, multi-family residential uses may also be appropriate in some areas of Old Town or as part of a well-planned development in Community Commercial Centers, Regional Centers and Employment Mixed-Use areas. Multi-family projects should be developed with thoughtful layout, appropriate amenities, and quality architectural design as part of a master plan that can be achieved through a Planned Unit Development.

NEIGHBORHOOD COMMERCIAL

These are commercial centers of neighborhood significance, with up to 125,000 sf of commercial floor area (includes office, retail and service uses). Typical trade areas are 1-3 miles in radius. Individual tenant spaces typically do not exceed 60,000 SF. The location of this type of commercial development should be convenient to residential areas and employment centers to make walking and biking a reasonable option for access. Pedestrian connections and pedestrian-oriented design should encourage walking among these centers and the adjacent residential and employment areas. Neighborhood commercial should be located near the intersection of two arterials or the intersection of an arterial and a collector, except where shown on the Future Land Use Map.

COMMUNITY COMMERCIAL

This medium intensity commercial area provides a place for mixed-use commercial centers of local significance. The trade area of these centers typically extends for 3 to 6 or greater miles in radius, and the total commercial floor area is between 125,000 SF and 400,000 SF. Commercial uses could include retail, service, office and lodging. Community commercial centers should be located near the intersection of two arterials, at the intersection of an arterial and a collector, or along interstate frontage. These centers are intended to include a mix of uses. The typical land use mix for planned developments in this area includes 50% non-residential and up to 50% residential land uses. A mix of housing types, including single family, attached and multi-family units and units above first-floor commercial space are encouraged as secondary uses. Residential density and commercial intensity should be lowest near established single family residences.

REGIONAL CENTER

Located along a major highway or arterial streets connecting to a major highway, the area contains high-intensity commercial uses (large-scale) that thrive on a high level of both visual and vehicular access so business can offer goods and services to the larger regional population. The commercial uses may have a combined floor area in excess of 400,000 SF. Commercial uses include those allowed in Community Commercial, although the typical land use mix includes less residential (typically no more than 30% of the land area for a planned

FRITTS FARM IS AN EXAMPLE OF AN EXISTING COMMUNITY COMMERCIAL CENTER

development). A mix of housing types, including attached and multi-family units, are encouraged as secondary uses.

EMPLOYMENT MIXED-USE

This area accommodates a mix of uses and is primarily located along arterials. In many cases these areas include light industrial uses and heavy commercial uses that could redevelop in the coming years. New developments should be designed to mimic a campus or office park setting. Principal uses are office and flex uses, if impacts to adjacent properties are limited (via hours of deliveries, no outdoor storage, and limited noise and light impacts). Some supporting service and retail uses may also be located in this area to serve those employed and/or living in the area.

To support a live-work environment, redevelopment may integrate or include multifamily and attached housing units. Horizontal and vertical mix of uses is supported. As with other commercial and mixed-use areas, driveways should be consolidated and parking lots should be connected. Mixed-use developments should be designed to include pedestrian connections between residential and non-residential uses. Intensity and land use mix of development may vary based on size and depth of parcel and should be compatible with surrounding residential uses.

PROFESSIONAL OFFICES, OTHER BUSINESSES AND SOME MULTI-FAMILY IS APPROPRIATE IN EMPLOYMENT MIXED-USE AREAS

TRANSITIONAL COMMERCE

Located along interstate highways and arterials, Transitional Commerce accommodates uses that rely heavily on access and visibility from major roadways. In this land use area, heavy commercial, light industrial, and some supporting office uses are appropriate. Such uses are oriented toward those roadways and away from adjacent neighborhoods, which helps mitigate the potential impacts of traffic generated by such uses on neighborhoods. Limited outdoor storage, though screened from public view with landscaping, walls, or fences, is also permissible as an accessory use. Creating separation between major roads and neighborhoods, this land use area serves to buffer neighborhoods from highway traffic impacts, such as noise and light and new land uses within this designation must demonstrate their compatibility with adjacent residential uses. Given the location of Transitional Commerce relative to highways and neighborhoods, it is imperative that the appearance of development in this area is designed to present a positive image of the city, and managed to ensure operations (i.e., deliveries, outdoor speaker volumes, outdoor floodlight angles, etc.) do not unnecessarily impact nearby homes. Residential uses are not a component of this land use area, as such uses are incompatible and encroach upon land that should be reserved for these more intense uses (existing uses, future uses, and expansions).

LIGHT INDUSTRIAL

This area includes existing heavy commercial, office, warehouse, flex, light industrial and existing medium industrial development and reserves adequate tracts of land to accommodate future businesses, professional services, manufacturing facilities, etc. New more intense uses should be physically separated from residential areas via landscaped buffers, fencing, berms or distance to reduce potential conflicts.

INSTITUTIONAL

These areas include schools, healthcare facilities, and services that are important to the day-to-day function and security of the community. They are maintained by public and private entities and typically exist for the benefit of the public.

PARKS AND RECREATION

Public facilities, including neighborhood, community, and special use parks, comprise the recreation system. Parks are intended to accommodate active and passive recreational activities, including sports fields, playgrounds, trails, and natural areas. The range of offerings appeal to the variety of interests and abilities. This area includes large privately owned and operated recreational facilities, including three golf courses.

This category is not meant to include all lands that may be devoted to parks and open space in the future. The system outlined on the Future Land Use Map is meant to be complemented by new public facilities that have yet to be identified and plazas, parks, recreation facilities and open space included in new development. Floodplains, for example, should be preserved to the extent possible but are appropriate for some types of recreation. Parks, playgrounds, pools, greenways and other amenities should be incorporated into developments of all types as focal points.

PUBLIC PARKS AND FACILITIES ARE MEANT TO PROVIDE A VARIETY OF ACTIVE AND PASSIVE RECREATIONAL ACTIVITIES FOR ALL AGES

PUBLIC PLAZAS AND PRIVATE RECREATION FACILITIES AND AMENITIES SHOULD BE INCLUDED IN NEW DEVELOPMENT TO AUGMENT THE PUBLIC PARKS SYSTEM

FUTURE LAND USE PLAN DEVELOPMENT TYPES

The following table illustrates the types of development that are encouraged in each future land use category. Refer to the Future Land Use Descriptions and land use policies for more information.

TABLE 3.1: DEVELOPMENT TYPES

FUTURE LAND USE	Single Family Residential	Patio Homes or Attached Residential	Apartments and Condos	Small Scale Retail, Service or Office (<30k sqft)	Medium Scale Commercial (30-125k sqft)	Large Scale Commercial (125k - 400k sqft)	Regional Commercial (400k+ sqft)	Professional Offices and Institutional Uses	Heavy Commercial / Light Industrial
Park / Golf Course	-	-	-	-	-	-	-	-	-
Open Space Residential	*	*	-	-	-	-	-	-	-
Neighborhood Preservation	☑	-	-	*	-	-	-	-	-
Urban Residential	☑	*		*	-	-	-	*	-
Multi-Family Residential	☑	☑	☑	☑	-	-	-	*	-
Neighborhood Commercial Center	☑	*	*	☑	☑	-	-	☑	-
Community Commercial Center	☑	*	*	☑	☑	☑	-	☑	-
Regional Center	-	*	☑	☑	☑	☑	☑	☑	-
Old Town	*	*	*	☑	*	☑	-	☑	*
Institutional	-	-	-	-	-	-	-	☑	-
Employment Mixed-Use	-	*	*	☑	☑	☑	-	☑	*
Transitional Commerce	-	-	-	☑	☑	☑	-	☑	*
Light Industrial	-	-	-	☑	☑	☑	-	☑	☑

☑ = Use permitted

* = Certain uses permitted, subject to location criteria or design standards (i.e. minimum open space percentage, building, parking lot, storage, buffer design or landscaping requirements)

OLD TOWN

The heart of the community, this area of Moore is and should remain unique. Having the greatest mixture of uses and a wide range of community activities, this area functions as a central gathering place for Moore. Local government jobs, new and renovated housing, transit service, and programs and events at Central Park all contribute to the increase in the daytime and nighttime populations. Shops, restaurants, and other businesses are complemented by office, civic, residential, and recreational uses.

There should be a range of public spaces to complement private development and accommodate a variety of temporary uses, such as events and festivals. With pedestrian and bike facilities lessening the emphasis on vehicular travel, parking lot and street capacities can be lower than other parts of the city, resulting in more efficient use of land.

The Old Town Land Use Concept Map (Figure 3.3) illustrates the mix of uses desired in different areas of Old Town and key infrastructure improvements recommended as part of this Plan. These include:

Commercial and Mixed-Use Areas: A variety of uses are envisioned in the Commercial and Mixed-Use areas identified on the Old Town Land Use Concept Map. Retail, restaurants, professional offices and a mix of residential products are appropriate including single family homes, duplexes, townhomes, apartments and residential units over commercial space. Building form and site design are more important than use in these areas.

Residential Areas: The Residential Areas on the Old Town Land Use Concept Map are blocks dominated by existing single family homes. New development should be context sensitive and at a scale and with architectural elements that fit the character of the block. Setbacks, building height and roof types should be compatible with the existing development pattern. Front porches, recessed garages, and recessed or alley loaded accessory dwelling units are appropriate.

PROPOSED USE ZONES

- Residential
- Commercial
- Mixed-Use
- Institutional
- Green Space / Park
- Existing Signage
- Gateway Opportunity
- Proposed Sidewalk / Multi-Use Path
- Future Greenway
- Future Roadway Connections
- Streetscape Improvements

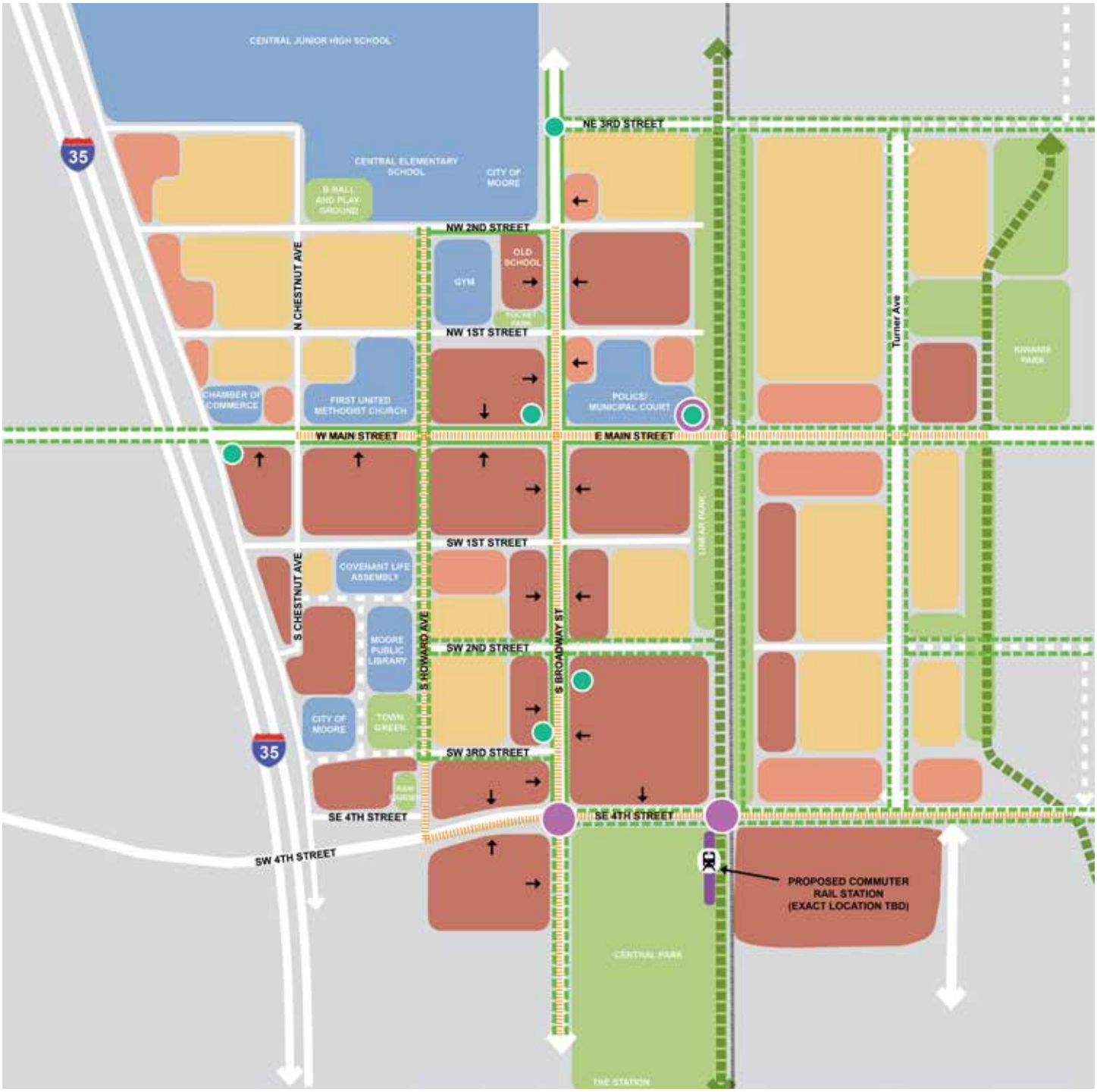


FIGURE 3.3: OLD TOWN LAND USE CONCEPT MAP

VISUALIZING DESIRED OUTCOMES

The following images are indicative of the type of design that Moore desires to achieve through this plan.

OLD TOWN

URBAN RESIDENTIAL

NEIGHBORHOOD PRESERVATION

OPEN SPACE RESIDENTIAL

MULTI-FAMILY RESIDENTIAL

NEIGHBORHOOD COMMERCIAL

COMMUNITY COMMERCIAL CENTER

REGIONAL CENTER

EMPLOYMENT MIXED-USE

TRANSITIONAL COMMERCE

LIGHT INDUSTRIAL


MOORE

4. REALIZING THE VISION

OVERVIEW

The following section includes policies and strategies that, if followed, will assist in achieving community-supported outcomes.

HOW TO USE

This section of the document is meant to be utilized by elected and appointed officials, government staff, business owners and citizens.

The chapter is organized by topic and goal. Goals serve as overarching principles that the city should seek to achieve. Each goal has a set of policies and strategies that should serve as the basis for Moore's regulations and policies and help to guide its physical development. It also inherently establishes ideas for public engagement, civic action and a framework for private investment.

POLICIES

- Policies are used to guide land use and investment decisions, program development, work plans and community efforts.

Strategies

- Strategies provide a specific project, plan or program idea to achieve a goal or further a policy.

THEMES

Envision Moore was developed around four key themes that are meant to shape the future of the city. These themes were developed based on related comments from citizens and stakeholders during the creation of the Plan. The policies and strategies are meant to further these themes and the goals.

PROTECT

- Protect neighborhoods and citizens
- Consider return on investment in infrastructure
- Conserve natural resources

CONNECT

- Preserve and improve mobility
- Provide transportation options
- Connect people to destinations (i.e. parks, schools and commercial)

RESTORE

- Continue rebuilding and improve capacity to respond to natural disasters
- Encourage investment and opportunity
- Restore our streams and the natural environment

REIMAGINE

- Create a vibrant Old Town
- Reimagine what aging shopping centers could be
- Consider long term implications of land use decisions

LAND USE

Land use policies are meant to guide decisions related to re-zoning, development design, utility and transportation investment and small area planning efforts. Strategies and associated action items reinforce policies and help achieve the overarching goals of balanced growth and economic development, creating a vibrant Old Town and ensuring that future development is attractive, protects property values and is in keeping with the small town character of the City of Moore.

GOAL: BALANCED GROWTH AND ECONOMIC DEVELOPMENT

Balancing existing centers of activity with new, well-designed shopping and dining destinations conveniently located throughout the city will help distribute traffic and improve quality of life. Stimulating reinvestment in existing centers, providing areas for high quality, local jobs, and protecting existing neighborhoods will be key to achieving this goal.

POLICIES AND STRATEGIES

1. ENCOURAGE ORDERLY GROWTH ON THE EAST SIDE OF THE CITY

Much of the recent development in the city has occurred on the west side of I-35, particularly along and near the 19th Street corridor. By supporting development and redevelopment on the east side, the city can simultaneously accommodate uses, such as housing and retail services, that meet future demand while lessening the burden of future growth on infrastructure on the west side. Development on the east side should be timed with infrastructure extension to avoid leapfrog development and reduce cost of service provision.

STRATEGIES:

- **Strategy 1.1:** Study and adopt utility policies that reflect the city's intent to support development on the east side of the city, and implement such policies with city-initiated projects and programs. Provide public investments in water, sewer and stormwater systems on the east side of I-35 to make development and redevelopment more feasible, especially in targeted locations.
- **Strategy 1.2**: Higher intensity development (i.e. commercial and urban residential) should occur only where access to city water and sewer is available.

2. ENCOURAGE RETAIL GROWTH IN COMMERCIAL AND MIXED-USE NODES

Traffic congestion in the city is exacerbated by the many driveways providing direct access onto the major arterial roads, which are the spines of the local- and regional-serving commercial corridors. Nodal development facilitates design that utilizes shared access points that reduce turning movements as well as a network of local streets and driveways that essentially lower traffic volumes by shifting local traffic off of the arterials. The resulting street/private drive network should be constructed with pedestrian walkways, and scaled and amenitized to make walking among uses a reasonable alternative to driving. Furthermore, nodes should be designed to provide secondary and tertiary access via streets connecting to neighboring development to further reduce dependence on the arterials for access to retail development.

STRATEGIES:

- **Strategy 2.1:** Establish Design Guidelines that can be utilized by private developers. These guidelines should outline the principles of mixed-use development that align with this Plan as well as accepted best practices. These principles should provide the foundation for recommended design standards set forth in the guidelines. The principles should also provide a framework sufficient to give direction to developers seeking an alternative to strict adherence to the standards, allowing them an avenue to offer innovative design approaches.

MIXED-USE DEVELOPMENT DESIGN CONSIDERATIONS

Opportunities for mixed-use planned developments exist in the areas designated as Community Commercial, Regional Centers, and Employment Mixed-Use Centers. Smaller scale opportunities exist in and around Old Town. These areas should be carefully designed as a whole in order to create dynamic centers to live, work, and play. Some design details that are important to consider include:

- **Orientation to the street**: Buildings should be brought close to the street and parking should be placed in the side or rear in order to create a walkable environment. Street-facing facades should be "active" with doors, entryways, transparent windows and other vertical elements.
- **Pedestrian environment**: Interior collectors and adjacent streets should include pedestrian facilities, a planting strip and street or yard trees to provide shade and improve aesthetics.
- **Block lengths and connections**: Block lengths should be short (< 600 ft.) in commercial, mixed-use and higher density areas. Vehicular connections to multiple arterials and safe pedestrian connections to adjacent development, planned greenways and schools should be a priority.
- **Amenities**: On-site amenities should be encouraged in order to improve the competitiveness of new developments and accommodate demand from new residents. Pocket parks, commons, and plazas should be included in commercial and mixed-use areas. Parks, open space and greenways should be integrated with residential areas. A significant amount of open space should be usable and accessible (i.e. not just floodplain, steep slopes or slivers of land).
- **Stormwater:** Riparian and floodplain areas should be preserved as open space. Stormwater best management practices should be used to detain and retain stormwater as close to the source as possible.

FIGURE 4.1: CONCEPTUAL PLAN FOR MIXED-USE COMMUNITY COMMERCIAL

Action Item: Establish design guidelines for mixed-use Community Commercial. This could be a stand alone document or could be part of small area plans for key nodes or activity centers. Design guidelines should address the design considerations included on the previous page.

- **Strategy 2.2:** Support rezoning requests and development plans for mixed-use projects that demonstrate adherence to the Design Guidelines.
- **Strategy 2.3**: Require shared access points and a network of local streets to minimize drives on arterials; connect to collector streets in neighborhoods when possible.

3. ENCOURAGE REINVESTMENT IN EXISTING CENTERS AND NEIGHBORHOODS

Gaps in the urban fabric created when new development moves to the edges of the city not only contribute to a city's economic decline, but also put undue burden on public systems. Such systems are expanded to serve new development while capacity in existing infrastructure remains underutilized. By making redevelopment more attractive than "greenfield" development, sites within the city could also attract job-generating uses.

STRATEGIES:

- **Strategy 3.1 / Action Item:** Consider the establishment of a redevelopment incentive program.
    - Define the range of potential incentives to offer. This requires an examination of types of incentives offered by other cities in the US, an assessment of the feasibility of such incentives given legal constraints (i.e., limitations of Oklahoma Statutes), the city's resources (i.e., staff capacity and ability to fund each incentive), and an evaluation of the potential effectiveness of such incentives given current and near-term development costs. Potential incentives could include:
        - Façade grants
        - Vacant space incentives
        - Utility fee modifications
    - Delineate areas that are eligible for participation in one or more programs. The properties that are eligible for incentives will vary. Therefore, an important step in the establishment of the program is the provision of a map (online and hardcopy) that identifies the parcels that comprise the areas associated with the different grant opportunities.
    - Market the program. Such programs are only effective if investors are aware of the opportunities. By developing and delivering a marketing campaign, the city can raise awareness of the grants, and disseminate information directly to the target audiences.

CASE STUDY: ENID, OK – Enid has a Facade Renovation Grant program that encourages improvements to commercial facades within the Main Street Enid boundary. Repairs and improvements such as windows, doors, repairs and renovations are eligible.

http://www.mainstreetenid.org/facade-grants.html

CASE STUDY: PALATKA, FL – The City of Palatka has a broad range of incentives available to both residential and nonresidential development, individual property owners and developers. The grants, some of which are matching, address several city objectives including the provision of housing, appearance of structures, and job creation.

http://palatka-fl.gov/248/Redevelopment-Incentive-Programs

- **Strategy 3.2:** Amend the zoning in Old Town.

A successful downtown typically spurs economic development in other parts of the city, so many municipalities will focus efforts there as a way of catalyzing additional investments in the long term. While the city can direct funding and other resources to Old Town, the success of Old Town depends on private investment to complement public investment. Therefore, investing in Old Town should be an easy choice for the private sector. One way to facilitate desired change is to remove regulatory barriers. Zoning should require only that which is absolutely critical to the formation of a strong core and otherwise be flexible.

Action Item: Establish one or more form-based zoning districts to enhance the character of Old Town.

- Convert the Central Business District and General Commercial District in Old Town to a form-based district that emphasizes form of development over location of uses, promotes a mix of compatible uses, and establishes performance standards to ensure such compatibility and mitigate potential negative impacts.
    - Using the concept plan prepared for Old Town (see Figure 4.2), standards regarding building scale, building orientation, setbacks, pedestrian

ROANOKE, TX ADOPTED A FORM-BASED ZONING DISTRICT IN TANDEM WITH INVESTING IN STREETSCAPE IMPROVEMENTS. THE TOWN IS NOW A DINING AND ENTERTAINMENT DESTINATION IN THE NORTHERN FORT WORTH REGION.

connectivity, streetscape and street furnishings, parking, open space (parks, greens, courtyards, and plazas), and landscaping should be developed. The creation of this district requires an assessment of existing uses so the standards of the modified CBD acknowledge some of the existing conditions that are appropriate. (Note: Testing of the proposed standards with hypothetical infill development concepts is recommended.)

- Consider establishing an Old Town residential district where commercial uses are discouraged. New residential in these areas should be context sensitive. Setbacks, building height and roof types should be compatible with the existing development pattern. Front porches, recessed garages, and recessed or alley loaded accessory dwelling units are appropriate.
- Amend the Official Zoning Map. Apply the district(s) across Old Town to correspond with character areas as delineated on the Old Town Land Use Concept Map.

4. ACCOMMODATE LARGE-SCALE OFFICE AND LIGHT INDUSTRIAL USES IN APPROPRIATE AREAS

The city has an opportunity to diversify the mix of uses and encourage more employment growth. Perhaps the greatest benefit is the potential reduction in work commutes, which is the primary driver of traffic congestion in the I-35 corridor in Moore. A higher percentage of the population in the future could live close to their place of employment. Large-scale office (i.e. corporate headquarters) and light industrial uses should be located in areas that are accessible but do not preclude opportunities for additional retail development and the city's ability to maximize potential sales tax generation.

STRATEGIES:

- **Strategy 4.1:** Support rezoning requests for a Light Industrial district (or Employment Mixed-Use if appropriate for a development proposal given its context) in areas shown as Light Industrial on the Future Land Use Map.
- **Strategy 4.2:** Support rezoning requests for an Office District (or Employment Mixed-Use, if appropriate for a development proposal given its context) in areas shown as Office District on the Future Land Use Map.
- **Strategy 4.3:** Consider the location of such land use areas in updates to utility policies, plans, and the CIP to ensure utility capacity exists to support such development.

5. ENCOURAGE A MIXTURE OF USES IN KEY AREAS OF THE CITY TO CREATE ENTERTAINMENT, SHOPPING AND DINING DESTINATIONS

The SW 19th corridor draws visitors from all over the region. However, visits are often limited to single experiences (i.e. attending a movie). Moore has an opportunity to capitalize on visits by broadening the range of shopping, dining, and entertainment options, thereby encouraging longer stays. Mixed-use development should cluster related uses to enhance the experience and become places of interest. For example, a theater and restaurants benefit from close proximity, as they build business for each other. Proximity allows the clientele of one to become the clientele of the other. An entertainment experience can be expanded to become an entertainment and dining experience. The collection of complementary experiences will help strengthen the city as a destination.

STRATEGIES:

- **Strategy 5.1:** Prepare area plans for areas within the city that lend themselves to the creation of places of interest in the long-term. Conceptual plans developed as part of the area plans help convey the idea and inspire investment in keeping with the city's vision. Shaped by input from and expectations of the residents and property owners in the vicinity, the plans will build on the policies of the Comprehensive Plan and provide additional guidance to city leaders as they consider development proposals in these key opportunity areas. Recommended areas for future area planning include:
  - Underutilized shopping centers
  - Undeveloped Community Commercial Nodes
  - I-35 Corridor
  - Old Town
  - S 4th Street Corridor
  - Shields Boulevard
  - Southeast Moore
- **Strategy 5.2:** As these places evolve and emerge as places of interest, consider the development of a local marketing campaign. This may include a strategy for promoting all of the city's mixed-use destinations, such as Old Town, and events to entice residents and visitors to explore and enjoy all that the city has to offer.

6. PROMOTE MOORE AS AN IDEAL LOCATION FOR ENTREPRENEURSHIP

In close proximity to the University of Oklahoma (OU) and with access to the resources and infrastructure of Oklahoma City, Moore is ideally suited for entrepreneurs. A business-friendly community not only successfully attracts corporate relocations and facilitates expansions of existing businesses, but facilitates start-ups that could grow into major job-generators of the future. Entrepreneurs can enjoy living in a community with a high quality of life while pursuing new business opportunities. In Moore, entrepreneurs can take advantage of relatively inexpensive office and commercial space, particularly in Old Town.

STRATEGIES:

- **Strategy 6.1:** Study the provision of public wifi or broadband to encourage tech-savvy start-ups.
- **Strategy 6.2:** Consider partnering with other entities to increase or market office/flex space.

7. PROMOTE ADDITIONAL RETAIL DEVELOPMENT IN THE I-35 CORRIDOR

Situated between Oklahoma City and Norman, Moore enjoys being a major regional retail destination. The I-35 corridor provides easy access to shopping for a large percentage of the region's population. Sites that border I-35 have the visibility that regional retailers seek.

STRATEGIES:

- **Strategy 7.1:** Support rezoning requests for a General Commercial District or Planned Shopping Center District in areas shown as Regional Centers or Community Commercial on the Future Land Use Map.
- **Strategy 7.2:** Utilize Planned Unit Development to accomplish a mix of uses, quality design, and connectivity in such large-scale development areas.
- **Strategy 7.3:** Accommodate a mix of commercial uses, and limit the range of permitted uses to exclude heavy commercial uses. Heavy commercial uses such as car sales, mini-storage facilities, and other uses with large outdoor storage requirements are generally not conducive to shopping, dining, and entertainment activities and are more appropriately located in the Light Industrial land use areas.

  Action Item: Update regulations to encourage quality design in the I-35 corridor.

  - Update zoning regulations to prohibit certain uses and encourage quality design, particularly in areas with large-scale development opportunities.
  - Special attention should be given to the quality of design to enhance visitor experience and to present a positive image of the city in a highly visible corridor. Design standards could be established to achieve quality design, particularly as it relates to public or publicly-accessible spaces, and to ensure connectivity.
  - Prepare small area plans with conceptual designs for key areas along the I-35 corridor to inform decisions about the arrangement of uses, the incorporation of public spaces (or common open spaces), scale and orientation of buildings, circulation patterns, outdoor storage, landscaping, etc.
- **Strategy 7.5:** Consider the location of major opportunity areas in updates to utility policies, plans, and the CIP to ensure utility capacity exists to support such development.

RESILIENCY TOUCHPOINTS

Resilience in land use planning includes preparing the city to adapt to changing conditions in the natural environment, the built environment and the community. The land use recommendations improve resiliency by:

- Encouraging economic resiliency
- Encouraging reinvestment
- Recognizing interdependencies of the natural environment and human systems and mitigating potentially disruptive events (i.e. natural hazards).

GOAL: CREATE A VIBRANT OLD TOWN

The walkable nature of Old Town, the architectural scale, short blocks and shaded alleys feel much different than the rest of the City. This character will continue to attract businesses and interest in redevelopment and should be reinforced by land use, urban design, and transportation decisions.

POLICIES AND STRATEGIES

1. PROVIDE FLEXIBILITY FOR REDEVELOPMENT

STRATEGIES:

- **Strategy 1.1:** Support more retail, dining, and shopping options.
- **Strategy 1.2:** Allow the incorporation of residential uses as part of redevelopment projects.
- **Strategy 1.3:** Revise parking requirements to allow for shared parking and to account for existing and planned public on-street parking and potential for non-motorized trips.

2. REINFORCE THE CHARACTER AND SCALE OF OLD TOWN

- **Strategy 2.1:** Implement Old Town overlay or a new mixed-use zoning district addressing walkable scale and mix of uses that matches the scale of surrounding uses.
    - Potential mixed-use areas are designated on the Old Town Concept Map on page 69.
- **Strategy 2.2:** Develop design guidelines for new development including:
    - Pedestrian-scaled architecture.
    - Transparent facades (avoid blank walls).
    - "Build-to" line that will bring commercial and mixed-use buildings close to the street
    - Reduce side and rear setbacks except when abutting single family residential areas
- **Strategy 2.3:** Modify parking requirements to require parking to be located behind buildings and utilize alleys for access to parking in order to preserve the potential for addition of on-street parking as part of planned streetscape improvements.

3. IMPROVE THE VISUAL APPEARANCE OF THE PUBLIC REALM

- **Strategy 3.1:** Invest in the public realm (rights-of-way) via streetscape improvements.
    - Streetscape improvements, including pedestrian facilities, planting strips, and some form of on-street parking (parallel or angled) should be considered for the following side streets:
        1. Howard Avenue
        2. SW 3rd Street
        3. NW 2nd Street
        4. NW 1st Street
        5. SW & SE 2nd Street

FIGURE 4.2: OLD TOWN CONCEPTUAL REDEVELOPMENT FRAMEWORK

OLD TOWN REDEVELOPMENT FRAMEWORK

The concept plan illustrates the potential form and location for redevelopment and public realm improvements in Old Town. It is not a development proposal and exact uses and building forms will be dependent on the market. However, new development should adhere to general principles illustrated including:

- Buildings should be brought close to the street with minimal setbacks.
- The historic grid pattern should be preserved where possible to maintain vehicular and pedestrian connectivity.
- Pedestrian access should be provided every 300 feet.

Note: The streetscape and public space improvements shown are illustrative and will likely require further study. Generally streetscape improvements should include a planting strip, sidewalks, on-street parking, bike lanes, bike racks, decorative lighting and gateway monuments where shown on the concept plan. Drainage issues should also be addressed.

Strategy 3.2: Plan for future public space in Old Town (i.e. a linear park along the railroad, a "Town Green", an enhanced community garden).

Action Item: Develop a conceptual plan for the Old Town Railroad Park that accomplishes the following:

- Creates a new destination in Old Town.
- Incorporates art and tells the history of Moore.
- Adds additional parking for events.
- Improves pedestrian connectivity.
- Provides a vegetative or fenced barrier to improve safety of the railroad tracks while preserving views from the east side of the track to Old Town.

- **Strategy 3.3:** As part of streetscape and public space improvements, study improvements to stormwater system.
  - Consider stormwater planters as part of streetscape improvements.
  - Incorporate a stormwater retention area, water feature and/or rain garden just north of S. 4th Street as part of a long-term redevelopment plan for the area.
  - Deploy green stormwater infrastructure (GSI) as part of new development and greenway projects east of Turner Ave.

4. ENCOURAGE COMMUNITY INTERACTION VIA PROGRAMMING

- **Strategy 4.1:** Continue to coordinate with the Old Town Association, civic organizations and businesses to promote events in Old Town.
- **Strategy 4.2**: Incorporate art as placemaking elements in public places when feasible.
    - Art installations could be permanent or temporary installations marketed as part of an art walk program.

5. ACTIVATE CENTRAL PARK

- **Strategy 5.1:** Encourage redevelopment adjacent to the edges of Central Park (both sides of railroad tracks).
- **Strategy 5.2:** Improve pedestrian safety in the vicinity of Broadway Avenue and 4th Street on the North side of Central Park.

Action Item: Redesign 4th Street between Howard Street and Tower Drive.

- Addition of a pedestrian refuge at the intersection of 4th and Broadway Ave.
- Inclusion of a high-order pedestrian and bicycle connection as part of the planned underpass beneath the rail line.
- Consider elevated north/south pedestrian facility and park extension near the railroad tracks (see Figure 4.2).

- **Strategy 5.3:** Study potential for a commuter rail station in the vicinity of Old Town.
    - Study the potential for locating a commuter rail station in Central Park as close to Old Town as feasible to encourage redevelopment in the area. This location would provide a node of activity south of Old Town that would further activate the park.

6. IMPROVE CONNECTIONS BETWEEN OLD TOWN AND SURROUNDING NEIGHBORHOODS

- **Strategy 6.1:** Address connectivity barriers (i.e. to Central Park and surrounding neighborhoods).
    - Main Street:
        - Improve bicycle and pedestrian connections to neighborhoods east of railroad.
        - Improve bicycle and pedestrian connection to neighborhoods west of I-35 (using underpass).
    - Telephone Road: Add sidewalks along east side of Telephone Road.
    - Other streets as appicable.

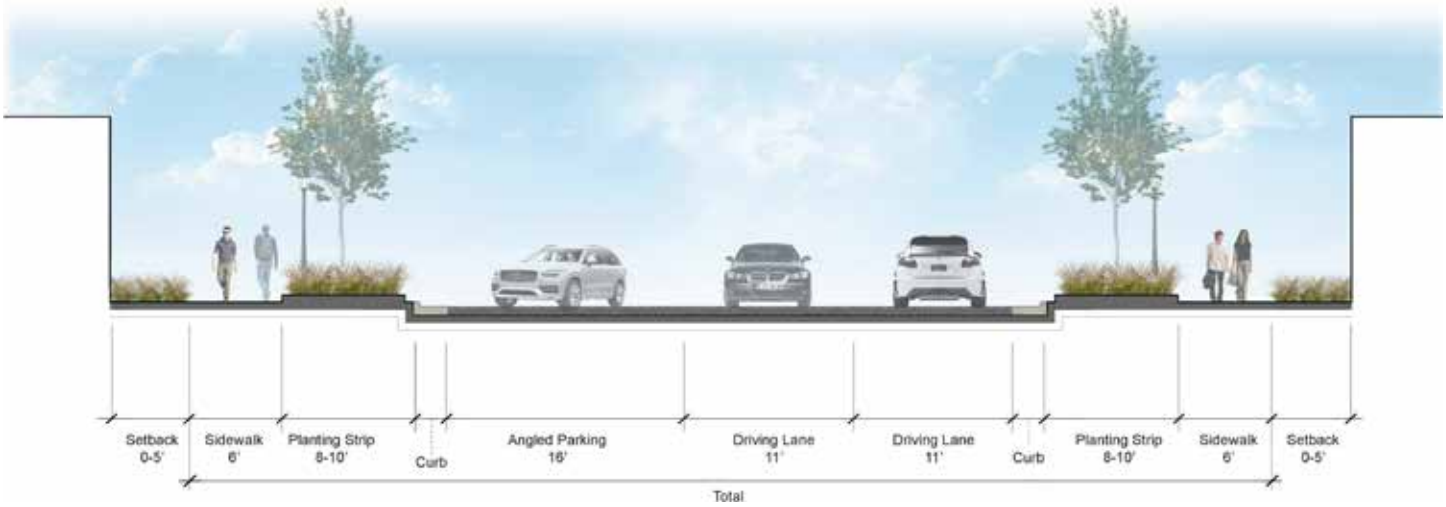


FIGURE 4.3: HOWARD STREET CROSS SECTION RECOMMENDATION

7. ENCOURAGE CONTEXT-SENSITIVE RESIDENTIAL AT A SCALE AND WITH ARCHITECTURAL ELEMENTS THAT FIT THE CHARACTER OF OLD TOWN

- **Strategy 7.1:** Encourage single family homes in residential areas shown on the Old Town Conceptual Plan.
- **Strategy 7.2:** Consider allowing for accessory dwelling units in residential areas in Old Town if properties meet defined criteria (minimum lot size, minimum setbacks).
- **Strategy 7.3:** Allow for residential units over commercial space, attached and multi-family development in areas shown as Mixed-Use on the Old Town Conceptual Plan.

8. REINFORCE OLD TOWN'S IDENTITY WITH GATEWAY MONUMENTS, SIGNAGE AND STREET FURNISHINGS

- **Strategy 8.1:** Update gateway monumentation, signage, lighting, and street furniture.

  A comprehensive approach to improved gateways, signage, wayfinding, lighting and street furnishings could be undertaken as a study. This concept plan could set the standard for the "brand" of the Old Town district. Alternatively it could be accomplished in a phased approach including:

  - 4th Street Gateway: Monumentation or architectural elements on 4th Street west of Broadway could be complimented with a feature on the NW corner of Central Park.
  - Eastern gateways: Monumentation, art or furnishings on the edges of the Railroad Park or to complement new development or redevelopment along Main Street or 4th Street.

FIGURE 4.4: ALLOWING ACCESSORY DWELLING UNITS IN RESIDENTIAL AREAS COULD BE ONE WAY TO INCREASE HOUSING OPTIONS WHILE RETAINING THE RESIDENTIAL CHARACTER OF SOME PARTS OF OLD TOWN.

- Updates to existing monumentation on Main Street and Broadway as needed.
- Improve wayfinding for motorists, pedestrians and bicyclists.
- Improve lighting and street furnishings.
    - Streetscape improvements could be complemented by lighting and street furniture that is indicative of the character of Old Town.

RESILIENCY TOUCHPOINTS

A vibrant downtown can be a competitive advantage for attracting and sustaining commercial or retail tenants, as well as residents while drawing attraction to the area from outside the community. Focusing on Old Town and related efforts to increase resiliency should involve activities that will increase visibility while maintaining retention for economic success.

- Focus on elements that increase growth such as urban design improvements and transportation infrastructure improvements.
- Explore the potential of locating alternative transportation infrastructure connections to attract visitors, improve safety and provide options.
- Involve current Old Town business owners in decision making that focuses on the strategic growth of the area, such as an improvement district or a framework that supports exploration of involvement from the business owners.

OLD TOWN ARCHITECTURAL CHARACTER

Attendees at the Old Town neighborhood meeting for the Comprehensive Plan expressed support for new buildings to incorporate architectural elements that reinforce the character of Old Town.

Moore was founded during the land-run during the late 1880s. Although many of the buildings that originally stood in Old Town no longer exist, many cities in Oklahoma were founded during this same period and provide a window to the past. Cities, like Guthrie, OK and Ardmore, OK have largely intact historic districts and design guidelines that require new development to adhere to historical patterns.

Encouraging more traditional architectural elements and scale near the Old School and the older facades of Main Street, while allowing for some more modern elements and taller buildings on the edges of Old Town may be one way to balance preservation and progress.

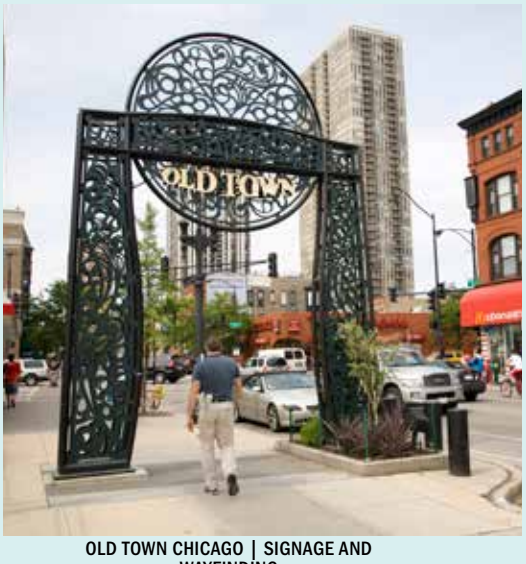
OLD TOWN HAS LOST MANY OF ITS HISTORIC STRUCTURES, SUCH AS DR NAIL'S HOME.

THE MOST NOTABLE HISTORIC STRUCTURE IN OLD TOWN IS THE ORIGINAL MOORE PUBLIC SCHOOL BUILDING. IT IS A TWO STORY BRICK BUILDING BUILT IN THE LATE GOTHIC REVIVAL STYLE AND FEATURES AN ORNATE STONE TRIMMED ENTRY AND STONE ACCENTS ON THE BRICK WALLS. THE BUILDING IS CURRENTLY UNDER PRIVATE OWNERSHIP.

OLD TOWN PRECEDENT IMAGERY

BROKEN ARROW, OK | FARMER'S MARKET PLAZA WITH FOOD TRUCKS

RICHARDSON, TX | STATION AREA AND PEDESTRIAN ACCESS



OLD TOWN CHICAGO | SIGNAGE AND WAYFINDING

OAKLAWN, IL | TOD

OAKLAWN, IL | STREETSCAPE AND ARCHITECTURAL CHARACTER

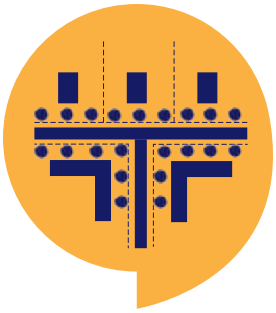
STATESVILLE, NC | DOWNTOWN STREETSCAPE REDEVELOPMENT

CHARLOTTE, NC | RAIL TRAIL

BROKEN ARROW, OK | ROSE DISTRICT - STREETSCAPE IMPROVEMENTS

ROANOKE, TX | STREETSCAPE IMPROVEMENTS

BROKEN ARROW, OK | ROSE DISTRICT - ROOFTOP/PATIO DINING



GOAL: PROMOTE DEVELOPMENT THAT IS ATTRACTIVE IN APPEARANCE AND REFLECTS MOORE'S CHARACTER

Great places share similar features. They are designed with form, function, and longevity in mind. Aesthetic standards for new development and redevelopment can improve property values, reduce maintenance costs and increase quality of life.

POLICIES AND STRATEGIES

1. IMPROVE STANDARDS FOR SAFETY, AESTHETICS AND AMENITIES

- **Strategy 1.1:** Improve off-street parking, buffers and landscaping.

  Action Item: Update parking and buffer guidelines and regulations.

  - Locate parking along the side or rear of buildings.
  - Encourage on-street parking for internal streets for retail, mixed-use and higher density residential developments (i.e. > 5 dwelling units per acre).
  - Encourage shared parking in the vicinity of Old Town.
  - Update buffer guidelines to include variable buffers based on adjacent uses.
    - Require improved buffer techniques between commercial and residential.
    - Provide guidance on how to address integration of compatible uses with appropriate design standards (i.e. well designed mixed-use areas should not have the same requirements as disparate, incompatible uses).

  Action Item: Update landscaping requirements.

  - Require a mix of planting material, including shrubs, evergreens, ornamental trees and large trees.
  - Require shrub placement as buffer from parking lot to sidewalk or ROW.
  - Require landscaping buffer at side and rear property lines.
  - Strengthen landscaping requirements for the I-35 Corridor.
  - Provide or revise credits provided for landscape connectivity with adjacent landscaped areas, preservation of natural features, and/or irrigation.

- **Strategy 1.2:** Limit strip commercial development (See LU Policy #2 for more information).
  - Avoid strip commercial development on major arterials.
    - Concentrate commercial development at the intersections of arterials and collectors.

- Commercial development should be limited to within:
  - 600ft of principle intersection (of at least one arterial and an arterial or collector) for Neighborhood Commercial except where shown on the Future Land Use map.
  - 1200ft of principle intersection (of at least one arterial and an arterial or collector) for Community Commercial except where shown on the Future Land Use map.

- **Strategy 1.3:** Encourage a walkable environment and a sense of arrival around existing and planned commercial nodes.
  - Study feasibility of maximum setbacks for commercial development in the vicinity of nodes.
  - Implement location and screening requirements for outdoor storage.
  - Consider updates to commercial aesthetic requirements.
  - Encourage quality building materials and discourage use in all or specific zoning districts (i.e. vinyl, 'architectural' metal treatments, Exterior Insulation and Finish Systems (EIFS)).
  - Limit blank walls that are visible from the street through minimum glazing requirements and/or requirements for architectural variations.
- **Strategy 1.4:** Encourage improved street design to increase safety.
  - Require adherence to residential street standards that include a planting strip on internal collectors to improve pedestrian safety and comfort.
  - Encourage street and yard trees in new development.
  - Encourage the consolidation of access and improved connectivity to reduce traffic.
    - Adopt access management standards based on street class to require consolidation of curb-cuts.

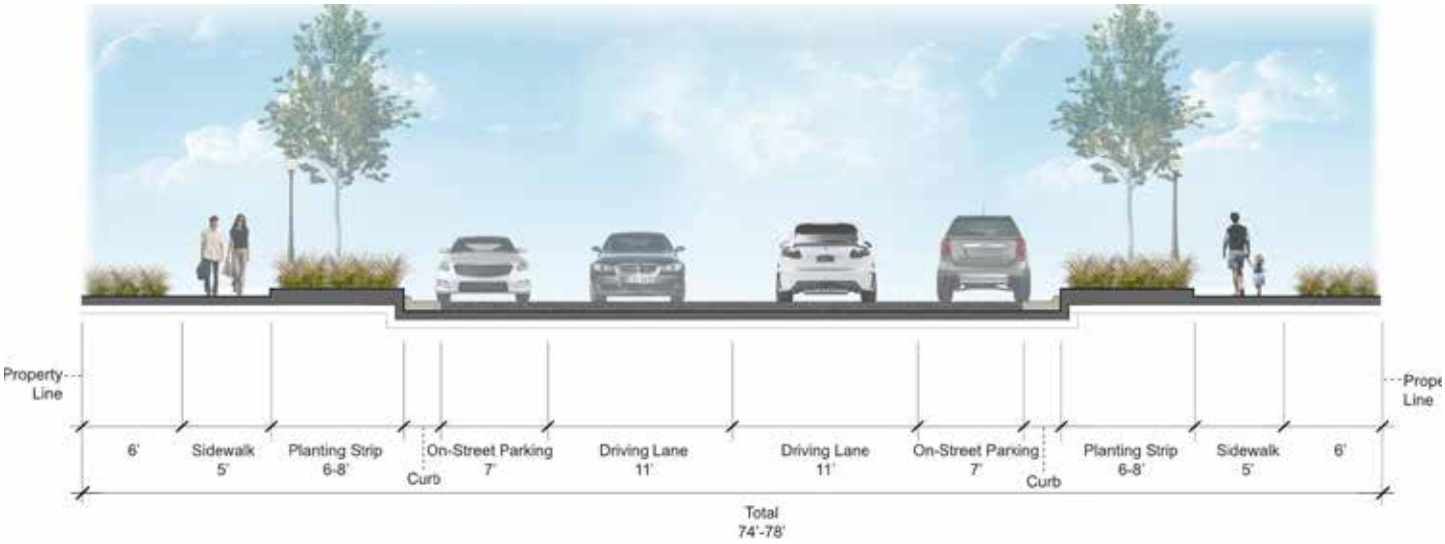


FIGURE 4.5: POTENTIAL CROSS-SECTION FOR RESIDENTIAL COLLECTOR STREET

- Update subdivision regulations to require larger distance between curb cuts on arterials.
- Consider requiring new commercial developments over a certain threshold to have access via at least two streets.
- Encourage short block lengths in the vicinity of Old Town, Neighborhood Commercial, Community Commercial and Regional Centers.

Action Item: Update subdivision regulations to include improved street design, access management standards and block length maximums dependent on road classification and/or future land use category.

- **Strategy 1.5**: Encourage quality residential, commercial, and mixed-use development.
  - Consider return on investment and impacts to city services (i.e. parks, utilities and schools) and adjacent property values during rezonings.
  - New development should provide ample usable open space (i.e. not just floodplain), amenities and well-designed infrastructure.
  - Site design should protect key natural resources and adjacent property values.
- **Strategy 1.6**: Encourage new subdivisions in the Urban Residential areas to include amenities and open space.
  - For gross dwelling unit density of 7 dwelling units per acre or less, require standards or incentives for amenities and 10-15% open space.

Action Item: Modify standards and/or zoning regulations to codify the above design details.

- **Strategy 1.7**: Encourage new subdivisions in the Open Space Residential area with access to sewer to be designed to preserve the rural character of this part of Moore.
  - Allow for a maximum gross dwelling unit density of 3 units per acre with a minimum open space requirement of 30%.

FIGURE 4.6: URBAN RESIDENTIAL CONCEPT WITH MULTIPLE OPEN SPACE TYPES, RIPARIAN BUFFER AND STORMWATER AMENITIES

- Allow for a density bonus if additional open space (above minimum requirements) is included in the development design.
    - For instance, include a 12.5% bonus or 0.5 dwelling units per acre per each additional 10% of the property that is devoted to open space. This would allow a gross dwelling unit density of 4 units per acre if 40% of the property is reserved as open space.
- At least 10% of the property should be devoted to "upland" open space that is accessible and usable (i.e. not just floodplain).
- Priority open space includes floodplains, riparian areas, mature forest, highly erodible soils, steep slopes, views from public roads, and areas adjacent to residential properties with larger lots than those proposed.

Action Item: Create new zoning district for Open Space Residential or modify the "RE" zoning district to achieve the recommendations above.

RESILIENCY TOUCHPOINTS

The city has an opportunity to improve its livability through addressing community focused priorities such as aesthetics, increased walkability, connectivity of roadways, safety improvements, and access to amenities. The following actions contribute to financial and social resiliency:

- Plan for improvements that address the well-being of businesses and property owners.
- Encourage high quality development that preserves and enhances the value of adjacent properties.
- Review the role aesthetics of new development can play to increase walkability.
- Address inter-connectivity of roadways to reduce traffic congestion and improve emergency response times.
- Improve access to parks and private amenities in new development.

HOUSING AND NEIGHBORHOODS

Quality housing options and the strong neighborhoods are key to the future of the city. The following policies and strategies are identified to meet the current and future housing needs of Moore's citizens and address maintenance, safety and aesthetic concerns brought up during the planning process.

GOAL: PROMOTE A VARIETY OF QUALITY, AFFORDABLE HOUSING OPTIONS

The majority of homes in Moore are single-family, detached homes. This large block of homes limits options for those that prefer other housing types and for those that choose to rent. Moore's capacity for additional development is limited and finite. Growing in a way that accommodates current and future housing needs is essential. There is a need to support and encourage higher density housing options for both young professionals and empty nesters.

POLICIES AND STRATEGIES

1. ACCOMMODATE A MIX OF HOUSING TYPES IN FUTURE LAND USE PLAN, IN APPROPRIATE AREAS

- **Strategy 1.1 :** Allow for small lot (patio / cottage homes), attached and multi-family housing types near Community Commercial and Regional Centers defined on the Future Land Use Map.
- **Strategy 1.2:** Establish design guidelines for small lot (patio / cottage homes), attached and multi-family housing units.
- **Strategy 1.3 / Action Item:** Modify regulations to allow for accessory dwelling units if properties meet certain criteria (i.e. lot size, setback requirements).
- **Strategy 1.4:** Allow pocket neighborhoods and other innovative forms of senior friendly housing in locations with access to parks, shopping or other amenities.
- **Strategy 1.5:** Anticipate the arrival of commuter rail by allowing multi-story mixed-use development and higher density housing types in appropriate locations in the vicinity of Old Town such as:
  - Along S. 4th Street on the southern end of Old Town
  - Adjacent to I-35 on the west side of Old Town.
  - As part of redevelopment fronting Sante Fe Street on the east side of the railroad track.
  - Along Tower Drive south of 4th Street.

- **Strategy 1.6:** Consider a mix of housing in redevelopment of underutilized and aging retail centers.

2. PARTNER WITH OTHER AGENCIES AND ORGANIZATIONS TO FULFILL HOUSING NEEDS OF NEIGHBORHOODS

- **Strategy 2.1:** Support the incorporation of affordable units in new development that demonstrates quality of place.

  Action Item: Identify barriers to affordable housing.

3. ENCOURAGE MASTER-PLANNED MULTI-FAMILY PROJECTS

- **Strategy 3.1:** Encourage the detailed planning of large (more than 20 unit) multi-family housing projects by the use of Planned Unit Development zoning that requires:
  - Master Development Plan
  - Neighborhood-scale amenities

FIGURE 4.7: POCKET NEIGHBORHOOD SKETCH

GOAL: STRENGTHEN NEIGHBORHOODS

Strong neighborhoods are defined by engaged citizens and community pride. Preventing commercial encroachment, improving maintenance, targeting investment and reducing crime can contribute to strong city and active neighborhood organizations.

POLICIES AND STRATEGIES

1. PREVENT COMMERCIAL ENCROACHMENT IN ESTABLISHED NEIGHBORHOODS

Encroachment of commercial development on existing neighborhoods erodes the fabric of the community. It results in poor relationships between uses and introduces incompatible activities: noise from customers and deliveries, light from exterior commercial lighting, excess parking, etc.

STRATEGIES:

- **Strategy 1.1:** Consider the creation of a Neighborhood Conservation Overlay District to bolster efforts to protect existing neighborhoods in areas designated as "Neighborhood Preservation" on the Future Land Use Map (Golden Acres, Electric, and Lockoma). As noted in Moore's Vision 20/20 Comprehensive Plan, "These neighborhoods are three of the oldest in Moore and contain a mixture of commercial and residential uses. Public input about these neighborhoods indicates a clear preference for the areas to remain predominantly residential in nature."

Action Item: Carrying forward the policies of Vision 20/20, the following should be codified in the creation of the district:

- Further commercial expansion in these neighborhoods is highly discouraged.
- Any future commercial development must include sufficient buffering to protect the integrity of abutting residential uses.
- Only light commercial should be allowed in these neighborhoods along the periphery.
- Traffic impacts from commercial uses should be minimal as should noise, light and odor emissions.
- There should be no commercial activity after dark.
- There should be limits on timing and logistics of commercial deliveries.
- Commercial outdoor storage should be prohibited.
- There should be limits on paved or impervious area.
- There should be standards for architecture, such as building scale, roof type/pitch, and massing.

- There should be parking requirements and quality parking design.

- **Strategy 1.2:** Amend the Official Zoning Map. Once created, the Neighborhood Conservation District should be applied as an overlay district to the designated areas.
- **Strategy 1.3:** Subject applications for nonresidential development within this area to additional review, giving site plan approval authority to a designated board or the planning director.

2. CONTINUE CODE ENFORCEMENT ACTIVITIES

- **Strategy 2.1:** Focus enforcement activities in neighborhoods with high concentrations of renter occupied dwellings and/or age of housing stock, and other indications of blight.

3. CONSIDER TARGETED INVESTMENT IN NEIGHBORHOOD PROJECTS/PROGRAMS IN DISTRESSED NEIGHBORHOODS AND BLIGHTED AREAS

Distressed neighborhoods include areas with higher rates of poverty, unemployment and vacant properties. Blighted areas can include areas with high crime, underutilized properties and/or maintenance issues. These areas should be identified and targeted for beautification projects, infrastructure improvements, home renovations and the purchase of vacant properties.

- **Strategy 3.1 / Action Item:** Collect data on nuisances, code enforcement activities, vacant properties, and underutilized land and map areas of blight.
- **Strategy 3.2 / Action Item:** Streetscape and lighting improvements, particularly in areas with underutilized commercial properties, high crime, and pedestrian safety issues..

CASE STUDY

CASE STUDY: SAN ANTONIO, TX – San Antonio is one of many cities that have adopted NCDs to protect neighborhoods that contribute to the character of the city but are not historic. Several have been challenged because they go too far with standards pertaining to aesthetics. However, a simplified district that restricts land uses and discourages encroachment with specific dimensional standards can be a deterrent to further commercial / residential conflicts.

https://www.municode.com/library/tx/san_antonio/codes/unified_development_code?nodeId=ARTIIIZO_DIV4OVDI_S35-335NCNECODI#!

- **Strategy 3.3 / Action Item:** Identify gateway enhancement and beautification projects. These could include the addition of pocket parks, signage for neighborhoods, landscaping, and/or green storm-water infrastructure (GSI) improvement projects to improve water quality and reduce the risk of flooding.
- **Strategy 3.4:** Consider the provision of sidewalks, benches and shelters in the vicinity of future transit stops.

4. ENCOURAGE DEVELOPMENT DESIGN USING CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) PRINCIPLES

- **Strategy 4.1:** Improve natural surveillance by establishing clear lines of sight. Design buildings with windows facing street, well designed lighting, and other design details that increase visibility.
- **Strategy 4.2:** Clearly define public space and private areas through the use of landscaping.
- **Strategy 4.3:** Encourage proper maintenance and management of private property.
- **Strategy 4.4:** Encourage a mix of land uses at designated centers to ensure activity during all hours of the day.
    - Examples of this include allowing residential uses as part of the redevelopment of aging commercial centers and allowing commercial development in primarily light industrial areas.

RESILIENCY TOUCHPOINTS

Strong neighborhoods are fundamental to social resiliency. Code enforcement and targeted investment can help reduce crime and improve property values.

FIGURE 4.8: THE ADDITION OF STORM-WATER PLANTERS AND OTHER LOW IMPACT DEVELOPMENT (LID) TECHNIQUES OR GREEN STORM-WATER INFRASTRUCTURE (GSI) PROJECTS CAN HELP WITH STORM-WATER RUNOFF ISSUES. THESE TYPES OF PROJECTS HAVE ALSO BEEN SHOWN TO REDUCE CRIME IN THE VICINITY OF THE BEAUTIFICATION PROJECT.

OPEN SPACE AND NATURAL RESOURCES

With careful design it is possible to preserve unique natural resources as amenities for future residents while also accommodating development. Small scale green spaces in more developed areas and larger swaths of green spaces in more suburban and rural areas can provide recreational opportunities, help manage stormwater and improve water quality.

GOAL: PROTECT THE NATURAL ENVIRONMENT AND RESTORE WATER QUALITY

To achieve this goal it is necessary to protect key environmental features while accommodating development, reimagining our relationship to natural systems, restoring water quality and riparian areas, increasing connections between citizens and open space, and providing amenities in new developments. The objectives of this goal include integrating open space and stormwater infrastructure as amenities in new development and existing neighborhoods, reducing non-point source pollution in existing and new development, and preserving the unique natural features of the eastern and southeastern part of the city.

POLICIES AND STRATEGIES

1. REQUIRE QUALITY OPEN SPACE IN NEW DEVELOPMENT LOCATED IN THE URBAN RESIDENTIAL AND OPEN SPACE RESIDENTIAL AREAS IDENTIFIED ON THE FUTURE LAND USE MAP

- **Strategy 1.1:** Encourage the preservation of natural features, accessible open space and stormwater amenities.
    - Natural features such as floodplains, streams, riparian areas and steep slopes are a priority.
    - A portion of open space in new projects should be accessible uplands (i.e. not just floodplain or areas that are not accessible via a public sidewalk). Examples of accessible open spaces include community greens, pocket parks, and playgrounds.
    - Infiltration basins and stormwater detention areas are green stormwater infrastructure features that can be landscaped to appear as natural amenity areas and can serve as dual purpose open space.
- **Strategy 1.2:** Require a higher standard for open space in the Open Space Residential areas identified on the Future Land Use Map.

- This area contains the majority of the remaining floodplain and riparian forests in the city.
- Key natural features that provide scenic views from public roads should be incorporated into new developments. These features include stands of mature trees, hedgerows, and foreground meadows and pasture lands.
- Applications for rezoning and/or development plan approval should require applicant to explain/demonstrate how plan is consistent with and/or implement the Comp Plan.

Action Item: Update regulations to specify priority open space types, access, ownership and maintenance requirements for new developments.

2. PRESERVE AND RESTORE RIPARIAN AREAS

- **Strategy 2.1:** Encourage new development to utilize riparian areas as open space.
- **Strategy 2.2 / Action Item:** Consider implementing riparian buffer requirements for new development.
- **Strategy 2.3:** ReLeaf Moore: Build on past efforts to restore tree canopy and riparian areas on publicly-owned land. Opportunities include parks, schools, and rights-of-ways.

Action Item: Partner with local non-profits to seek grant funding for a pilot tree canopy and riparian restoration project that would improve water quality and have other secondary benefits.

RIPARIAN BUFFERS

Preserving vegetation adjacent to streams can be a cost-effective way of protecting water quality and reducing sedimentation and stormwater pollution. The effectiveness of buffers depends on soils and vegetation, but studies show that buffers between 48 and 90 ft. result in nitrogen removal of 46-75%. The City of Norman, OK has implemented riparian buffers of 100 ft. from top of bank for new development. There is also a performance-based alternative of 25 ft. if a reduction of pollutants can be demonstrated with approved Best Management Practices (BMPs).

For more information see:

- Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness, EPA, 2005 (http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000O182.txt)
- Riparian Buffer Systems for Oklahoma, Oklahoma State University, BAE-1517 (http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2245/BAE-1517web%20color.pdf)

FIGURE 4.9: EXAMPLE OF RIPARIAN BUFFERS

3. MINIMIZE DISTURBANCE OF FLOODPLAINS

- **Strategy 3.1 / Action Item:** Revise and enforce codes and regulations to reduce the risk of flood damage.
- **Strategy 3.2:** Encourage new development to utilize floodplains as open space.
- **Strategy 3.3:** Incentivize restoration of tree canopy and vegetation to prevent erosion and naturalize floodplains.
- **Strategy 3.4:** Conduct a study to establish an inventory of existing tree canopy.

4. ENCOURAGE BEST PRACTICES IN STORMWATER MANAGEMENT

- **Strategy 4.1 / Action Item:** Encourage green stormwater infrastructure to be integrated as open space in new development (i.e. rain gardens, naturalized retention and detention areas).
- **Strategy 4.2:** Require on-site detention and retention (recommendations in the SMMDP).
    - Allow fee-in-lieu option for certain conditions (i.e. redevelopment where there is not a known history of flooding).
- **Strategy 4.3:** Encourage reduced and disconnected impervious surface in new development.

Action Item: Update regulations to require on-site detention and/or retention and specify design criteria and the amount of credit to provide for naturalized retention and detention amenities.

- **Strategy 4.4:** Study targeted Low Impact Development (LID) and Green Stormwater Infrastructure (GSI) retrofits on public land and as public/private partnerships. Potential projects were identified based on previous studies, aerial photography, and a GIS based drainage analysis. See Figure 4.10 for these locations.

EXAMPLE OF STORMWATER AMENITY (ATLANTA'S 4TH WARD PARK)

A few opportunities are detailed below:

- **A: N Shields Blvd / Houchin Elementary School Area** Opportunity for rain garden/ amenity on school property, as part of new development on vacant parcel to the south or as part of redevelopment on partially developed property to the southeast. Also opportunity for LID infrastructure, filter strips and tree canopy improvement within right-of-way along Shields Blvd between North Moore Ave and Cass Ave.
- **B: I-35 Gateway Feature(s)** Stormwater treatment (constructed) wetland or grassy meadow/filter strip and gateway feature.
- **C: LID improvements**
  - Highland West JHS and I-35 Commercial Area: Parking lots drain to field and creek. Opportunity for rain garden / grass drainage swale and filter strip.
  - Plaza Towers Elementary School: Opportunity for rain garden or wet meadow feature, stream restoration and riparian plantings.
- **D: Buck Thomas Park** Riparian restoration and tree plantings.
- **E: Green street opportunities** (curb enhancements to incorporate rain garden and infiltration infrastructure)
  - NW 12th Street: Green street opportunity on north side of roadway near Grace Point Drive. Could be paired with private development for pocket park opportunity/ gateway feature.
  - NW 23rd Street where crossing creek east of Kings Road.
  - Kelley Elementary School and NW 20th Street
  - Numerous opportunities exist in the western part of the City.
- **F: Rain garden or "green street" feature** near Old Town.
- **G: Protection of riparian area** along the North Fork of the Little River and tree canopy improvement at potential future park site.

Action Item: Identify and pursue grant funds for low impact development (LID) / green stormwater infrastructure (GSI) retrofit projects.

- **Strategy 4.5:** Identify a long-term funding source for stormwater/water quality improvement projects.

IMPERVIOUS SURFACE

Impervious surface coverage of 5-10% of a watershed can impact stream health. Coverage of 10-20% results in erosion and species loss. Coverage of greater than 20% usually results in significant stream impairment.

Many watersheds in the more developed parts of the city are nearing the 10% and 20% thresholds. Watersheds in the southeast are still below the 5% threshold. Disconnecting and reducing the amount of impervious surface in new development, utilizing pervious pavements and other Low Impact Development (LID) techniques can help protect water quality.

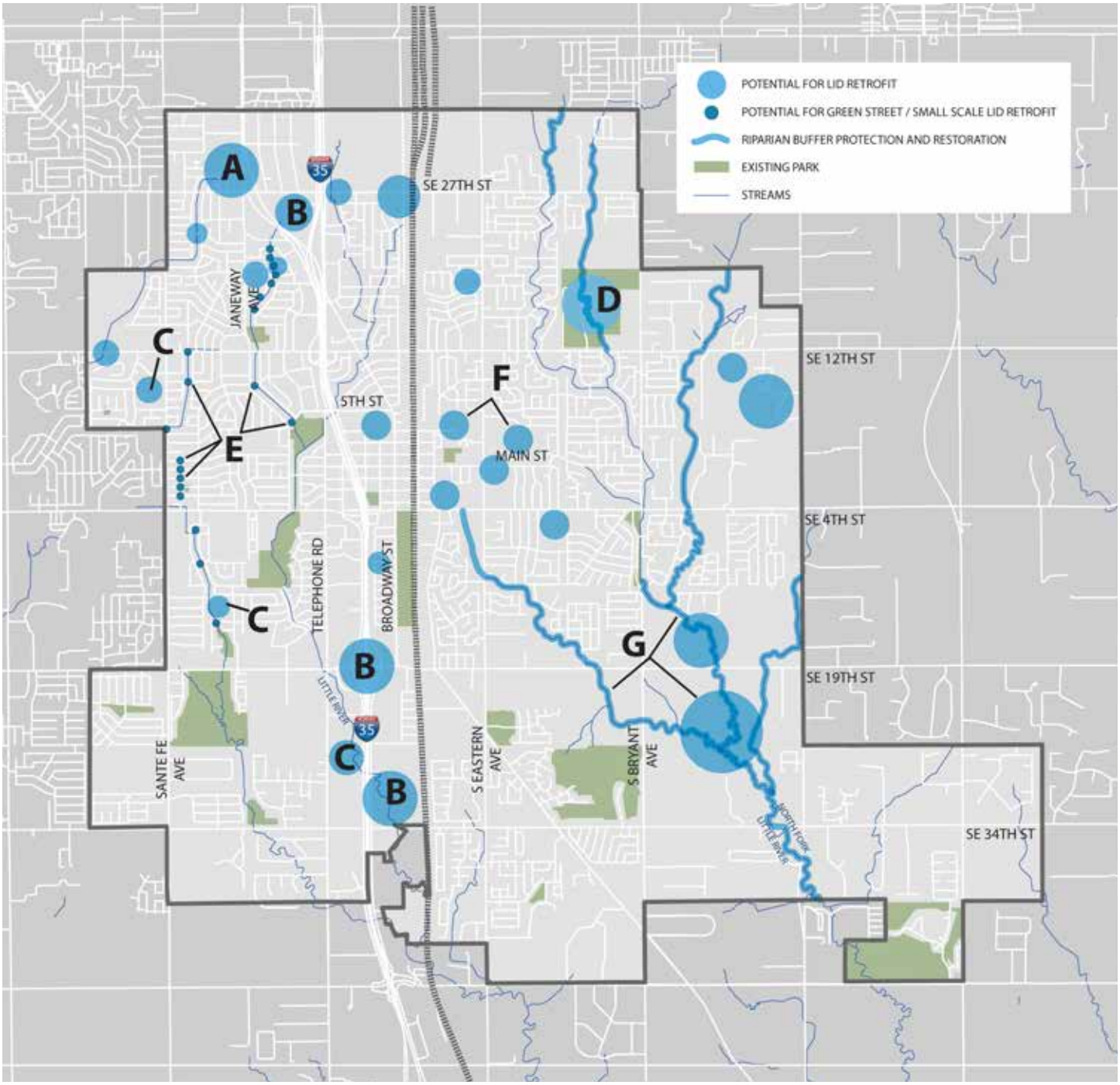


FIGURE 4.10: LOW IMPACT DEVELOPMENT PROJECT OPPORTUNITIES

5. IMPLEMENT LOW IMPACT DEVELOPMENT TECHNIQUES IN NEW PUBLIC AND PRIVATE DEVELOPMENTS

- **Strategy 5.1:** Modify regulations to require or encourage low impact development (LID) techniques in new developments (see next page for illustrations).
- **Strategy 5.2:** Consider LID certification program and manual modeled after Broken Arrow, OK. See http://www.brokenarrowok.gov/155/Living-Green for more information.

RESILIENCY TOUCHPOINTS

- Protection of floodplains and riparian areas can reduce impacts from flooding and erosion as well as save water treatment costs for downstream communities.
- Evidence suggests that adopting low impact development techniques can save significantly on maintenance costs for stormwater systems and can increase property values.
- A recent study found that green infrastructure installations in Philadelphia resulted in reduced crime rates.

CASE STUDY

Building on Past Success: In 2015 Serve Moore (www.servemoore.com), a local volunteer organization, partnered with ReTreet (www.retreet.org), the Arbor Day Foundation, the City of Moore, and other partners to plant 162 trees at 78 sites in Moore. These Shumard Oaks and Redbuds will provide cooling benefits during the summer for nearby structures and pedestrians that pass underneath their canopies and help to intercept rainfall, reducing the negative impacts of storm-water runoff. One tree can make a big impact. For instance, a Shumard Oak can grow to provide $4,429 worth of overall benefits over 50 years. After reaching maturity, this can include $35 worth of annual cooling benefits during the summer and $119 in annual stormwater benefits (Source: i-Tree Design software (http://design.itreetools.org/)).

A campaign building on this work to increase the amount of tree canopy in the City of Moore could have multiple benefits including:

- Improved water quality and reduced flooding
- Increased shade for pedestrians and activities at parks
- Improved aesthetics
- Sequestering carbon dioxide

Future Opportunity: According to data provided by the city, only 7% of the land area is covered by trees. This vegetation inventory should be updated based on a study of remote sensing data and aerial photography. Opportunities for reforestation include public properties (parks, schools, and other government owned properties) as well as street rights-of-way. Currently there are 300 acres of parks and 2,000 acres of rights-of way. If 500 acres of new trees could be planted then the amount of tree cover in the city could be increased to 10%. This equates to about 11,000 Shumard Oaks (assuming mature canopy of 50' in diameter).

Recommended trees include those on the Oklahoma Proven list http://oklahomaproven.okstate.edu/. See also, the Putting Down Roots landscape guidelines by Oklahoma City at https://www.okc.gov/home/showdocument?id=3582.

FIGURE 4.11: GREEN STREET LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

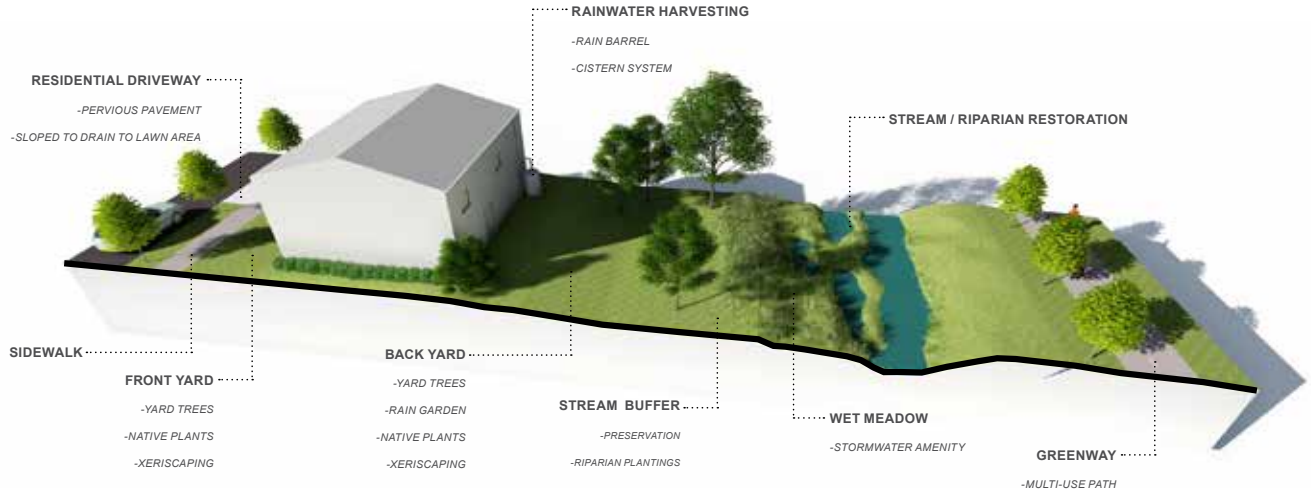


FIGURE 4.12: RESIDENTIAL TRANSECT LID TECHNIQUES

FIGURE 4.13: COMMERCIAL LID TECHNIQUES


Nature
Hunt

PARKS AND RECREATION

Access to parks, open space and recreational opportunities can improve health outcomes and impact quality of life. This Plan envisions creating a healthier Moore by continuing to invest in existing parks and programming, addressing levels of service gaps and connecting destinations with greenways. The objectives of these goals include maintaining and enhancing existing parks, improving access to parks, allowing for the integration of walking and biking to destinations into the daily lives of residents, and tailoring programming to create a healthy community.

GOAL: PLAN FOR A HEALTHY COMMUNITY

The vision for this goal is a city that has high quality parks and programming for all ages that are well connected to neighborhoods via sidewalks, greenways and bicycle facilities that allow for a healthy lifestyle.

POLICIES AND STRATEGIES

1. CONTINUE TO MAINTAIN AND IMPROVE EXISTING PARKS

- **Strategy 1.1 / Action Item:** Continue to make improvements to existing parks specified in Parks and Recreation Plan (2012)
  - Complete Fairmoore Park renovation
  - Renovate Westmoore Park
  - Develop Old Town Railroad Park
  - Continue improvements to Central Park & The Station
  - Develop Quail Ridge Park
- **Strategy 1.2 / Action Item:** Consider long-term costs of operations and maintenance for parks facilities.
  - Utilize native and drought tolerant plants in landscaping.
  - Improve water efficiency at public parks and other facilities by implementing rainwater collection systems and greywater systems for irrigation purposes.
  - Design new parks and retrofit existing parks with dual purpose stormwater infrastructure (open space + storage/treatment) such as wet meadows and stormwater amenity areas.

2. FILL LEVEL OF SERVICE GAPS

- **Strategy 2.1:** Acquire land for new public parks.

  Action Item: Study potential parkland acquisition in the vicinity of Park Needs identified in Figure 4.14.

- **Strategy 2.2:** Address gaps and barriers in the pedestrian network to provide connections to parks.
  - Coordinate with private landowners and new development to construct pedestrian connections and reserve land for future greenways.
- **Strategy 2.3:** Update land dedication and fee-in-lieu requirements to meet level of service needs.

3. CONNECT DESTINATIONS WITH GREENWAYS

- **Strategy 3.1:** Preserve riparian areas for the construction of greenways.
  - Priority greenway segments are shown in the Future Bikeway and Greenway Network map.
- **Strategy 3.2:** Study and fund priority greenway projects.
  - Improve pedestrian and bicycle connections between Little River Park and Fairmoore Park.
  - Connect Little River Park to 19th St commercial area via greenway along Little River.
  - Connect Kiwanis Park to future parkland on North Fork of Little River via greenways.
  - Connect Buck Thomas Park to future park on North Fork of Little River via greenways.

4. CATER PARKS AND PROGRAMMING TO ALL AGES

- **Strategy 4.1 / Action Item:** Convene youth and senior focus groups during the next update of the Parks and Recreation Master Plan.

5. INCREASE OPPORTUNITIES FOR ENVIRONMENTAL EDUCATION

- **Strategy 5.1:** Promote biodiversity and environmental education in public parks and private development.
  - Integrate environmental education into planned open space where feasible.
- **Strategy 5.2 / Action Item:** Augment Phase 2 Stormwater Management Program to include more outreach related to LID practices focusing on preserving and enhancing riparian vegetation.

RESILIENCY TOUCHPOINTS

- Providing transportation options increases resiliency by enabling safer active transportation and provides connections for multiple modes of travel.
- Financial benefits of health: Reduced healthcare costs.
- Competitive benefits: A connected system of greenways can be a differentiator to new businesses and potential home buyers.
- Property values: Properties adjacent to greenways have been shown to increase in value.

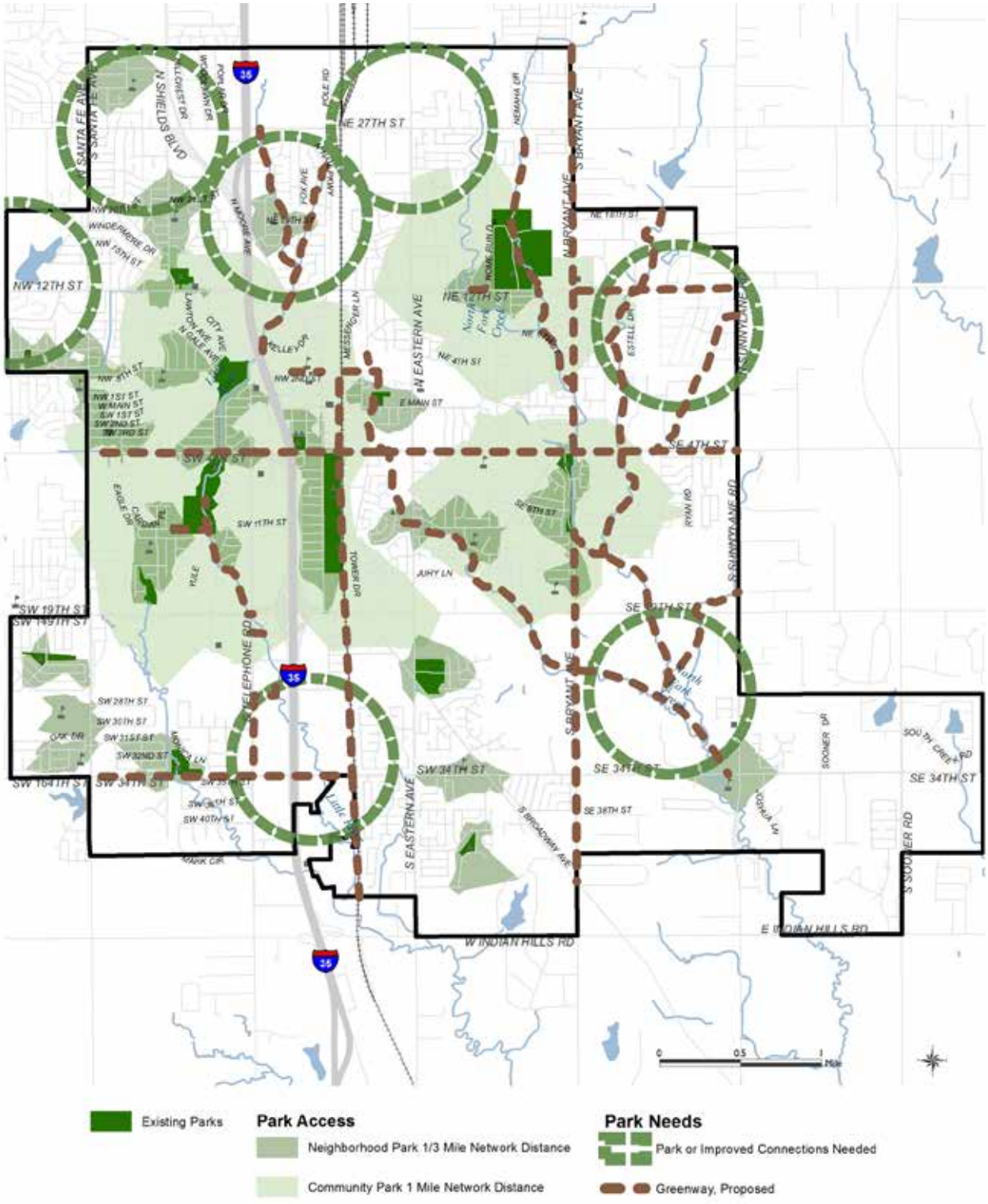


FIGURE 4.14: PARK NEEDS

PUBLIC SERVICES

With adequate public services, from utility delivery to public safety and emergency response, the city can ensure quality of life for its residents. This Plan continues the city's support of these services, ensuring that people do not worry about access to safe, plentiful drinking water, properly working sanitation system, and that they feel safe and secure in Moore. The objectives of this goal includes ensuring water source availability for proposed population growth, providing safe drinking water at reasonable costs to customers, and serving and protecting residents, visitors, and business with adequate public safety resources.

GOAL: EFFICIENTLY DELIVER ADEQUATE INFRASTRUCTURE AND SERVICES

POLICIES AND STRATEGIES

1. UPDATE STORMWATER POLICIES AND STANDARDS

- **Strategy 1.1:** Focus more on retention and infiltration and less on conveyance and detention.
- **Strategy 1.2:** Require on-site detention/retention.
- **Strategy 1.3:** Reserve fee-in-lieu option for certain conditions (i.e. redevelopment where there is not a known history of flooding).
- **Strategy 1.4:** Study the implementation of a stormwater fee.
- **Strategy 1.5:** Develop stormwater infrastructure as amenities (See Parks and Natural Resource Recs related to stormwater amenities).

2. MAINTAIN AN ADEQUATE WATER AND SEWER SYSTEM

- **Strategy 2.1:** Consider the Life Cycle Cost for proposed capital projects. Evaluate long-term costs of different design approaches.
- **Strategy 2.2:** Complete a Water Master Plan to study the entire water system, including new water sources, treatment, distribution, expansion, and associated costs and potential affects to rates.
- **Strategy 2.3:** Promote a high quality and secure water supply.
- **Strategy 2.4:** Complete a Wastewater Master Plan to study the entire wastewater system, including collection, treatment, expansions, and associated costs and potential affects to rates.

3. SUPPORT DEVELOPMENT PATTERN WITH WASTEWATER UTILITIES

- **Strategy 3.1:** Review plans for Cleveland Heights and anticipate constraints that may be placed on the existing wastewater system if the area is built as currently platted.
- **Strategy 3.2:** Increase pipe sizes in the south side of the wastewater system so that development in the southeast and Cleveland Heights can be accommodated by the existing force mains.
- **Strategy 3.3:** Implement recommendations from the Wastewater Master Plan (Strategy 2.4).

4. PROTECT PUBLIC SAFETY

- **Strategy 4.1:** Continue Community Policing Program.
- **Strategy 4.2:** Complete a fire station location and staffing study based on the updated land use plan.
- **Strategy 4.3:** Maintain the forward-thinking approach to protecting its residents through adopting natural disaster-related building codes.
- **Strategy 4.4:** Study multi-family storm shelter options and strategies for including shelters in existing and new developments and for rental properties.
- **Strategy 4.5:** Investigate a regional lift station solution for the east side.

RESILIENCY TOUCHPOINTS

Achieving resilient systems in energy, water, and power systems takes time and thoughtful planning. Examination of current conditions and desired performance needs to be identified. The gaps between these begin to illustrate the future levels of resilience these systems have.

- Improve energy system performance and grid resilience so that end user needs are prioritized along with public safety and restoration requirements.
- Understand and plan for the interdependency of energy systems and communications to increase resiliency during and after disruptive events.

CASE STUDY

A Stronger Hays: Building a Stronger Future, A Candid Conversation

In 2015, the City of Hays, Kansas researched the costs of providing services to its residents. As a result of this research, the city bluntly stated, with emphasis added:

"The City of Hays' current pattern of development does not match the growth rate of its population. **The revenues we're receiving are not sufficient enough to justify our current expenses. Our growth rate is simply unsustainable.**"

The City of Hays found that its sales tax revenue model was not keeping up with development and infrastructure costs; geographic expansion was creating costs that outpace sales tax growth.

The City of Hays is currently analyzing how to deal with this reality and change the way it views growth and the delivery of city services.

Possible options for the future of Hays are:

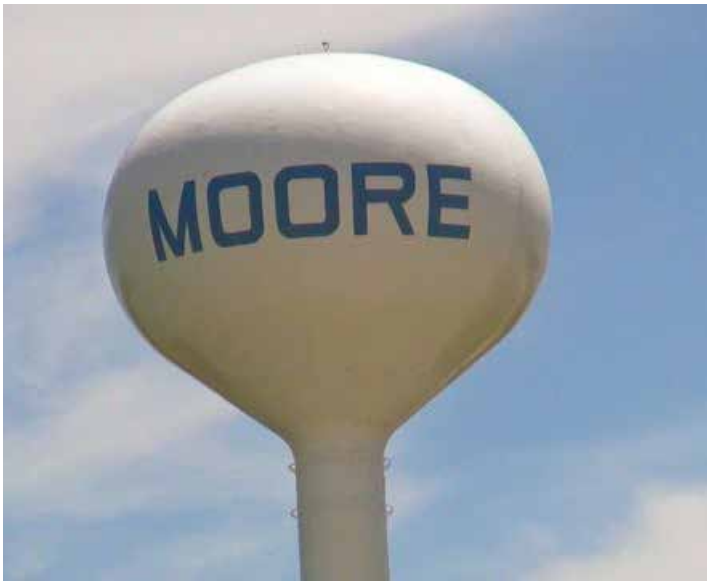
Gamble: Build more roads and infrastructure in the hope that it will raise sales tax revenue.

Raise Taxes: Guarantees more revenue to meet the city's growth rate, but hurts resident's pocket books.

Conserve: Stop expanding infrastructure systems and focus on development and redevelopment in areas where infrastructure already exists. In other words, grow internally instead of externally.

Do Nothing: Let future residents and elected officials worry about it.

- Identify and prioritize alternate energy sources during a disruptive event while protecting public and utility personnel safety.
- Identify and prioritize alternate water sources during a disruptive event while protecting public and utility personnel safety.
- Protect, maintain and recover the system while controlling costs.
- Plan for systems to mitigate environmental damage during recovery processes or future build out.
- Reinforce resiliency by improving water use efficiency by adopting an advanced/smart meter program to better monitor water usage citywide.



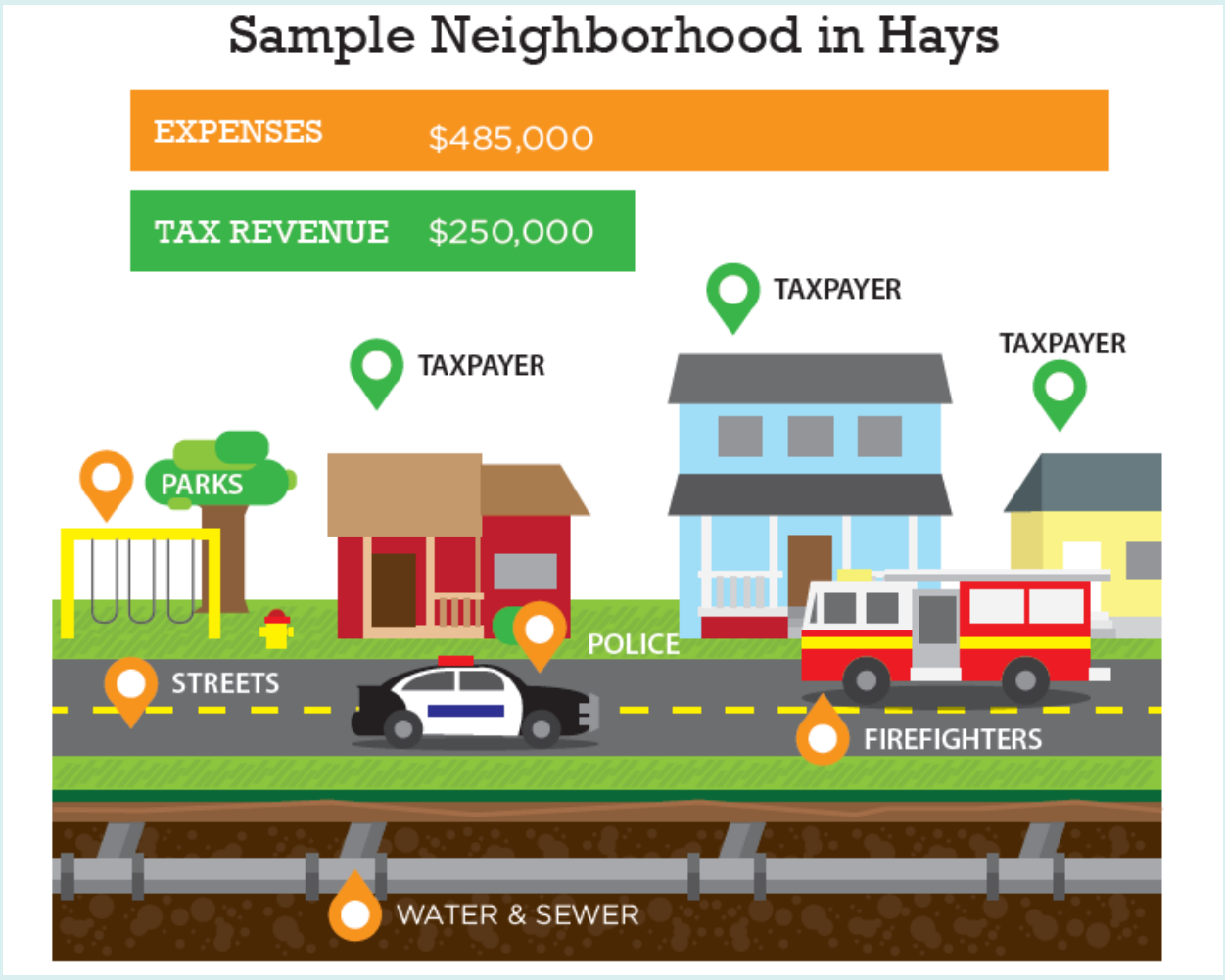


FIGURE 4.15: CITY OF HAYS EXPENSE & TAX REVENUE SAMPLE

Transportation

Transportation planning is the process used by municipalities and other governmental entities to provide for the development of an efficient and appropriate transportation system to meet existing and future travel needs. The primary purpose is to ensure the orderly and progressive development of the urban and rural street system to serve the mobility and access needs of the public. Transportation planning is interrelated with other components of the urban planning and development process, and seeks to reduce the use of single-occupant vehicles, make trips shorter, provides visible and convenient active transportation opportunities, and expands access management to preserve roadway capacities.

GOAL: EMPLOY BEST TRANSPORTATION PRACTICES BY RECOGNIZING THAT THE TRANSPORTATION SYSTEM INCLUDES COMMUNITY FACILITIES AND MUST BE DEVELOPED AND MAINTAINED TO SERVE THE ENTIRE COMMUNITY

POLICIES AND STRATEGIES

1. MAINTAIN ROADS, SIDEWALKS AND TRAILS

- **Strategy 1.1:** Continue focus on road and sidewalk maintenance programs.
- **Strategy 1.2:** Adjust financial capacity to maintain future greenways and trails.
- **Strategy 1.3:** Expand traffic count program for more accurate data.

2. INCREASE MOBILITY FOR ALL USERS

- **Strategy 2.1:** Increase mobility options via public transit.
  - Consider providing CART and Metro Transit.
  - Support Locally Preferred Alternatives with a Moore commuter rail transit station.
- **Strategy 2.2:** Prioritize routes for bicycles and pedestrians by providing sidewalks, multi-use trails and bicycle facilities.
  - Provide greater opportunity for pedestrian and bicycle access to schools, parks, and businesses.
  - Promote opportunities for easily accessible recreation and fitness.
  - Evaluate committed transportation projects, future transportation demand and destination accessibility to better coordinate future trail priority.

- Coordinate bicycle and pedestrian planning with thoroughfare planning.
- Enhance and protect the natural character of the City for trail alignments and supplement the urban forest through tree planting associated with the trail projects.
- Minimize bicycle and pedestrian barriers.
- Capitalize on transportation and recreation benefits in the local economy.

- **Strategy 2.3:** Build Better Blocks to revitalize and improve corridors.
  - Enhance streetscapes and the public realm.
  - Require minimum block lengths that are appropriate (i.e. <400ft in Old Town, <600ft in commercial, mixed-use and higher density areas, >1200ft in residential areas.
  - Construct on-street parking where feasible.
  - Identify shared parking lots to decrease the need of lots.
  - Implement access control to preserve traffic flow.
  - Use traffic calming techniques.

- **Strategy 2.4:** Create complete streets.
  - Adopt a complete streets policy.
  - Consider incorporating appropriate bicycle facilities into resurfacing projects .
  - Consider street upgrades to create complete streets where existing and forecasted traffic volumes permit conversion of travel lanes for bicycle and pedestrian facilities.

3. CONNECT DESTINATIONS WITH PEDESTRIAN AND BICYCLE ROUTES

- **Strategy 3.1:** Increase bicycling related enforcement, encouragement, education and awareness efforts.
- **Strategy 3.2:** Formalize existing Bicycle Routes and prioritize bicyclist comfort and safety.
  - Consider a maximum speed limit on roadways designated as a bike route.
  - Consider implementing MUTCD R4-11 “Bike May Use Full Lane” signage and appropriately placed Shared Lane Markings (SLMs) throughout existing on-road bike routes.
    - These elements should be considered especially in locations along signed bike

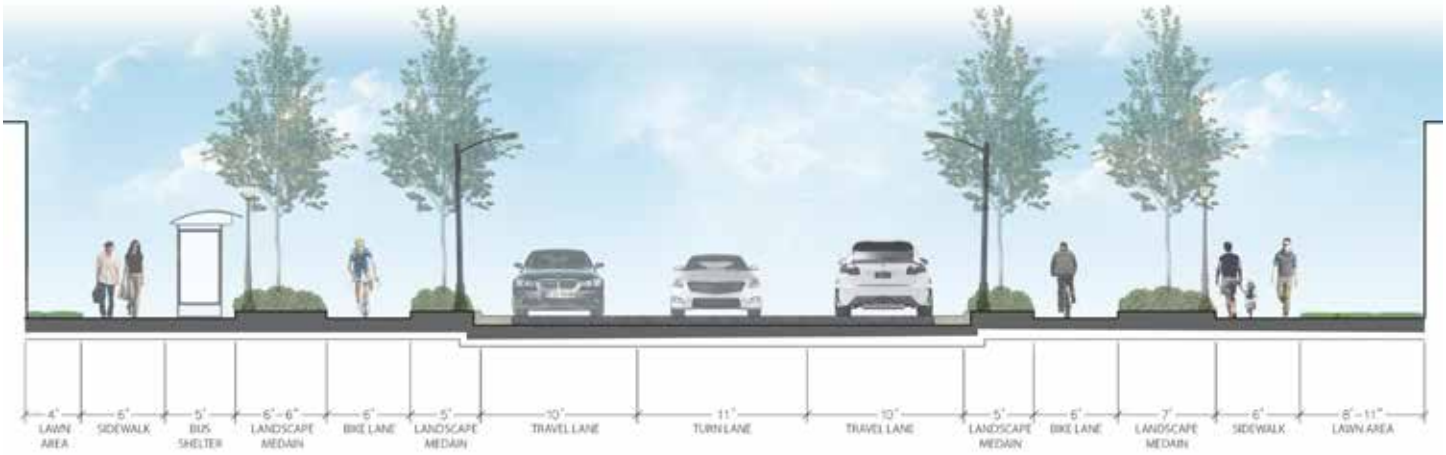


FIGURE 4.16: POTENTIAL CROSS-SECTION FOR 100’ RIGHT-OF-WAY ROADWAY

routes where road sections drop from four to two lanes to discourage edge riding by bicyclists using the route. SLM markings and lateral positioning should adhere to guidance provided in the MUTCD and the ITE Traffic Control Devices Handbook.

- Implement destination and distance wayfinding signage on existing and proposed bike routes.

- **Strategy 3.3:** Create a minimum grid for biking throughout Moore that connects local and regional destinations.
  - Most neighborhood streets are safe for biking, but in order to facilitate longer trips it is necessary to safely accommodate bicycles on a subset of collectors and minor arterials.
- **Strategy 3.4/ Action Item:** Fund priority pedestrian and bicycle projects.
  - Complete Planned/Funded Projects (Bryant Ave MUP, 4th Ave MUT, SW 34th MUP).
  - Improve bike/pedestrian connections.
    - Refer to Action Plan for a detailed list.
  - Study feasibility of improving pedestrian and bicycle connections between Little River Park and Fairmoore Park.
  - Improve bicycle accommodations along Main Street, Tower Road, Eastern and SE 34th Street.
  - Improve bike/ped connections or streetscape from Parmele Park to the east, west and north.
- **Strategy 3.5:** Update 2008 Trails Master Plan to include on-road bicycle facilities and multi-use trails.
  - Determine types of bike facilities needed based on user preference.
  - Incorporate findings from this plan.
  - Determine funding sources and develop a multi-year implementation schedule.

4. IMPROVE PEDESTRIAN FACILITIES IN NEW DEVELOPMENT

- **Strategy 4.1:** Develop guidelines and standards to which new development must adhere, including cross-sectional widths for roads, planting, strips, and sidewalks for all road classifications.
- **Strategy 4.2:** Require sidewalks or greenway connections to existing or future trails, greenways, parks and schools in new development.

5. ADDRESS TRAFFIC CONGESTION, HIGHEST COLLISION RATES, AND POTENTIAL DEVELOPMENT AREAS

- **Strategy 5.1:** Continue Moore's current transportation projects.
  - SW 34th Street, widening to 4 lanes with multi-use trail from Santa Fe Avenue to I-35.
  - SW 34th Street bridge over I-35.
- **Strategy 5.2/ Action Item:** Address current roadway infrastructure.
  - SW 19th Street from S Santa Fe Avenue to Broadway Avenue.
    - Update traffic study to adapt to current traffic patterns.
  - SW 4th Street and railroad intersection.
    - Pursue funding for underpass.
  - NW 27th Street and Pole Road intersection.
    - Traffic signal installation.
  - SE 19th Street bridge, between S Sunnylane Road and S Bryant Avenue, and S Sunnylane Road bridge, between Moore City Limits and SE 34th Street.
    - Reconstruct to increase weight limit.

- **Strategy 5.3/ Action Item:** Plan roadway and intersection improvements with future development.
    - Refer to the Action Plan for detailed improvement recommendations.

RESILIENCY TOUCHPOINTS

Transportation infrastructure plays a critical role in supporting a community's services, systems and residents. It is depended upon as a primary means for preparedness and recovery before, during and after a disruptive event in the community.

- Ensure consistent access throughout the City's transportation network, and develop practices for recovery and post recovery that enable the community to reach immediate service and emergency destinations, including evacuation routes.
- Define the city's performance goals based on the time needed for transportation infrastructure to be restored to provide access to its residents following a disruptive event.
- Focus on prevention of economic loss and environmental damage through maintaining system reliability and protecting public safety.
- Address transportation infrastructure interdependencies with other infrastructure systems such as: energy, communication, buildings, water and wastewater.
- Address railroad noise and congestion caused by trains to improve quality of life by:
    - Reducing noise pollution by implementing a safety corridor that fences off the right-of-way and adopts a Quiet Zone via the Federal Railroad Administration Process.
    - Implementing the separation of road and railroad tracks at S 4th Street.

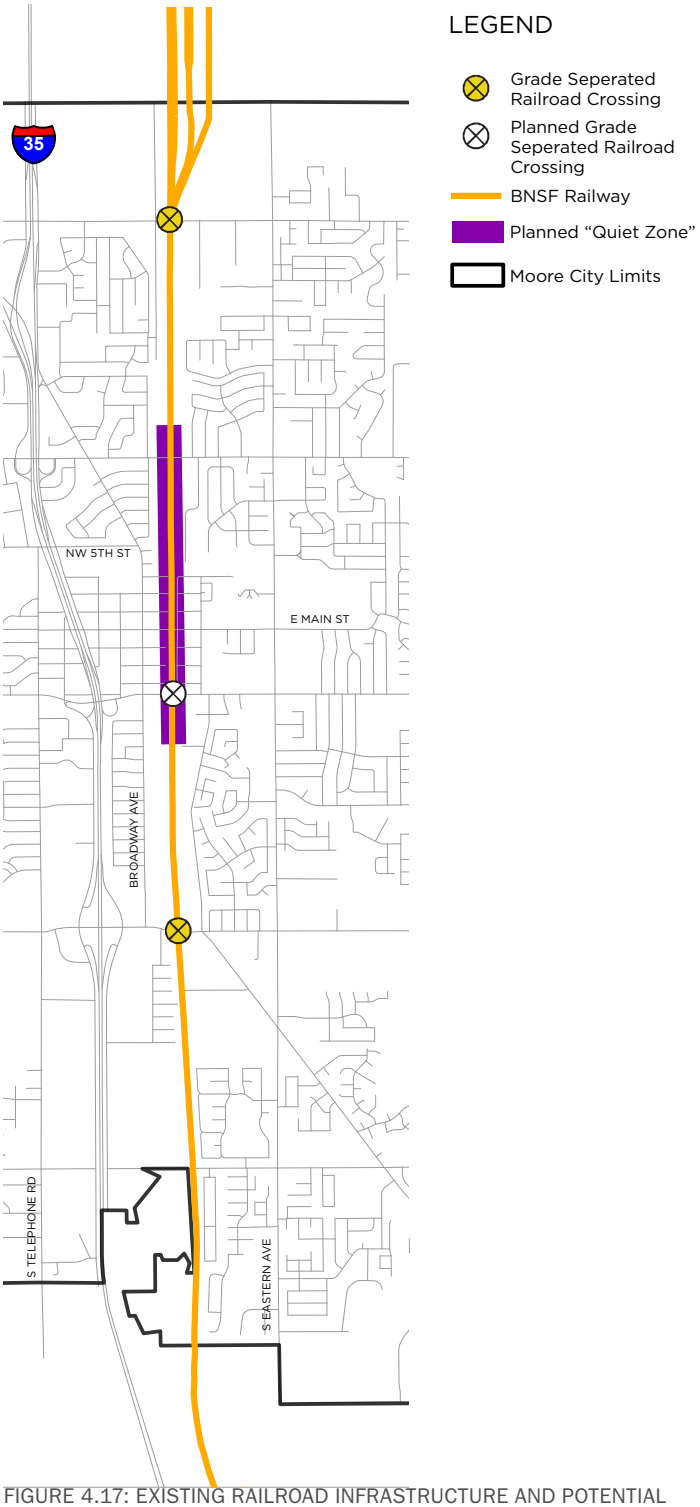


FIGURE 4.17: EXISTING RAILROAD INFRASTRUCTURE AND POTENTIAL CHANGES

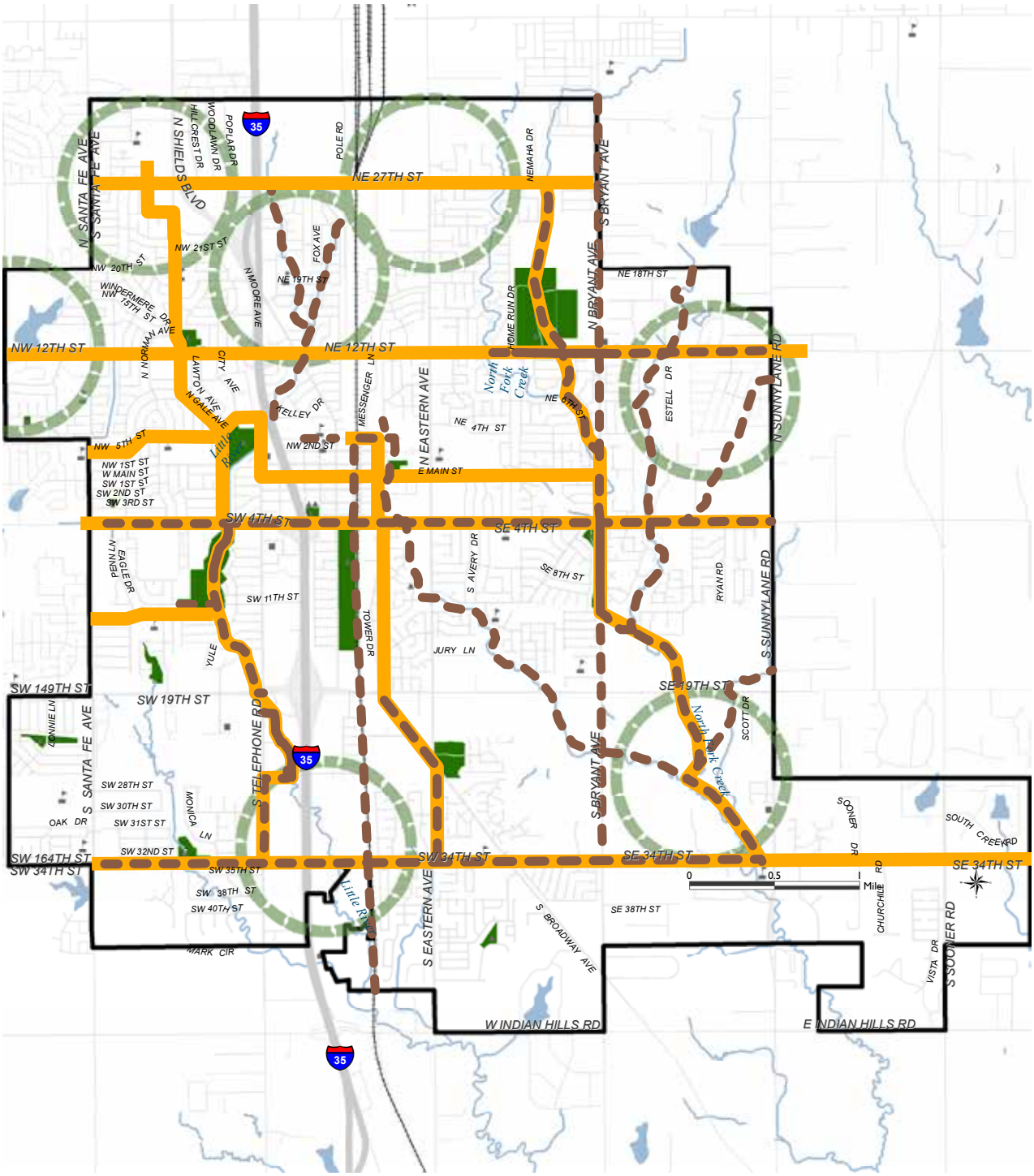


FIGURE 4.18: BIKEWAY AND GREENWAY NETWORK MAP

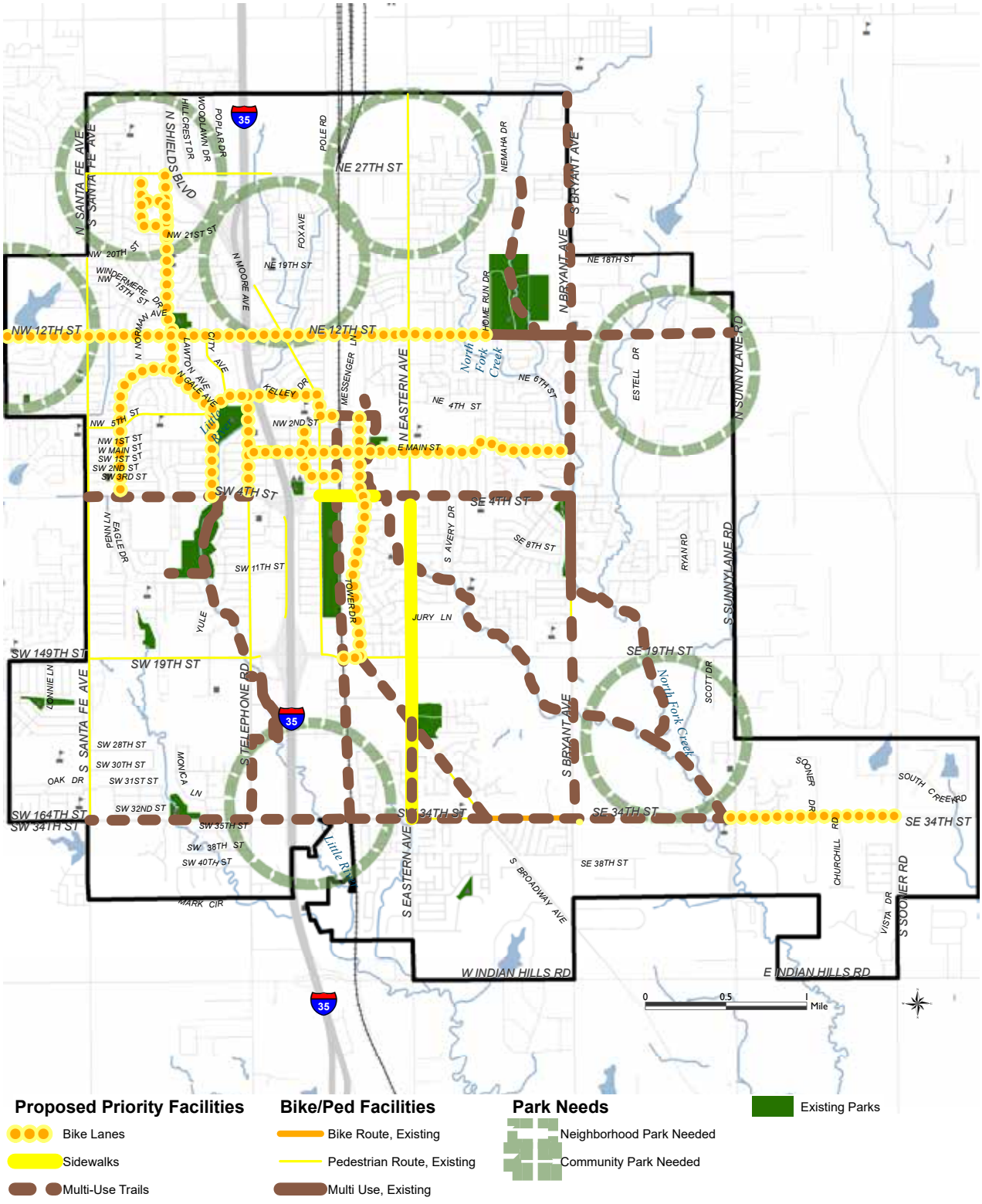


FIGURE 4.19: ACTIVE TRANSPORTATION CONCEPT MAP

BICYCLE FACILITY TYPES

GREENWAY (TOTAL SEPARATION FROM ROAD ROW). WHILE THESE FACILITIES ARE IDEAL IN TERMS OF SEPARATION AND SAFETY, THEY ARE DEPENDENT UPON AVAILABLE ROW AND CAN BE COSTLY TO DESIGN AND CONSTRUCT.

PROTECTED BIKE LANE (LOCATED WITHIN ROAD ROW WITH ELEMENT OF VERTICAL SEPARATION FROM AUTOMOTIVE TRAFFIC). THESE ARE CONSIDERED THE SAFEST AND MOST-COMFORTABLE ON-ROAD FACILITIES, AND TYPICALLY SHOW THE HIGHEST DEGREE OR SUCCESS IN ATTRACTING NEW RIDERS AND RIDERS OF ALL AGES AND DEMOGRAPHICS.

BUFFERED BIKE LANE. LATERAL BUFFER PROVIDES ADDITIONAL SPACE BETWEEN AUTOMOTIVE AND BICYCLE TRAFFIC AND ACCOMMODATES PASSING BY BICYCLISTS WITHIN THE SAME FACILITY ON CONGESTED OR UPHILL SEGMENTS.

BICYCLE BOULEVARD (SHARED FACILITY BETWEEN AUTOMOBILES AND BICYCLES WITH PRIORITIZATION FOR BICYCLES AND LOCAL TRAFFIC). THESE APPLICATIONS, ALONG WITH TRADITIONAL BICYCLE LANES, ARE TYPICALLY MOST EFFECTIVE ON LOW-VOLUME, LOW-SPEED STREETS.

RECOMMENDED TRANSPORTATION PROGRAMS

1. Targeted Walking and/or Biking Improvements

Targeted walking and/or biking improvements connect existing pedestrian and bike facilities to create a continuous and safe alternative routes for users.

Additional pavement is required for a bike lane. This additional widening will be needed on both sides of the street. A critical feature is to pave the bike lane continuously with the same material, thereby minimizing edges. This results in offsetting the bike lane from the curb when a standard concrete gutter pan is used on an asphalt street.

2. Greenway Trails

Greenway trails protect and enhance the natural resources of the city including creeks, floodplains, existing trees, habitat area, and supplement the urban forest through tree planting associated with the trail projects. These trails are a great way to utilize floodplains that may not be suitable for other uses. Trail construction within these areas should be sensitive and protect the natural resources. Additional tree planting associated with these trail projects will help to enhance the existing urban forest and provide a more desirable user experience.

Greenway trails can protect private property and increase property values adjacent to trail facilities. Numerous studies have shown that property values increase when located adjacent to a trail network or open space. By educating real estate professionals and developers about the benefits of the trail system, they can in turn promote the benefits to potential buyers.

3. Roadway Improvements with Complete Street Infrastructure

Roadway improvements provide for additional travel lanes to relieve congested roadway conditions and are recommended in locations where future projected traffic volumes will increase due to development and growth. Roadway widenings provide for more efficient travel, and in most cases, are recommended in locations where additional right-of-way can be acquired with minimal impact to adjacent land uses.

A combination of off-street multi-use trails and street linkages, otherwise known as a complete streets, will provide undisrupted pedestrian movement throughout the city. These trails will vary in experience to promote movement to and within business districts, recreational spaces, schools and residential neighborhoods. With these trails, transportation choices will be more available to the citizens of Moore, allowing persons of any mobility type the availability to move freely throughout the community.

4. Intersection Improvements

Intersection improvements provide safer conditions and were recommended in locations where accident rates were high and traffic flow was impeded. Intersection improvements, such as traffic signal installation or railroad separated crossings, provide for more efficient travel and increase public safety.

5. Access Management

In addition to the proposed roadway improvements identified in this plan, there are other non-capacity, transportation-related recommendations that can enhance the transportation system in Moore, such as access management and driveway control. Access management is defined as the protecting of the capacity of existing transportation routes and systems by controlling access rights from adjacent properties. Access management techniques serve to limit and separate vehicle (and pedestrian) conflict points, reduce locations requiring vehicle deceleration, remove vehicle turning movements from through lanes, create intersection spacing that facilitates signal progression, and provide adequate on-site capacity to accommodate ingress and egress traffic movements.

Access management techniques are extremely important for managing congestion on existing transportation facilities. The implementation

of applicable techniques, or a combination of techniques, can eliminate the need for expensive roadway widenings or potential right-of-way acquisitions. Studies have shown that increasing the signalized intersection spacing to uniform intervals of one-half mile and the use of a non-traversable median to restrict left-turns will increase the capacity of a four-lane urban arterial by about 50 percent as compared to quarter-mile signal spacing and unrestricted left-turns. This is the same increase in capacity that can be obtained by widening a four-lane divided arterial to six lanes. Also, safety will be increased and congestion reduced to a greater extent than by the roadway widening. Research has consistently shown that access management helps to reduce the rate and severity of traffic accidents and improves pedestrian and bicycle safety.

From a land development perspective, access management assists in the orderly layout and use of land and helps to discourage poor subdivision and site design. Poorly designed entrances and exits to major developments not only present a traffic hazard, but also cause increased congestion, which can create a negative image of the development. In addition, access management techniques, such as reducing the number and frequency of driveways and median openings, improve the appearance of major corridors. Scenic and environmental features can be increased, which improves the image of streetscapes and can attract additional economic development.

Access management relies on a variety of access control techniques to promote efficient vehicular movements. These include the following:

- Limit number of conflict points
- Separate conflict points
- Limit deceleration
- Remove turning vehicles from through lanes
- Space major intersections to facilitate progressive travel speeds along arterials
- Provide adequate on-site storage to accommodate both ingress and egress traffic

6. Bridge Improvements

Bridge improvements were recommended for bridges that cannot support the weight of emergency vehicles.

INTERSECTING STREET	STREET ON WHICH DRIVEWAY IS TO BE LOCATED				
	FRONTAGE ROAD	MAJOR ARTERIAL	MINOR ARTERIAL	COLLECTOR	RESIDENTIAL (LOCAL)
FREEWAY* FRONTAGE RD	N/A	200’	200’	200’	230’
MAJOR ARTERIAL	250’	170’	170’	150’	130’
MINOR ARTERIAL	250’	170’	170’	140’	100’
COLLECTOR	235’	135’	125’	95’	95’
RESIDENTIAL (LOCAL)	230’	130’	100’	90’	90’

*MEASURED FROM THE FRONTAGE ROAD RIGHT-OF-WAY

TABLE 4.1: ACCESS MANAGEMENT DRIVEWAY SPACING CRITERIA

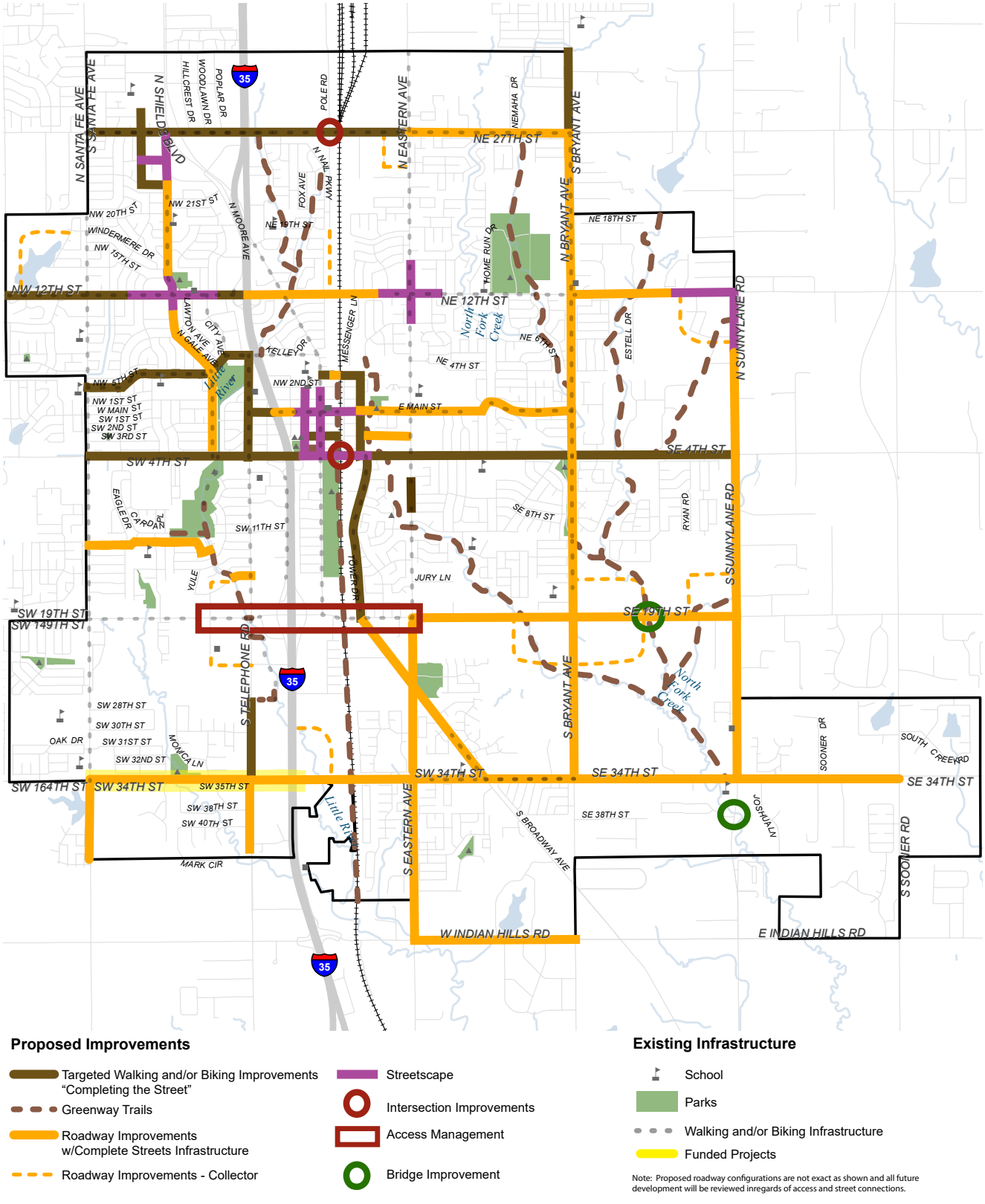
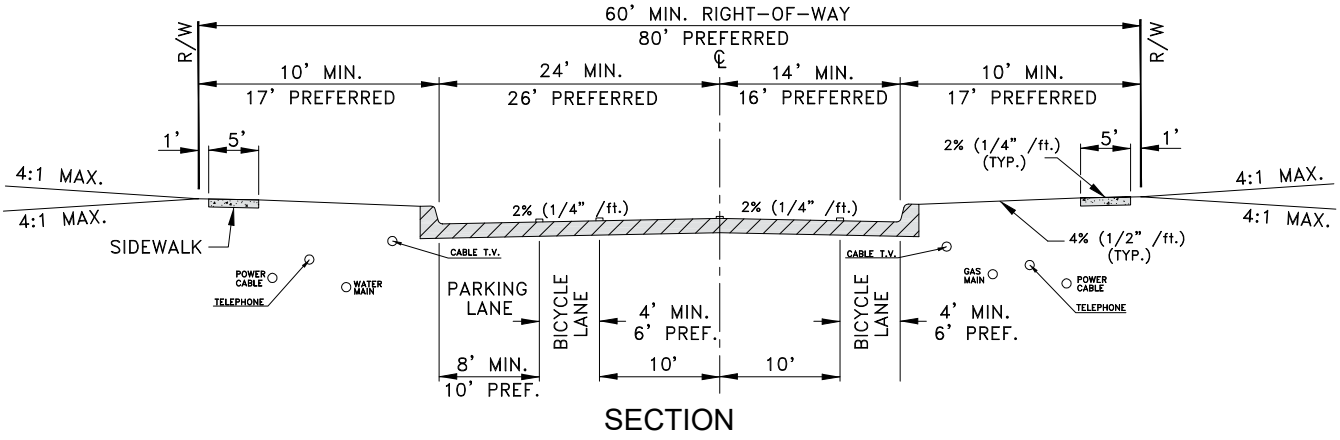
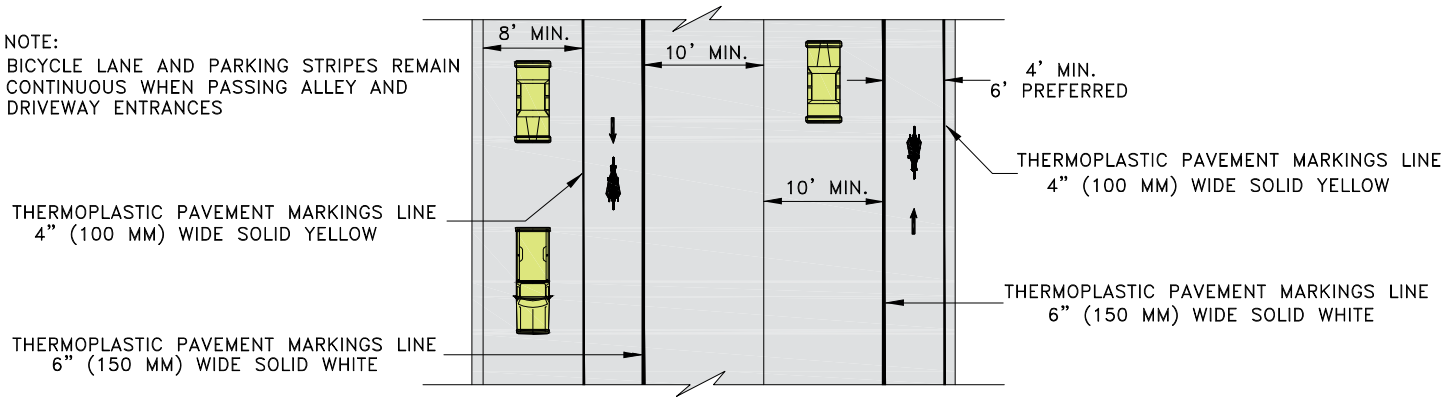


FIGURE 4.20: RECOMMENDED TRANSPORTATION IMPROVEMENTS

2-LANE ROADWAY WITH PARKING AND BIKE LANES

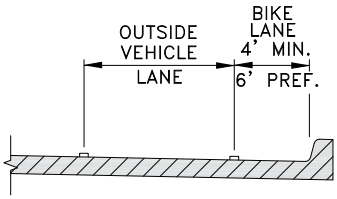


SECTION

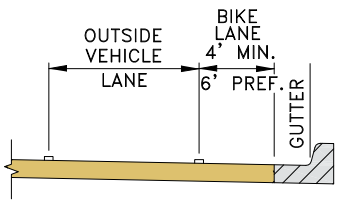


PLAN

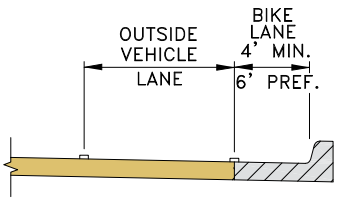
BIKE LANE ADDITION TO COLLECTORS OR MINOR ARTERIALS - NO PARKING



CONCRETE STREET



ASPHALT STREET ALT NO. 1



ASPHALT STREET ALT NO. 2

FIGURE 4.21: TYPICAL ROADWAY AND BIKE LANE STANDARDS

7. Functional Classification of City Streets

The Functional Classification system seeks to provide a baseline to measure the importance of all portions of a city's roadway system. Traditionally, the classification hierarchy goes from low volume, low capacity streets (local) to high volume, high capacity streets (arterials). However, this method relies simply on vehicle-based metrics and tends to ignore the adjoining land use.

The Functional Classification plan included in this Plan (Envision Moore) melds vehicle-based and land use-based classifications. The following list provides a brief explanation of each of the six classifications used in this Plan. A table also follows that details the Average Daily Traffic (ADT) count, typical recommended number of total travel lanes, and recommended lane widths for each classification.

Local: Local streets function to provide access to abutting property and to collect and distribute traffic between individual parcels of land and collector or arterial streets. Local streets include all other streets and roads that are not included in higher functional classes. They include internal and access streets that allow direct access to residential and commercial properties, and similar traffic destinations. Direct access to abutting land is their primary role, for all traffic originates or is destined to abutting land.

Collector: Collector streets provide for a balance of traffic movement and property access; they connect arterials and local streets that serve to collect traffic and distribute it to the network. Traffic movement is often internal to localized areas, with collectors connecting residential neighborhoods, parks, churches, etc. with the arterial system. As compared to arterial streets, collectors accommodate smaller traffic volumes over shorter distances. Collectors also serve to provide direct access to a wide variety of residential, commercial and other land uses, and their design involves site-specific considerations. They provide service to neighborhoods and other local areas, and may border or traverse neighborhood boundaries.

Minor Arterial, Urban: Minor arterials in urbanized areas typically serve as connections between local and collector streets and the major arterials, and facilitate the movement of larger traffic volumes over shorter distances within the community. Because direct access to abutting property is a secondary function of arterial streets, access should be carefully managed to avoid adverse impacts on the movement function intended for these facilities.

Major Arterial, Urban: Major arterials form an interconnecting network for citywide and regional movement of traffic, including connections to freeways and expressways, and to minor arterials and collectors. A one- to two-mile spacing is generally desirable between major arterials, with a one-mile spacing between a major arterial and a minor arterial or freeway. Major arterials are typically on section-line roads.

Minor Arterial, Edge: Minor arterial streets on the edge of the city serve similar functions to minor arterial streets in the urbanized area, but serve fewer vehicles per day.

Major Arterial, Edge: Major arterial streets on the edge of the city serve similar functions to major arterial streets in the urbanized area and are typically the same section line roads that are considered major urban arterials in the urbanized part of the city, but carry fewer vehicles per day.

Freeway/Expressway: These facilities include interstate highways, freeways, expressways and parkways, and provide for the rapid and efficient movement of large volumes of traffic between regions and within one region. Direct access to abutting property is not an intended function of these facilities. Design characteristics support the function of traffic movement by providing multiple travel lanes, a high degree of access control, and no at-grade intersections. The city does not own, operate, or maintain any such facilities at this time.

CLASSIFICATION	ADT RANGE	TYPICAL RECOMMENDED TOTAL # OF LANES	RECOMMENDED LANE WIDTHS
LOCAL	< 2,500	2	9' TO 11'
COLLECTOR	2,500 TO 5,000	2	10' TO 12'
MINOR ARTERIAL, URBAN	5,000 TO 15,000	3	10' TO 12'
MAJOR ARTERIAL, URBAN	> 15,000	4 TO 5	11' TO 12'
MINOR ARTERIAL, EDGE	< 2,500	2	10' TO 12'
MAJOR ARTERIAL, EDGE	> 2,500	3	11' TO 12'
FREEWAY/EXPRESSWAY	> 35,000	VARIES	13' TO 14'

TABLE 4.1: ADT COUNT, TYPICAL RECOMMENDED TRAVEL LANES & LANE WIDTHS FOR EACH CLASSIFICATION

8. Streetscape Enhancements, Lanes and Road Sizing

Streetscapes define a community's aesthetic quality, identity, economic activity, and health. When correctly designed, a streescape completes the street by encouraging more pedestrian traffic, improving overall experience for users, and increasing biodiversity along urban areas. Old Town and other areas of potential growth in the city could link their economic goals with their public health and environmental goals by incorporating well-planned streetscape principles.

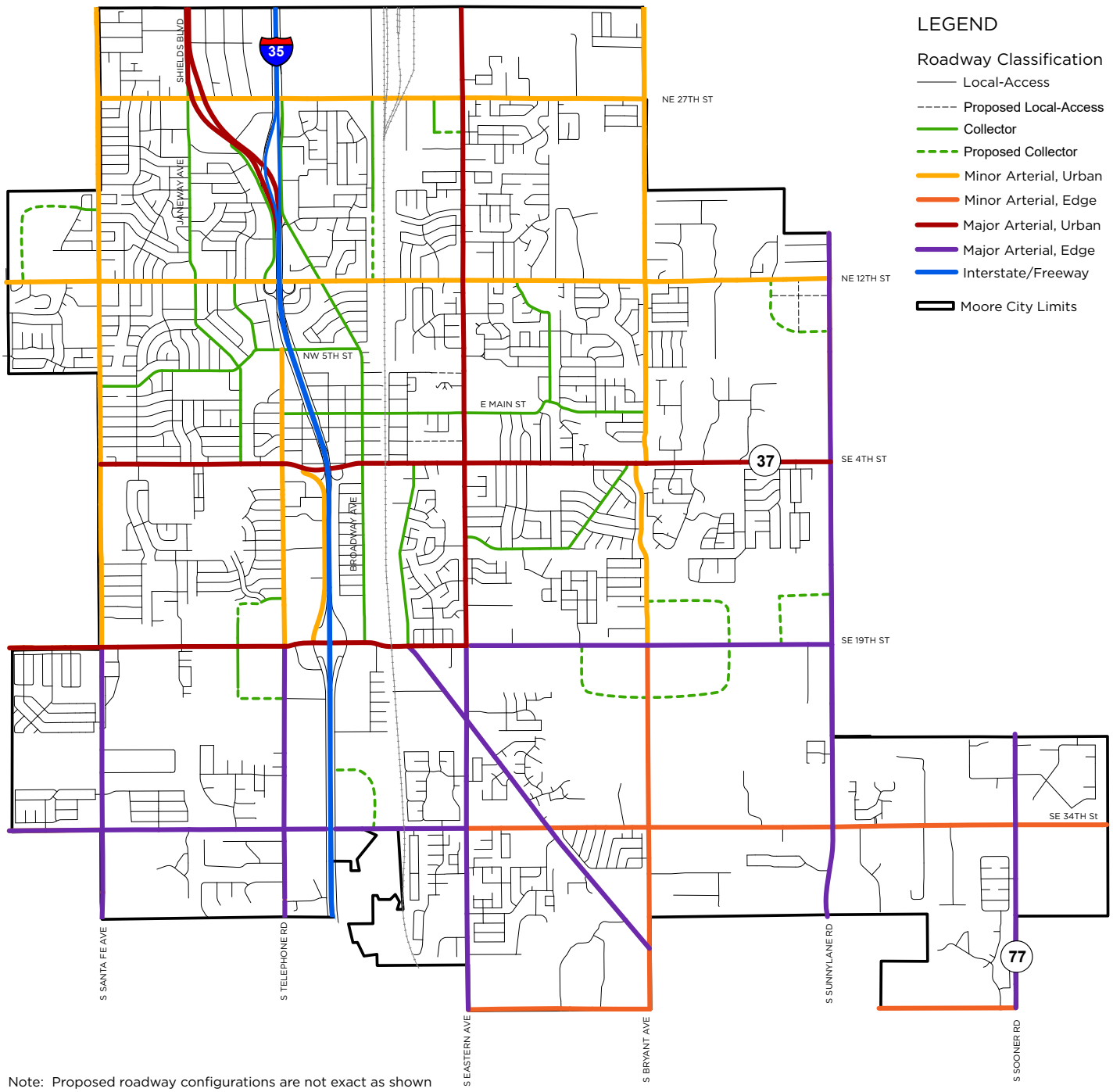
The majority of streets in the city currently have ADT counts that fall within recently published studies related to road re-sizing validated by the Federal Highway Administration (FHWA). In its Road Diet Informational Guide, published in November 2014, FHWA notes that studies have shown that roadways with between 8,000 vpd and 24,000 vpd can be reduced in lanes.

In summary, FHWA identifies the following benefits of road diets, which can be extended to recommending that roadways that may need to be widened only need a single lane added (from 2 to 3) instead of spending more to add two full lanes, which may also require more ROW.

These are the key points identified in the FHWA Road Diet informational guide:

- Improved Safety
  - "Studies indicate a 19 to 47 percent reduction in overall crashes when a Road Diet is installed on a previously four-lane undivided facility..."
- Operational Benefits
  - Separating Left Turns
  - Side-street Traffic Crossing
  - Speed Differential Reductions
- Pedestrian and Bicyclist Benefits
- Livability Benefits

A 3-lane section provides for more space for pedestrian and bicycle facilities within the existing ROW, which assists in accomplishing various other goals and strategies within this plan. Right-sizing existing facilities, or right-sizing designs for new roads, can help the city reduce future maintenance costs as well.



Note: Proposed roadway configurations are not exact as shown and all future development will be reviewed in regards to access and street connections.

FIGURE 4.22: FUNCTIONAL CLASSIFICATION PLAN

TRANSPORTATION FACILITY TYPES

COMPLETE STREET IN OKLAHOMA CITY 180 PROJECT. THE ADDITION OF BIKE LANES, STREETSCAPE, WIDENED SIDEWALKS AND DEFINED CROSSWALKS CREATES A SAFER ENVIRONMENT FOR PEDESTRIANS. SOURCE: A BETTER LIFE OKC BLOG, HTTP://IQC.OU.EDU/2013/11/05/BOTTOMOFTHELIST/

RAILROAD SEPARATED CROSSING KEEPS TRAFFIC FLOWING UNINTERRUPTED BY PASSING TRAINS. SIDEWALKS ALONG THE ROADWAY AT THESE CROSSINGS INCREASES PEDESTRIANS' AND BICYCLIST'S SAFETY AND COMFORT LEVELS. SOURCE: HTTPS://MISSPRESERVATION.FILES.WORDPRESS.COM/2014/08/UNDERPASS-AND-PEDESTRIAN-WALKWAYS.JPG

BUFFERED MULT-USE TRAILS. LATERAL BUFFER PROVIDES ADDITIONAL SPACE BETWEEN AUTOMOTIVE AND PEDESTRIAN. SOURCE: MATT CARROLL, HTTP://INDYCULTURALTRAIL.ORG/ABOUT/

STRIPED BIKE LANES REQUIRE ADDITIONAL CONTINUOUS PAVEMENT. SOURCE: HTTPS://FBTARCH.COM/WALK-BIKE-AND-RIDE-ON-COMPLETE-STREETS-DAY/

IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

The goals, policies and strategies in this Plan are meant to inform regulations, development management activities, services and programs and capital improvements in the coming years. The Plan should be updated and amended as necessary to serve as the foundation for building a better city. Implementing the recommendations in this Plan will involve elected officials, city staff, citizens, community leaders, non-profits, landowners, and businesses. This chapter describes action items related to the implementation of this Plan including considerations for land use decisions, development review policies, recommended code and ordinance changes, recommendations for further study, and an action plan that includes a prioritized list of plans, programs and projects.

LAND USE PLAN CONSISTENCY

In order to successfully implement the Future Land Use Plan, new development should conform to the land use policies in this Plan. Exceptions may be made for the following cases:

- Applications for subdivision of land or a change in zoning district classification should be consistent with the Future Land Use Plan. Exceptions require the filing of a simultaneous request to the City Council and Planning Commission to consider a formal plan amendment.
- Large-Scale Mixed-Use – In the case of large-scale planned development projects, certain parcels may exceed maximum densities on a net acre basis, provided the total gross project density does not exceed that provided in the Land Use Plan.
- Planned Unit Development – In the proposal of a Planned Unit Development (PUD), the Planning Commission may consider higher densities or density averaging when the PUD proposes other amenities to mitigate the higher density impacts on surrounding areas. Some mitigation proposals may include, but are not limited to: additional green space and landscaping, screening/fencing, buffering when appropriate land uses, greater setbacks, a maximum structure height, transportation improvements, and access considerations.
- Variances – No land use variance that will have the effect of permitting the density or intensity of land or structures in a manner inconsistent with the Envision Moore Future Land Use Map may be approved by an administrative official, board, or commission. Setback, height, parking, and bulk requirements may be approved in accordance with findings for legitimate, non-self imposed hardships and related issues.

DEVELOPMENT REVIEW POLICIES

City Council intends for no official, board, or commission to recommend, authorize, approve, or grant any project or development permit that is not consistent with the following development review policies. All development approvals shall meet the following conditions:

- Water – Potable water mains, facilities, and services will be available in sufficient capacity and proximity to provide for the needs of the proposed development.
- Sewer – Sanitary sewer collection, treatment, and disposal facilities will be made available prior to issuance of occupancy certificates in sufficient capacity to serve the needs of the proposed development. Connection to facilities with insufficient capacity shall not be approved. The city discourages developer construction of small lift stations; small drainage basin lift stations shall only be approved after exhausting all regional and sub-regional options.
- Public Safety – Fire and police services will be adequate to protect people and property in the proposed development with adequate equipment and acceptable response times.

RECOMMENDED CODE AND ORDINANCE CHANGES

Land Use

- Establish Commercial Design Guidelines to be used for identified commercial nodes, I-35 Corridor, and mixed-use development to address building orientation, access, landscaping, signs, and façade materials.
- Consider a greater front yard setback for residential lots fronting upon a collector street.
- Establish Design Guidelines for high-density and multi-family residential uses to increase compatibility with surrounding land uses.
- Establish buffering requirements between residential developments and incompatible uses including the railroad, oil and gas wells and tanks, and industrial uses.
- Review uses permitted by right, uses permitted upon review, and development regulations in the commercial zoning ordinance to ensure compatibility with the policies of the comprehensive plan.
- Require residential and commercial development to incorporate traffic calming techniques.
- Consider a policy to require a Traffic Impact Analysis for any development that is expected to generate 100 or more trips during the highest peak hour on the roadway system.
- Create one or more new zoning districts and minimum design guidelines for the Old Town District; initiate the rezoning of Old Town.
- Update zoning regulations to exclude uses from commercial zoning that are not conducive to shopping, dining, and entertaining, including car sales, mini-storage, and heavy car repair.
- Create a new Open Space Residential zoning district that emphasizes preservation of open space and clustered housing. Alternatively revise “RE” zoning to accomplish the recommendations in this Plan.
- Update parking and buffering requirements within the Land Development Code to encourage shared parking and increased buffering between parking lots and adjacent land uses.
- Modify outdoor storage requirements to increase screening and buffering when seen from a street or adjacent to residential land use.
- Update landscaping requirements for one or more districts.
- Revise parking requirements to allow for shared parking and require rear parking in Old Town.
- Consider implementing riparian buffer requirements for new development.

Housing and Neighborhoods

- Revise Home Occupation regulations to ensure compatibility with residential land use.
- Consider the creation of a Neighborhood Conservation District Overlay zoning district.
- Allow pocket neighborhoods and senior friendly housing in locations with access to parks, shopping or other amenities.
- Revise code to allow accessory dwelling units in certain zoning districts under specified conditions.

Open Space and Natural Resources

- Update zoning regulations to require Open Space Amenities with new developments.
- Update the Drainage and Floodplain Regulations to reduce flooding risks, improve stormwater quality, and allow for the incorporation of Low-Impact Development techniques.

Parks and Recreation

- Update Parkland Ordinance to increase land dedication requirements in new subdivisions and revise the fee-in-lieu of parkland dedication.

Public Services

- Update City Standards and Specifications for Low-Impact Development techniques.
- Update City Standards and Specifications to require more ROW for new/updated plats along arterial and collector streets so that Complete Streets and utility infrastructure are adequately supported.

Transportation

- Adopt an Access Management Policy to require shared access points and a network of local and collector streets to minimize drives on arterial roadways.

RECOMMENDATIONS FOR FURTHER STUDY

Land Use

- Study and adopt programs and incentives to redevelop under-utilized or blighted properties.
- Research feasibility of adopting a form-based code for the Old Town District.
- Investigate the costs and benefits of implementing a local marketing campaign for destination districts, such as Old Town.
- Study the provision of public wi-fi or broadband in Old Town to encourage tech-savvy and creative-class start-ups.
- Investigate partnering with other entities to increase or market office and flex-space.
- Study the feasibility of including Green Stormwater Infrastructure or LID in Old Town and other areas with historical flooding concerns.
- Plan for future open space in Old Town.
- Study the potential for locating a commuter rail station in close proximity to Old Town and prepare a Transit-Oriented Development plan for the general area.
- Investigate feasibility of an elevated north/south pedestrian facility and park extension with SW 4th Street RR Underpass.

- Investigate the implementation a local marketing campaign for destination districts, such as Old Town.
- Consider allowing accessory dwelling units in certain zoning districts under specified conditions.

Economic Development

- Evaluate effectiveness of "community branding."
- Consider the establishment of a redevelopment incentive program.

Housing and Neighborhoods

- Collect data on nuisances, code enforcement activities, vacant properties, and underutilized land and map areas of blight.
- Complete a comprehensive 'build-out' study for development within the city.
- Investigate how to incorporate Crime Prevention Through Environmental Design (CPTED) Principles into public and private development projects.
- Identify barriers to affordable housing.

Open Space and Natural Resources

- Study targeted LID and Green Stormwater Infrastructure retrofits on public land to determine effectiveness.
- Determine long-term funding sources for stormwater and water quality improvements.
- Consider implementing an LID certification program for developments or similar to encourage use in new developments and redevelopment.
- Investigate incentives for the restoration of tree canopy and vegetation to prevent erosion and naturalize floodplain.

Parks and Recreation

- Study the needs and potential location of new park(s) in the southeast, northeast, and northwest quadrants of the city.
- Study the feasibility, funding, and maintenance of priority greenway projects.
    - Connect Little River Park to Riverwalk Trail
    - Connect Kiwanis Park to future parkland on North Fork River
    - Connect Buck Thomas Park to future park on North Fork River
- Update the 2012 Parks and Recreation Plan as needed.
- Convene youth and senior focus groups during next update of Parks and Recreation Master Plan.

Public Services

- Study alternatives to increase water pressure between Santa Fe, I-35, NW 27th Street and SW 19th Street.
- Complete a Water Master Plan to study the entire water system, including the need for an additional water tower.
- Conduct a Hydraulic Study of the city's water system.
- Complete a Wastewater Master Plan to study the entire sewer system.

- Conduct a Rate Study for water and sewer utility fees
- Investigate solutions for water well-head treatment for arsenic.
- Research potential constraints on the wastewater system from a developed Cleveland Heights.
- Evaluate the east-side basin for sub-regional sanitary sewer lift stations and consider establishing an assessment district for improvements.
- Evaluate sewer plant capacity.
- Study feasibility of providing regional lift station to sewer undeveloped land on the east side of Moore; consider establishing assessment districts for regional lift station(s).
- Complete a fire station location and staffing study based on the updated land use plan.
- Inventory all public and private drainage infrastructure; create a scheduled maintenance program for public storm sewer systems and a scheduled inspection program for private storm sewer systems.
- Conduct a Study of the Recycle Moore Center to provide cost-effective and efficient recycling services.
- Conduct a Fleet Replacement Study and implement replacement program.
- Study multi-family and rental homes storm shelter options and strategies for including shelters in new and existing developments.
- Evaluate the development fee structure to ensure that public investment in infrastructure is repaid by the developer.
- Prepare a Master Site Development Plan for the public works, fleet maintenance, sanitation, and animal control operations to determine most effective facility layout and implement adopted plan.
- Consider expanding the wind-resistance building code updates to multi-family and commercial construction.

Transportation

- Consider a maximum speed limit for roadways with an On-Road bicycle facility.
- Study rail with trail facility from Old Town to SW 34th Street.
- Investigate feasibility of providing protected bike lanes along bicycle routes.
- Study feasibility of protected bicycle and pedestrian connections between Fairmoore Park and Little River Park.
- Complete a full update to the 2008 Master Trails Plan that includes a funding and implementation plan.
- Study safety outcomes and citizen preferences for implementation of ‘sharrow’ marking program, ‘full use of left lane’ policy for bike routes, or dedicated, separated facilities.
- Investigate the feasibility of establishing a Railroad Safety Corridor (Quiet Zone), including fencing, security, and crossing improvements as needed.

ACTION PLAN

The following table includes prioritized projects and programs essential to the implementation of the Envision Moore Comprehensive Plan. Annual work plans and capital improvement programs should reflect these priorities.

Each item has an associated priority. The following classifications are used to distinguish between priorities:

- **Ongoing - Current Activity**
- **S - Short-term** (1-7 years)
- **M - Medium-term** (8-15 years)
- **L - Long-term** (16+ years)

TABLE 4.2: SHORT TERM PLAN

	PROJECT
LAND USE	Include a high-order pedestrian and possible bicycle connection as part of the planned S. 4th Street RR Underpass.
	Update Old Town gateway, monumentation, signage, lighting, and street furniture.
	Address connectivity barriers to Old Town at Main Street east of RR tracks.
	Invest in the public realm in Old Town via targeted streetscape improvements.
	Update codes and ordinances.
	Prepare conceptual plans for key areas of the city.
ECONOMIC DEVELOPMENT	Provide data to attract business and industry to Moore.
HOUSING & NEIGHBORHOODS	Continue Code Enforcement activities in aging neighborhoods and other reinvestment areas.
	Rehabilitate or remove structures declared by the City Council to be dilapidated and in violation of City regulations. Associated blight shall also be removed.
	Include streetscapes and lighting improvements with roadway reconstruction in aging neighborhoods and other reinvestment areas
	Provide City Staff to serve as a liaison between City Hall and neighborhoods and facilitate the creation of neighborhood organizations and tenant organizations.

TABLE 4.2: SHORT TERM PLAN

OPEN SPACE & NATURAL RESOURCES	Identify and pursue grant funds for low impact development (LID) / green storm-water infrastructure (GSI) retrofit projects. These could include native plantings, rainwater collection systems, water reuse systems, or stormwater amenity areas.
	Partner with local non-profits for a pilot program to restore tree canopy, riparian areas, or a LID retrofit project to improve stormwater quality.
	Augment Phase 2 Stormwater Management Program to include more outreach related to LID practices focusing on preserving and enhancing riparian vegetation.
PARKS & RECREATION	Continue improvements to Central Park and the Station.
	Complete Fairmoore Park renovation.
	Renovate Westmoore Park.
	Repurpose tennis court at Greenbriar Park.
	Develop Old Town Park.
	Develop Quail Ridge Park.
PUBLIC SERVICES	Update City Standards to include LID and Green Stormwater Infrastructure options.
PUBLIC SERVICES WATER/ WASTEWATER	Implement a Smart Meter program as first studied in 2015.
TRANSPORTATION	Create a Function Street Classification System.
	Add pedestrian refuges at 4th Street/Broadway Intersection.

	Fund priority pedestrian and bicycle projects:
	• Multi-Use Trail
	  • SW 34th Street, from Telephone Road to Santa Fe Avenue
	  • Bryant Avenue, from NE 12th Street to SE 4th Street
	  • SW 34th Street, from Telephone Road to Eastern Avenue-S
	  • SW 34th Street, from Eastern Avenue to Broadway-S
	  • Broadway Avenue, from SW 34th Street to Eastern Avenue-S
	• Bike/Ped Connection
	  • Main Street, from Telephone Road to Eastern Avenue-S

TABLE 4.2: SHORT TERM PLAN

TRANSPORTATION	Adjust number of lane segments when appropriate per Plan guidance: • NE 27th – Eastern Avenue to Bryant Avenue • SE 19th – Eastern Avenue to Bryant Avenue • SW 34th – I-35 to Eastern • SW 34th St- Eastern to Broadway • SE 34th St- Broadway to Bryant • Broadway Avenue – SE 19th to SE 34th St. • SW 34th – Santa Fe Avenue to Telephone • Eastern Avenue – SE 19th to SE 34th St • Bryant Avenue, SE 4th Street to NE 12th Street • Bryant Avenue, SE 4th Street to NE 12th Street • Main Street, I-35 to Eastern Avenue
	Reconstruct/Resurface: • Main Street, Eastern Avenue to Bryant Avenue • Main Street, I-35 to Eastern Avenue

TABLE 4.3: MEDIUM TERM PLAN

	PROJECT
LAND USE	Address connectivity barriers to Old Town at: • Main Street west of I-35 • Telephone Road from NW 5th to SW 4th St.
HOUSING & NEIGHBORHOODS	Continue Code Enforcement activities in aging neighborhoods and other reinvestment areas.
	Provide sidewalks, benches, and shelters for future transit stops.

TABLE 4.3: MEDIUM TERM PLAN

PARKS & RECREATION	Acquire parkland in the SE quadrant.
	Implement recreation-related improvements identified in the Trails Master Plan and this Plan.
	Update the 2012 Parks and Recreation Plan.
	Develop newly acquired NE corner of Buck Thomas Park.
TRANSPORTATION	Construct a grade separated railroad crossing at SW 4th Street.

	Fund priority pedestrian and bicycle projects:
	• Multi-Use Trail
	  • S 4th Street, from Eastern Avenue to Broadway Avenue
	  • SW 34th Street, from Broadway to Bryant Avenue
	  • Bryant Avenue, from SE 4th Street to SW 19th Street
	• Bike/Ped Connection
	  • NW 5th Street from Broadway Avenue to Janeway
	  • S 3rd Street from Howard Avenue to RR Tracks

	Fund priority transportation projects: • SW 4th Street and RR Underpass • Bridge Rehabilitation at SE 19th Street between S Sunnylane Road and S. Bryant Avenue. • Bridge Rehabilitation at S Sunnylane Road between S city limits and SW 34th Street.
	Adjust number of lane segments when appropriate per Plan guidance: • SW 17th - S Telephone Road to S Janeway Avenue • SW 11th - Santa Fe Avenue to S Janeway Avenue • SE 19th – Bryant Avenue to Sunnylane Road • SE 34th – Bryant Avenue to Sunnylane Road • NE 12th – Bryant Avenue to Sunnylane Road • Bryant Avenue, SE 4th Street to SE 19th Street • Janeway, NW 12th Street to NW 27th Street
	Reconstruct/Resurface: • NE 12th Street, I-35 to Eastern Avenue • Janeway, SE 4th Street to NW 12th Street

TABLE 4.4: LONG TERM PLAN

	PROJECT
LAND USE	Construct a masonry barrier wall and landscape amenities where residential uses abut I-35.
HOUSING & NEIGHBORHOODS	Continue Code Enforcement activities in aging neighborhoods and other reinvestment areas.
PARKS & RECREATION	Acquire parkland in the far NW quadrant.
	Acquire parkland in the far NE quadrant.
	Continue additional improvements to existing parks identified in the 2012 Parks and Recreation Plan.

TRANSPORTATION	Fund priority pedestrian and bicycle projects:
	• Multi-Use Trail
	  • Bryant Avenue, from NE 12th Street to NE 27th Street
	  • Bryant Avenue, from SE 19th Street to SE 34th Street
	• Bike/Ped Connection
	  • Janeway, from NW 12th Street to NW 27th Street
	  • NW 12th Street from Santa Fe Avenue to Broadway Avenue
	• Bicycle Facility
	  • Tower Drive, from SE 19th Street to SE 4th Street

TABLE 4.4: LONG TERM PLAN

	PROJECT
TRANSPORTATION	Adjust number of lane segments when appropriate per Plan guidance: • SE 34th – Sunnylane Road to Sooner Road • Santa Fe –SW 34th to city limits • Eastern Avenue – SE 34th to Indian Hills • Sunnylane Road – North of NE 12th to SE 4th • Sunnylane Road – SE 4th to SE 19th • Sunnylane Road – SE 19th to South of SE 34th • Indian Hill – Eastern Avenue to Bryant Avenue • Bryant Avenue, NE 12th Street to NE 27th Street • Bryant Avenue, SE 19th Street to SE 34th Street

APPENDIX A: COMMUNITY INPUT

Public involvement is an important component of the Envision Moore Plan 2040. Activities focused on obtaining meaningful input from key stakeholders and general public to this date have included:

- Envision Moore Community Survey 1
- Stakeholders Workshop and Public Meeting, May 12, 2016
- Envision Moore Community Survey 2
- Stakeholders Workshop and Public Meeting, August 16, 2016
- Stakeholders Survey
- Old Town Meeting, Stakeholders Workshop, and Public Meeting, December 7 - 8, 2016

A1. STAKEHOLDER INTERVIEWS

QUESTION 1: What are important policy, aesthetic or land use improvements to Commercial Areas? (Top 5 responses)

1. Adoption of design guidelines for redevelopments and improvements as a way to match historic character, enhance walkability and increase business visibility
2. Incentivize redevelopment of aging commercial centers
3. Additional public space requirements (i.e. plazas, outdoor dining, open space)
4. Improved buffers or landscaping between commercial and existing development
5. Additional trees along sidewalks for shade and visual enhancements

QUESTION 2: What kind of improvements should be considered for Old Town? (Top 5 responses)

1. Incentivize additional retail and restaurants in Old Town
2. Enhanced landscaping, trees and sidewalks along Old Town streets that promote a walkable experience
3. Encourage easier access of Central Park from Old Town through beautified street parking, traffic speed management, bicycle and pedestrian safety enhancements along Broadway, especially at the intersection of S. 4th St.
4. Improved wayfinding and signage
5. Promote infrastructure improvements that facilitate pop-up events and festivals

QUESTION 3: The biggest barrier to walking or biking to or around Old Town is: (Top 5 responses)

1. Lack of safe bicycle or pedestrian accommodations on S 4th street
2. Lack of safe bicycle or pedestrian accommodations on Main Street
3. Lack of safe bicycle or pedestrian accommodations on Broadway
4. Lack of safe bicycle or pedestrian accommodations on side streets (i.e. Howard Street)
5. The railroad tracks

QUESTION 4: What should recommendations should be included in the Envision Moore plan related to housing? (Top 5 responses)

1. Protect existing neighborhoods from commercial encroachment
2. Improve connectivity (pedestrian or streets) between neighborhoods and destinations
3. Encourage amenities and open space (i.e. parks and playgrounds) in new residential developments
4. Improve maintenance of rental properties
5. Encourage more diversity in housing types to cater to younger people and older adults

QUESTION 5: Where should the Plan encourage more housing diversity or density (i.e. patio homes, townhomes or condos)? (Top 5 responses)

1. Where there is limited impact to existing single family neighborhoods
2. As part of redevelopment of aging shopping centers or underutilized areas
3. In Old Town as infill and redevelopment
4. Near existing and future commercial centers (within walking distance)
5. Near schools and parks

QUESTION 6: What is resiliency for the City of Moore and its citizens? (Top 5 responses)

1. Financial
2. Infrastructure
3. Disaster Recovery
4. Transportation
5. Water

QUESTION 7: What places or "precedents" should Moore seek to emulate, and why?

Name	Why?	Where is this appropriate in Moore?
Green space/community parks	The focus has been on "big" collector parks that require most patrons to use automobiles to access	Throughout the city
Classen Miller Condos (401 E Boyd St, Norman)	The development is built in a contemporary fashion, close to shopping and food, and available as an inclusive community. The condos are sold as individual units, and seem to be very successful.	This would be great near a re-gentrified Old Town area or near 19th St shopping/ food.
Highland Village/Flower Mounds Tx	This area and other suburbs in Texas seem to be a good example of growing communities that have employed successful traffic management techniques. If you want to turn around, make a u-turn, stop the flow of traffic in some way, you're likely to be frustrated. Very limited number of curb cuts, the traffic is forced to go to a few specific places. In some of our growing areas, I think this could be helpful to examine.	Commercial growth areas like 19th
Alexandria, VA	Lots of areas have commercial / restaurants on the lower level w/ residential on the upper levels. The restaurants have outdoor dining.	Old Town

Name	Why?	Where is this appropriate in Moore?
Overland Park/Lee's Summit, Kansas	Cities that have an inviting visual appearance and are supported with lots of recreational opportunities and entertainment options that promotes quality of life standards for it's citizens. But much like Moore, is in close proximity to a large Metropolitan (KC).	All of Moore, but we certainly have opportunities in our current growth areas, i.e.-South, West and East.
Pedestrian/bicycle friendly streets	Even if Moore had more neighborhood parks or greenspaces, save access would be difficult because of the lack of sidewalks/bike paths.	Everywhere.
Outdoor, Street Side Dining (similar to the Mont, or Library Grill in Norman)	It would be nice for Moore to offer a comfortable gathering place with indoor/outdoor seating options. In neighboring cities, we see successful restaurants embrace the patio style retreat in varying areas of the city. This would encourage young business professionals to come by home to Moore after work, instead of seeking other areas.	OldTown; or Near I-35 and Main; or on Broadway between 19th to Main...
Plaza District, OKC	This is a fun example of a neighborhood that has seen a good bit of decline in the past and is now in the middle of a renaissance. The neighborhood is connected to the businesses, the success of one has meant the success of the other. Homes, retail, restaurants are thriving and being redeveloped. History is being given homage, and in some ways being re-written in this area.	Old Town
Palo Alto, California	I like the thought of the technological enhancements they have incorporated into their community development. I think this will be an attraction to for generations to come into our community. We have a great historic profile here and it would be great to bridge the new modern enhancements into the historic values we already embrace.	
Plano/Frisco, TX	When visiting it was impactful to see the standardization of the design standards which kind of tied the city as a whole together comprehensively. You could clearly see measures were taken to make the city identifiable in a unique kind of way. There was a cohesiveness to the visual appearance.	In new development and refurbishment areas in Old Town

QUESTION 8: What additional comments do you have?

1. Sidewalks connecting our city internally is a great start to building an accessible community. Also, I would love to see old shopping centers updated; maybe it would be helpful to give incentives to businesses willing to redefine these spaces.

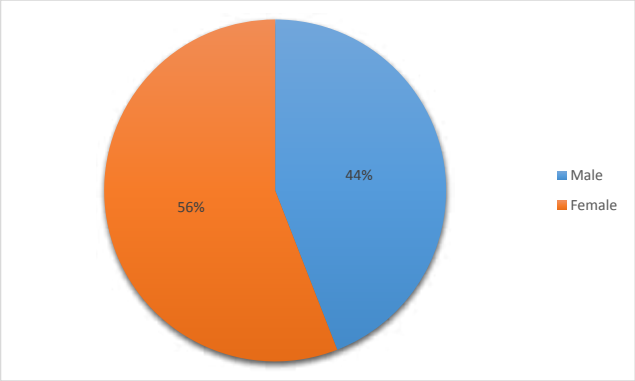
2. I wish for us to seek out additional ways that sets our community apart. Moore is in a progressive state that allows us to no longer be a stepchild to Edmond and Norman, but a very viable community with exceptional quality of life opportunities. I would like for us to identify some of the areas where we can become more self sustaining, i.e.- an event center or major sports complex (like one to attract the Energy soccer team or the likes).

A2. COMMUNITY SURVEY

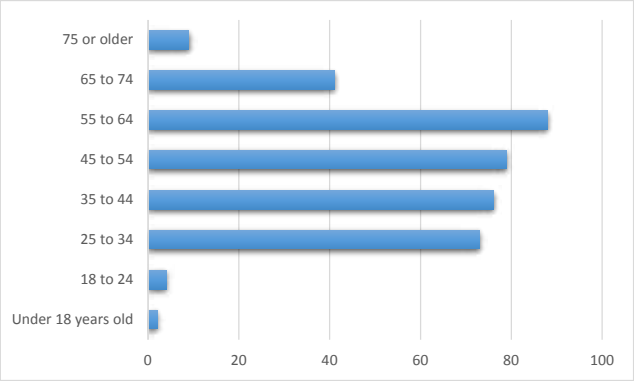
COMMUNITY SURVEY 1

PART 1: DEMOGRAPHIC DATA

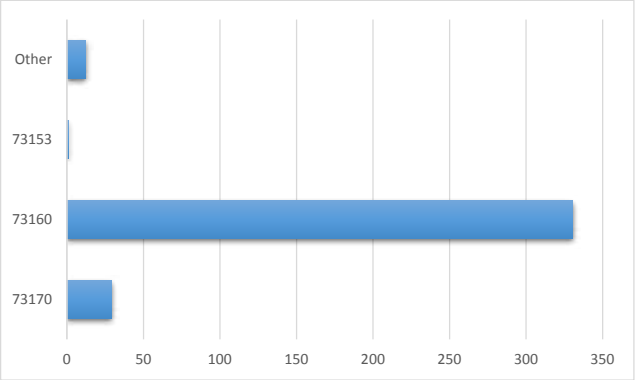
QUESTION 1: Gender



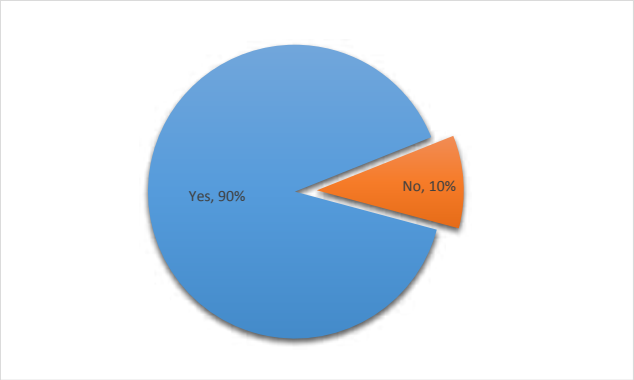
QUESTION 2: Age



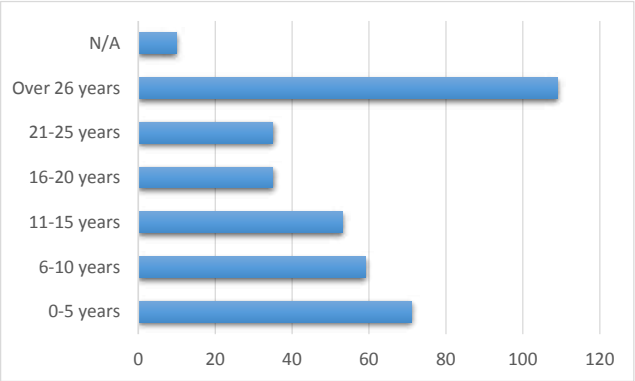
QUESTION 3: Residential Zip Code



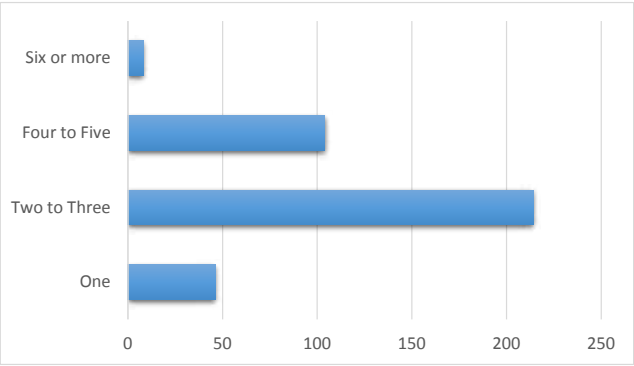
QUESTION 4: Are you a property owner in Moore?



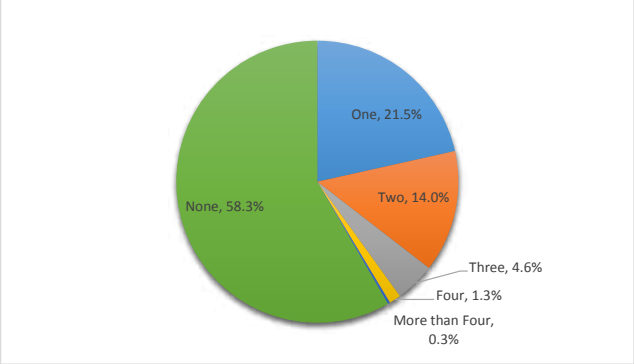
QUESTION 5: if you are a resident, how many years have you lived in Moore?



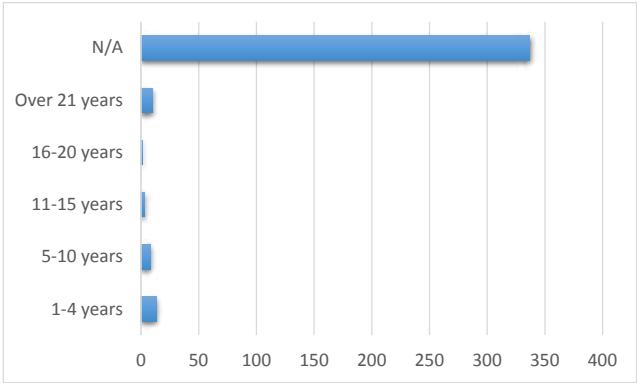
QUESTION 6: How many members are in your household?



QUESTION 7: How many children under the age of 18 are in your household?

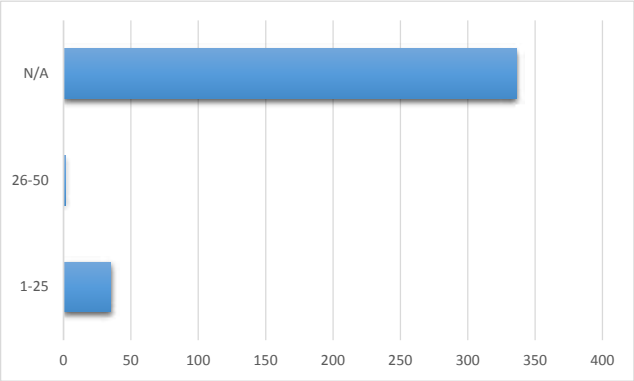


QUESTION 8: If you own a business in Moore, how many years have you done business in Moore?

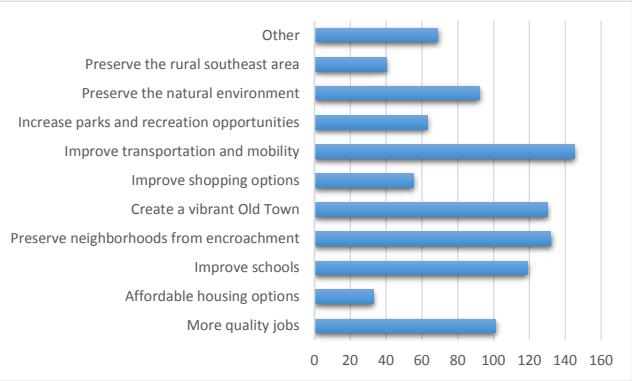


PART 2: SHAPING MOORE'S FUTURE

QUESTION 9: If you own a business in Moore, how many employees do yo have working in Moore?



QUESTION 2: What would you like to CHANGE about Moore?



QUESTION 3: Which goals from the current Moore Vision 20/20 Plan are most important to you?

Top 6 Responses

1. Minimize traffic congestion (56%)
2. Strengthen neighborhoods recognizing that healthy neighborhoods are essential in building community pride. Promote safe, diverse, adequately served, quality, and affordable housing for all citizens (40%)
3. Work with other entities toward the careful development of the I-35 Corridor which promotes the City of Moore, its businesses, and its citizens (35%)
4. Protect the personal safety of all residents (34%) / Prepare for potential emergencies and response (29%)
5. Attract and sustain economic development in Moore to enhance and enrich the quality of life, support urban growth, make employment opportunities accessible, and increase household incomes (33%)
6. Support, maintain, and enhance the natural beauty of our parks, rivers, and natural resources (22%) / Safeguard the community from the adverse effects of flooding, erosion, silt and standing water (22%)

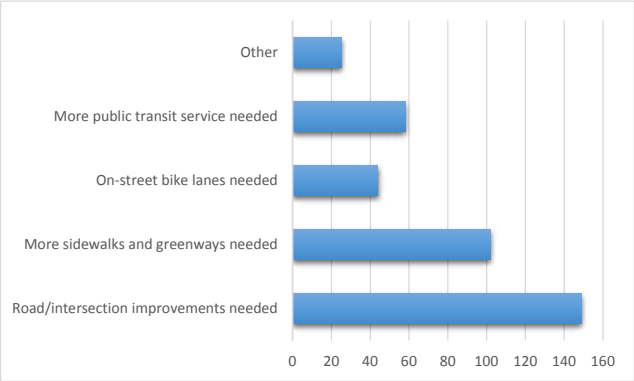
COMMUNITY SURVEY 2

PART 1: DEMOGRAPHIC DATA

QUESTION 1: What is your vision for Moore? (Sample of responses)

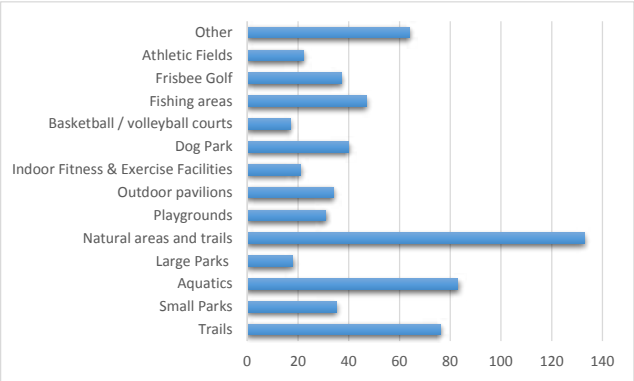
- I'd like to see Moore continue to grow and thrive while maintaining a small town feel
- To be an All Inclusive City where people want to live/work/shop/visit
- Carefully planned growth with an effort to keep Moore unique and excellent
- A city that offers high quality of life, an affordable place to live and safe access to all
- Beautification, increased quality of life, develop a culture beyond big chains and behind-the-times town
- To retain a community feel while offering great schools, great streets, great infrastructure and shopping and dining experiences that are NOT located in only one area

QUESTION 2: What is the biggest transportation issue in Moore?

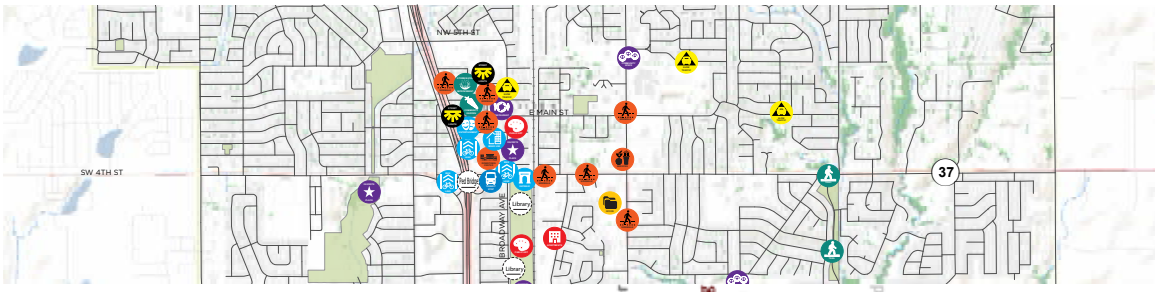


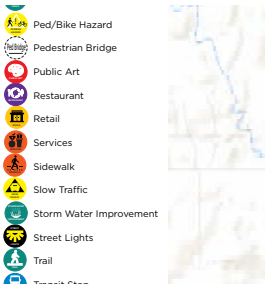
QUESTION 3: Is there a particular transportation that you would like to see addressed? Please explain. Be as specific as possible.

QUESTION 4: What new parks and rec facilities are needed the most?



A3. COMMUNITY MEETINGS





WHAT ARE YOUR PRIORITY GOALS? (TOP 3 RESPONSES)

CREATE A VIBRANT OLD TOWN

PLAN FOR A HEALTHY COMMUNITY

DEVELOPMENT THAT IS ATTRACTIVE IN APPEARANCE AND REFLECT MOORE'S CHARACTER

WHAT KIND OF IMPROVEMENTS SHOULD BE CONSIDERED FOR OLD TOWN?

INCENTIVIZE ADDITIONAL RETAIL AND RESTAURANTS IN OLD TOWN

ENHANCED LANDSCAPING, TREES AND SIDEWALKS ALONG OLD TOWN STREETS THAT PROMOTE A WALKABLE EXPERIENCE

ENCOURAGE EASIER ACCESS OF CENTRAL PARK FROM OLD TOWN

IMPROVE WAYFINDING AND SIGNAGE

Most liked Action Items (top 3)- Public Meeting 3

Parks and Recreation

- Connect Fairmoore Park with Little River Park and Little River Riverwalk via safe, continuous bicycle and pedestrian facilities
- Require open space in new development
- Improve bicycle and pedestrian access to Old Town

Land Use

- Establish and promote redevelopment incentive program (Old Town or other areas)
- Create an I-35 Overlay District that improves the aesthetics(the "look") of development along I-35
- Limit strip commercial development by restricting large-scale commercial development to within a defined distance of major intersections or defined Centers

Old Town

- New zoning district(s) that emphasizes compatible form
- 4th Street: Underpass at RR tracks, consider trees, landscaping, on-street parking, bicycle and pedestrian facilities
- Façade grant program

Housing & Neighborhoods

- Allow pocket neighborhoods and other innovative forms of senior friendly housing in locations with access to parks, shopping or other amenities
- Establish open space and amenity requirements for new subdivisions over a certain size
- Establish design guidelines for small lot (patio/cottage homes), attached and multi-family housing units
- Establish a Neighborhood Conservation District to prevent commercial encroachment in established neighborhoods (tied for 3rd)

Environment (all 4 ranked the same)

- Update Parks and Open Space requirements for new development
- Encourage best practices in stormwater management (including Low Impact Development (LID) and green stormwater infrastructure (GSI))
- Restoration of tree canopy + riparian areas on publicly-owned land
- Green stormwater infrastructure (GSI) retrofits

Transportation

- Construct missing segments of sidewalks along the arterial streets
- Develop more on-street bike lanes
- Provide streetscape improvements at strategic locations to spur development

Infrastructure (only 3 choices)

- Develop an overall Water Master Plan to study future needs
- Develop an overall Sanitary Sewer Master Plan to study future needs
- Implement the Stormwater Master Plan

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APPENDIX B: EXISTING CONDITIONS COMMUNITY ASSESSMENT REPORT

The information in Appendix B was presented to the Stakeholders and the Public as part of the first Public Meeting. The information was compiled as an assessment of existing conditions in Moore, known as the Community Assessment Report.

Envision MOORE

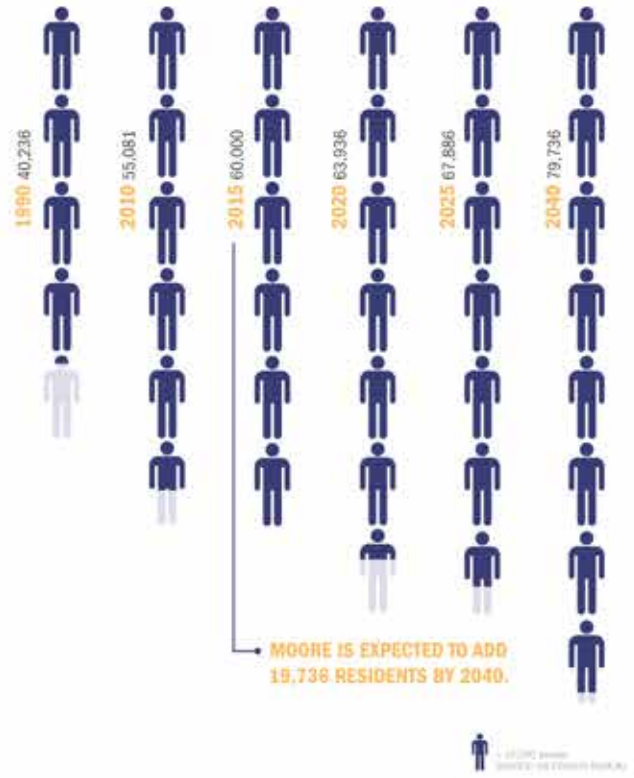
A Plan for MOORE'S Future

Moore has experienced exceptional growth over the past sixty years. From a population of just 942 in 1950, to a 2015 population estimate of 60,000 residents, the City has evolved from a small community by a railroad stop to a thriving destination in Oklahoma City region. Moore's location, evolving retail options, high quality school system and relatively low cost of living continue to draw thousands of residents to its boundaries. All indicators suggest that this growth will continue. By 2040, the population of Moore could top 80,000 residents.

- How will this growth shape Moore's identity ?
- What bold moves can the City make to ensure that the small town character remains while providing for new residents to join the community?
- How can the City continue to support strong and safe neighborhoods and thriving businesses?
- What does it take to position Moore for continued success?
- How can we protect our environment better?
- How can we continue to make the City more resilient?

These are all important questions that deserve careful thought. This planning process is designed to work with the community to answer these questions, develop a widely-supported vision and identify the investments needed to realize that vision for the City.

POPULATION GROWTH AND PROJECTIONS



GREAT PLANS transform communities into GREAT PLACES.

Moore has a long-standing tradition of preparing plans to help guide growth and development decision in the community. The most recent Comprehensive Plan was updated in 2006. Each of these efforts resulted in a set of recommendations that provide the City with a decision-making framework. The findings and recommendations of these plans will inform the update of the Moore Comprehensive Plan.

ENVISION MOORE PLAN 2040

DEMOGRAPHICS + HOUSING

AVERAGE HOUSEHOLD SIZE

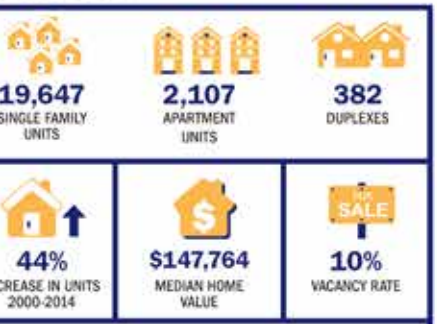
22%	33%	20%	25%
1-person household	2-person household	3-person household	4-person household
4,691	7,005	4,182	5,349

MEDIAN HOUSEHOLD INCOME (2014)

$58,542	$46,235	$53,482
MOORE	OKLAHOMA	UNITED STATES

SOURCE: US CENSUS BUREAU

HOUSING UNITS



SOURCE: CENSUS

HOUSING + TRANSPORTATION COSTS

Traditional measures of housing affordability ignore transportation costs. Typically a household's second-largest expenditure, transportation costs are largely a function of the characteristics of the household's neighborhood. Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.

SOURCE: HUD

ENVISION MOORE PLAN 2040

COMMUNITY PROFILE

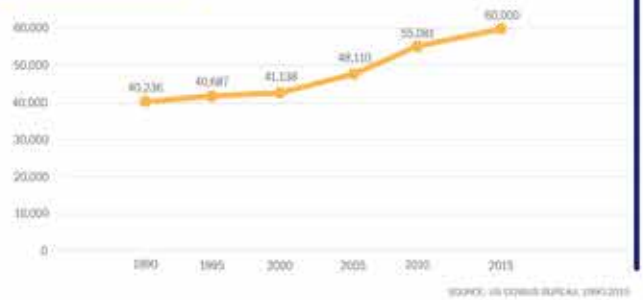
POPULATION GROWTH

Moore has experienced exceptional growth over the past two decades, making it the fastest-growing city in the OKC region. ***The estimated 2015 population of Moore is 60,000.*** This is an increase of 49% since 1990. The City has evolved from a small, rural community to a thriving suburban destination in Oklahoma.

Did you know?

The City of Moore is the fastest growing city in the OKC region.

HISTORIC POPULATION

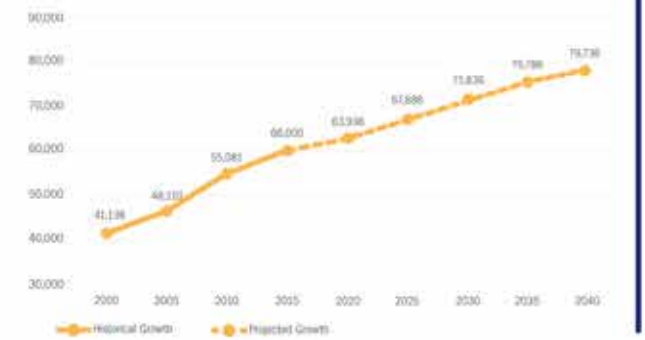


SOURCE: US CENSUS BUREAU, 1990-2010

GROWTH RATES BY COMPARISON 2000-2014

SOURCE: US CENSUS BUREAU

PROJECTED GROWTH



AGE (2014)

0-4	5-19	20-64	65+
4,318	12,037	35,854	5,354
7.5%	20.9%	62.1%	9.2%

EDUCATION ATTAINMENT (2014)

MOORE	OKLAHOMA	UNITED STATES
85.5% High School Graduate or Higher	86.7% High School Graduate or Higher	86.3% High School Graduate or Higher
8.7% Bachelor's Degree or Higher	23.8% Bachelor's Degree or Higher	29.3% Bachelor's Degree or Higher

SOURCE: US CENSUS BUREAU

RACE AND ETHNICITY (2000-2010)

	2000	2010	% CHANGE
WHITE	34,814	44,945	29%
BLACK OR AFRICAN AMERICAN	1,201	2,064	72%
AMERICAN INDIAN AND ALASKA NATIVE	1,704	2,567	51%
ASIAN	667	1,480	122%
NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER	20	23	15%
HISPANIC OR LATINO	2,098	5,978	185%
OTHER	720	1,516	111%

SOURCE: CENSUS 2000-2010

ENVISION MOORE PLAN 2040

ECONOMIC DEVELOPMENT

EMPLOYMENT

According to 2014 Census estimates there were over 16,953 people employed in Moore. The majority of jobs are in services, such as education, public administration, retail, food services, and construction. While important to the economy, these industries don't drive growth, but instead follow it. Increasing the number of jobs in the office and manufacturing sectors would add balance to the economy.

CITY OF MOORE IS A RETAIL DESTINATION

SOURCE: WARREN THEATRE

TOP EMPLOYERS

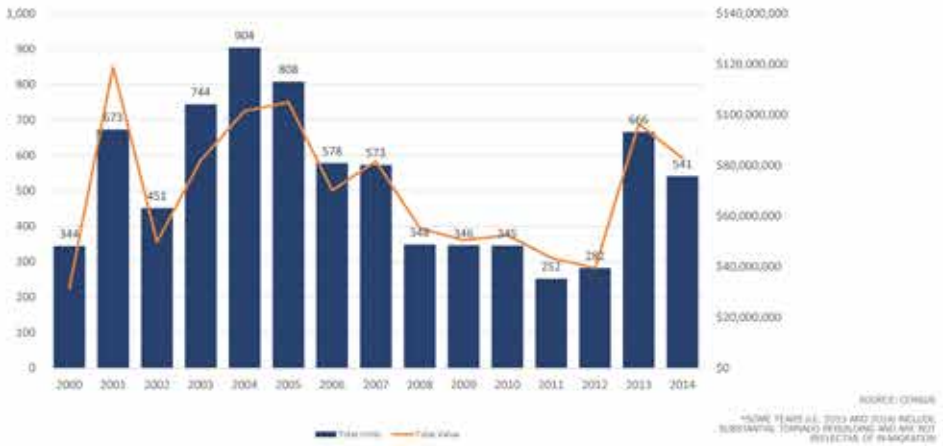
- Moore Public Schools
- Vaughan Foods
- Wal-Mart
- Moore Medical Center
- City of Moore
- Warren Theatre
- Moore Norman Technology Center

SOURCE: CITY OF MOORE

3.4%
Unemployment Rate

SOURCE: OK EMP. SECURITY COMMISSION

RESIDENTIAL BUILDING ACTIVITY*



SOURCE: CENSUS

*SOME YEARS (E.G. 2013 AND 2014) INCLUDE SUBSTANTIAL TORNADO REBUILDING AND ARE NOT REFLECTIVE OF IN-MIGRATION

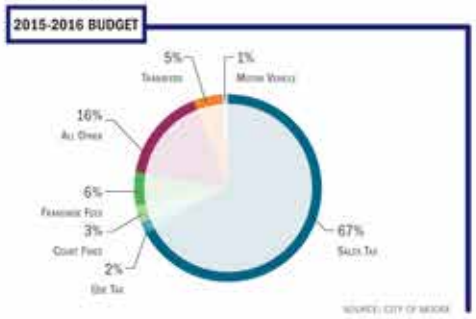
RETAIL LEAKAGE

According to 2015 ESRI Retail Marketplace Data, Moore loses potential sales in a variety of categories including the following:

DRINKING PLACES	LAWN & GARDEN SUPPLY
GENERAL MERCHANDISE STORES	SPECIALTY FOOD SERVICES & STORES
GAS STATIONS	AUTO DEALERS

REVENUE SOURCES

Sales tax makes up the majority of the revenue for the City.



SOURCE: CITY OF MOORE

ENVISION MOORE PLAN 2040

PARKS + RECREATION

KEY STATS

301 ACRES
OF PUBLIC PARK LAND IN MOORE

20
ACRES OF PARK LAND UNDER DEVELOPMENT

81
ACRES OF PARK LAND DEVELOPED SINCE 2014

TRAILS AND GREENWAYS

3 MILES
OF TRAILS COMPLETE SINCE 2014

31 MILES
OF GREENWAYS PLANNED

SOURCE: FY 2016-2018 BUDGET, CITY OF MOORE

PARKS, RECREATION AND TRAILS

According to the 2012 Parks & Recreation Master Plan trails and greenways, a community center, a swimming pool, a dog park, restrooms and trees at existing parks, and a Farmers Market were high priorities.

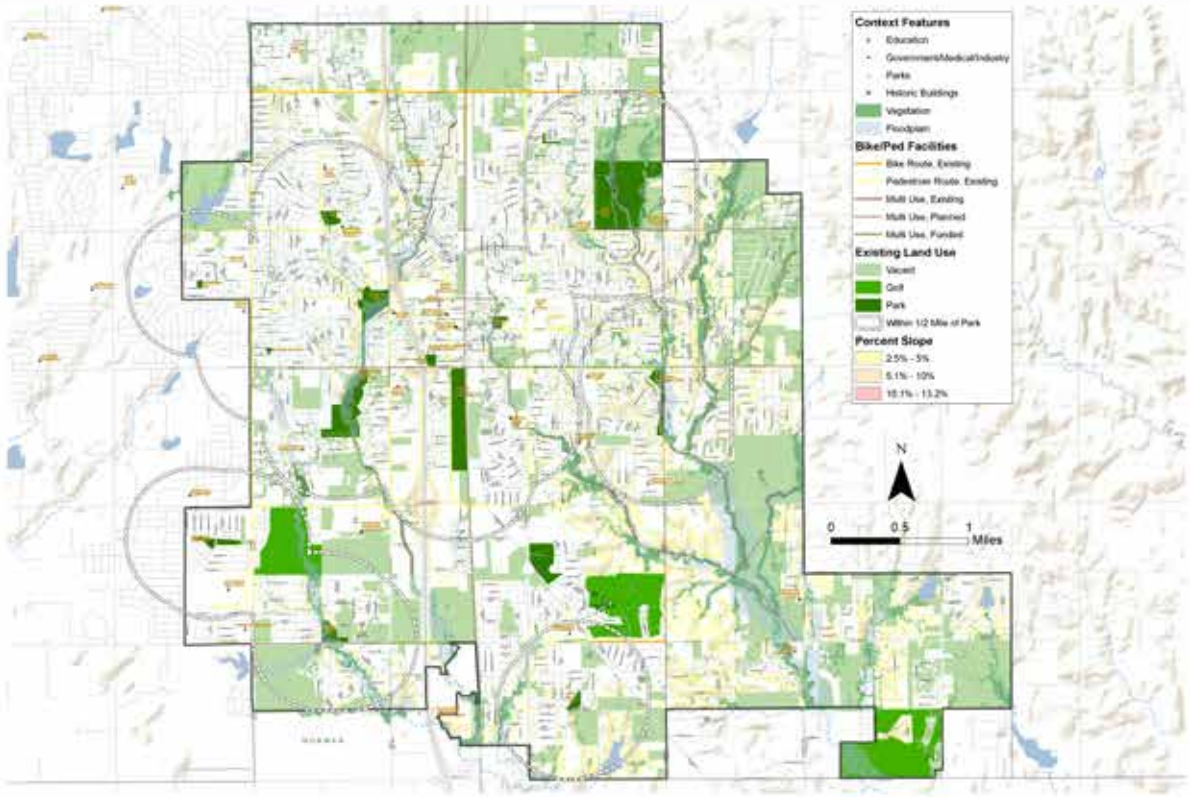
ACCESS TO RECREATION FACILITIES		
RESIDENTIAL PARCELS WITHIN 1/2 MILE OF PARK	13,680	68%
TOTAL RESIDENTIAL PARCELS	20,178	

Did you know?

28% of Adults in Cleveland County are Obese. The percentage of obese adults is one indicator of the overall health and lifestyle of a community.

SOURCE: CLEVELAND COUNTY HEALTH IMPROVEMENT PLAN (2012)

PARKS AND NATURAL RESOURCES



ENVISION MOORE PLAN 2040

NATURAL RESOURCES

ISSUES

WATER QUALITY & EROSION

The majority of streams in the City of Moore drain to Lake Thunderbird which is a water source for the region. The Lake is currently recieving too much nitrogen and sedimentation due to urban stormwater runoff.

LACK OF TREES

The lack of tree canopy exacerbates water quality and erosion issues downstream. More trees combined with Low Impact Development (LID) techniques could improve water quality.

PASSIVE RECREATION

In addition to sidewalks and athletic fields, passive recreation, like greenways, provides multiple benefits like improved aesthetics and increased adjacent property values.

SPECIES

Rare species, including the Bachman's Warbler, Black-capped Vireo, aquatic species such as the Arkansas River shiner and mammal species, including the gray bat, need to be protected in tandem with development.

TORNADOES

Located within Tornado Alley, Moore is susceptible to this form of natural disaster. Tornadoes influence the design of the built environment and must be taken into regard for Moore's future planning efforts.

MOORE, OK STATS

463 miles of roadway

1117 acres of floodplain

2027 acres of public right of way

56 miles of streams

<10% tree cover

6,100 tornado shelters

22 square miles of land mass

301 acres of land devoted to parks

THE STORMWATER STORY

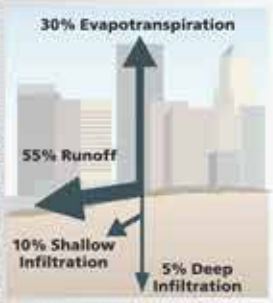


Figure 1. When roads, rooftops and parking lots cover much of the land, more than half of the rainfall runs off and flows directly into surface waters. In highly developed areas, such as in Seattle, Washington (above left), only 15 percent of rain water has the opportunity to soak into the ground.

Figure 2. When vegetation and natural areas cover most of the land, such as in Oregon's Upper Tillamook Bay watershed (above left), very little water (only 10 percent) runs off into surface waters. Nearly half of the rainfall soaks into the soil. The remaining water evaporates or is released into the air by vegetation.

SOURCE: EPA - BENEFITS OF LOW IMPACT DEVELOPMENT

Low Impact Development (LID) Techniques

- Reducing develoment footprint
- Trees and open space
- Rain gardens and bioswales
- Porous pavements and green roofs
- Stormwater structures that focus on retention and infiltration instead of detention and conveyance

Low Impact Development (LID) Benefits

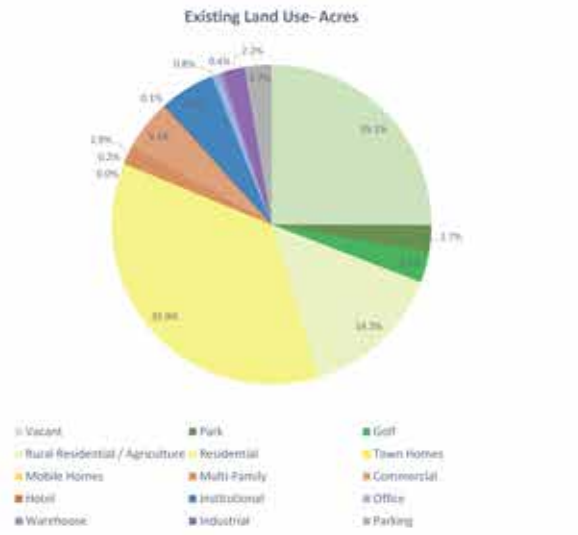
- Improved water quality
- Reduced flooding
- Restored aquatic habitat
- Improved groundwater recharge
- Enhanced Neighborhood beauty

LAND USE

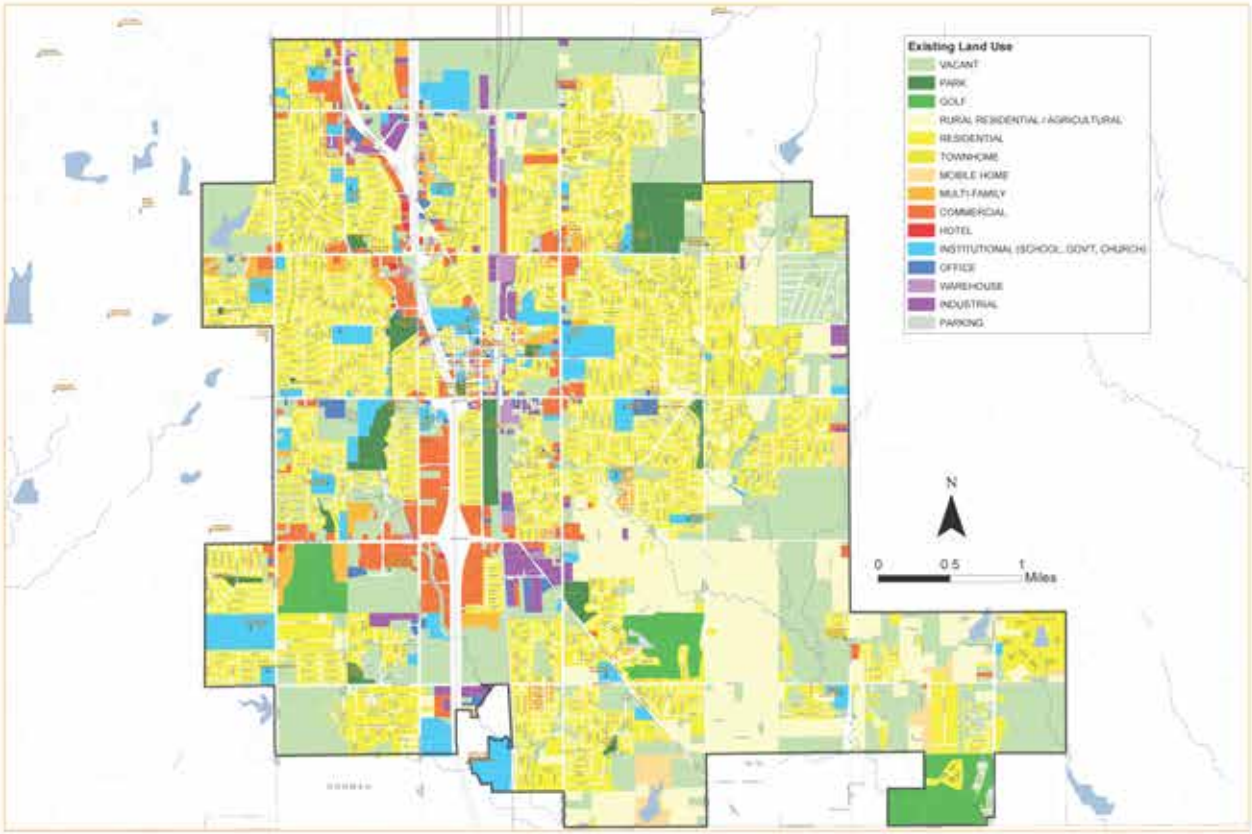
LAND USE ISSUES

- Aesthetics, development quality (design, code enforcement)
- Attractiveness, economic competitiveness
- Utilization of existing infrastructure
- Balance – relationship between development and infrastructure
  - Concentrate more development where infrastructure capacity is or can be
  - Less development where infrastructure is not available and shouldn't be
- Minimizing traffic – relationship between land use pattern and transportation network
- Land use relationships –
  - Location of uses, proximity (EX: residential in CBD, commercial along arterials, industrial clustered for minimal impact)
  - Compatibility (adjacency, separation, buffers, landscaping, berms, screening)
  - Housing – standards and affordability
- Protecting assets/resources – natural and historic
- Protect neighborhoods from nonresidential encroachment
- Protect rural character of southeast Moore

EXISTING LAND USE

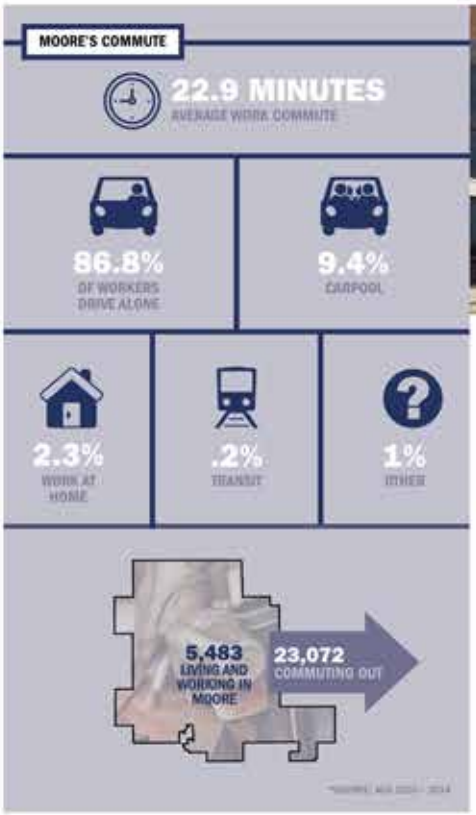


EXISTING LAND USE MAP



ENVISION MOORE PLAN 2040

TRANSPORTATION



TRANSPORTATION TRENDS

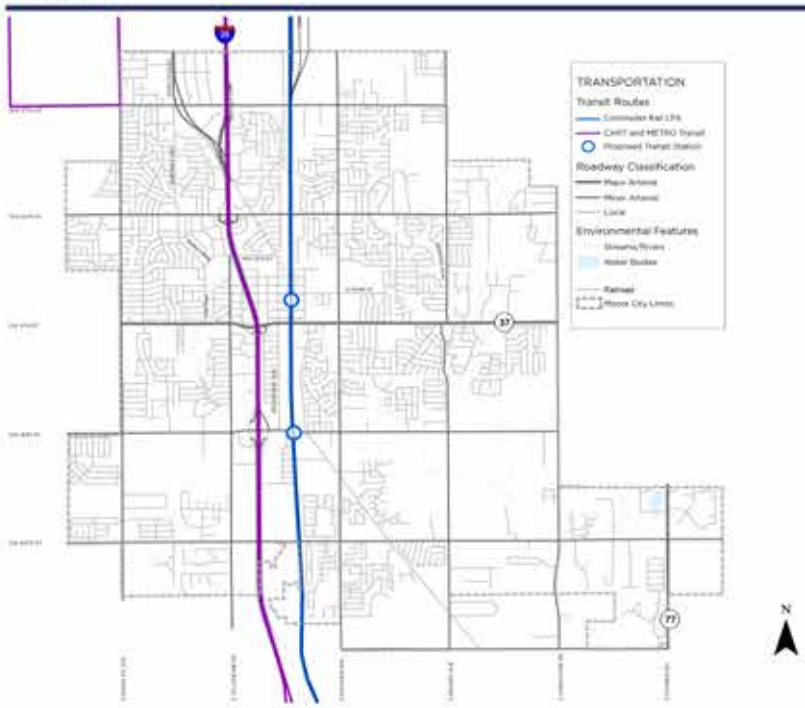
In suburban areas like Moore, people own more vehicles and drive further distance for daily activity; both of those factors drive up the cost of living. The majority of Moore residents currently travel outside the City for employment.

$16,877
AVERAGE ANNUAL TRANSPORTATION COSTS PER HOUSEHOLD

1.93
AVERAGE NUMBER OF AUTOMOBILES PER HOUSEHOLD

18,891
AVERAGE HOUSEHOLD VEHICLE MILES TRAVELED PER YEAR

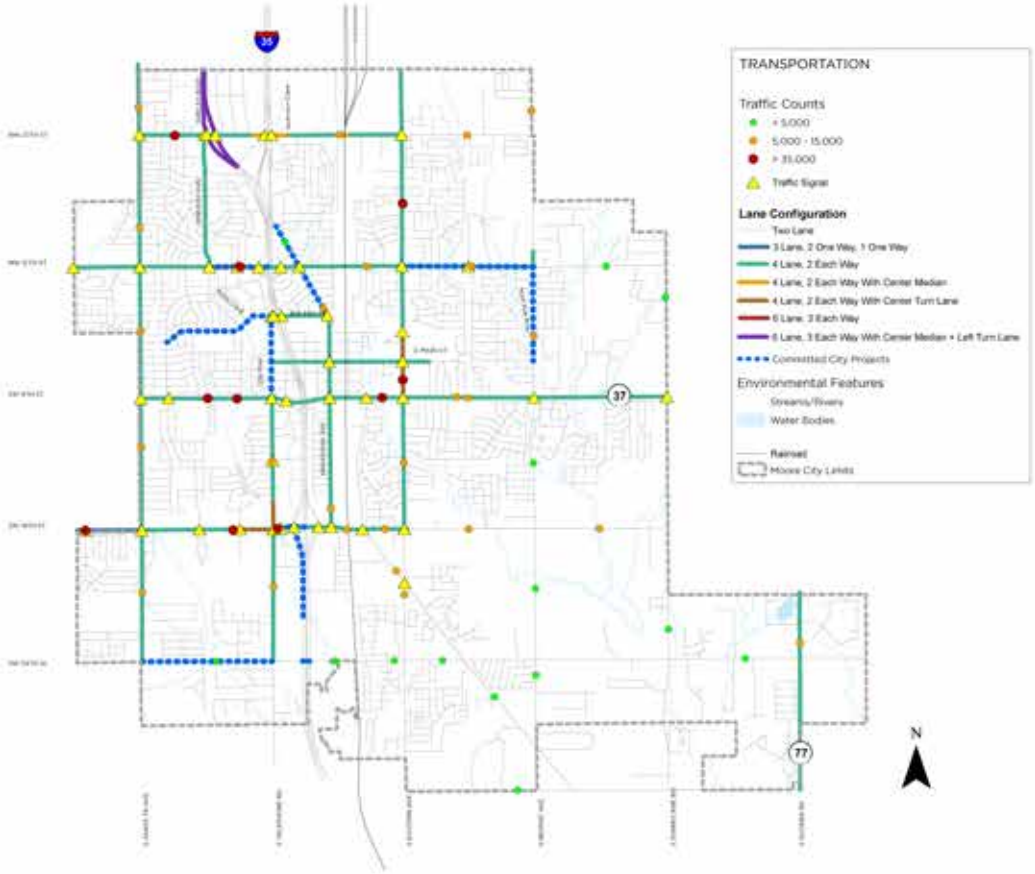
TRANSIT



The CentralOK!go Steering Committee has formalized a conceptual plan to create a north-south Commuter Rail service. The route will run between Edmond and Norman with two intermediate stops within Moore. The rail system will connect to a streetcar system in Oklahoma City that will take riders to locations within Oklahoma City, Del City and Midwest City.

The City of Moore does not currently have an operating fixed route transit system. A bus route operated through the Cleveland Area Rapid Transit (CART) runs through Moore along Interstate-35, connecting Oklahoma City with Norman. This bus route does not have stops within the city limits of Moore.

TRANSPORTATION



ROADWAY PROJECTS

CURRENT TRANSPORTATION PROJECTS		
Project	Status	Improvement
SW 19th Street	Completed	Telephone Road to W 35 Service Road
NE 12th Street	Completed	Eastern Avenue to Bryant Avenue
NW 5th Street	Completed	Mockwell Avenue to Telephone Road
NW 12th Street	Completed	Janeway Avenue to W I-35 Service Road
N Broadway Street	Completed	NW 5th to NW 18th
Telephone Road	Estimated Completion - 2016	S 4th Street to N 5th Street - widen to 3 lanes
I-35 W Service Road	Completion - 2016	SW 19th to Bridge Box - widen to 3 lanes
SW 4th Street	Engineering estimated start - 2016	Telephone Road intersection - add dual turn lanes from west bound to south; add dual turn lanes from north bound to west
SW 34th Street	Engineering estimated start - 2017	Bridge over I-35 with multi-use trail
SW 34th Street	Engineering estimated start - 2018	Telephone Road to Santa Fe Avenue - widen to 4 lanes with multi-use trail
N Bryant Avenue	Engineering estimated start - 2018	Main Street to NE 12th Street - widen to 3 lanes with multi-use trail

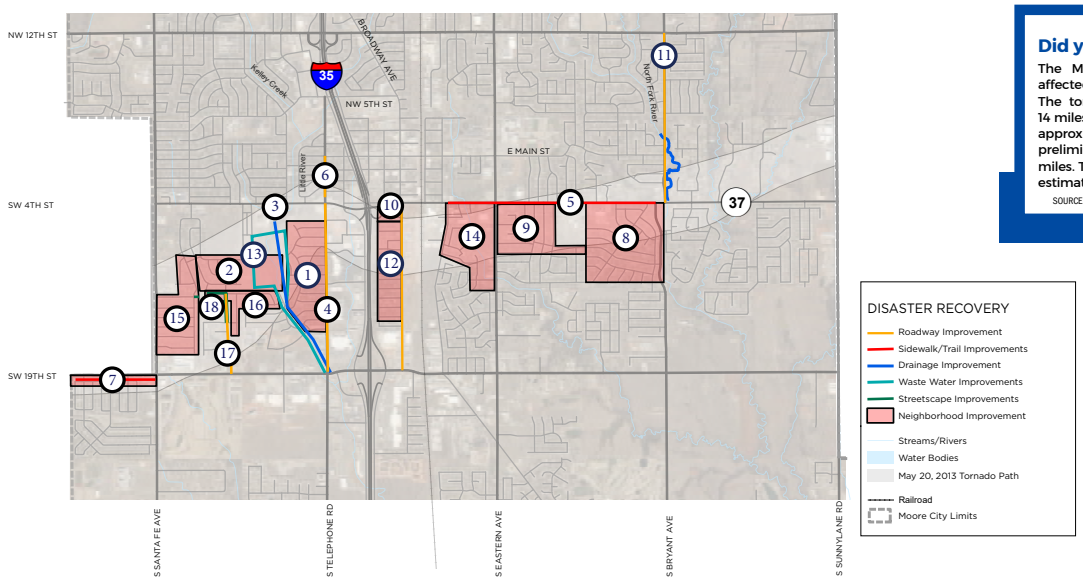
SOURCE: CITY OF MOORE FISCAL YEAR 2015-2016 BUDGET

The City of Moore currently has 463.46 miles of existing roadway and 44 signalized intersections within the city limits. Significant progress has been made to improve the roadway system since 2006. Voters passed five major street projects in the general election on November 2008 and overpass improvements on Southwest 34th Street in the general election on November 2014.

Traffic counts were conducted by the Association of Central Oklahoma Government (ACOG) from 2010 to 2015. Rapid development and increased demand on the roadway system has increased the need for transportation improvements.

SOURCE: CITY OF MOORE FISCAL YEAR 2015-2016 BUDGET

DISASTER RECOVERY



Did you know?

The May 20, 2013 Tornado Outbreak affected three cities within two counties. The tornado's path was approximately 14 miles in length, was on the ground for approximately 40 minutes, and had a preliminary maximum path width of 1.1 miles. The total amount of damages was estimated at $2 billion.

SOURCE: NATIONAL WEATHER SERVICE WEATHER FORECAST OFFICE

INFRASTRUCTURE IMPROVEMENTS

Public Facilities

Park Improvements

Planning Activities

Housing Activities

DISASTER RECOVERY PLAN

Following the destructive tornado on May 20, 2013, an Infrastructure Recovery and Implementation Plan (IRIP) was prepared to further refine infrastructure-related data described in the City of Moore Disaster Recovery Program Action Plan (Action Plan).

The IRIP prioritized and coordinated public infrastructure improvements in the Action Plan and developed a funding strategy and implementation schedule for these projects.

CURRENT DISASTER RECOVERY PROJECTS

	Project	Budget
1	Kings Manor Street Repairs	$2,480,182.15
2	Plaza Towers Street Repair North	$2,872,484.01
3	Little River Park Sewer Interceptor	$3,823,158.65
4	Telephone Road Resurfacing South	$1,000,000.00
5	SE 4th St Pedestrian Trail and Traffic Signals	$840,340.00
6	Telephone Street Resurfacing North	$1,065,497.76
7	Baer's Westmore Sidewalk and Street Repairs	$540,000.00
8	J.D. Estates Street Panels Repairs	$333,333.34
9	Eastmoore Street Panels Repairs	$333,333.34
10	Southmoore Street, Waterline and Storm Sewer Improvements	Unknown
11	South Bryant Street and Drainage Improvements	$3,902,725.00
12	South Broadway Street, Trail and Drainage Channel Improvements	$3,187,580.00
13	Little River Park Channel and Pond	$5,154,200.00
14	Hunter's Glen Street Panels Repairs	$333,333.34
15	Plaza West Addition Street Repairs	Unknown
16	Bonnie Brae Street Repairs	Unknown
17	Eagle Drive Street Repairs	$687,744.96
18	Plaza Towers Streetscape & Bridge Box	$1,897,182.14

SOURCE: FISCAL YEAR 2015-2016

EMERGENCY RESPONSE

EMERGENCY CAPABILITIES

The Moore Fire Department and Moore Police Department are a intricate part of the emergency and disaster response teams after a natural disaster. These departments are the first responders during disasters and emergencies and are the first line defense in assisting natural disaster victims.

4
FIRE STATIONS

72
MEMBERS OF THE MOORE FIRE DEPARTMENT

4,300 +
ANNUAL FIRE SERVICE RESPONSE CALLS

22 SQ. MILES
CURRENT FIRE STATION SERVICE AREA

6
PUMPING ENGINES

2
AERIAL APPARATUS

4
BRUSH PUMPERS

1
POLICE STATION

89
COMMISSIONED POLICE OFFICERS

5
CIVILIAN POLICE EMPLOYEES

$12,000,000
INVESTED INTO NEWLY CONSTRUCTED PUBLIC SAFETY CENTER

9-1-1 CENTER
24 HOURS, 7 DAYS PER WEEK OPERATION

11
9-1-1 DISPATCHERS

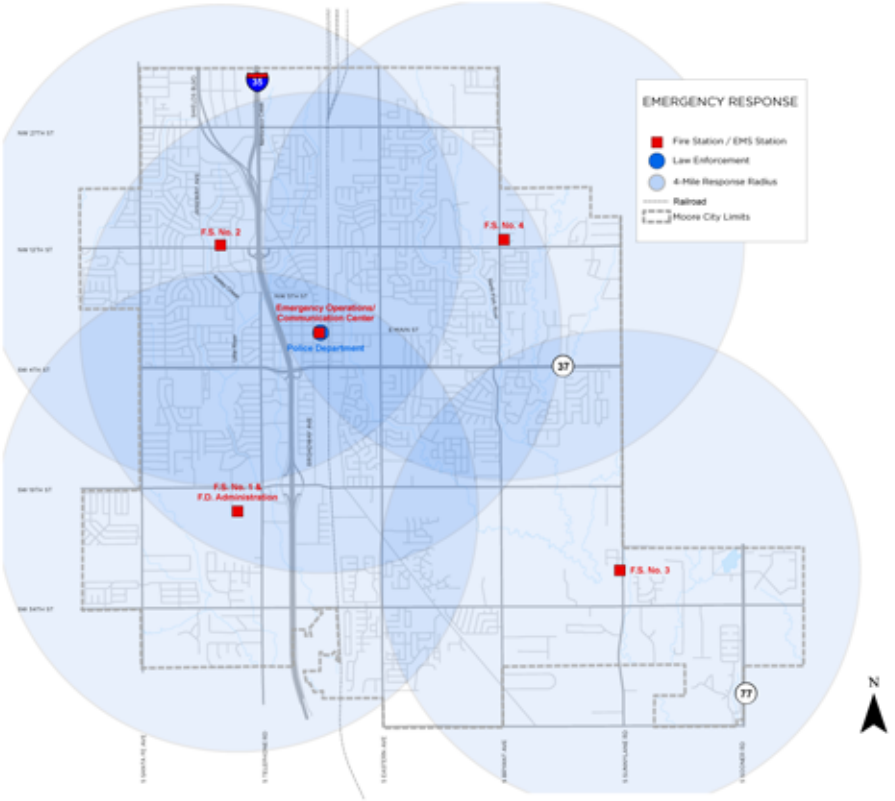
SOURCE: THE CITY OF MOORE

FIRE STATION 4-MILE RESPONSE RADIUS

Did you know?

Personnel at the Fire Administration Building decided to move their fire apparatus out of the storm's path during the 2013 tornado instead of taking shelter. "This allowed both the preservation of much needed rescue equipment as well as quick deployment into the damage area."

SOURCE: DISASTER RECOVERY PLAN



ENVISION MOORE PLAN 2040

UTILITIES

WATER

Groundwater and surface water purchased from Oklahoma City is the water source for the City of Moore. The City of Moore does not have a water treatment plant.

WATER AND SEWER USAGE AND CAPACITY

390 MILES
CURRENT MILES OF WATER LINES

4 TOWERS
CURRENT WATER TOWERS

12.5 MGD
CURRENT WATER USAGE (PEAK DAY)

12 MGD
FUTURE WASTEWATER TREATMENT PLANT CAPACITY

28 WELLS
CURRENT ACTIVE WATER WELLS

3 PUMP STATION
CURRENT GROUND STORAGE PUMP STATION

9 MGD
CURRENT CAPACITY MOORE WASTEWATER TREATMENT PLANT

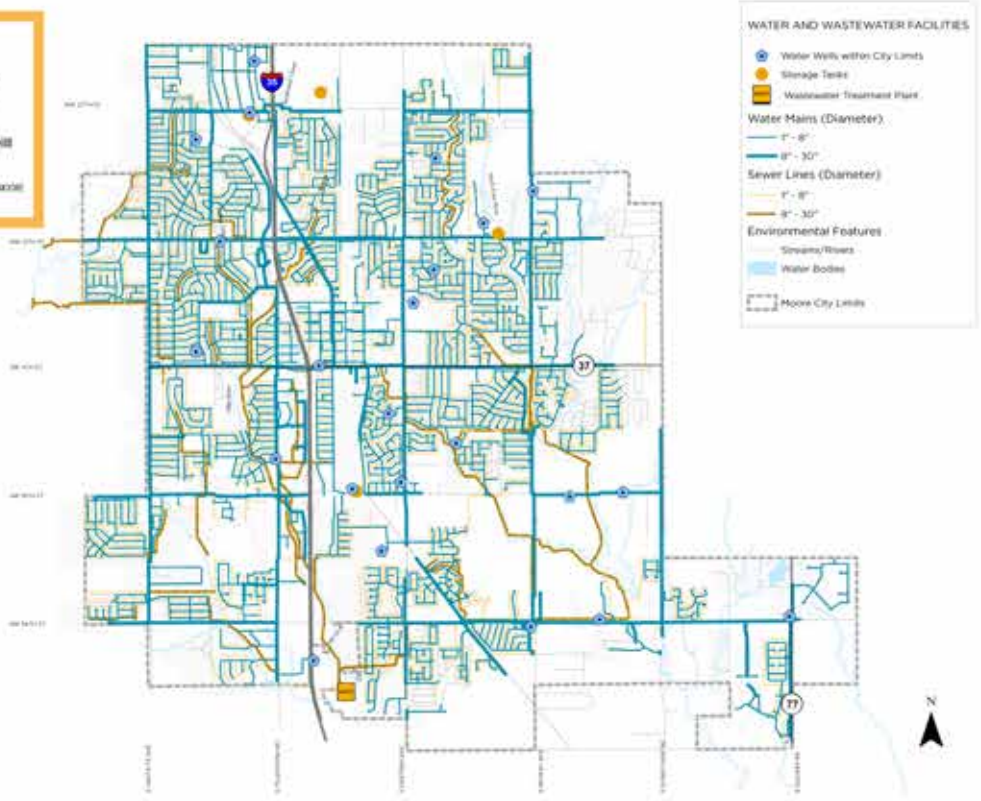
SOURCE: THE CITY OF MOORE

UTILITIES IN MOORE

Did you know?

The City of Moore has implemented permanent water conservation measures by enforcing mandatory odd/even water (Stage 1) schedule. Additional conservation measures will take effect if drought worsens.

SOURCE: THE CITY OF MOORE



ENVISION MOORE PLAN 2040

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APPENDIX C: LAND USE SCENARIOS

OVERVIEW

As part of the Envision Moore planning process a scenario planning exercise was conducted in order to compare potential implications of different future development patterns. A GIS growth model was constructed using CommunityViz, an extension to ArcGIS. This model calculated build-out capacity by parcel based on generalized future land use categories. Indicators were created to measure how well different scenarios achieved goals of the Plan. The report card on the next page illustrates the performance of the two scenarios tested for key metrics.

SCENARIO DESCRIPTIONS

The Business As Usual Scenario (BAU) was created based on existing zoning that was created in 2006 as part of the Vision 20/20 planning effort. The BAU is essentially a "do nothing" scenario that performs decently for a number of metrics. The Preferred Alternative Scenario (PA) was based on an initial draft of the Future Land Use Plan that was developed as part of the Envision Moore Comprehensive Plan.

FINDINGS

The PA scenario encourages more mixed use development types at appropriately located areas of the city and encourages more growth in the vicinity of Old Town. This change in the development pattern results in more homes near retail and restaurants, schools, and parks, which could improve walkability. It also results in nearly double the number of new homes near Old Town. This could increase the vibrancy of Old Town which is a key goal.

By increasing the development capacity in key areas the overall commercial square footage, dwelling unit capacity and sewer demand increased slightly in the PA scenario, which could have financial benefits to the city as it could allow for increased return on investment for past expenditures for infrastructure.

The PA scenario also includes an assumption that a new policy would require new subdivisions in the Urban Residential area to be designed with more open space and amenities. This scenario also introduces Open Space Residential, a new development type that "raises the bar" for development design in the southeast part of the city by requiring more parks and open space. These two changes result in the amount of open space in new development to be increased in this scenario.

	EXISTING PLAN	PREFERRED ALTERNATIVE		
ECONOMIC DEVELOPMENT				
Sqft of New Commercial (Retail and Service)	4.86M	5.24M	●	+8%
Dwelling Unit Capacity	12,498	12,911	◒	+3%
VIBRANT OLD TOWN				
New Dwelling Units Near Old Town	447	864	●	+93%
QUALITY DEVELOPMENT				
New Homes Near Retail and Restaurants	6,443	7,495	●	+16%
ADEQUATE INFRASTRUCTURE AND COST TO SERVE				
Sewer Demand at Build Out (MGD)	3.79	3.95	◒	+4%
New Development Near Schools	4,975	5,570	●	+12%
PARKS, RECREATION AND OPEN SPACE				
New Homes Close to Parks	43%	54%	●	+31%
Open Space in New Development	115	407	●	+253%

RESULTS KEY

◒ = Less than 5% change from existing plan

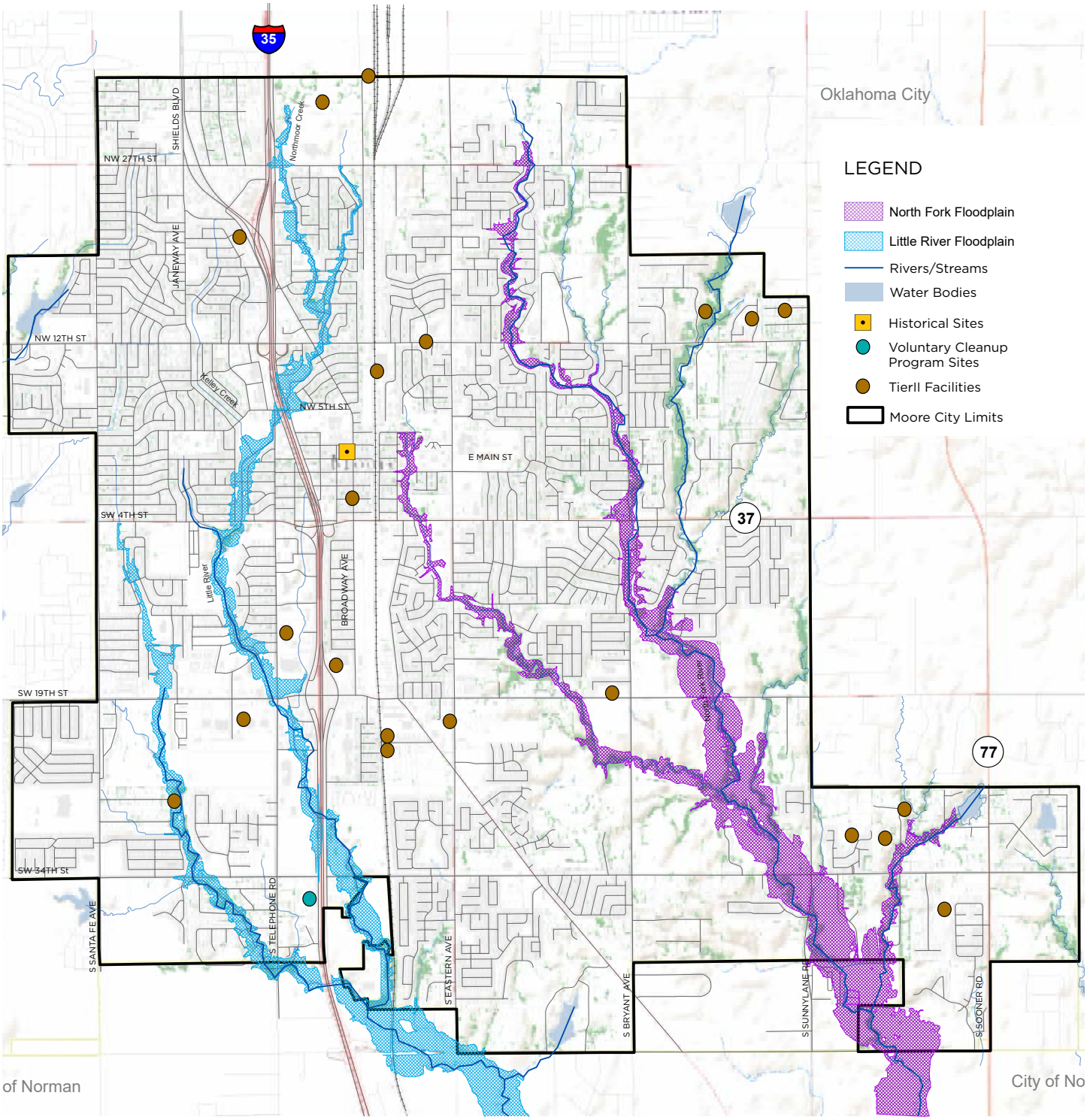
● = Significant improvement compared to existing plan

*WITHIN 1320 FT (1/4 MILE) OF MIXED USE OR COMMERCIAL AREAS
**WITHIN 1/2 MILE OF EXISTING OR PLANNED SCHOOL (SCHOOL INCLUDED IN PREFERRED ALT SCENARIO IN THE VICINITY OF CLEVELAND HEIGHTS)
***WITHIN 1/2 MILE, ASSUMES A NEW PARK IN THE SOUTHEAST AREA OF CITY
****ASSUMES 5% IN EXISTING PLAN FOR URBAN RESIDENTIAL, THE PREFERRED ALTERNATIVE SCENARIO ASSUMES 10% OPEN SPACE REQUIREMENT FOR URBAN RESIDENTIAL AND A CONSERVATIVE 15% OPEN SPACE REQUIREMENT FOR OPEN SPACE RESIDENTIAL

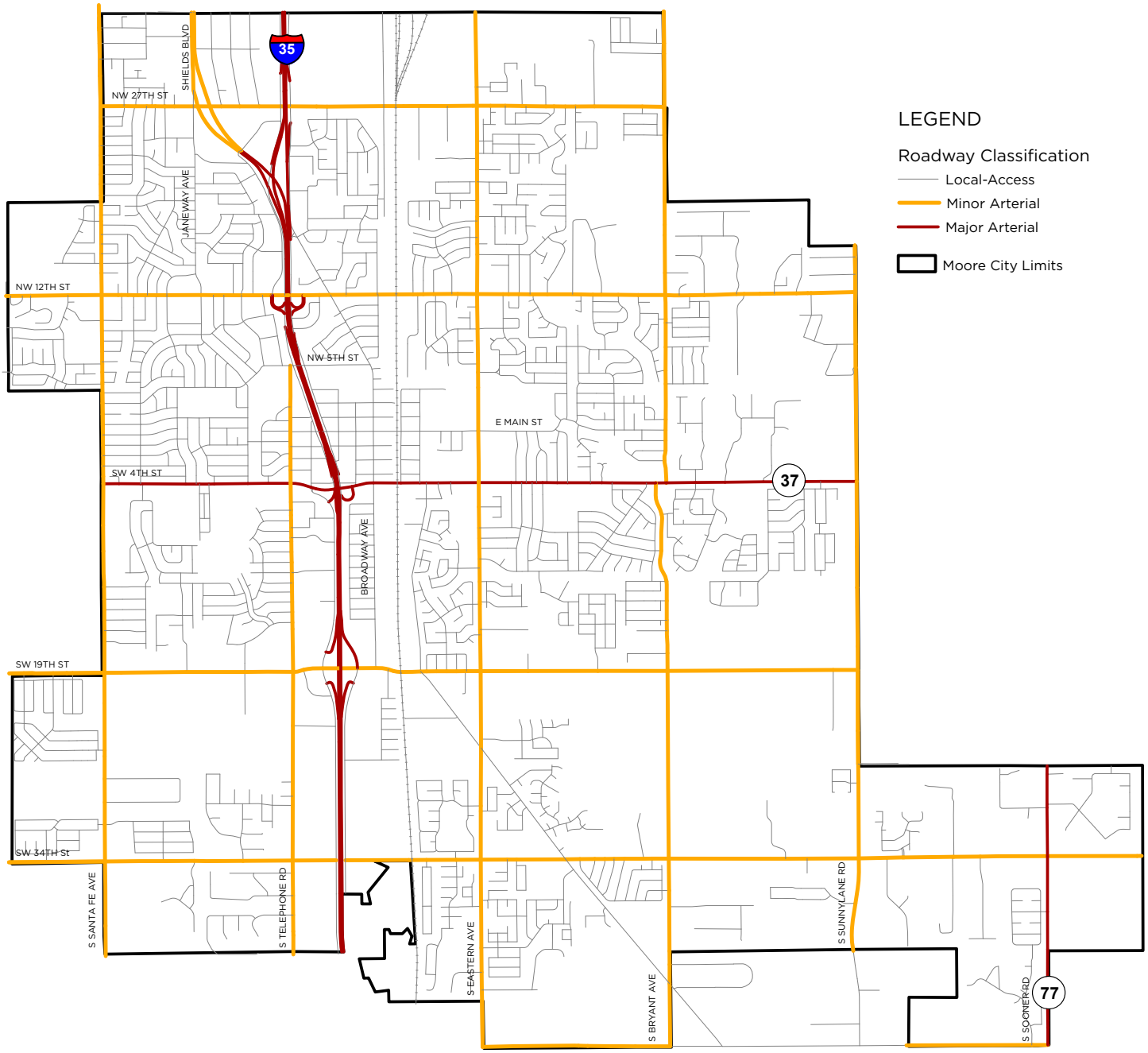
SOURCE: MOORE GROWTH MODEL (A GIS BASED MODEL USED TO DETERMINE FUTURE GROWTH POTENTIAL AND IMPACTS, CONSTRUCTED USING COMMUNITYVIZ)

APPENDIX D: TRANSPORTATION MAPS

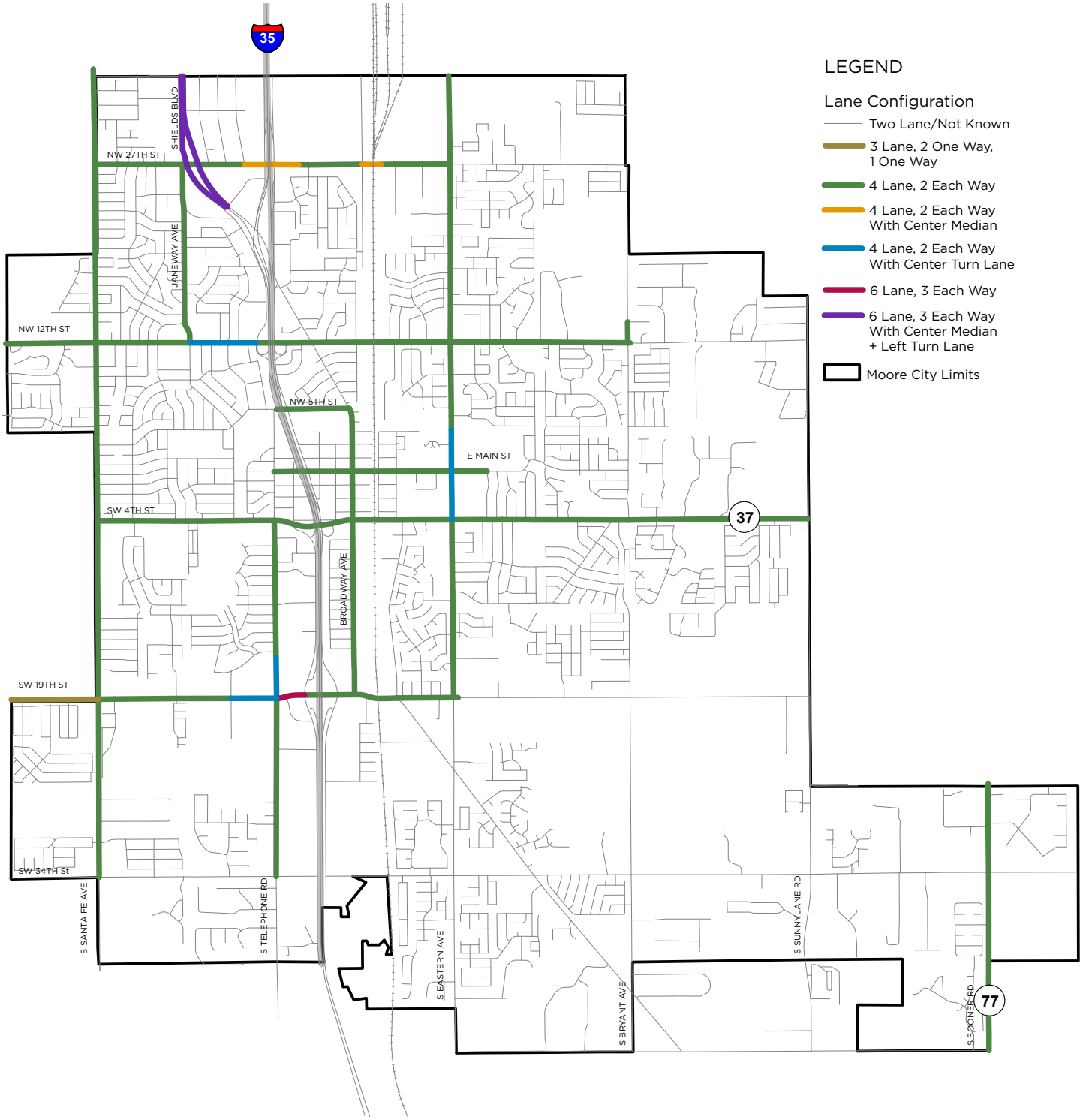
D1. ENVIRONMENTAL CONSTRAINTS



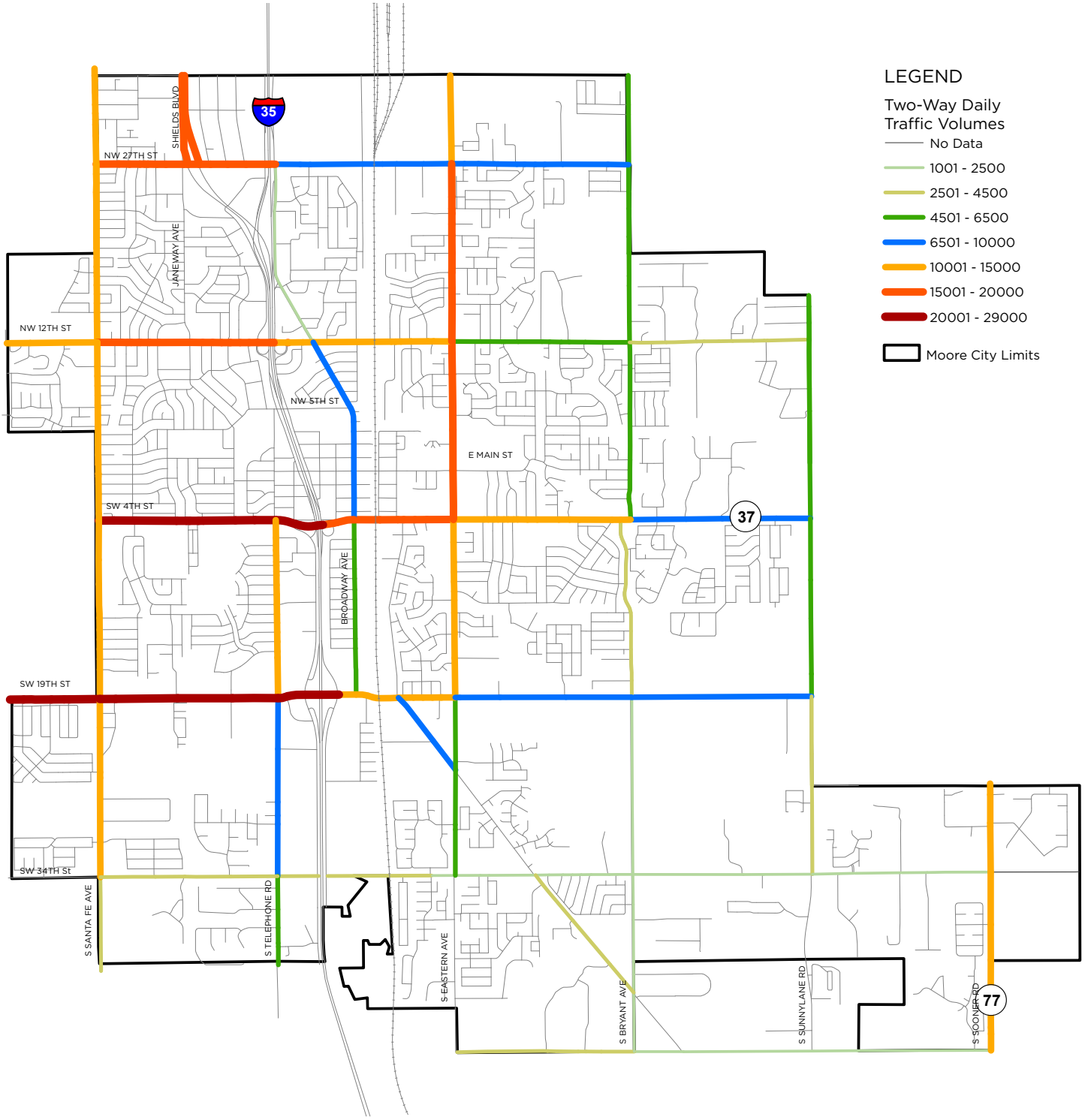
D2. EXISTING ROADWAY CLASSIFICATION



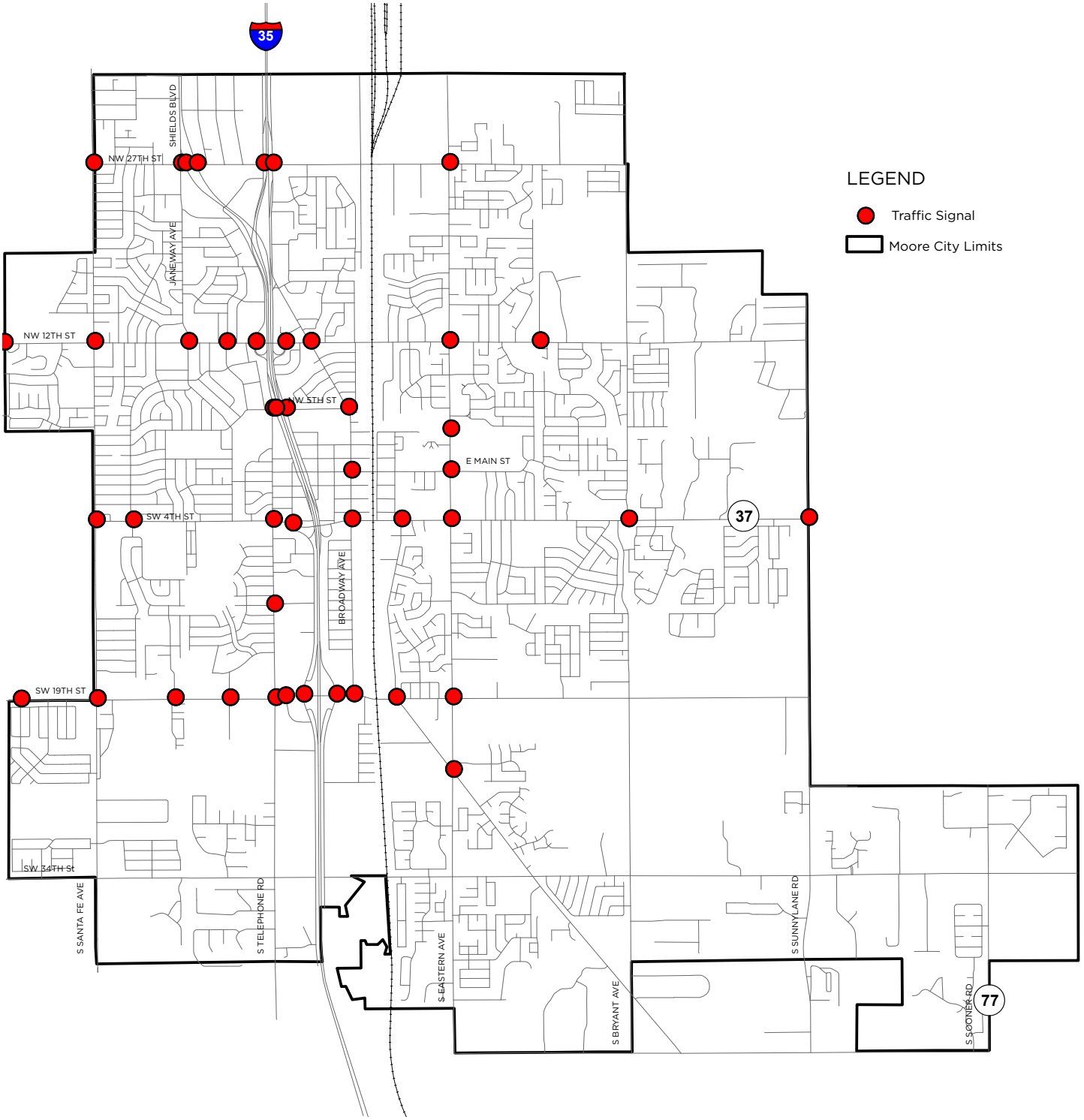
D3. EXISTING ROADWAY TRAVEL LANES



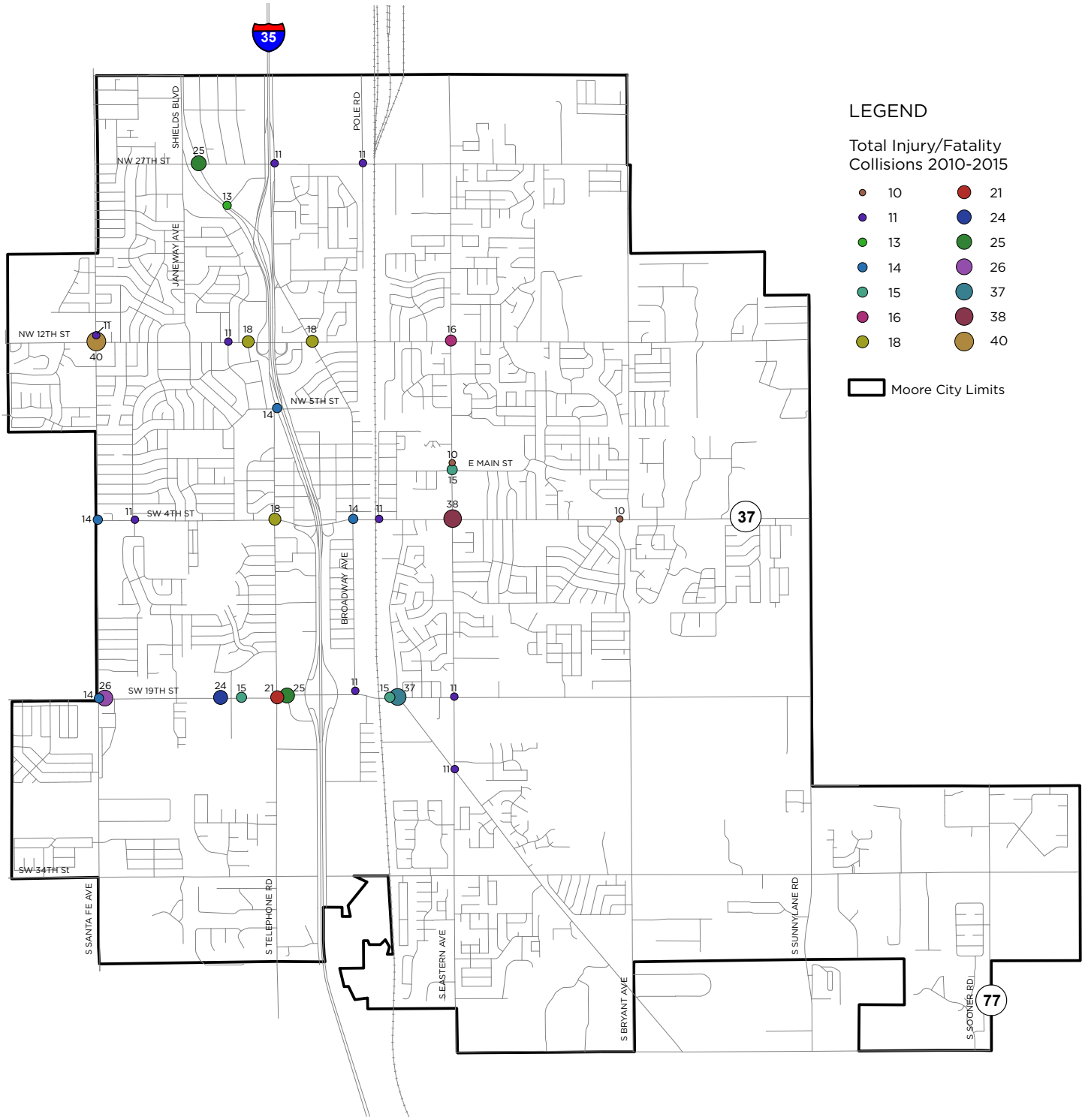
D4. EXISTING ROADWAY TRAFFIC VOLUMES



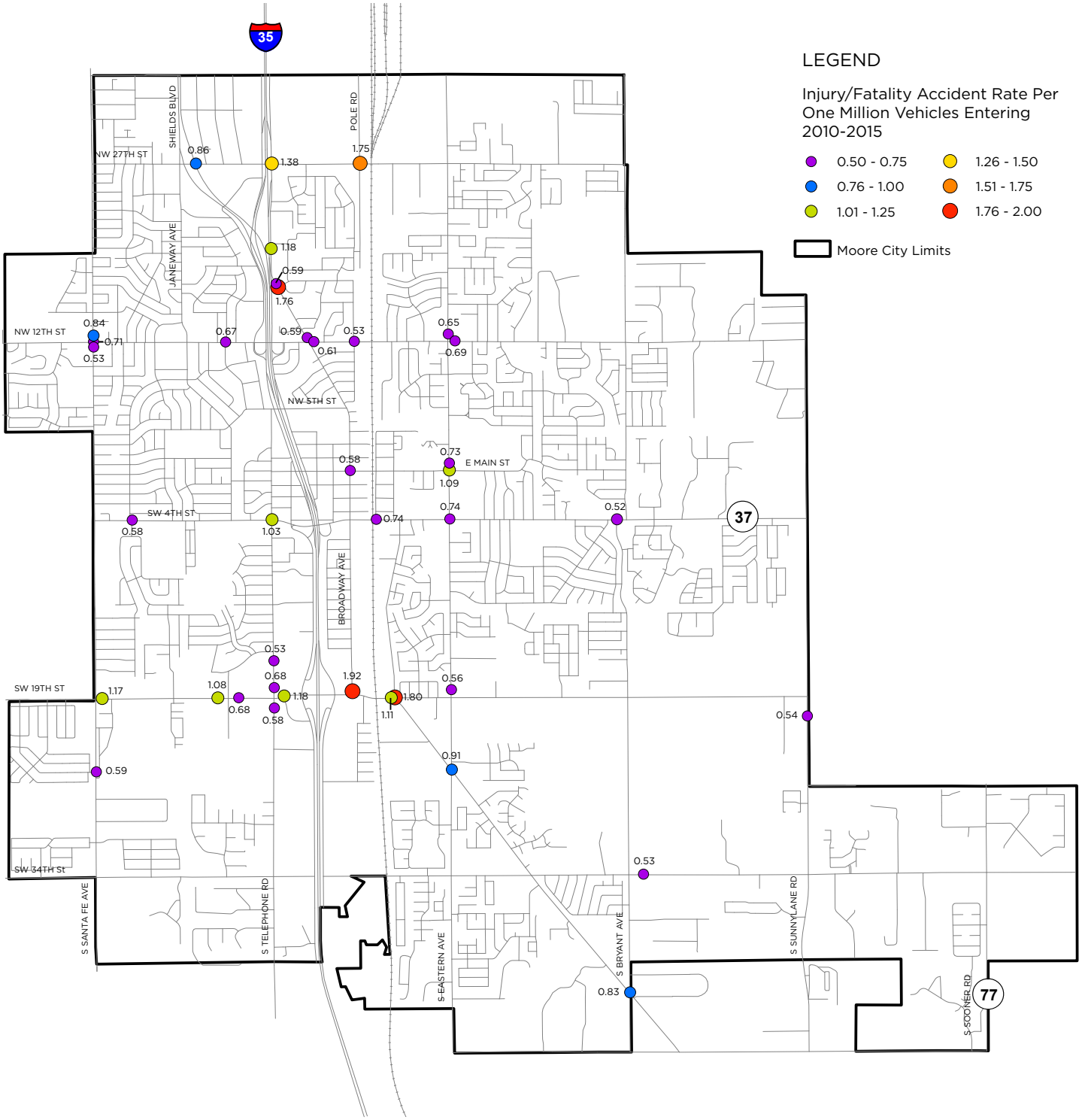
D5. EXISTING TRAFFIC SIGNALS



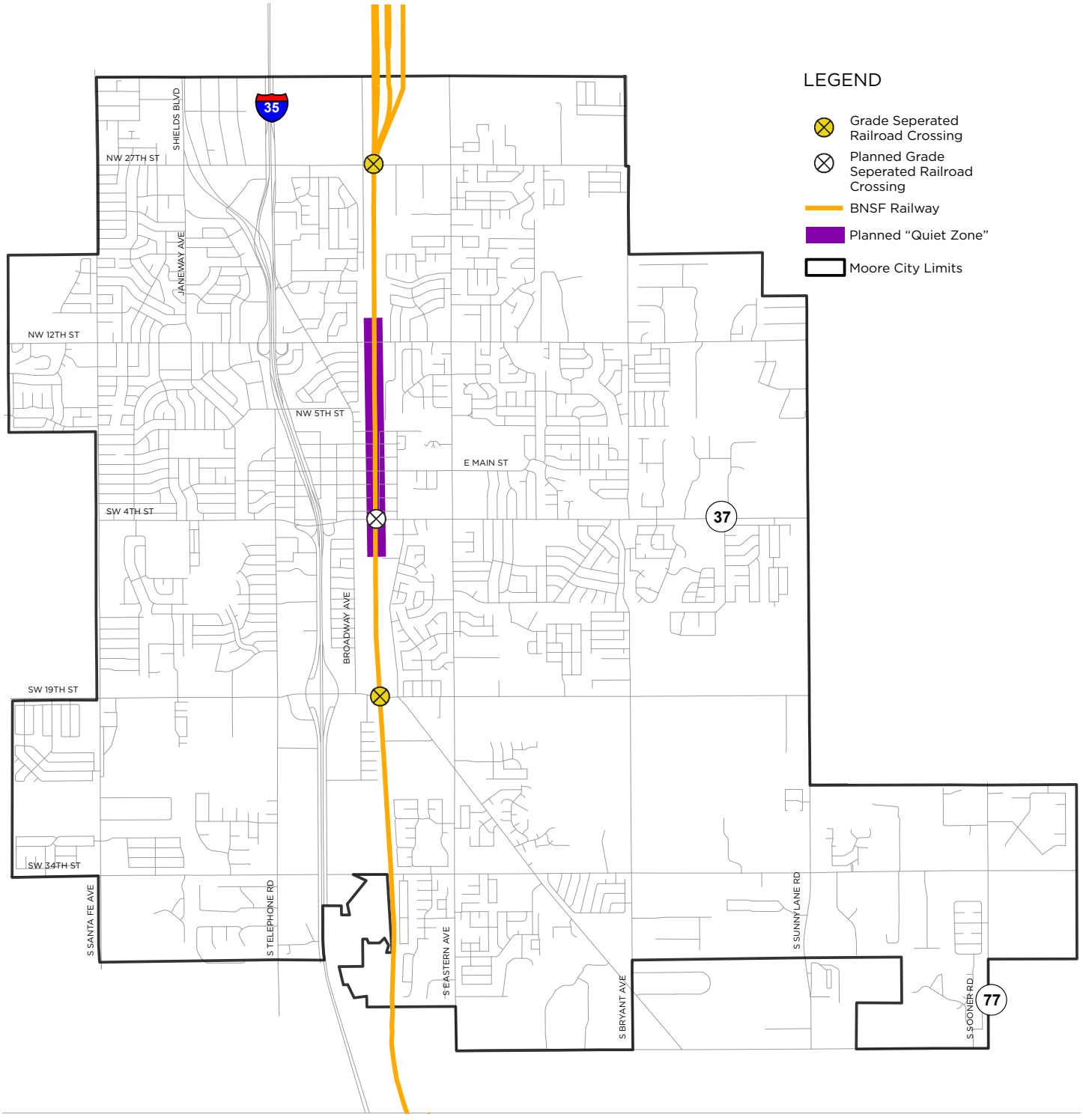
D6. HIGHEST INJURY AND FATALITY COLLISIONS



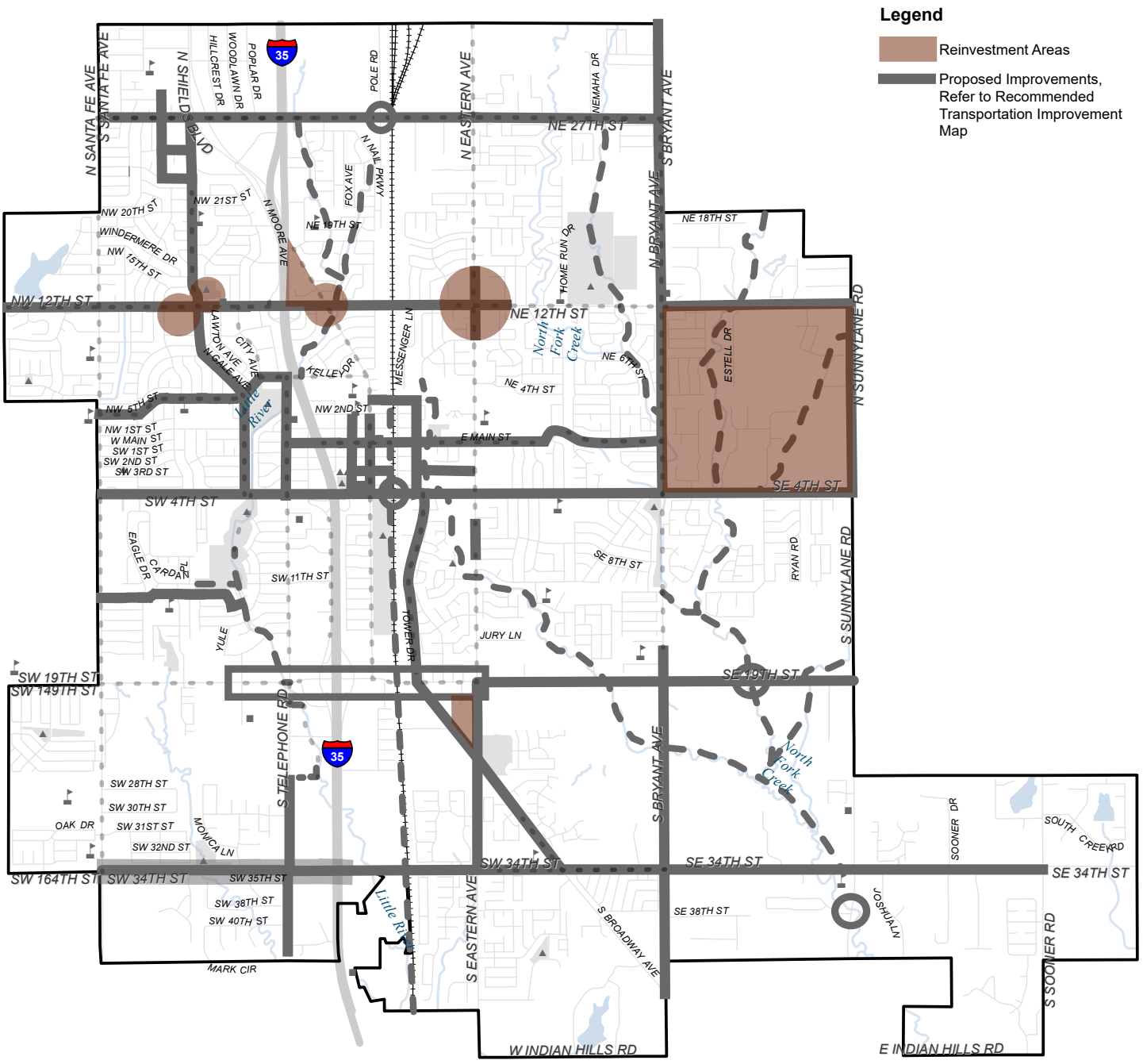
D7. HIGHEST COLLISION RATES



D8. EXISTING RAILROAD AND POTENTIAL IMPROVEMENTS

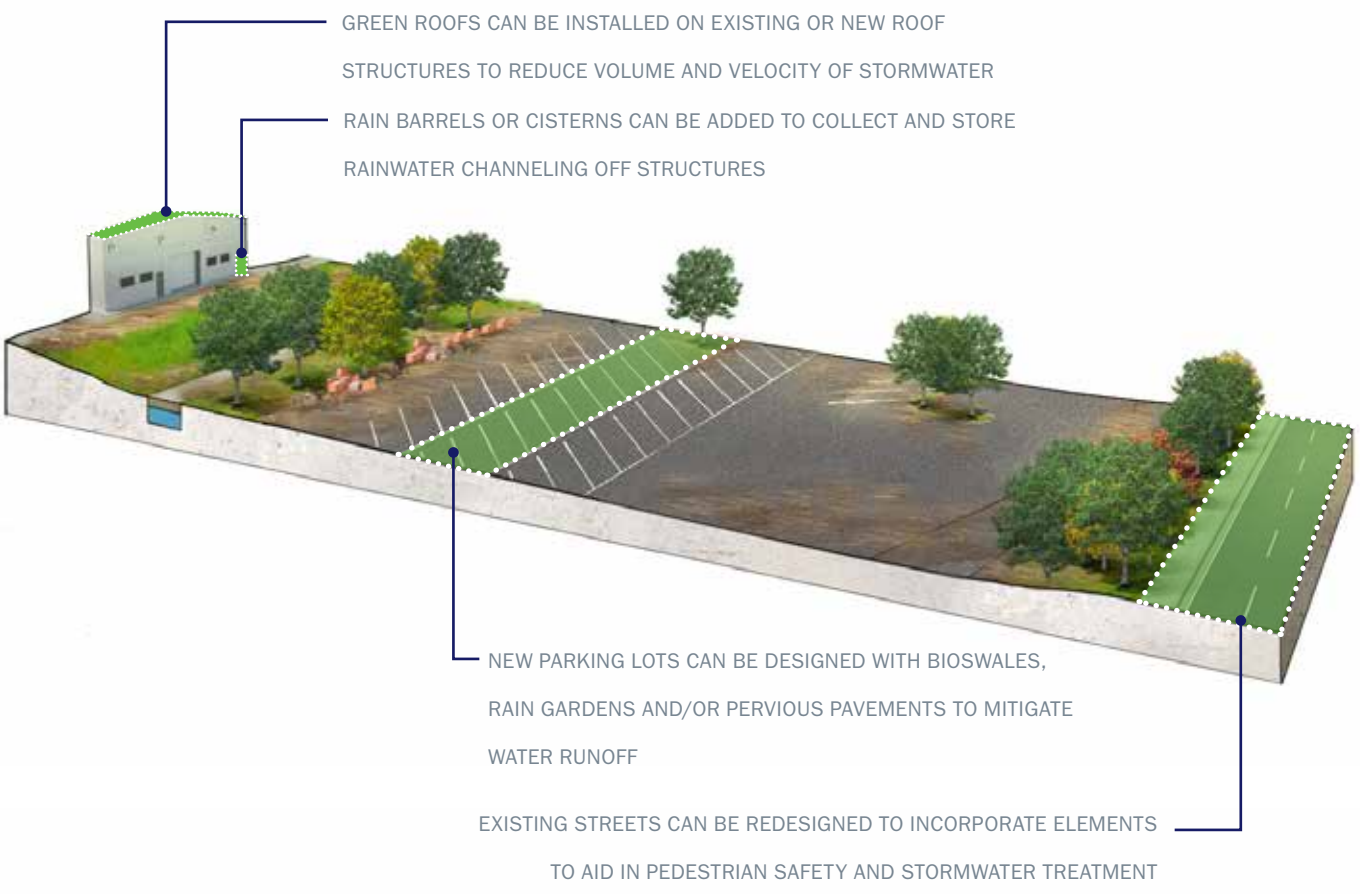


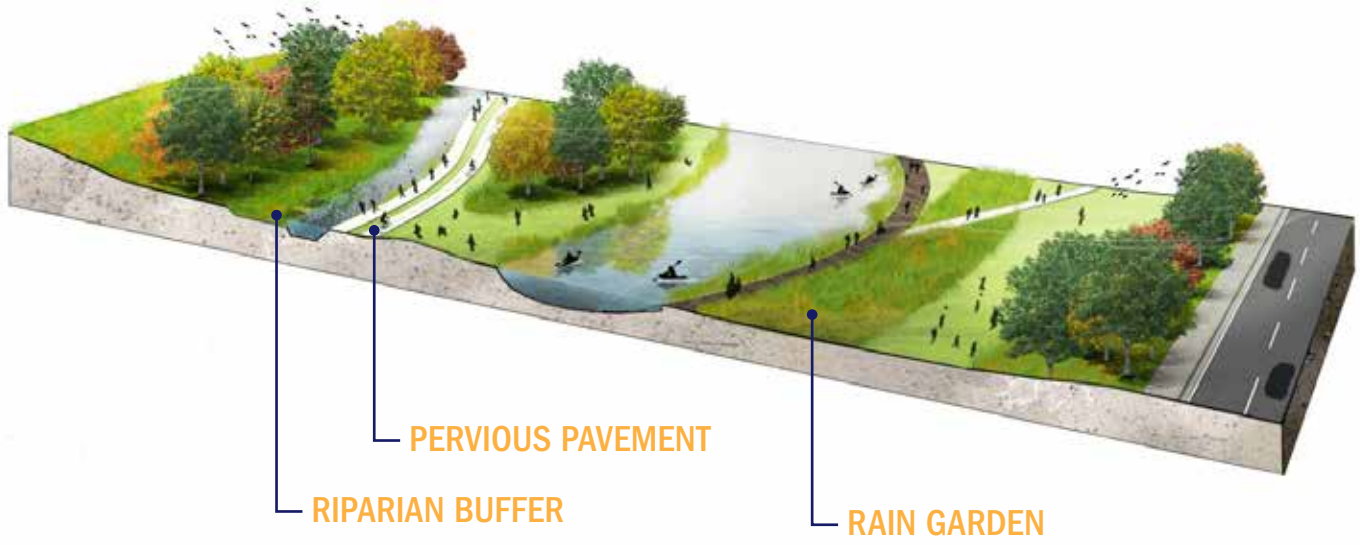
D9. TARGETED REINVESTMENT AREAS



APPENDIX E: LID
LOW IMPACT DEVELOPMENT TECHNIQUES

APPENDIX E: LOW IMPACT DEVELOPMENT TECHNIQUES





APPLICATION

1 GREEN STREETS

A Green Street is a street right-of-way that, through a variety of design and operational treatments, gives priority to bicycles, pedestrian circulation and stormwater treatment. The improvements may include sidewalk widening, bike lanes, landscaping, traffic calming, and stormwater planters.

2 RAIN BARREL

A rain barrel or cistern is a structure that collects and stores stormwater runoff from rooftops. The collected rain water can be used for irrigation to water lawns, gardens, window boxes or street trees. By temporarily holding the stormwater runoff during a rain event, more capacity can be added to the city's sewer system. However, rain barrels and cisterns only serve an effective stormwater control function if the stored water is used or emptied between most storms so that there is free storage volume for the next storm. Rain barrels are designed to overflow into the sewer system through the existing downspout connection in large storm events. Although these systems store only a small volume of stormwater, collectively they can be effective at preventing large volumes of runoff from entering the sewer system.

3 RAIN GARDEN

A rain garden is a garden designed to collect runoff from impervious surfaces such as roofs, walkways, and parking lots, allowing water to infiltrate the ground. The garden is normally moderately depressed (lower than the surrounding ground level), with the bottom layer filled with stone so runoff can collect and pond within it. The site is graded appropriately to cause stormwater to flow into the rain garden area from the nearby impervious area. The water ponds on the surface, is used by the vegetation in evapotranspiration, and infiltrates into the subsurface stone storage and soil. Rain gardens can be connected to sewer systems through an overflow structure, but usually they are sized to infiltrate the collected stormwater runoff within 72 hours. Flexible and easy to incorporate into landscaped areas, rain gardens are suitable for many types and sizes of development and retrofits. Rain gardens are effective at removing pollutants and reducing stormwater runoff volume.

4 GREEN ROOF

A green roof is a roof or section of roof that is vegetated. Its system is composed of multiple layers including waterproofing, a drainage layer, an engineered planting media, and specially selected plants. They can be installed on many types of roofs, from small slanting roofs to large commercial flat roofs. Two basic types of green roofs have been developed: extensive and intensive. An extensive green roof system is a thin (usually less than 6 inches), lighter-weight system planted predominantly with drought-tolerant succulent plants and grasses. An intensive green roof is a deeper, heavier system designed to sustain more complex landscapes. A green roof is effective in reducing the volume and velocity of stormwater runoff from roofs by temporarily storing stormwater, slowing excess stormwater release into the combined sewer system, and promoting evapotranspiration.

5 RIPARIAN BUFFERS

A riparian buffer is a vegetated area (a "buffer strip") near a stream, usually forested, which helps shade and partially protect a stream from the impact of adjacent land uses. It plays a key role in increasing water quality in associated streams, rivers, and lakes, thus providing environmental benefits.

6 PERVIOUS PAVEMENT

Pervious pavement is a specially designed pavement system that allows water to infiltrate through the pavement and never become runoff. This system provides the structural support of conventional pavement but is made up of a porous surface and an underground stone reservoir. The stone reservoir provides temporary storage before the water infiltrates the soil. There are many different types of porous surfaces, including pervious asphalt, pervious concrete, and interlocking pavers. Interlocking pavers function slightly differently than pervious concrete and asphalt. Rather than allowing the water to penetrate through the paving, pavers are spaced apart with gravel or grass in between to allow for infiltration.

GREEN STREET CONCEPT

ADDITION OF STORM-WATER PLANTERS AND OTHER LOW IMPACT DEVELOPMENT (LID) TECHNIQUES OR GREEN STORM-WATER INFRASTRUCTURE (GSI) PROJECTS CAN HELP WITH STORM-WATER RUNOFF ISSUES. THESE TYPES OF PROJECTS HAVE ALSO BEEN SHOWN TO REDUCE CRIME IN THE VICINITY OF THE BEAUTIFICATION PROJECT.

APPENDIX F: RESILIENCY

Resiliency in Moore

Moore defines resiliency as the ability to be prepared for short and long term stresses with a plan that proactively defines strategies which ensure a community can function during and after a hazardous event. The Plan incorporates resiliency throughout its strategic goals to weave a cohesive effort for a resilient community.

The Plan enables the city to create opportunities to overcome these natural disasters, short and long term stresses, and other disruptive events in the community through preparedness, adaptation, and strength. This document proactively integrates resiliency into other community goals as described throughout the Plan. It is an effort that identifies an understanding of Moore's social, political and economic systems as supported by larger goals such as land use, growth, economic development, open space and natural resources, housing, and neighborhoods. Moreover, this document incorporates detailed input by a broad cross-section of stakeholders and leaders in both the public and private sectors which effectively assist in developing resiliency efforts highlighting the desired and anticipated performance of the built environment.

Often it is critical to ask through a planning process like the Plan: "when and how does the built environment affect a community's ability to serve its residents?" With the Plan, resiliency can be improved by the community because it is a tool that addresses preparedness, planning and development for prosperity.

While communities face hazardous events, such as infrastructure failures, cyber attacks, environmental changes and economic downturns, disruption from weather and natural disasters are a part of Moore's history and will remain a large part of its future. To increase resiliency, Moore can work through and overcome the effects of these events by the implementation of strategies identified in this document. These strategies are supportive of the Infrastructure Recovery and Implementation Plan (IRIP), an outcome of the City of Moore Disaster Recovery Action Plan.

Overview of Tornado Recovery Efforts

Following the destructive tornado on May 20, 2013, an Infrastructure Recovery and Implementation Plan (IRIP) was prepared to further refine infrastructure-related data described in the City of Moore Disaster Recovery Program Action Plan (Action Plan). The IRIP prioritized and coordinated public infrastructure improvements in the Action Plan and developed a funding strategy and implementation schedule for these projects.

Prioritization of projects in the built environment enables a community like Moore to address the functionality of time to recovery. This becomes a measure of how well the built environment can operate to deliver services to its community, and return to its intended purpose.

The city is the first in the United States, that it is aware of, to adopt tornado-specific building code wind resistance standards. The city continuously seeks to protect its residents and infrastructure via review and adoption of appropriate building standards.

RESILIENCY DEFINED:

"A Resilient City is one that has developed capacities to help absorb future shocks and stresses to its social, economic, and technical systems and infrastructure so as to still be able to maintain essentially the same functions, structures, systems, and identity."

http://www.resilientcity.org/index.cfm?id=11449

LAND USE

RESILIENCY TOUCHPOINTS

Resilience in land use planning includes preparing the city to adapt to changing conditions in the natural environment, the built environment and the community. The land use recommendations improve resiliency by:

- Encouraging economic resiliency
- Encouraging reinvestment
- Recognizing interdependencies of the natural environment and human systems and mitigating potentially disruptive events (i.e. natural hazards).

A vibrant downtown can be a competitive advantage for attracting and sustaining commercial or retail tenants, as well as residents while drawing attraction to the area from outside the community. Focusing on Old Town and related efforts to increase resiliency should involve activities that will increase visibility while maintaining retention for economic success.

- Focus on elements that increase growth such as urban design improvements and transportation infrastructure improvements.
- Explore the potential of locating alternative transportation infrastructure connections to attract visitors, improve safety and provide options.
- Involve current Old Town business owners in decision making that focuses on the strategic growth of the area, such as an improvement district or a framework that supports exploration of involvement from the business owners.

The city has an opportunity to improve its livability through addressing community focused priorities such as aesthetics, increased walkability, connectivity of roadways, safety improvements, and access to amenities. The following actions contribute to financial and social resiliency:

- Plan for improvements that address the well-being of businesses and property owners.
- Encourage high quality development that preserves and enhances the value of adjacent properties.
- Review the role aesthetics of new development can play to increase walkability
- Address inter-connectivity of roadways to reduce traffic congestion and improve emergency response times
- Improve access to parks and private amenities in new development.

HOUSING AND NEIGHBORHOODS

RESILIENCY TOUCHPOINTS

Strong neighborhoods are fundamental to social resiliency. Code enforcement and targeted investment can help reduce crime and improve property values.

OPEN SPACE AND NATURAL RESOURCES

RESILIENCY TOUCHPOINTS

- Protection of floodplains and riparian areas can reduce impacts from flooding and erosion as well as save water treatment costs for downstream communities.
- Evidence suggests that adopting low impact development techniques can save significantly on maintenance costs for stormwater systems and can increase property values.
- A recent study found that green infrastructure installations in Philadelphia resulted in reduced crime rates.

PARKS AND RECREATION

RESILIENCY TOUCHPOINTS

- Providing transportation options increases resiliency by enabling safer active transportation and provides connections for multiple modes of travel.
- Financial benefits of health. Reduced healthcare costs.
- Competitive benefits A connected system of greenways can be a differentiator to new businesses and potential home buyers.
- Property values. Properties adjacent to greenways have been shown to increase in value.

PUBLIC SERVICES

RESILIENCY TOUCHPOINTS

Achieving resilient systems in energy, water, and power systems takes time and thoughtful planning. Examination of current conditions and desired performance needs to be identified. The gaps between these begin to illustrate the future levels of resilience these systems have.

- Improve energy system performance and grid resilience so that end user needs are prioritized along with public safety and restoration requirements.
- Understand and plan for the interdependency of energy systems and communications to increase resiliency during and after disruptive events.
- Identify and prioritize alternate energy sources during a disruptive event while protecting public and utility personnel safety.
- Identify and prioritize alternate water sources during a disruptive event while protecting public and utility personnel safety.
- Protect, maintain and recover the system while controlling costs.
- Plan for systems to mitigate environmental damage during recovery processes or future build out.
- Reinforce resiliency by improving water use efficiency by adopting an advanced/smart meter program to better monitor water usage citywide.

TRANSPORTATION

RESILIENCY TOUCHPOINTS

Transportation infrastructure plays a critical role in supporting a community's services, systems and residents. It is depended upon as a primary means for preparedness and recovery before, during and after a disruptive event in the community.

- Ensure consistent access throughout the city's transportation network, and develop practices for recovery and post recovery that enable the community to reach immediate service and emergency destinations, including evacuation routes.
- Define the city's performance goals based on the time needed for transportation infrastructure to be restored to provide access to its residents following a disruptive event.
- Focus on prevention of economic loss and environmental damage through maintaining system reliability and protecting public safety.
- Address transportation infrastructure interdependencies with other infrastructure systems such as: energy, communication, buildings, water and wastewater.
- Address railroad noise and congestion caused by trains to improve quality of life by:
    - Reducing noise pollution by implementing a safety corridor that fences off the right-of-way and adopts a Quiet Zone via the Federal Railroad Administration Process.
    - Implementing the separation of road and railroad tracks at S 4th Street.

ENVISION MOORE PLAN 2040