city of Ankeny

TRANSPORTATION MASTER PLAN

March 2025

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Glossary of Terms

Auxiliary Lanes: Auxiliary lanes, often referred to as turn lanes in urban areas, are additional lanes on a street designed to separate turning vehicles from through traffic. These lanes enhance efficiency and safety by allowing motorists to decelerate, wait, or accelerate outside the main flow of traffic, thereby reducing congestion and the likelihood of rear-end crashes.

Average Daily Traffic (ADT): A measurement of the total volume of vehicular traffic on a given street segment over a specific time period, typically expressed as the average number of vehicles per day. It is a key indicator used by planners and engineers to assess capacity needs, traffic flow, and roadway design requirements.

Crash Rate: Crash Rate is a normalized measure of how frequently crashes occur on a given roadway segment or at an intersection, accounting for the amount of traffic exposure. It is often expressed as the number of crashes per million vehicle-miles traveled (VMT) or per million entering vehicles (MEV). This metric allows transportation professionals to compare safety performance across various facility types and traffic conditions.

Curb and Gutter: (section) A standard urban street design feature consisting of a raised concrete curb and an adjoining gutter. The curb helps delineate the street edge, separates vehicular traffic from pedestrian areas, and provides structural pavement support. The gutter, typically sloped toward storm drains or catch basins, directs water runoff away from the driving surface to improve drainage and reduce flooding.

Equivalent Property Damage Only: Equivalent Property Damage Only (EPDO) is a method used in traffic safety analysis to account for varying crash severities by assigning numerical weights to different outcomes (e.g., fatalities, injuries). Each crash is converted into an “equivalent” number of property damage only (PDO) crashes based on its severity. This allows analysts to combine and compare crashes of different severity levels under one consistent measure for more comprehensive safety evaluations.

High-intensity Activated Cross Walk (HAWK):	A traffic control device that helps pedestrians safely cross streets while minimizing traffic delays. HAWKs are a type of traffic signal that is generally placed mid-block in high pedestrian areas and is designed to stop traffic when activated to allow pedestrians to cross safely.
Property Damage Only:	Property Damage Only (PDO) refers to crashes in which no individuals are injured, and the only resulting harm is to vehicles or other property. These crashes are recorded for safety and statistical analyses to help identify locations or conditions where improvements can minimize overall crash frequency, even if the collisions typically do not involve bodily harm.
Regional Trail:	A regional trail is a path that connects cities, counties, or states, and is usually larger than local trails. Regional trails are often separated from roads and are used for recreation.
Rectangular Rapid-Flashing Beacon (RRFB):	A traffic control device that uses flashing yellow lights to warn drivers of pedestrians in crosswalks. RRFBs are pedestrian-actuated and often used at marked crosswalks without stop signs or signals.
Rural Road: (section)	A roadway section that typically lacks curb and gutter infrastructure and is characterized by features such as wider shoulders, open drainage ditches, and reduced access points. Rural road sections often serve lower-density areas outside urban environments, carrying a mix of local and through traffic across undeveloped, or fringe, areas that have not yet been urbanized.
Shared Use Sidepath:	A shared use sidepath is a multimodal facility that allows for pedestrians and bicyclists. These typically run parallel to a street alignment and are separated from the street.
Sidewalk:	A sidewalk is a designated pedestrian-only facility that is intended to only be used for walking.
Urban Street: (section)	A street design commonly found in cities and towns, featuring curb and gutter for drainage, sidewalks for pedestrian use, and often street lighting and availability for on-street parking where relevant. These streets typically serve higher-density development, accommodate multiple modes of travel (vehicles, bicycles, pedestrians, and transit), and include more frequent intersections to support a complex network of local mobility and access.

city of Ankeny

EXECUTIVE SUMMARY

Executive Summary

The City of Ankeny's Transportation Master Plan (TMP) is a strategic document designed to guide the development and management of the City's transportation infrastructure over the next 25 years. Consistent with the City's comprehensive plan – The Ankeny Plan 2040, the TMP evaluates continued growth and addresses the City's need for a comprehensive, safe, efficient, and sustainable transportation network that supports Ankeny's rapid development and the evolving needs of its residents.

PURPOSE AND SCOPE

The TMP outlines Ankeny's vision for a future transportation system that is comprehensive, safe, efficient, and sustainable for all community members. It sets forth a strategic framework for identifying transportation needs, prioritizing projects, and guiding the maintenance and enhancement of the City's transportation infrastructure. This plan serves not only as a roadmap for future development but also as a tool for communication and collaboration with the public, key stakeholders within the community, and other public agencies.

PUBLIC AND STAKEHOLDER ENGAGEMENT

Public involvement has been a cornerstone of the TMP's development process. The City of Ankeny has engaged with residents, businesses, and stakeholders through multiple phases to ensure the TMP reflects a range of community values, concerns, and aspirations. This engagement has helped shape the plan's goals and has been integral in prioritizing projects that align with community preferences.

STRATEGIC GOALS AND OBJECTIVES

The TMP establishes clear goals and objectives aimed at creating a transportation system that is comprehensive, safe, efficient, and sustainable. Performance measures have been defined to track progress and ensure that the transportation system adapts to the changing needs of the community.

FINANCIAL IMPACTS

Recognizing the challenges of funding such an expansive plan, the TMP details a comprehensive funding outlook that includes current funding sources, revenue projections, and potential financial challenges. The plan also explores opportunities for securing additional funding through programs such as discretionary federal grants.

KEY INITIATIVES

Several programs and policies are recommended to support the TMP's objectives. These include initiatives to enhance pedestrian and bicycle infrastructure, improve safety, streamline capital improvement programs, and adopt modern technologies to optimize traffic management.

PROJECT PRIORITIZATION

The TMP concludes with a list of proposed projects, each evaluated and prioritized based on their potential impact, cost-effectiveness, and alignment with the TMP's strategic goals. While the dynamic nature of transportation projects can change with growth patterns realized, these prioritization tools can help encourage that the most beneficial projects are implemented first, optimizing the use of available resources when conducting capital programming activities.

CONCLUSION

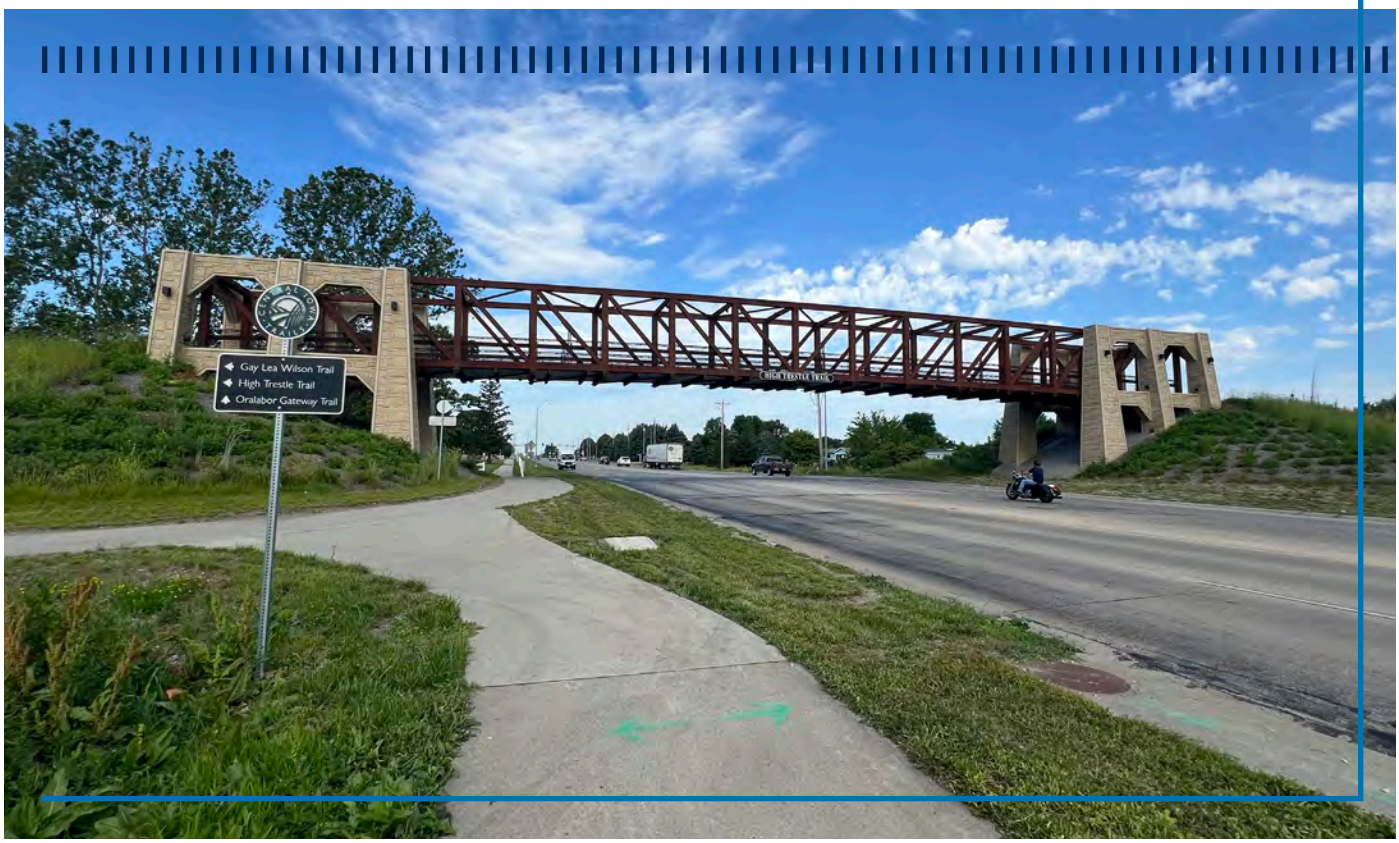
The Ankeny TMP is more than just a planning document. It is a commitment to building a future-ready transportation system that is comprehensive and prioritizes safety, efficiency, and sustainability. By implementing this plan, Ankeny strives to enhance the quality of life for all its residents and support the City's continued growth and development.

The TMP is a dynamic, living document, open to revisions as new data and technologies emerge and as community needs evolve. It is crafted not only to address current transportation challenges but also to anticipate future demands, ensuring Ankeny remains a vibrant and connected community.

city of Ankeny

INTRODUCTION

Introduction



PURPOSE OF A TRANSPORTATION MASTER PLAN

The City of Ankeny's TMP is a strategic guide designed to support the City's long-term vision for a comprehensive, safe, efficient, and sustainable transportation network. Rooted in the City's overarching goals outlined in The Ankeny Plan 2040, the TMP seeks to address both current and anticipated transportation needs, enabling Ankeny to manage growth responsibly while enhancing the quality of life for its residents. As Ankeny experiences rapid development, a comprehensive TMP provides a roadmap for prioritizing projects, securing resources, and aligning future transportation improvements with the City's needs for mobility, accessibility, and connectivity.

A TMP can serve multiple purposes for a City. It is a tool for organizing and directing infrastructure investments, serves as a basis for engaging and educating stakeholders, and provides a flexible framework that can evolve with the City's dynamic transportation network. By providing a cohesive strategy, the TMP positions the City to manage the demands of growth while ensuring that its transportation system remains adaptable, resilient, and reflective of community aspirations.

PLANNING PROCESS

Developed through a collaborative, data-informed process, the TMP reflects a balanced approach to technical rigor and community engagement. The planning process unfolded in multiple phases, each aimed at capturing the diverse needs of Ankeny's residents, businesses, and visitors. This comprehensive approach began with an in-depth assessment of existing transportation conditions, including current infrastructure, traffic patterns, and safety considerations. Following this assessment, a forward-looking needs analysis was conducted, considering projected population growth, anticipated land use changes, and emerging transportation trends.

Stakeholder and public engagement were pivotal throughout the process. Ankeny facilitated a series of public meetings, focus group discussions, and surveys, allowing residents to voice their preferences and evaluate opportunities. This feedback was instrumental in refining the TMP's goals and prioritizing projects that directly respond to community needs. In addition, close collaboration with City Staff, local stakeholders, and other agencies, such as Iowa DOT, Des Moines Area Metropolitan Planning Organization (DMAMPO), helped ensure that the TMP aligns with broader metropolitan and state-level transportation initiatives.

PLAN MAINTENANCE & UPDATE PROCESS

A hallmark of the TMP is its adaptability. Recognizing that transportation needs and technologies evolve, the City of Ankeny can establish a routine maintenance and update process for the TMP. This process can include regular reviews and revisions to account for new data, infrastructure performance metrics, and shifts in community priorities. Every five years, it is recommended that the TMP undergo a review, during which the City will evaluate progress on established goals, assess any changes in funding availability, and identify emerging trends or challenges that may impact the transportation network.

Annual updates, as available, on key performance indicators related to safety, efficiency, and infrastructure maintenance will help Ankeny track the effectiveness of its transportation initiatives and guide adjustments as needed. This proactive, data-driven approach to plan maintenance ensures that the TMP remains a living document, capable of responding to the evolving needs of Ankeny's community and advancing the City's commitment to sustainable, resilient transportation solutions.

city of Ankeny

CURRENT & FUTURE NEEDS ASSESSMENT

Current & Future Needs Assessment

An inventory and assessment of the existing transportation system present a current snapshot of transportation opportunities for Ankeny residents. In addition, a planning-level review of proposed future growth and development in the community highlights impacts and needs for the current transportation system. This section documents the current conditions of the multimodal transportation system and the future baseline conditions based on the anticipated growth in the City of Ankeny.

CONSOLIDATION OF KNOWN ISSUES

The community identified transportation and mobility issues and opportunities through the community engagement process. The issues were consolidated, and logged in a database, and categorized thematically to enable sorting and trend identification. The location-specific transportation issues have also been geocoded, mapped, and saved as a GIS shapefile for Ankeny. These community comments served as a critical element of needs identification and informed the vision/goal/recommendations development.

PREVIOUS PLANS

Many previously formulated and adopted plans for the City of Ankeny were used as resources for the development of the TMP. To ensure the integrity and justification of the recommendations in the TMP, it is crucial to consider all previous goals from established plans for the City of Ankeny. Descriptions of plans that informed the creation of the TMP follow.

The Ankeny Plan 2040

The Ankeny Plan 2040 is a comprehensive plan adopted in 2018 to present a vision of the future for the City of Ankeny. This plan contains goals and objectives for many aspects of the community, such as the environment, housing, parks and recreation, infrastructure, community facilities, economic development, hazards, land use, and transportation. This plan is reviewed annually to assess the success of the implementations to determine if changes or updates are needed. The community goals in this plan were updated from the previous comprehensive plans for the City of Ankeny. Goals the community wants to accomplish are to ensure that the growth occurs within the contexts of new neighborhoods and not separate or disconnected

developments, ensure the transportation system is adequate to meet future demands and promote a sense of community and premier quality of life as growth continues.

Pavement Management Study and Master Plan

The 2023 Pavement Management Study and Master Plan for the City of Ankeny provides a comprehensive assessment of the City's public street network, focusing on existing pavement conditions, prioritized pavement improvement projects, and pavement design standards. The study identified areas of concern within the current infrastructure and offers recommendations to enhance pavement design standards, particularly for public streets constructed with development projects. By implementing these recommendations, the plan aims to improve the durability and long-term performance of Ankeny's street system, ensuring a more reliable and efficient transportation network for the community.

Bicycle Tourism Plan

The Bicycle Tourism Plan, adopted in 2019, aims to identify achievable strategies that will support local economic activity through bicycle tourism. This plan identifies six goals to make Ankeny a destination for bicycle tourists. Goals include identifying strategies to leverage the City of Ankeny's investment in trails, identify strategies to promote Ankeny as a bicycle destination, and identify trail users' characteristics.

Fiber Optic Network Master Plan

The Fiber Optic Network Master Plan, adopted in 2023, addresses the needs recognized by the City to provide a more maintainable and reliable network connecting City facilities and traffic signals while also allowing flexibility and scalability to aid in future growth and development. This plan focuses on network redundancy and reliability for existing and future connections and recommends four phases for implementation.

Parks and Facilities Comprehensive Plan

The Parks and Facilities Comprehensive Plan was adopted in late 2019. The goal of this plan was to create a vision for the future of parks and recreation in the City of Ankeny. A project website was made for the community to provide comments on issues or future recommendations for any of the parks and greenways. There are four high priority recommendations due to the estimated impact on the immediate future that should be addressed within the first five years of the plan's adoption. These major priorities include an

indoor recreation facility, a central or signature park, an additional sports complex, and the expansion of Prairie Ridge Aquatic Center. This plan is reviewed annually to evaluate the success of the implementations to determine if changes or updates are needed for this plan.

DMAMPO – Mobilizing Tomorrow

The DMAMPO – Mobilizing Tomorrow plan, adopted in 2019, guides future mobility planning from 2020-2050. This plan continues to prepare and adapt to future needs and demands in transportation. The Mobilizing Tomorrow update aims to maintain an efficient transportation system, enhance the quality of life, and support a strong regional economy. It is of high priority to maintain the infrastructure DMAMPO already has and get more use out of it by offering more modes of travel. This updated plan builds on the previous plan's success while reflecting the ongoing development of the future of transportation.

Americans with Disabilities Act Transition Plan

The Americans with Disabilities Act (ADA) Transition Plan's (April 2016) purpose is to protect and preserve the rights of individuals with accessibility needs in the United States. Ankeny is growing at a rapid pace and the City's ADA compliance efforts are primarily focused on sidewalk ramps and recreational trail ramp improvements.

Capital Improvement Program

The Capital Improvement Program (CIP) is a five-year plan, reviewed and updated annually, for scheduling capital projects and long-term debt. The first year of the plan is included in the City's budget for the upcoming year and also determines the number of bonds and other debt instruments to be issued in the coming year. The Capital Improvement Program for 2024-2028 has an approximate $200 million capital budget. This money goes towards transportation projects, municipal utilities (water, sewer, and stormwater) projects, park facilities, municipal buildings, and sidewalks/trails.

Ankeny Transit Study

The Ankeny Transit Study, developed in 2021, analyzed whether the Des Moines Area Regional Transit Authority (DART) services are of value to Ankeny compared to the level of investment the City is making for the program. Four different policies were presented as options for expanding DART service in the future. Those options include remaining in the DART system with the same or similar return on investment, revisions to current routes, and adding routes to

have a higher return on investment, withdraw from DART and create Ankeny's own transit plan, or withdraw from DART and have no transit services in Ankeny except for paratransit services.

Strategic Plan

The Strategic Plan (October 2022) identifies the vision, mission, and values for the City of Ankeny. The plan lists the City of Ankeny's eight goals and has multiple strategies included to help accomplish each of them.

Strategies related to transportation include:

- Reducing traffic congestion and improving traffic safety;
- Completing transportation plan and addressing long-term public transit needs, and;
- Improving major transportation corridors for all modes of travel (vehicles, bikes, pedestrians).

TRANSPORTATION TRENDS AND DEMOGRAPHICS

Land use and demographics are key components to understanding the transportation system and anticipating where new or improved facilities may be needed. Housing and employment are the two land use categories used in forecasting travel demand. Demographic information (age, income, disability, etc.) helps to understand and address the unique transportation needs of different groups in the Ankeny community. The 2024 Ankeny city limits are depicted in *Figure 1.*

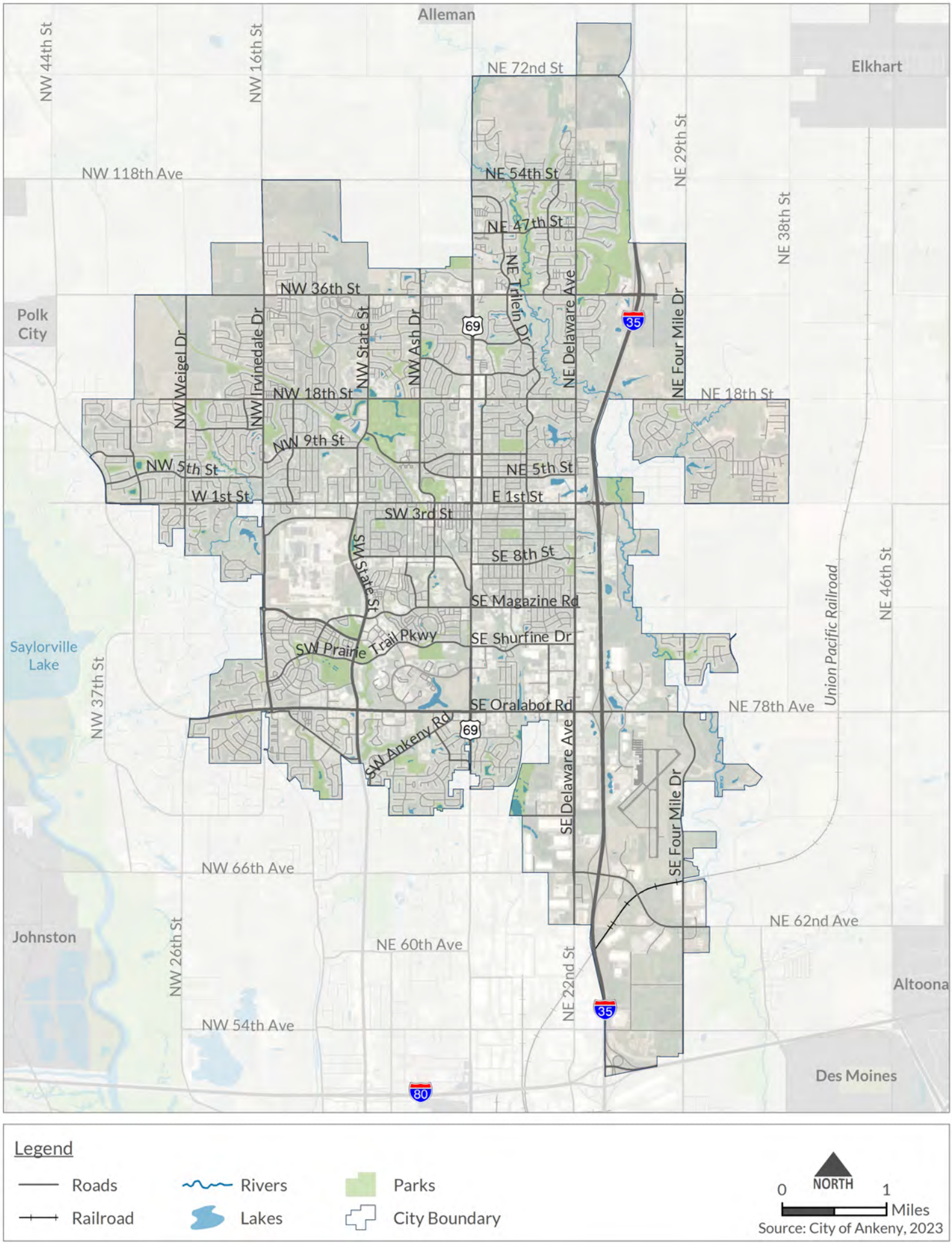


Figure 1: Ankeny City Limits

Chapter 3 of The Ankeny Plan 2040, adopted in 2018, details growth in private residences, population demographic traits, and public infrastructure. Estimates of future growth were considered based on annual numbers of residential building permits during different periods (between years 2000 to 2016), illustrating the impact of continued recent growth patterns. Assuming 2.6 residents per new household, the study projected that the City would more than double its population of 56,764 by 2040 *(Table 1).* Though population estimates varied, considering multiple factors, a final projected population of 129,507 was applied to the growth projections included with the land use plan.

Table 1: Rate of Population Growth

	Rate of Population Growth			
Year	**16-Year (2000-2016)**	**10-Year (2006-2016)**	**6-Year (2010-2016)**	**4-Year (2012-2016)**
2015	56,764	56,764	56,764	56,764
2020	67,522	67,764	69,554	71,782
2025	78,280	78,765	82,344	86,799
2030	89,038	89,765	95,134	101,817
2035	99,796	100,765	107,925	116,834
2040	110,554	111,765	120,715	131,852

Source: City of Ankeny Data 2000 – 2016 and the Ankeny 2040 Plan

Household and Employment Growth

Not only does the number of people living and working in the region affect transportation needs, but where people choose to live and work greatly influences the demand for transportation infrastructure and services. Understanding the region's existing and future housing and employment trends can help to inform and guide transportation investment decisions. Today's decisions must consider the changing population to meet future transportation needs.

The US Census estimates a 2023 population of 72,219 in Ankeny and 729,053 in the Des Moines Metropolitan Area, representing a 51.8 percent increase over the 2013 population for the City of Ankeny and an increase of 16.3 percent for the Des Moines Metro Area. The U.S. Census Bureau will conduct a Special Census survey for the City of Ankeny in 2024. Estimates based on the latest data available in 2023 should be reevaluated following the Special Census.

The Ankeny Plan 2040 produced an existing land use map for 2018 and a future land use map. While proposed land use changes are dynamic and continue to be updated, the attached *Figure 2* represents a future land use map update that illustrates expected continued growth. *Figure 3* illustrates an associated summary of land uses that detail projections for the year 2040. This map shows expansion primarily to the north, northwest, east, and southeast, with low-density residential and office/business park zoning as the most common land use. Some high-density areas are projected near stormwater detention basins and other areas where there may be high demand for development. Many mixed-use and residential mixed-use zoning areas are projected to develop near and along NE/SE Four Mile Drive.

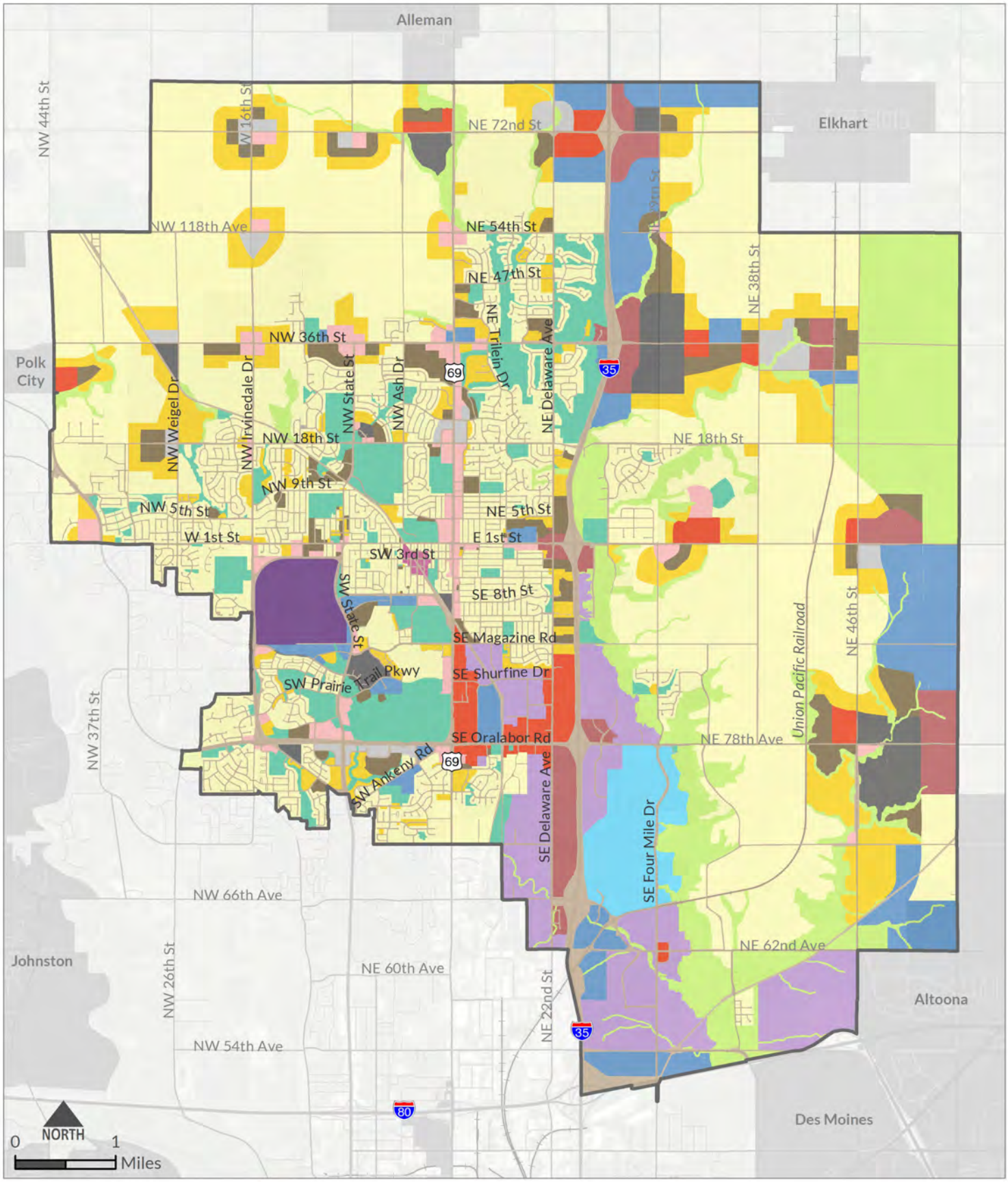
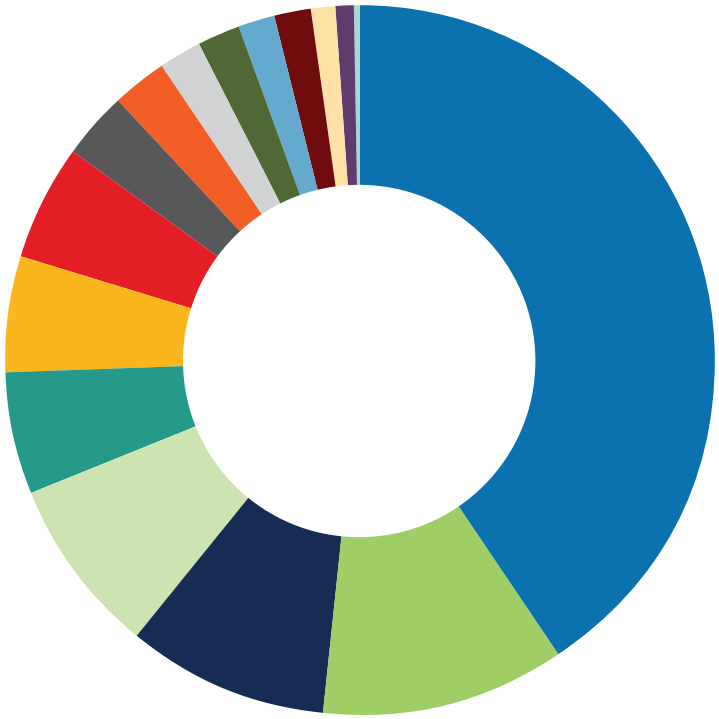


Figure 2: Future Land Use, City of Ankeny



Land Use

Low Density Residential	40.70%
Open Space	11.10%
Right-of-Way (ROW)	9.30%
Medium Density Residential	7.90%
Office/Business Park	5.60%
Civic/Public Park/Recreation	5.30%
Light Industrial	5.10%
High Density Residential	3.30%
Highway Commercial	2.40%
Mixed Use	2.00%
Community Commercial	1.80%
Airport Business Park	1.80%
Neighborhood Commercial	1.60%
Heavy Industrial	1.00%
Neighborhood Mixed Use	1.00%
Uptown	0.10%

Figure 3: The Ankeny Plan 2040 Future Land Use Summary, City of Ankeny

These projections reflect the land use needs expressed in Chapter 12 of The Ankeny Plan 2040. Through a series of public meetings, single-family, residential homes were identified as a priority for the City, specifically developments that extend east of the current City limits across Interstate 35. Developments north of the City were also considered a high priority. Infill development is explicitly noted in the Plan as a low priority.

Socioeconomic Equity

Transportation planning decisions have the potential to address equity within a community and provide benefits to those with the greatest need. To better understand the current socioeconomic attributes and needs of those who live in Ankeny, data from the U.S. Census American Community Survey was inventoried *(Table 2).* Thoughtful consideration of these populations in the transportation planning process may be beneficial as these populations often have higher than average unmet transportation needs.

To visually display the locations where populations with higher-than-average transportation needs live, a Transportation Socioeconomic Index map *(Figure 4)* was created. The areas with the highest proportion of underrepresented populations (dark purple) require special consideration during the planning process to ensure equity for all populations.

Table 2: Socioeconomic Indicators, City of Ankeny

Socioeconomic Indicator for Vulnerable Populations	Percent of Total Population	Figure #
Older Adults	11.6%	5
People with Disabilities	7.0%	6
People with Limited English Proficiency	1.9%	7
Single Parent Households	12.1%	8
People with Low Income	5.2%	9
Minority Populations	10.8%	10
People without Access to a Vehicle	2.02%	17

Source: American Community Survey, 2018

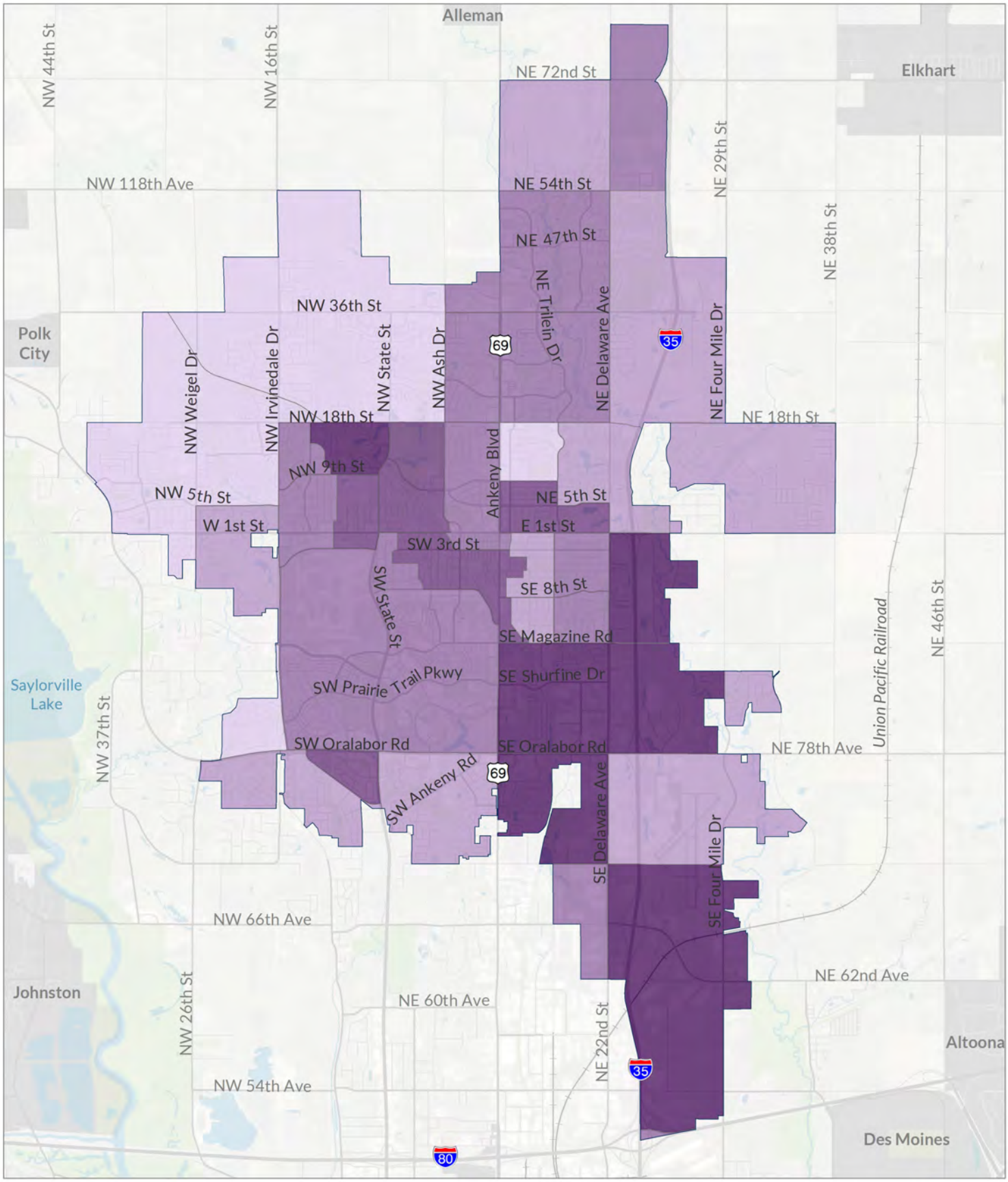


Figure 4: Transportation Socioeconomic Index Map, City of Ankeny

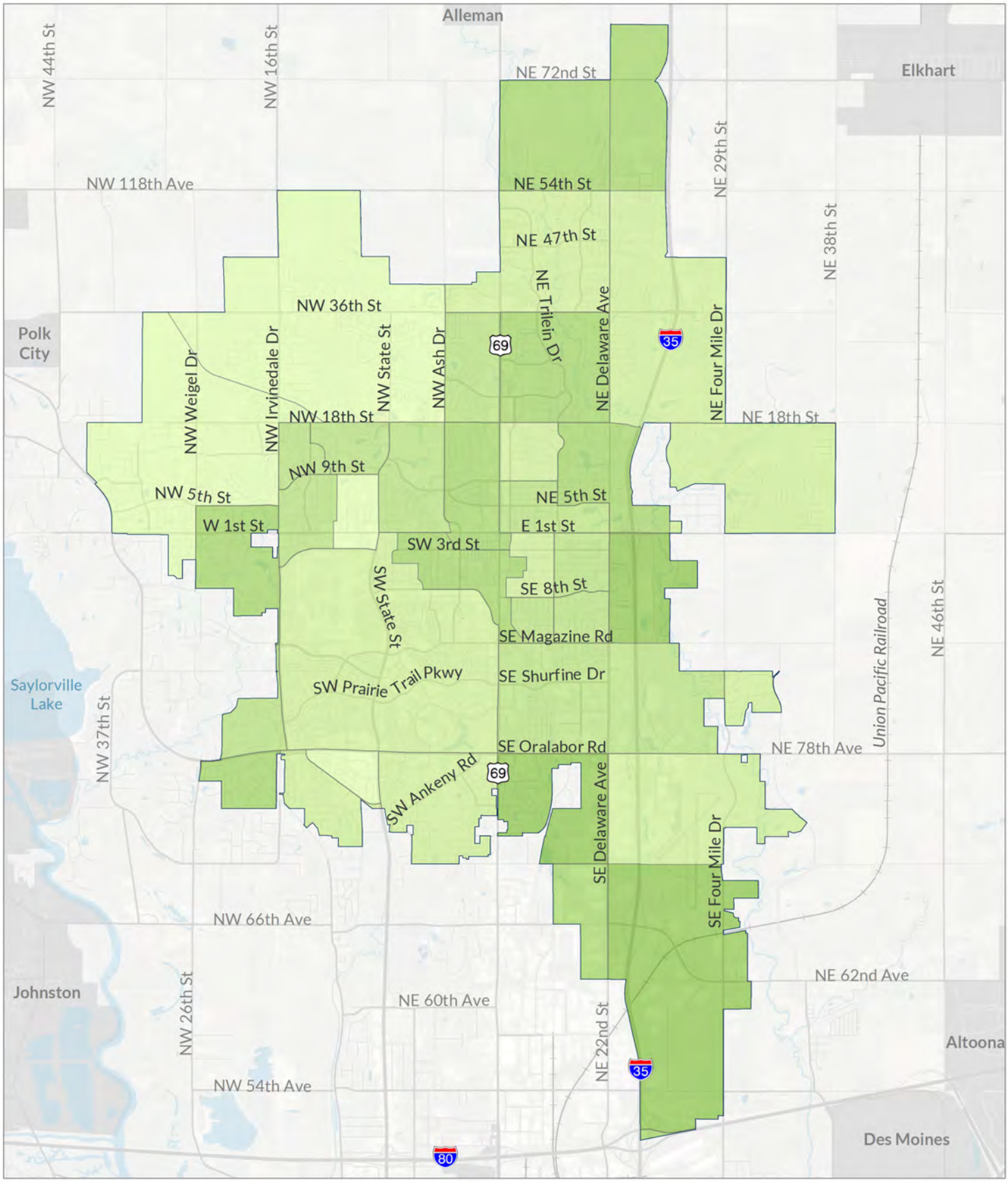


Figure 5: Older Adults (Ages 65+ years old), City of Ankeny

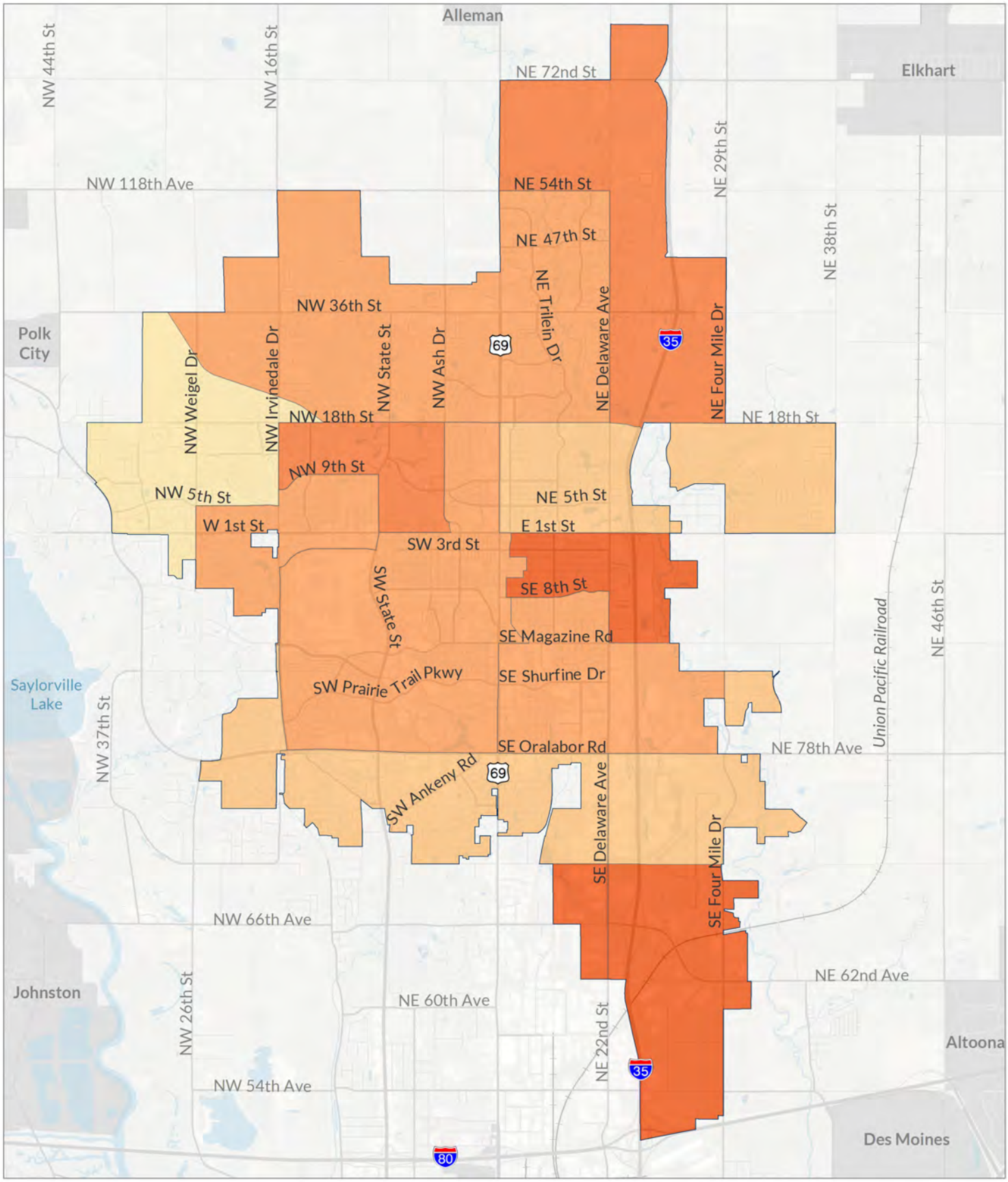


Figure 6: People with Disabilities, City of Ankeny

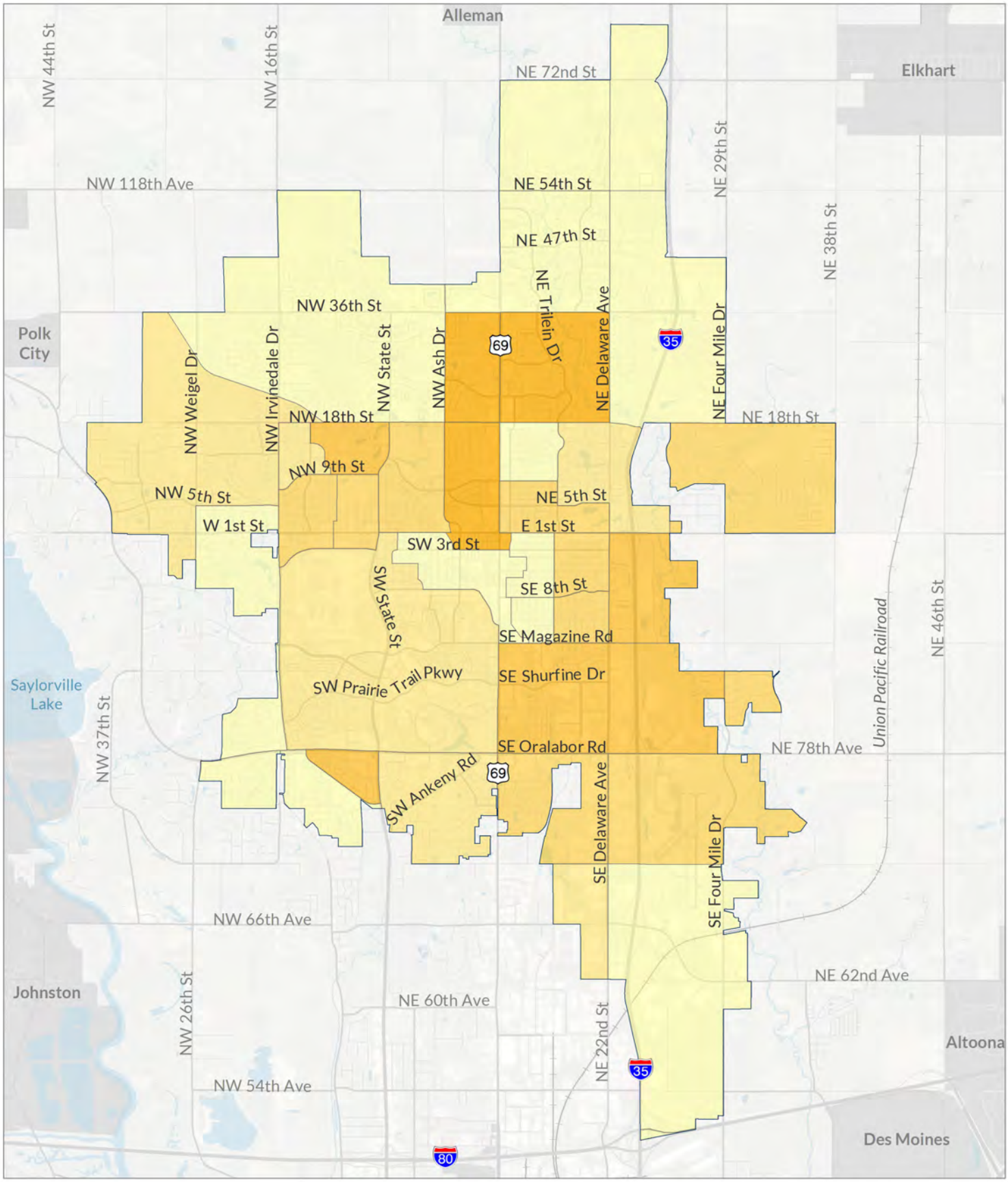


Figure 7: People with Limited English Proficiency, City of Ankeny

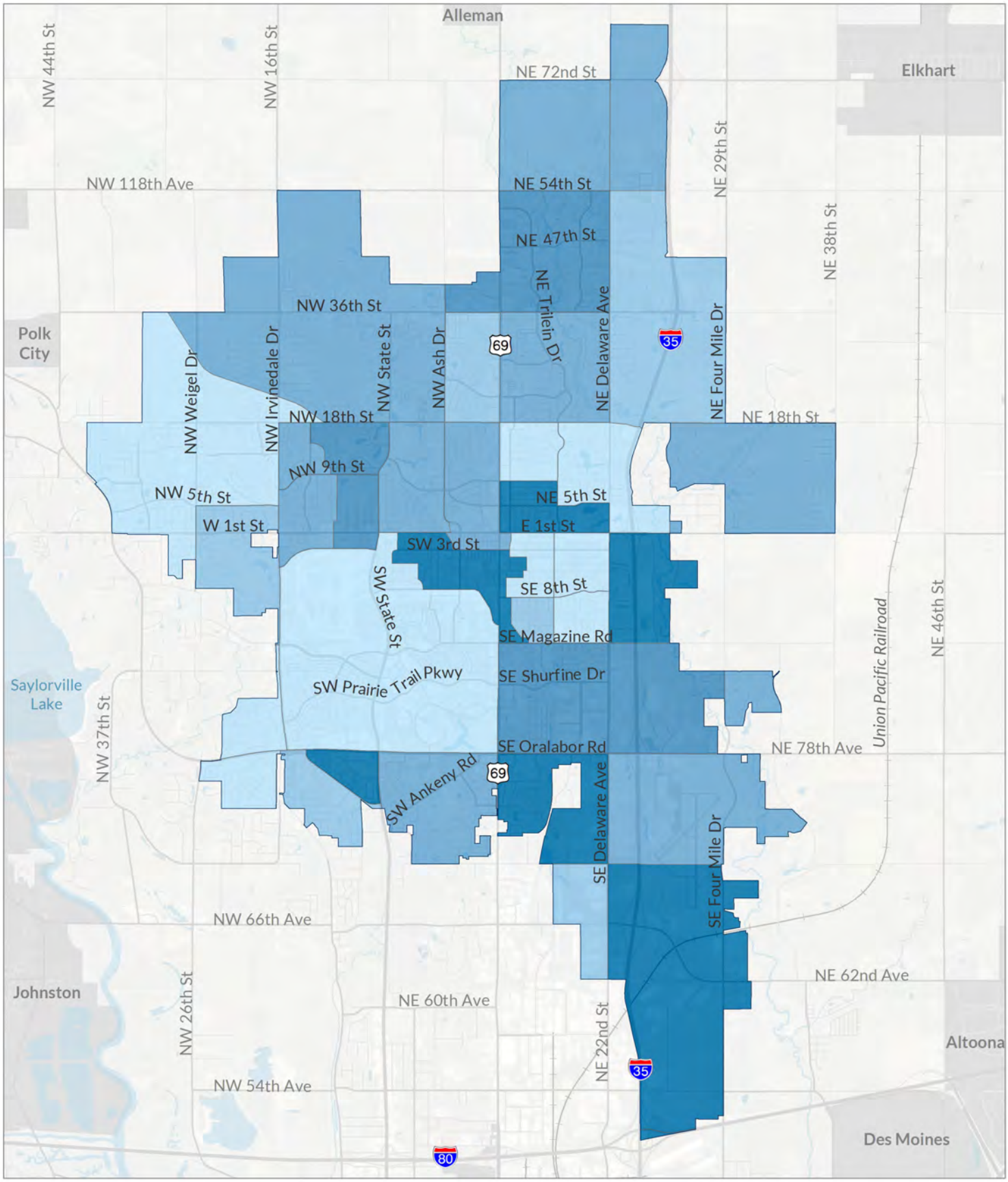


Figure 8: Single-Parent Households, City of Ankeny

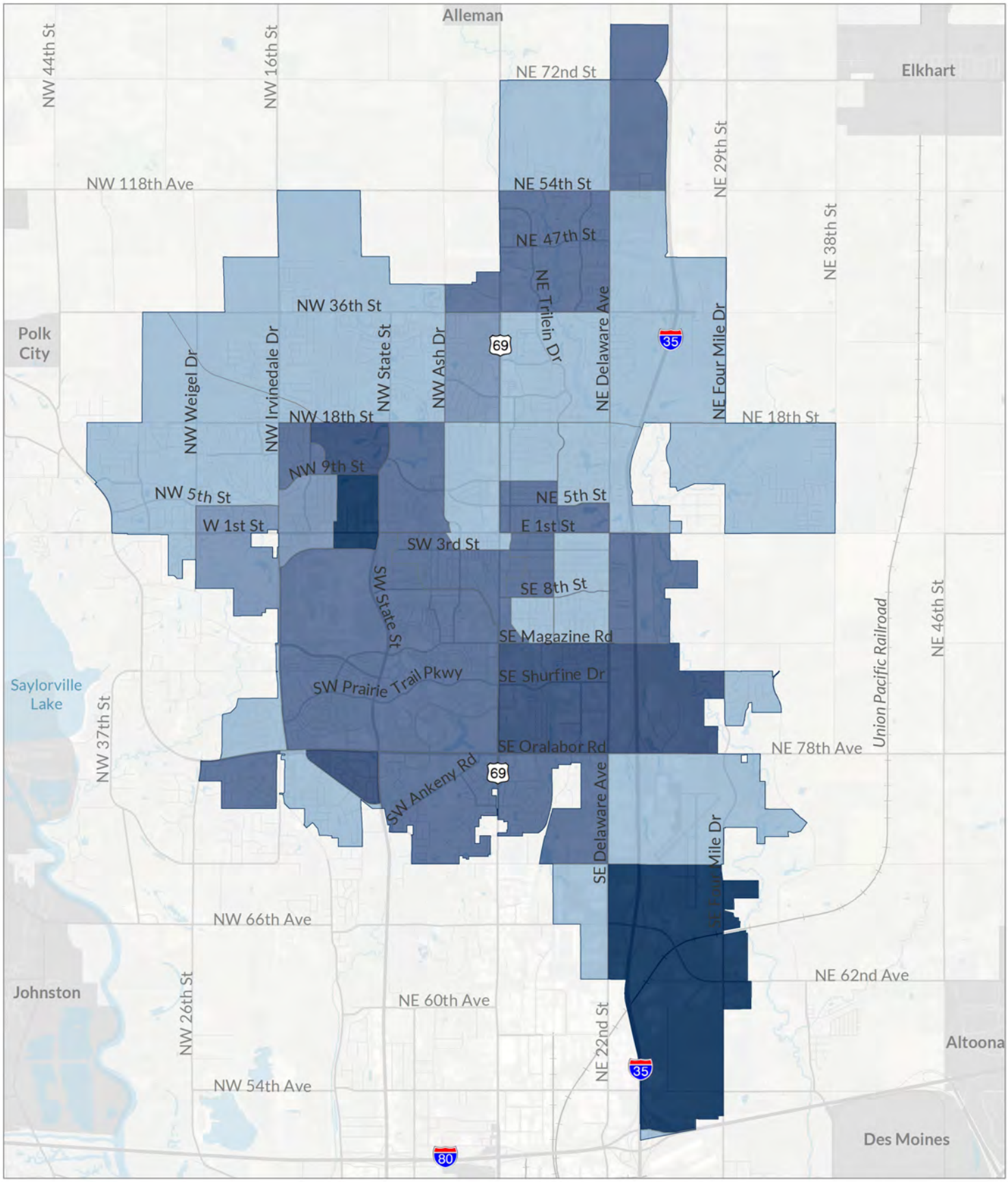


Figure 9: People with Low Income, City of Ankeny

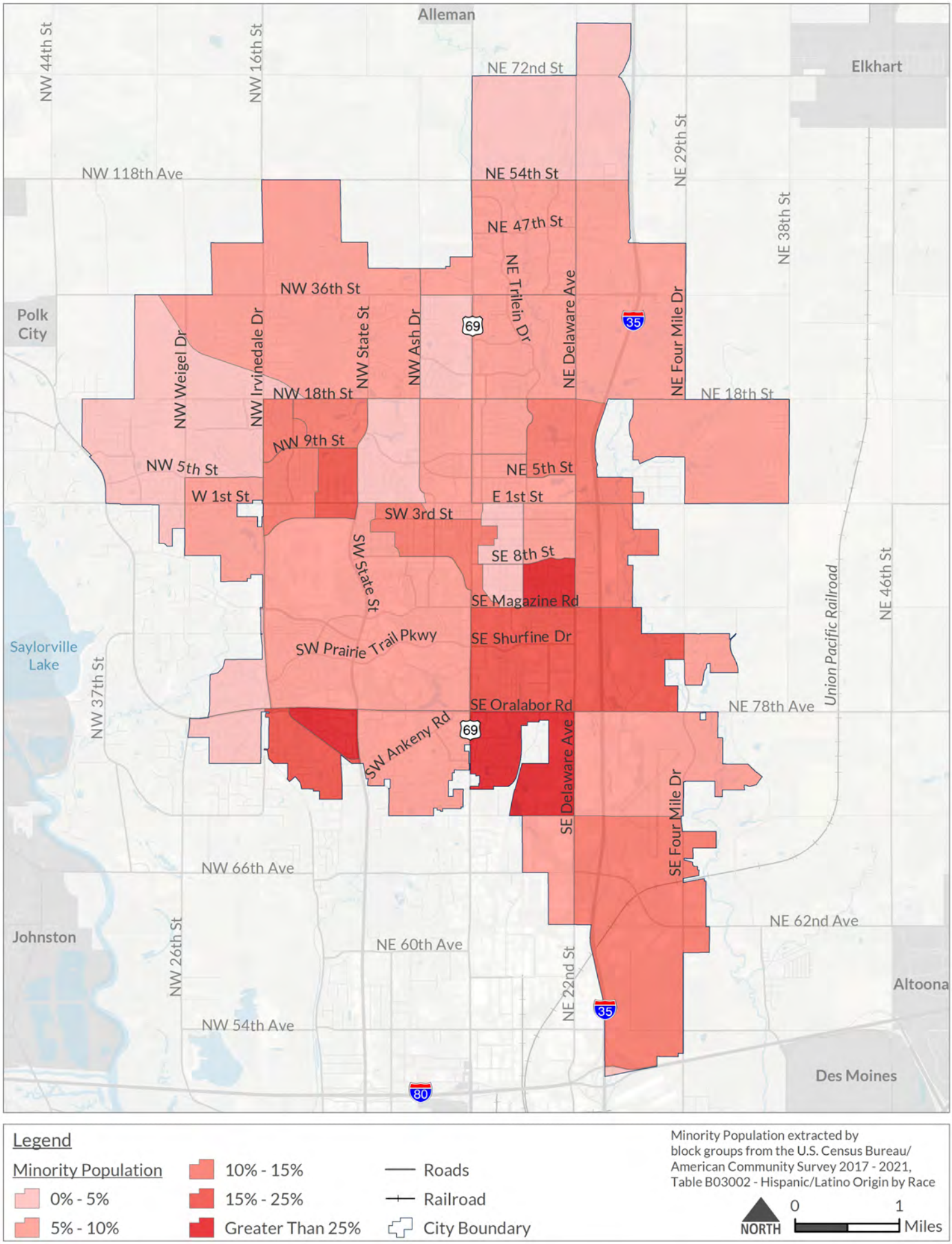


Figure 10: Minority Populations, City of Ankeny

Commuting Pattern

Each day, nearly 24,000 people travel to work in Ankeny from outside the City, while over 25,000 residents travel to work outside of Ankeny (as shown in *Figure 11*). Roughly 7,000 residents both live and work within Ankeny. That is, there is a comparable amount of inflow and outflow and approximately 22 percent of employed residents also work in the City.

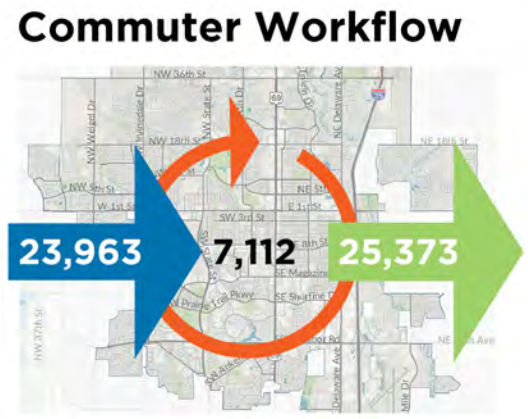


Figure 11: Commuter Workflow, City of Ankeny

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2020-2021).

The mean travel time to work for Ankeny residents is 21.3 minutes (US Census Data 2020, Table: PST045219), which is 2.2 percent higher than the average travel time for the City of Des Moines. This is also 5.5 percent less than the national average commute time of 26.8 minutes. The values in *Figure 12* reflect the average commute times for 2021 across the City of Ankeny, the City of Des Moines, and the broader DMAMPO. Seventy-four percent (74%) of Ankeny residents reached their destination in less than 25 minutes, closely mirroring the Des Moines metropolitan area, at 71 percent of residents.

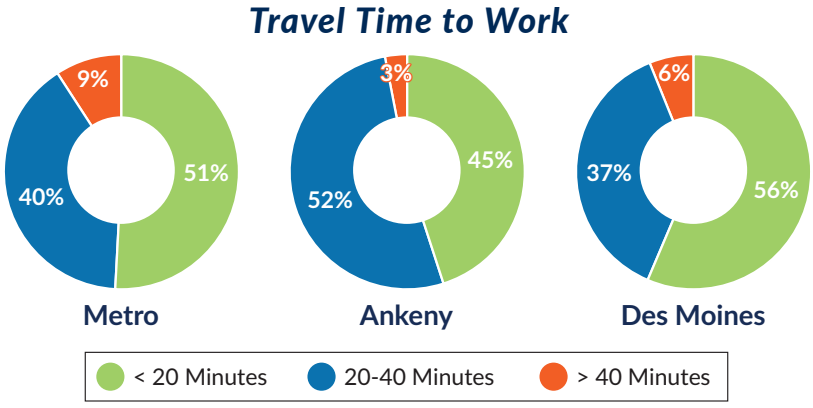


Figure 12: Travel time to work, City of Ankeny

Source: American Community Survey 2021 1-year Estimate Table BO8303

The three factors that strongly influence travel time to work are travel distance between home and work, travel mode used, and the level of congestion experienced during a trip. In 2019, approximately 50 percent of Ankeny residents traveled to jobs located less than 10 miles from their homes. Since 2010, this proportion has increased by 3 percent, while the percentage of workers living between 10 and 24 miles from work has increased by 0.5 percent; to 24 percent in 2019. While the average commute distance has increased for people in the United States as a whole, Ankeny's average travel distance has decreased since 2010. The percentage of commuters traveling over 50 miles and those traveling 25 to 50 miles have both increased; by 2.5 percent and 1 percent, respectively. *Figure 13* shows the distribution of miles traveled by Ankeny residents from their homes to work.

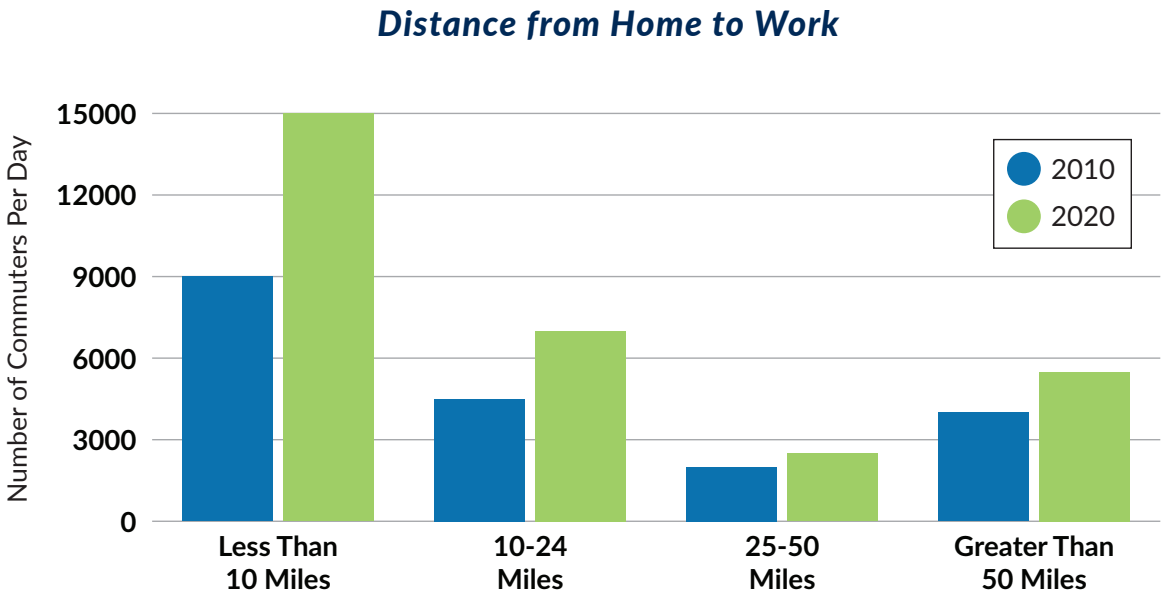


Figure 13: Distance from home to work for Ankeny Residents, City of Ankeny

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2021).

Most Ankeny residents traveling between 0 and 10 miles to their place of employment travel in a southwestern direction, toward the center of the Des Moines Metropolitan Area. Those traveling over 50 miles, however, tended to travel in an easterly direction. *Figure 14* shows the distance and direction of commute travel.

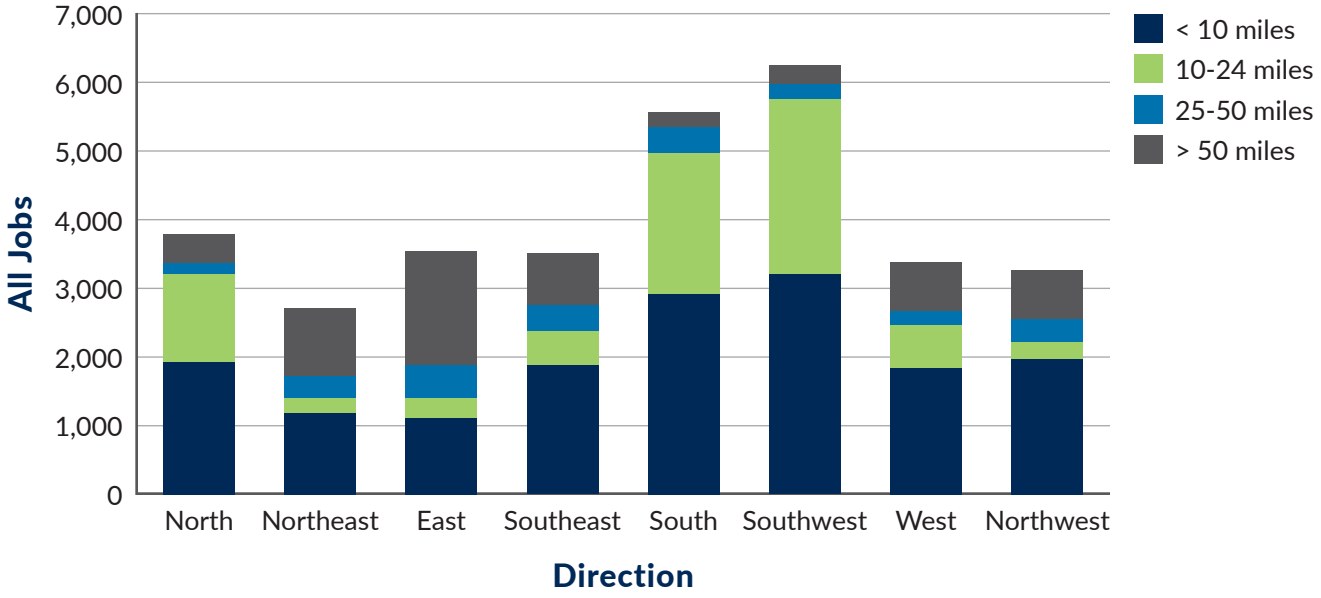


Figure 14: Job counts by distance/direction in 2021 – All Workers, City of Ankeny

Source: US Census Longitudinal Employer-Household Dynamics (LEHD) Employment for Ankeny, IA, 2019

Mode Split

The American Community Survey (ACS) asks respondents to identify their primary means of transportation to work. Driving alone, referred to as Single Occupant Vehicles (SOV), is by far the most common mode of transportation in Ankeny and the Des Moines Metro Area. Over 80 percent of Ankeny residents drove alone, based on estimates from 2016 to 2021. For simple comparison purposes, *Figure 15* displays the distribution of modes of transportation to work for residents in Ankeny, the Des Moines Metro Area, and the United States. Compared to the national averages, Ankeny had a lower usage rate in every mode of transportation except single occupancy vehicles.

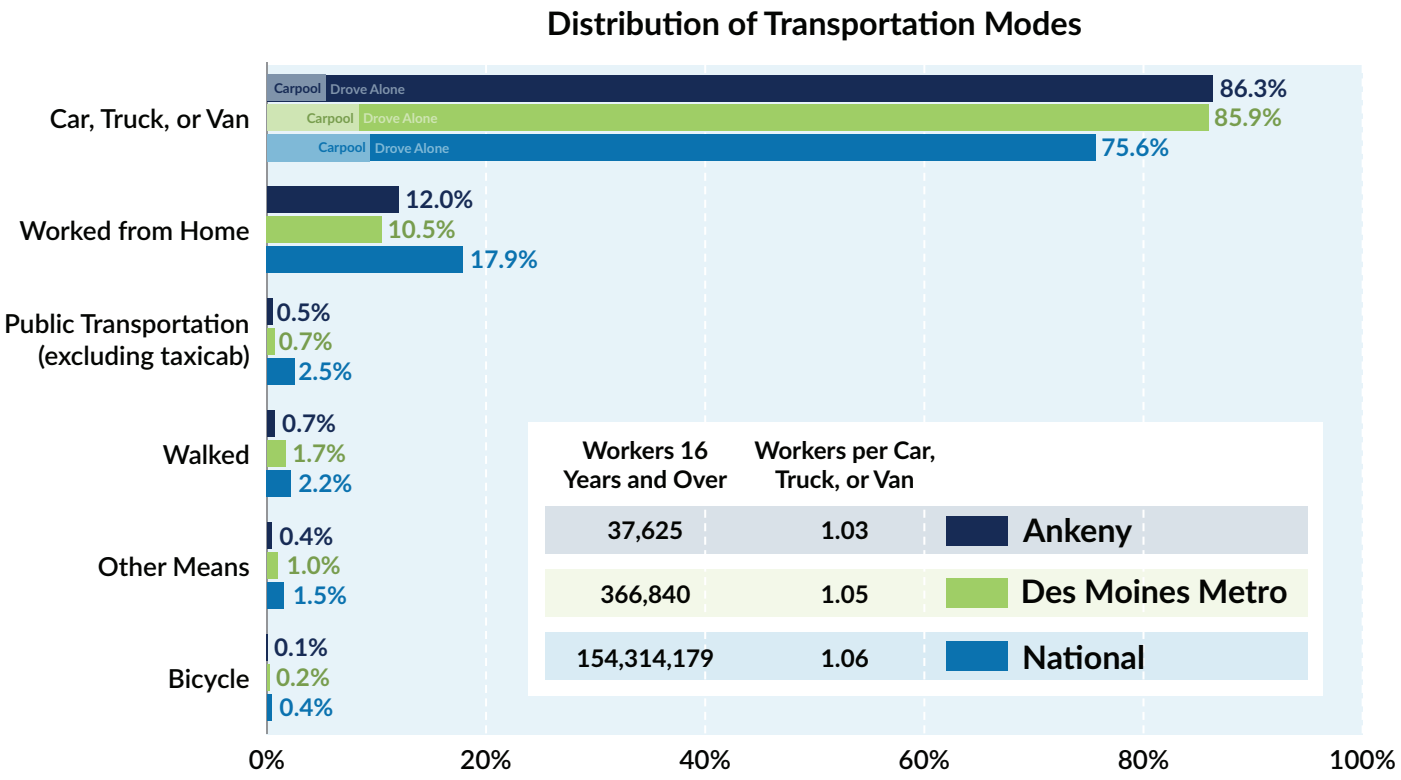


Figure 15: Distribution of transportation modes, City of Ankeny

Source: 2021 ACS 5-year estimates, Table S0801

As working from home and hybrid working options have increased following the COVID-19 pandemic, it is likely the percentage of people telecommuting will either increase or stay the same. These patterns will likely influence long-term commuting patterns, traffic congestion and quality of life.

Housing and Transportation Affordability

The Department of Housing and Urban Development considers housing to be affordable when consuming less than 30 percent of a household's income. The Housing and Transportation (H+T) index expands this traditional measure to include transportation costs, usually a household's second largest expense. The H+T index offers an expanded view of affordability, one that combines housing and transportation costs and sets the benchmark at no more than 45 percent of household income. By considering the combined costs of housing and transportation, the H+T index provides a more complete understanding of affordability and shows that location-efficient places can be more livable and affordable.

The average household's housing expense in Ankeny is considered affordable, accounting for approximately 25 percent of the total average income. Transportation expenses, on the other hand, account for approximately 21 percent of the total average income, exceeding the value that could be considered affordable (15%) by 6 percent, according to the US Bureau of Transportation Statistics (2022). Combined, the cost of housing and transportation in Ankeny is 46 percent of the average household income *(Figure 16)*, which is slightly higher than the Center for Neighborhood Technology (CNT) benchmark of 45 percent.

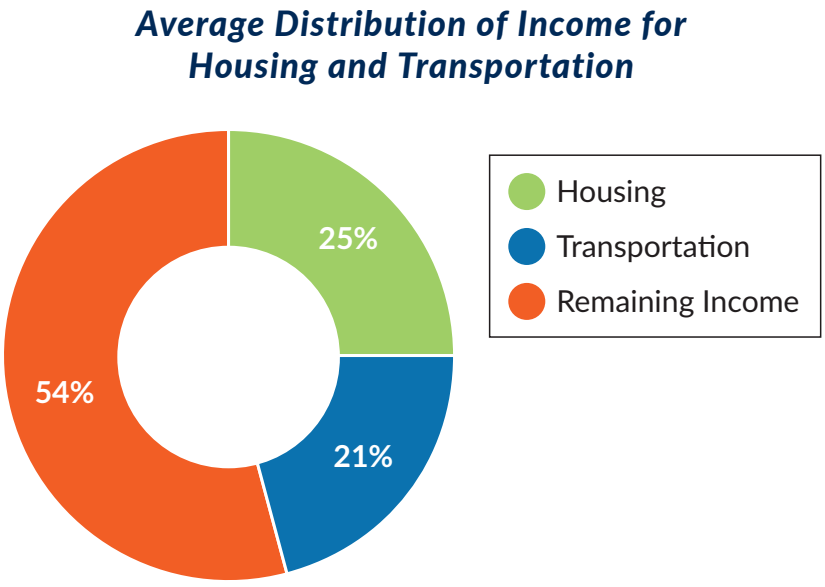


Figure 16: Average Distribution of Income for Housing and Transportation, City of Ankeny

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2020-2021).

Owning a personal vehicle is the single biggest transportation cost factor for households, followed by insurance and repairs. Lower-income households generally spend a larger portion of their income on transportation because of the high cost of personal vehicle ownership and associated maintenance costs.

Individuals who buy homes farther from jobs also pay more in the form of higher transportation costs. These same households are most sensitive to fuel prices and maintenance costs because they drive longer distances daily.

The community can also experience negative impacts overall. Longer travel distances and more single-operator vehicles (SOVs) consequently increase congestion on City streets, time spent commuting, and greenhouse gas (GHG) emissions.

Vehicle Availability

Access to a personal vehicle provides many residents with a common mode of transportation and increases the range of access to work opportunities, commerce, health care, education, and recreation. Although the most common form of commuting in Ankeny is by SOV, an estimated 485 households (1.9 percent) in 2021 (ACS 5-year estimates, S2504) had no access to a personal vehicle *(See Figure 17).* Reasons for this include being physically unable to drive, unable to afford a vehicle, or a personal choice to forego vehicle ownership. In 2016, this measure reflected 2.1 percent of the City population, demonstrating that the number and proportion of individuals with access to a personal vehicle has increased in recent years.

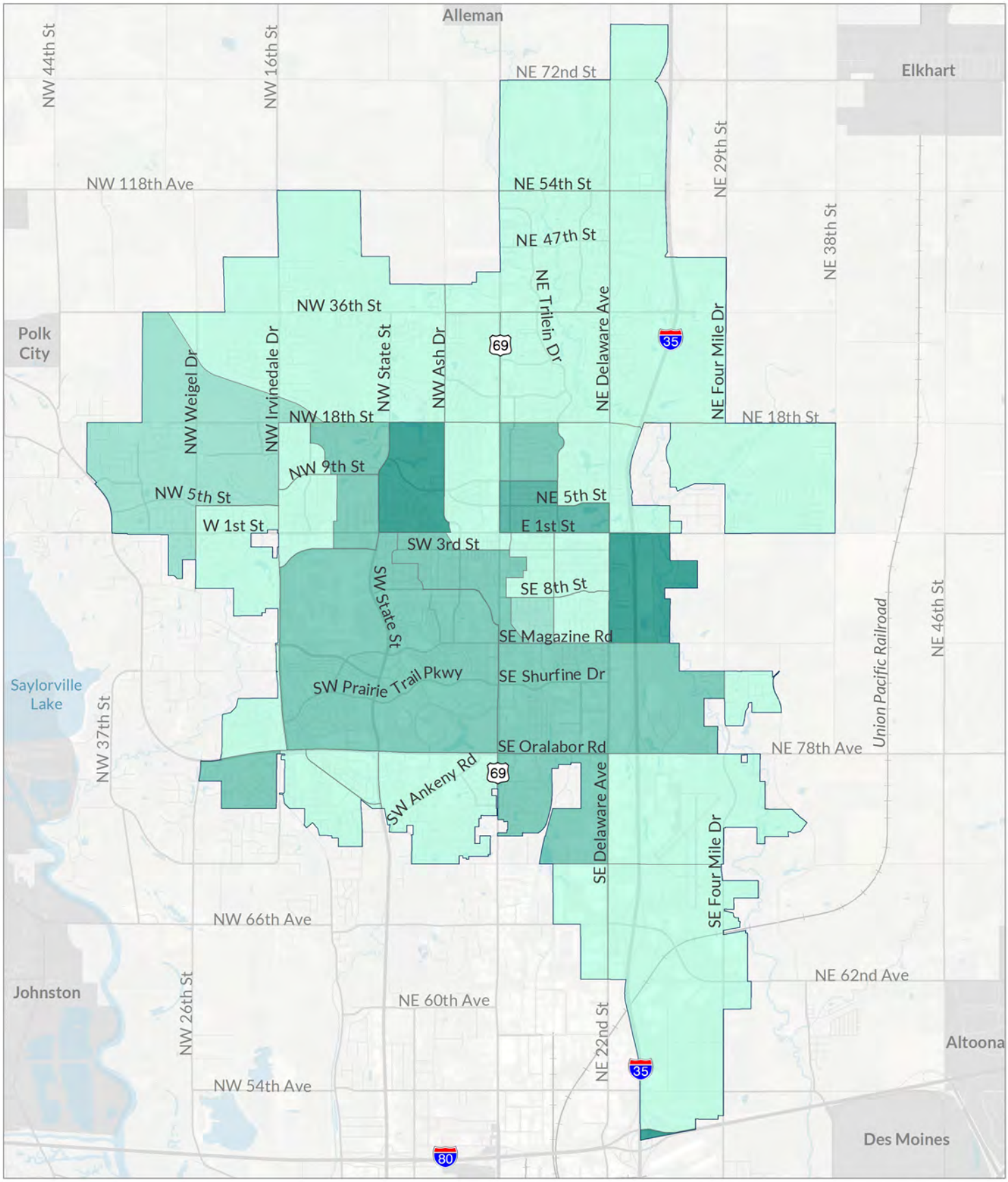


Figure 17: People Without Access to a Vehicle, City of Ankeny

Safety and Traffic Calming

Vulnerable street users, including children, people with a disability, older populations, and bicyclists, present additional safety considerations for the transportation network. Even though the overall crash rate by vehicle miles traveled has declined for many years, the proportion of crashes and fatalities involving pedestrians and bicyclists has steadily increased nationwide since 1996 (National Highway Traffic Safety Administration Fatality Analysis Reporting System 2021). In the last 25 years, pedestrian and bicyclist fatalities have increased nearly 15% nationally.

Perceived and demonstrated safety are key elements of successful bicycle and pedestrian networks. People may only choose to ride or walk if they feel safe and comfortable on the bikeway and pedestrian networks. The National Highway Traffic Safety Administration (NHTSA) has documented that the overall proportion of transportation fatalities associated with motorcyclists, pedestrians, bicyclists, and other nonoccupants has grown nationwide by more than 10 percent since 2000 compared to vehicle travelers. *Figure 18* below illustrates this trend.

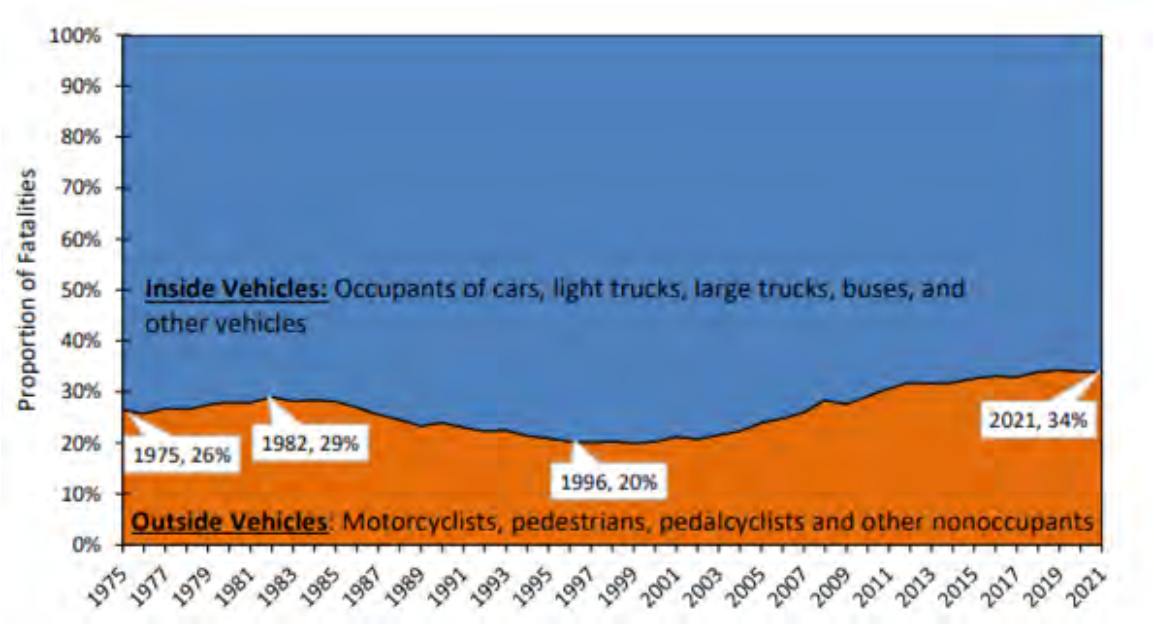


Figure 18: Proportion of vehicle crash fatalities for people inside a vehicle and outside a vehicle, United States

Source: National Highway Traffic Safety Administration Fatality Analysis Reporting System (FARS), 2021 Final File

Total crash data was also reviewed across the City of Ankeny based on the most recent 5 years of available database information (2018 to 2022), and the information was mapped and categorized. From this evaluation, crash summaries were provided to rank the top 20 intersections based on crash severity (fatal and injury), crash severity rate, and equivalent property damage only (EPDO). Using the ratios from the Iowa Department of Transportation (IDOT) Safety Analysis Guide, the EPDO factor for a fatal or severe Injury crash was 257, meaning it would take 257 Property Damage Only (PDO) crashes to equal the societal cost of a single fatal or severe injury crash. As a result, several intersections made the list of EPDO locations merely because of a single fatal or severe injury crash. Furthermore, most of the locations on the EPDO top 20 list were not arterial to arterial intersections, but rather arterial to local or collector. An illustration of intersection crashes by severity and an associated heat map is shown in *Figures 19* and *20* on the following pages. To further illustrate intersection safety characteristics, *Figure 21* displays the top 20 intersections ranked by personal injury (PI) crashes, *Figure 22* shows the top 20 intersections ranked by PI crash rates, and *Figure 23* indicates the top 20 intersections ranked by EPDO.

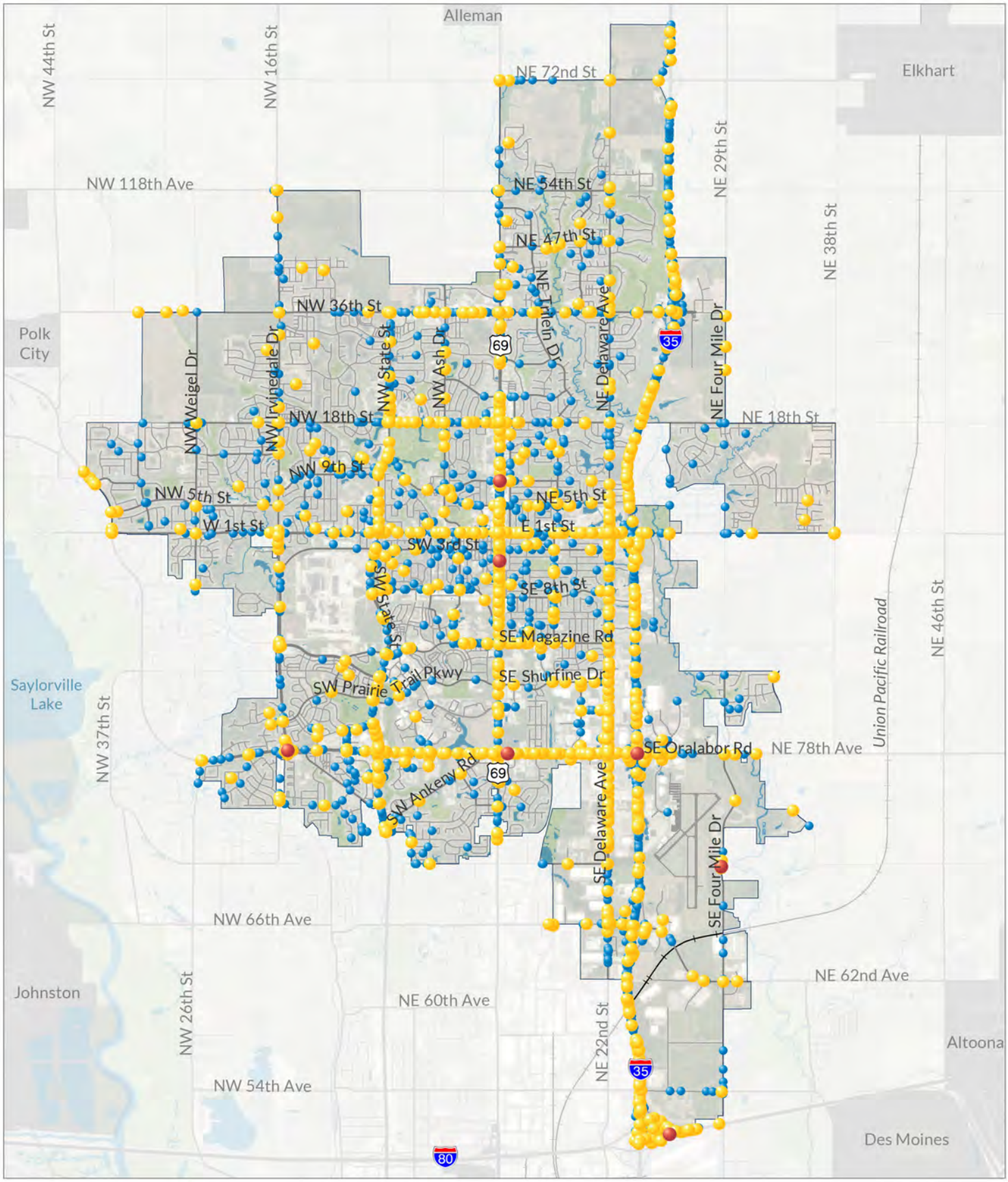


Figure 19: Crash location map, City of Ankeny (crash data 2018-2022)

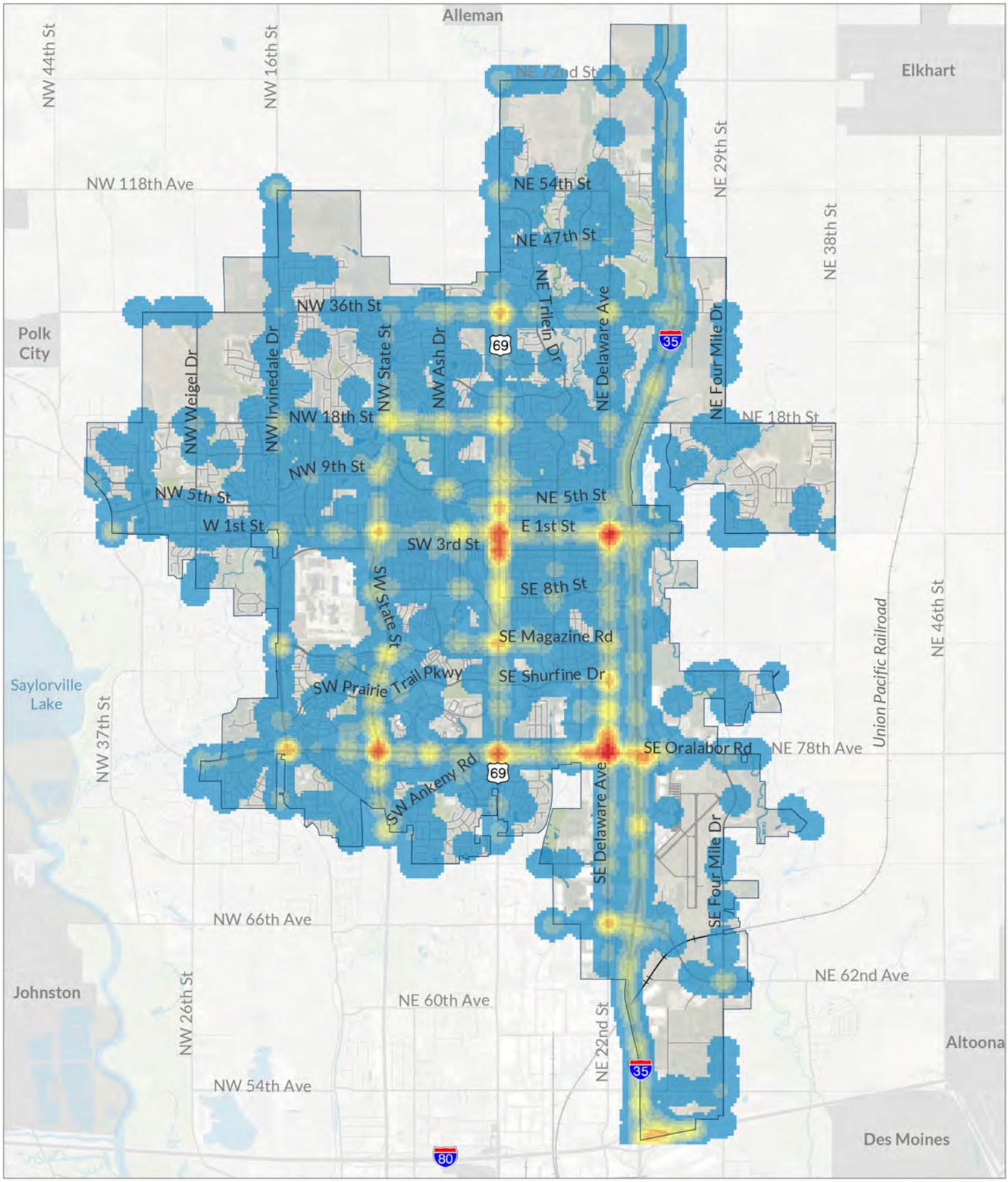


Figure 20: Crash location heat map, City of Ankeny (crash data 2018-2022)

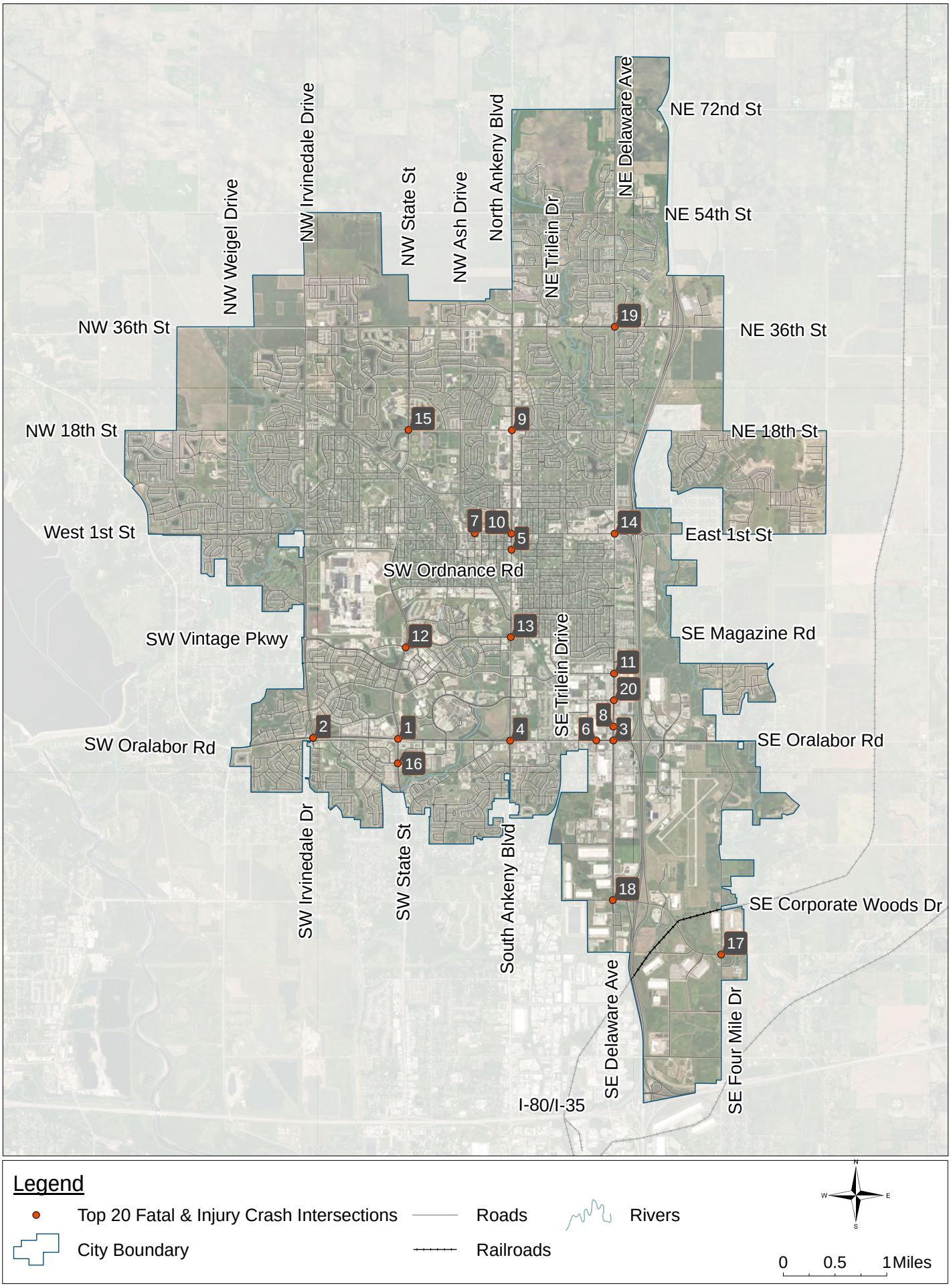


Figure 21: Top 20 intersections ranked by personal injury (PI) crashes, City of Ankeny

Table 3: Top 20 intersections ranked by personal injury (PI) crashes, City of Ankeny

Rank	Road 1	Road 2	Crashes (2018-2022)					
			Fatal	Serious Injury	Minor Injury	Possible/ Unknown Injury	PDO	Total PI
1*	IA 415/ SW State St	IA 415/ IA 160/ SW Oralabor Rd	0	0	6	17	50	23
2*	IA 415/SW Oralabor Rd	SW Irvinedale Dr	1	0	10	11	27	22
3	IA 160/SE Oralabor Rd	SE Delaware Ave	0	0	4	17	85	21
4	IA 160/Oralabor Rd	US 69/Ankeny Blvd	0	1	4	15	54	20
5	US 69/Ankeny Blvd	SW 3rd St & SE 3rd St	0	0	7	10	32	17
6	IA 160/SE Oralabor Rd	SE PDI Pl	0	0	6	11	28	17
7*	W 1st St	NW Ash Dr & SW Cherry St	0	2	6	8	19	16
8	SE Delaware Ave	SE National Dr	0	2	5	8	35	15
9*	US 69/Ankeny Blvd	NE 18th St & NW 18th St	0	0	7	7	20	14
10*	US 69/Ankeny Blvd	W 1st St & E 1st St	0	0	4	9	44	13
11	SE Delaware Ave	SE Shurfine Dr	0	1	4	7	25	12
12	SW State St	SW Magazine Rd	0	1	2	8	16	11
13*	US 69/Ankeny Blvd	SE Magazine Rd	0	1	4	6	32	11
14*	E 1st St	SE Delaware Ave & NE Delaware Ave	0	0	1	10	43	11
15	NW State St	NW 18th St	0	0	4	6	13	10
16	IA 415/SW State St	SW White Birch Dr & SW Tradition Dr	0	0	5	5	11	10
17	SE Corporate Woods Dr	SE Four Mile Dr	0	0	1	8	8	9
18*	SE Corporate Woods Dr	SE Delaware Ave	0	0	3	6	31	9
19	NE 36th St	NE Delaware Ave	0	0	4	4	15	8
20	SE Delaware Ave	SE Lorenz Dr	0	1	4	3	21	8

**Intersections with Recent Countermeasures*
PDO = Property Damage Only

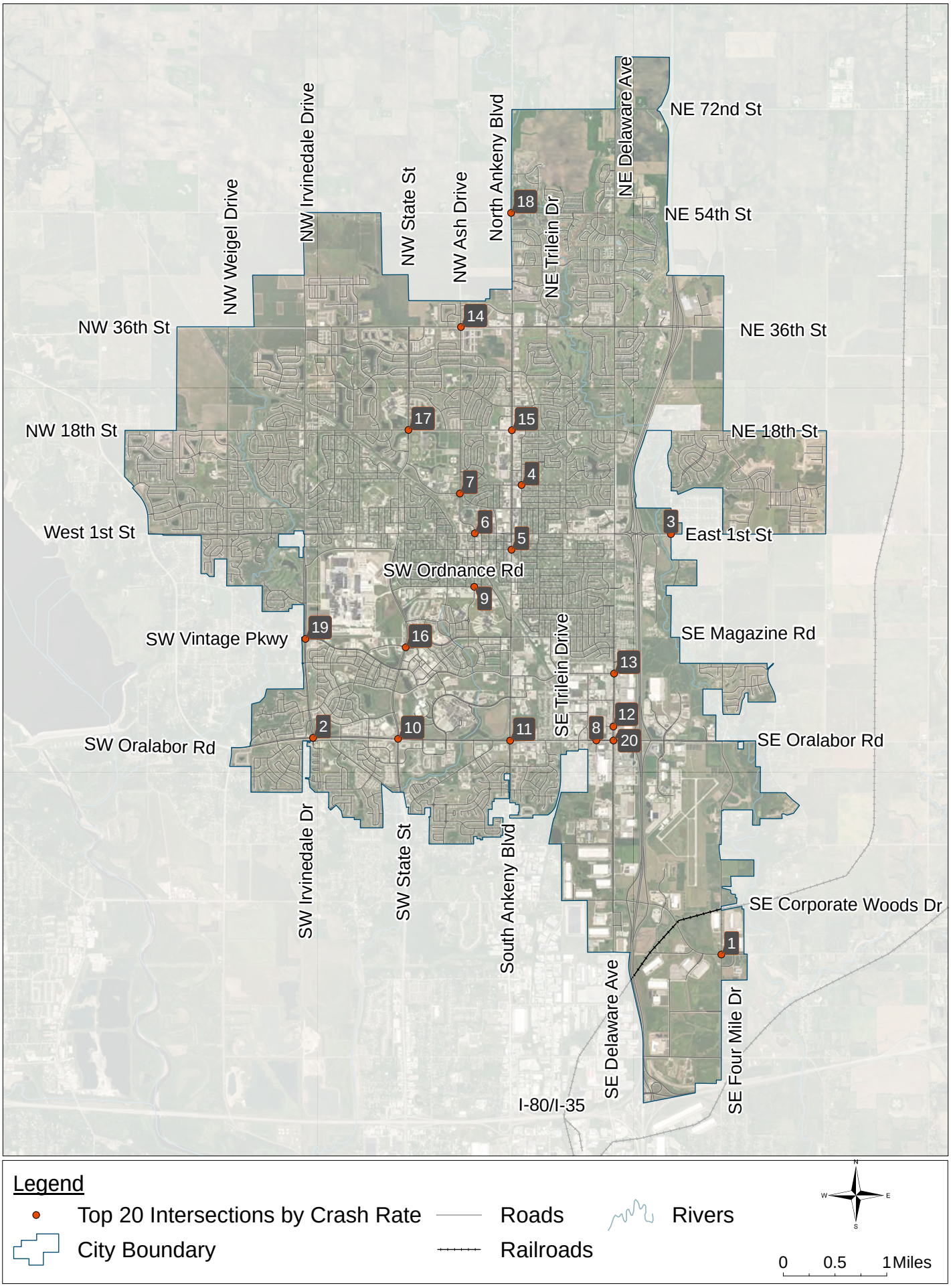


Figure 22: Top 20 intersections ranked by personal injury (PI) crash rates, City of Ankeny

Table 4: Top 20 intersections ranked by personal injury (PI) crash rates, City of Ankeny

Rank	Road 1	Road 2	Crashes (2018-2022)							
			Fatal	Serious Injury	Minor Injury	Possible/ Unknown Injury	PDO	PI	DEV	PI/MEV
1	SE Corporate Woods Dr	SE Four Mile Dr	0	0	1	8	8	9	6,537	0.75
2*	IA 415/SW Oralabor Rd	SW Irvinedale Dr	1	0	10	11	27	22	25,628	0.47
3*	E 1st St	NE Frisk Dr & SE Frisk Dr	0	0	2	4	1	6	8,667	0.38
4	NE 9th St	NE Grant St	0	0	4	2	4	6	8,976	0.37
5	US 69/Ankeny Blvd	SW 3rd St & SE 3rd St	0	0	7	10	32	17	26,642	0.35
6*	W 1st St	NW Ash Dr & SW Cherry St	0	2	6	8	19	16	26,736	0.33
7	NW Prairie Ridge Dr	NW 9th St & NW Ash Dr	0	0	1	5	8	6	10,430	0.32
8	IA 160/SE Oralabor Dr	SE PDI Pl	0	0	6	11	28	17	30,049	0.31
9*	SW Ordnance Rd	SW Cherry St	0	0	2	3	8	5	9,423	0.29
10*	IA 415/SW State St	IA 160/SW Oralabor Rd	0	0	6	17	50	23	45,902	0.27
11	IA 160/SW Oralabor Rd	US 69/Ankeny Blvd	0	1	4	15	54	4	41,740	0.26
12	SE Delaware Ave	SE National Dr	0	2	5	8	35	15	32,039	0.26
13	SE Delaware Ave	SE Shurfine Dr	0	1	4	7	25	12	26,712	0.25
14*	NW 36th St	NW Ash Dr	0	0	3	3	8	6	13,464	0.24
15*	US 69/Ankeny Blvd	NE 18th St & NW 18th St	0	0	7	7	20	14	32,073	0.24
16	SW State St	SW Magazine Rd	0	1	2	8	16	11	25,509	0.24
17	NW State St	NW 18th St	0	0	4	6	13	10	23,466	0.23
18*	US 69/Ankeny Blvd	NE 54th St	0	1	3	1	9	5	12,227	0.22
19	SW Irvinedale Dr	SW Vintage Pkwy	0	1	0	6	22	7	17,576	0.22
20	IA 160/SE Oralabor Rd	SE Delaware Ave	0	0	4	17	85	21	52,971	0.22

**Intersections with Recent Countermeasures*
DEV = Daily Entering Vehicles
PI/MEV = Personal Injuries per Million Entering Vehicles

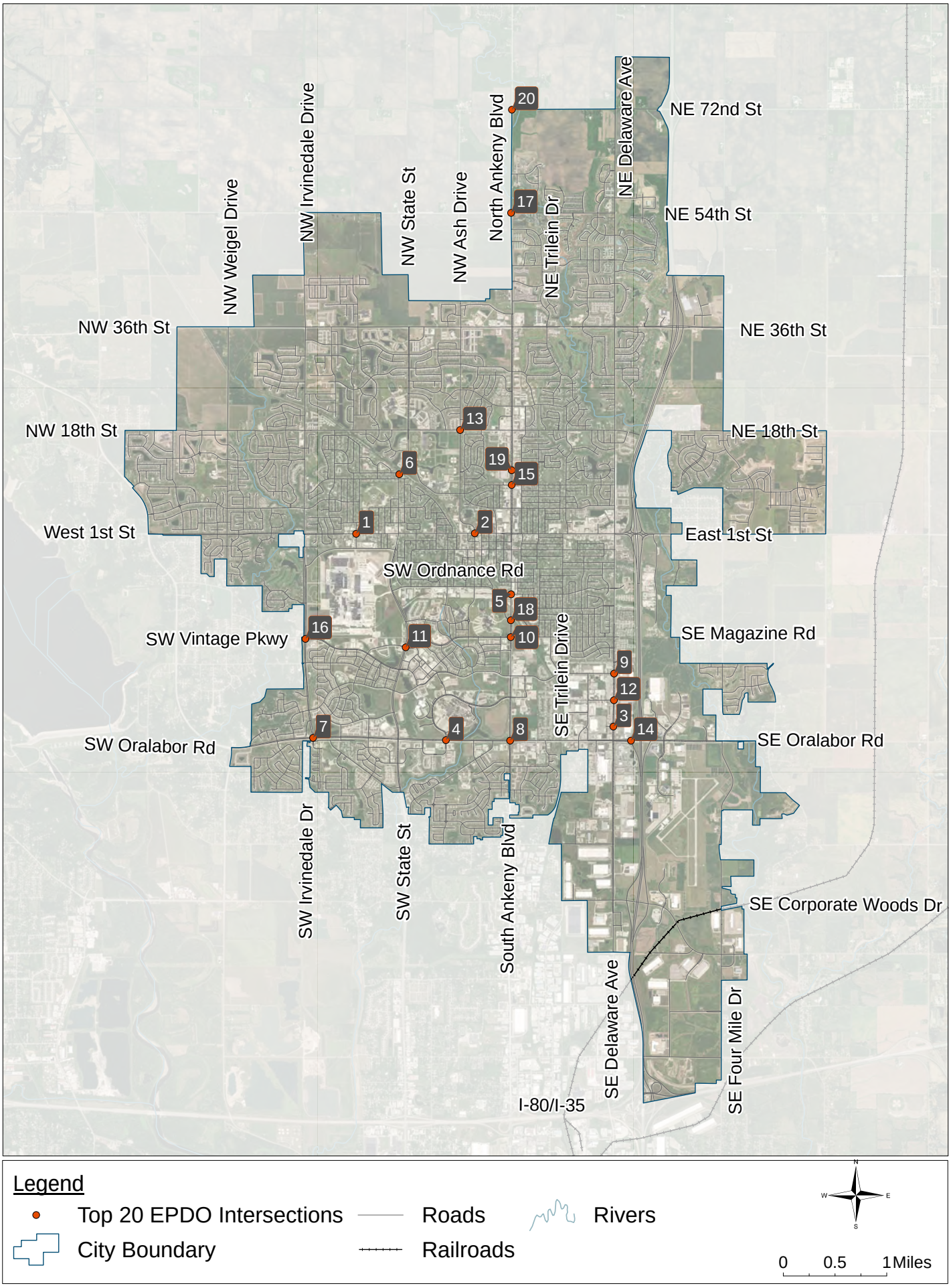


Figure 23: Top 20 intersections ranked by equivalent property damage only EPDO, City of Ankeny

Table 5: Top 20 intersections ranked by equivalent property damage only EPDO, City of Ankeny

Rank	Road 1	Road 2	Crashes (2018-2022)						
			Fatal	Serious Injury	Minor Injury	Possible/ Unknown Injury	PDO	Total	EPDO
1	W 1st St	SW Linden St & NW Linden St	0	3	1	3	2	9	815
2*	W 1st St	NW Ash Dr & SW Cherry St	0	2	6	8	19	35	701
3	SE Delaware Ave	SE National Dr	0	2	5	8	35	50	700
4*	IA 160/Oralabor Dr	SW Highpointe Dr/DMACC Blvd	0	2	2	4	19	27	600
5	US 69/Ankeny Blvd	SE 8th St	0	2	2	1	6	11	563
6	NW State St	NW 10th St	0	2	1	2	3	8	551
7*	IA 415/Oralabor Rd	SW Irvinedale Dr	1	0	10	11	27	49	545
8	IA 160/Oralabor Rd	US 69/Ankeny Blvd	0	1	4	15	54	74	501
9	SE Delaware Ave	SE Shurfine Dr	0	1	4	7	25	37	408
10*	US 69/Ankeny Blvd	SE Magazine Rd	0	1	4	6	32	43	406
11	SW State St	SW Magazine Rd	0	1	2	8	16	27	372
12	SE Delaware Ave	SE Lorenz Dr	0	1	4	3	21	29	371
13*	NW 18th St	NW Ash Dr	0	1	3	2	12	18	337
14	IA 160/Oralabor Rd	I35 W Ramp	0	1	1	5	22	29	337
15	US 69/Ankeny Blvd	NW 9th St & NE 9th St	1	0	1	6	6	14	329
16	SW Irvinedale Dr	SW Vintage Pkwy	0	1	0	6	22	29	328
17*	US 69/Ankeny Blvd	NE 54th St	0	1	3	1	9	14	326
18	S Ankeny Blvd	SW Ordnance Rd	0	1	3	0	5	9	314
19	US 69/Ankeny Blvd	NE 11th St	0	1	2	2	4	9	312
20	US 69/Ankeny Blvd	NE 72nd St	0	1	2	1	5	9	305

**Intersections with Recent Countermeasures*

Street Network

The following sections describe characteristics of the Ankeny street network and overall multimodal system.

Surface Conditions

The City completed a Pavement Management Study and Master Plan in December 2023, as previously referenced. Upkeep and maintenance of street infrastructure have become an increasingly critical need. The City monitors the pavement condition of the street network through field evaluations by the City's Public Works Department staff and by reviewing pavement condition information received from the Iowa Pavement Management Program on a biennial basis. To conduct a pavement condition survey, a specially equipped van collects high-quality digital images of the pavement surface and measures the number and extent of defects. The van also records the extent of roughness and rutting along each street surface. The information is entered into a pavement management software program designed to consider the type of paving materials and provide pavement condition ratings for streets.

The City's street network consists of almost 200 million square feet of paved surfaces. Effective maintenance of these streets requires ongoing prioritization and management.

National Highway System

The National Highway System (NHS) refers to a network of interconnected roads and highways that are considered vital to the economic well-being, defense, and mobility of the United States. It was established in 1956 with the passage of the National Highway System Designation Act, although its roots go back to the Federal Aid Road Act of 1916.

NHS routes within Ankeny include Interstate 35, US Highway 69 (Ankeny Blvd), and Iowa Highways 160 and 415 (Oralabor Rd and part of SW State Street). Overall, the National Highway System serves as a backbone of the country's transportation infrastructure, ensuring efficient movement of people and goods while contributing to economic development and national security.

Functional Classification

Ankeny's street network is composed of specific classifications with degrees of mobility and access among residential, commercial, retail, and industrial places. From local streets within neighborhoods and the arterial streets used to travel within the City to highways and interstates used to travel longer distances at faster speeds, each street shown on *Figure 24* has important functions to serve. Such functions influence the ability of a driver to move between

locations and what places are accessible along the route. *Figure 25* shows the number of through lanes on the current street network within the model area. *Figure 26* shows the posted speed limits of streets in Ankeny.

For vehicle operators, streets generally provide two important functions: mobility and land access. These functions conflict with each other—the carrying capacity for vehicle traffic decreases as greater access to adjacent land uses is provided. Each street type is specifically designed to operate with certain characteristics based on the adjoining land uses, level of continuity, and proximity and connections to other facilities.

Intersections

The City of Ankeny continues to evaluate the need for traffic management at intersections as growth and development continue. The need for auxiliary turn lanes is also analyzed so that proper intersection geometry can be incorporated. *Figure 27* illustrates the existing traffic controls at primary intersections including traffic signals, roundabouts and all-way stop control.

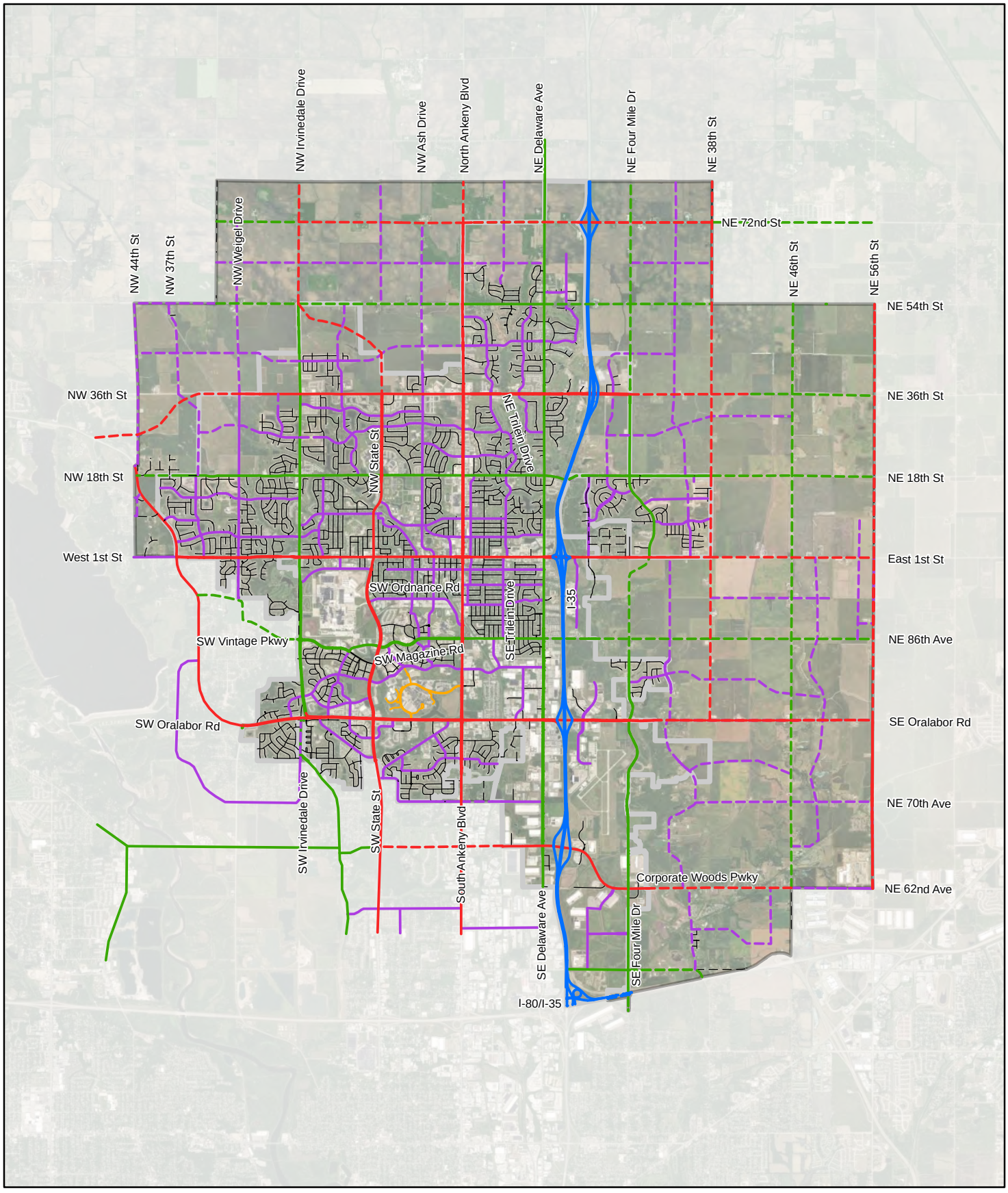


Figure 24: Functional classification, City of Ankeny

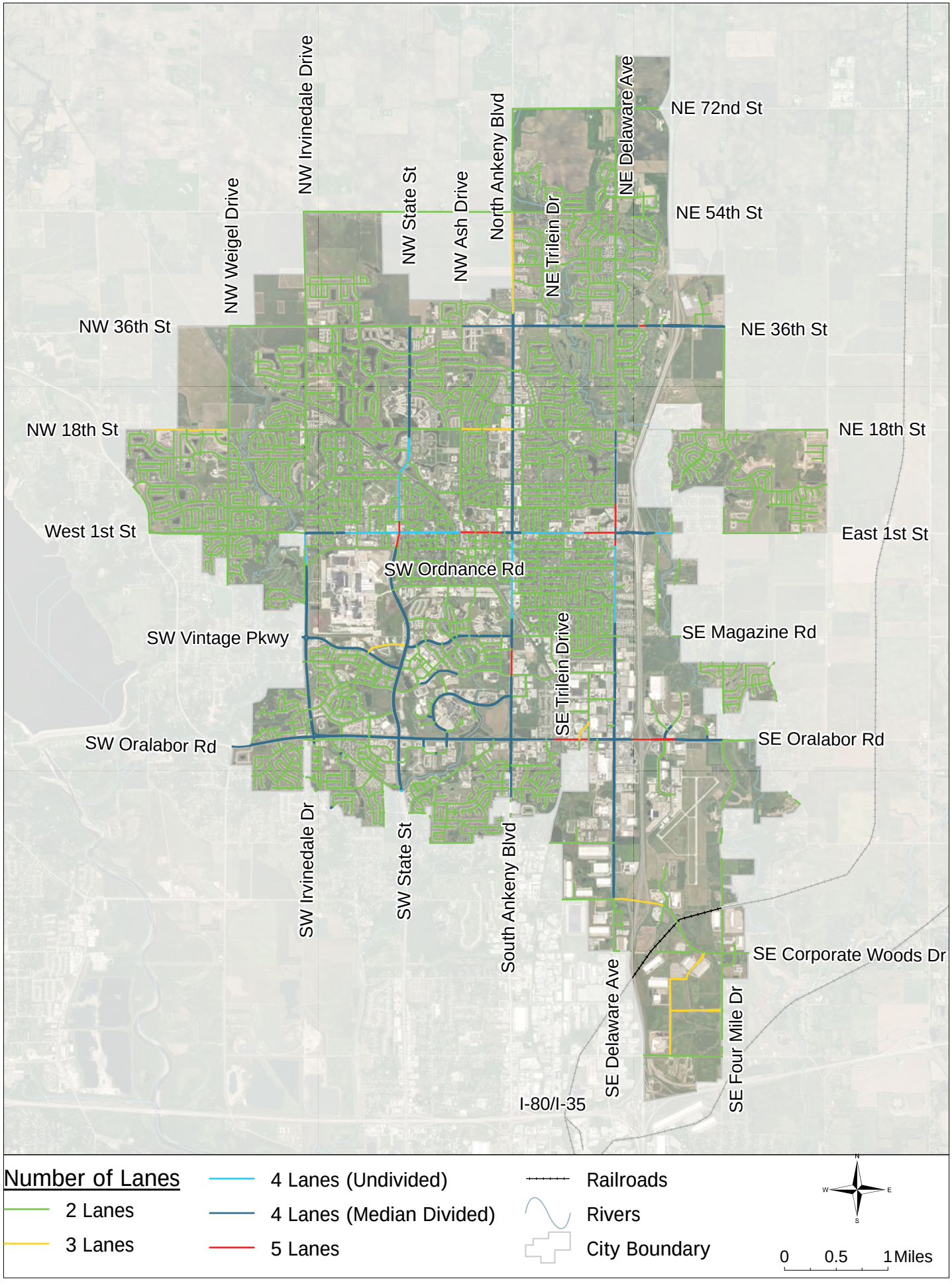


Figure 25: Number of lanes, City of Ankeny

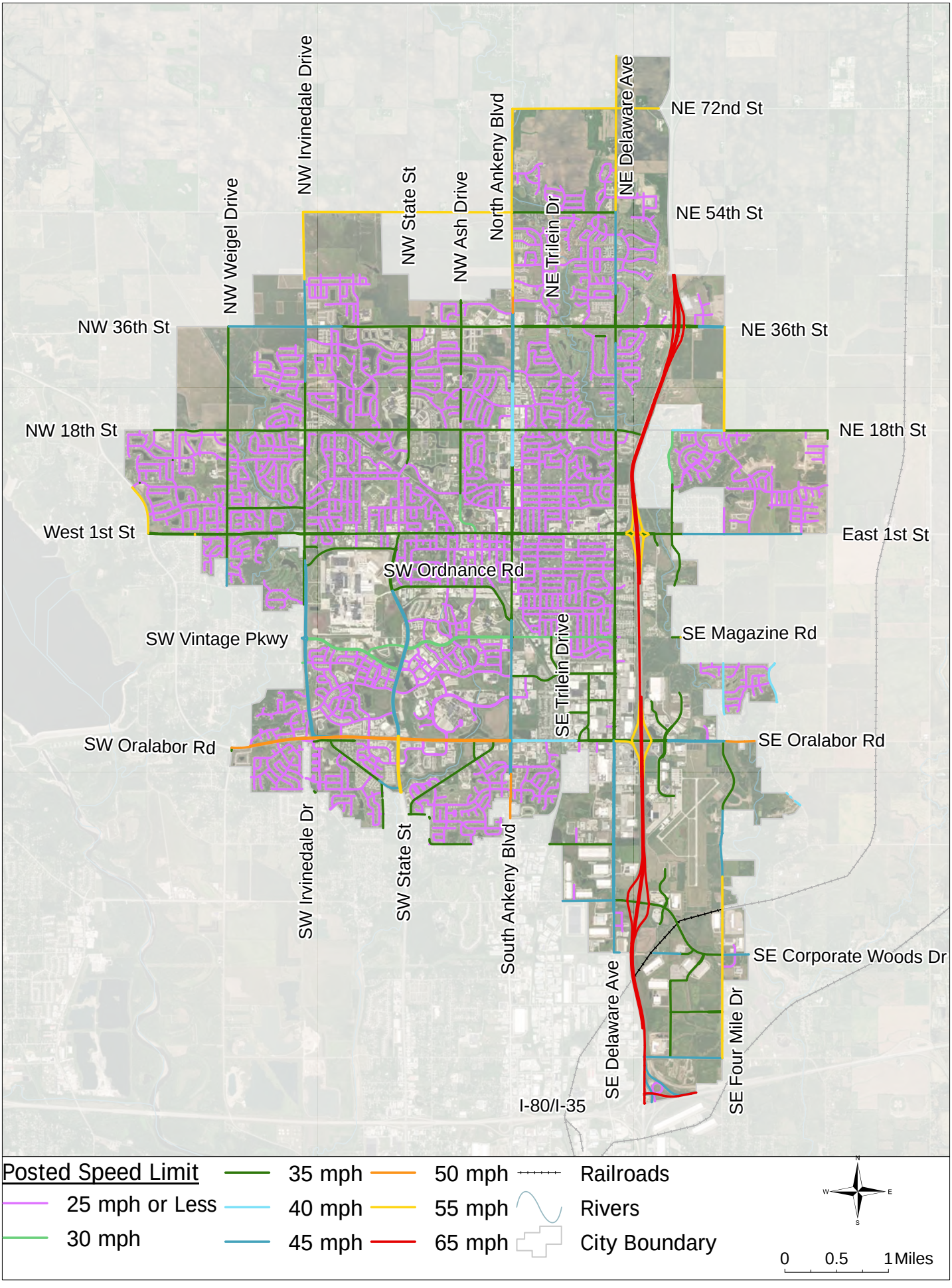


Figure 26: Posted speed limits, City of Ankeny

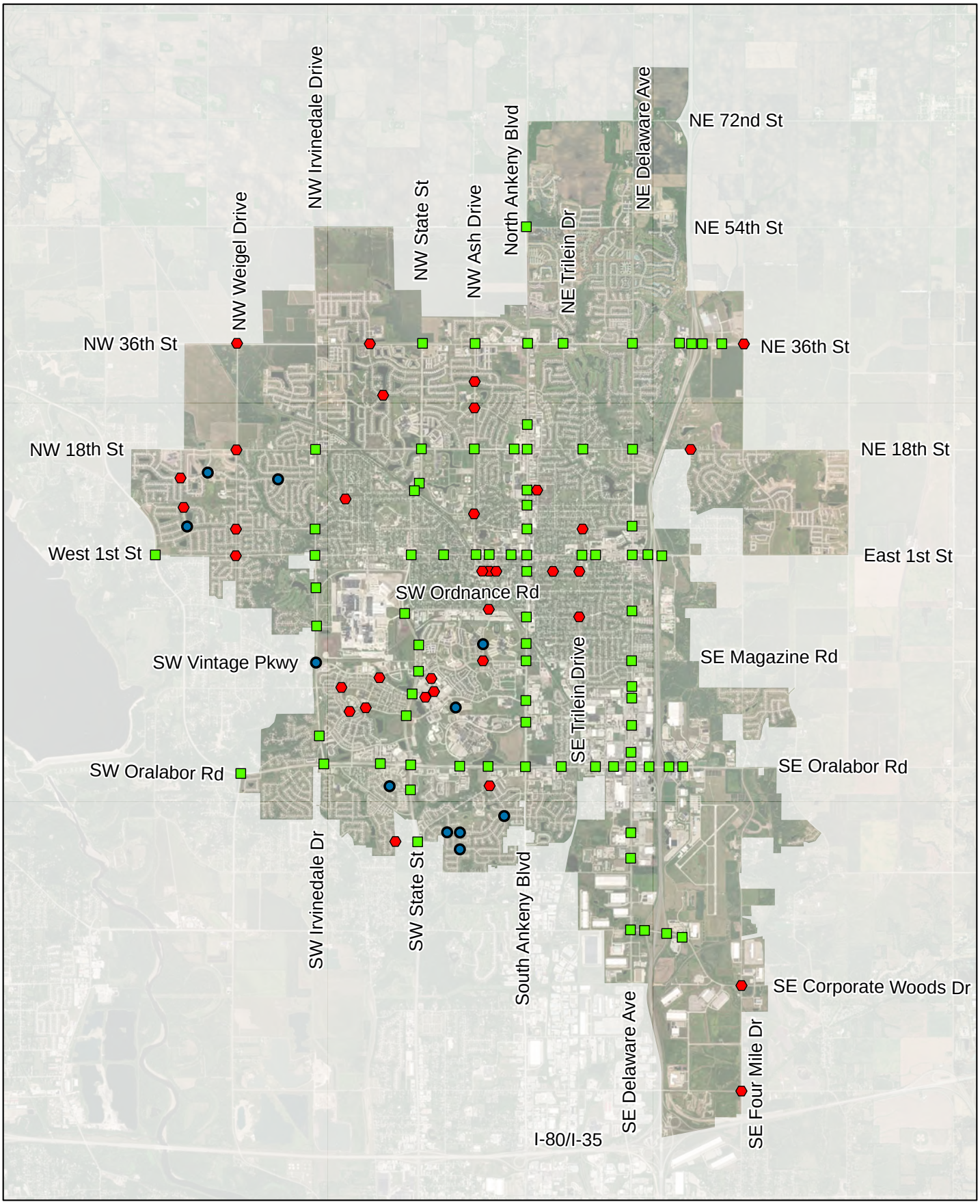


Figure 27: Intersection traffic control, City of Ankeny (2024)

Bikeway and Trails Network

Supporting active modes of transportation such as walking and bicycling is a crucial characteristic of a multimodal transportation system – improved public health and quality of life can be linked to communities that have enabled safe, comfortable, and convenient active transportation. The Ankeny Plan 2040 references the 2019 Parks and Facilities Plan, which developed several goals to guide the creation of parks and trails. Two goals that can be applied directly to trails include "provide recreational facilities to meet the needs of newly developing areas" and "distribute active recreation facilities to meet the needs of newly developing areas." The Ankeny Plan 2040 also notes that one of the City's priorities is to "identify improvements to the existing system of sidewalks and trails to increase opportunities for short commuter and retail trips by walking or biking." These goals are crucial to running a comprehensive bicycle network that can keep up with Ankeny's rapid growth.

Shared Use Trails

The City of Ankeny is home to 12 miles of regional trails, providing connections to work, school and recreation facilities, as well as the Greater Des Moines Metro Area Trail system, which is comprised of more than 500 miles of trails.

There are three primary regional trails in Ankeny that provide connections to various parks and recreational facilities. The longest is the High Trestle Tail, which extends nearly 25 miles from the town of Woodward, through Ankeny continuing southeast, and ending at the SE Oralabor Road Pedestrian Bridge. At the bridge, riders are given two options: to continue south on the Gay Lea Wilson Trail or head west along the Oralabor Gateway Trail. The Gay Lea Wilson Trail continues south of the City through much of the northeast corner of Des Moines, into the City of Pleasant Hill, and ending at the eastern edge of the City of Altoona. The Oralabor Gateway Trail follows SE and SW Oralabor Road to the western edge of Ankeny. It connects with the Neal Smith Trail, which runs south into the City of Des Moines and north through the Saylorville Lake Recreation Area, connecting with their trail network. An underpass was constructed for the Oralabor Gateway Trail at the intersection of SW State Street and SW Oralabor Road in 2024.

Figure 28 shows the highest-traffic volume bike routes among riders using the Strava application. The three regional trails–High Trestle, Oralabor Gateway and Gay Lea Wilson Trails–are all heavily trafficked.

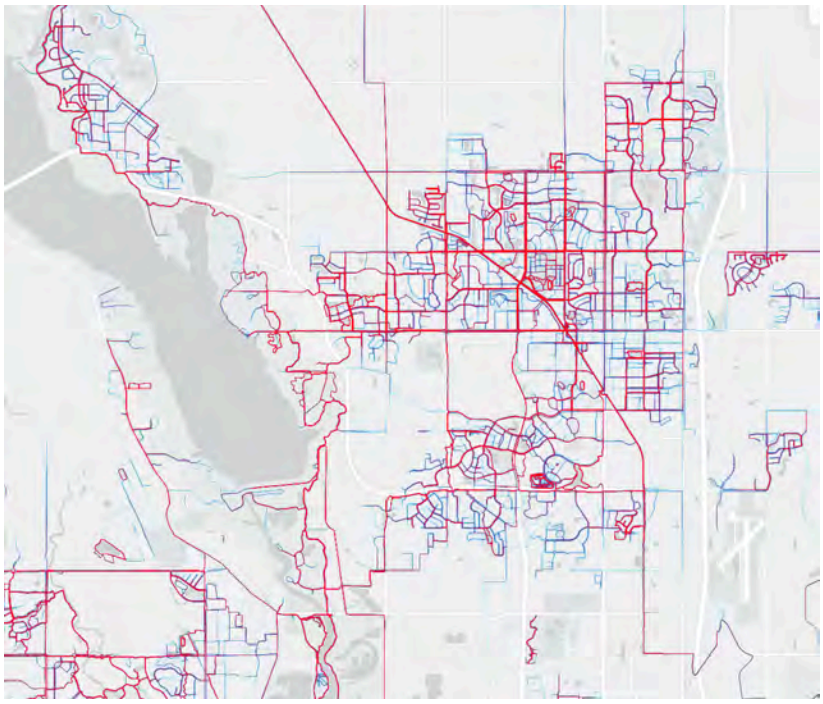


Figure 28: Bike path traffic volume - Strava, City of Ankeny

The City of Ankeny also has a continuously expanding network of sidewalks, shared use sidepaths, and trails. While sidewalks in Ankeny are 4 or 5 feet wide and regional trails like the High Trestle Trail are 10 feet wide, most of the shared use sidepaths are 8 feet wide and follow arterials and major collector streets. This provides enough room for two pedestrians to walk comfortably side by side, or for two cyclists to pass each other without risk of accident. Ankeny's rapidly expanding residential growth has resulted in many new facilities, such as along NW and NE 36th Street between NW Abilene Road and the new Costco development area east of I-35.

While the existing network of bicycle routes and designed facilities connects many parts of Ankeny and several of the trails extend into Des Moines and surrounding cities, the system's accessibility and functionality are limited for people traveling on the street who are uncomfortable bicycling close to motor vehicle traffic. Level of Traffic Stress (LTS) is a rating given to a road segment or crossing indicating the traffic stress it imposes on bicyclists using those facilities. Moving forward, as the City collects more data at crossing locations and has GIS information available, a further LTS evaluation can be conducted. The off-street system has a moderate level of comfort, but access can sometimes be challenging for people who do not live close to a trail or a shared use sidepath.

Figure 29 on the next page shows the pedestrian and bicycle network map in the City of Ankeny.

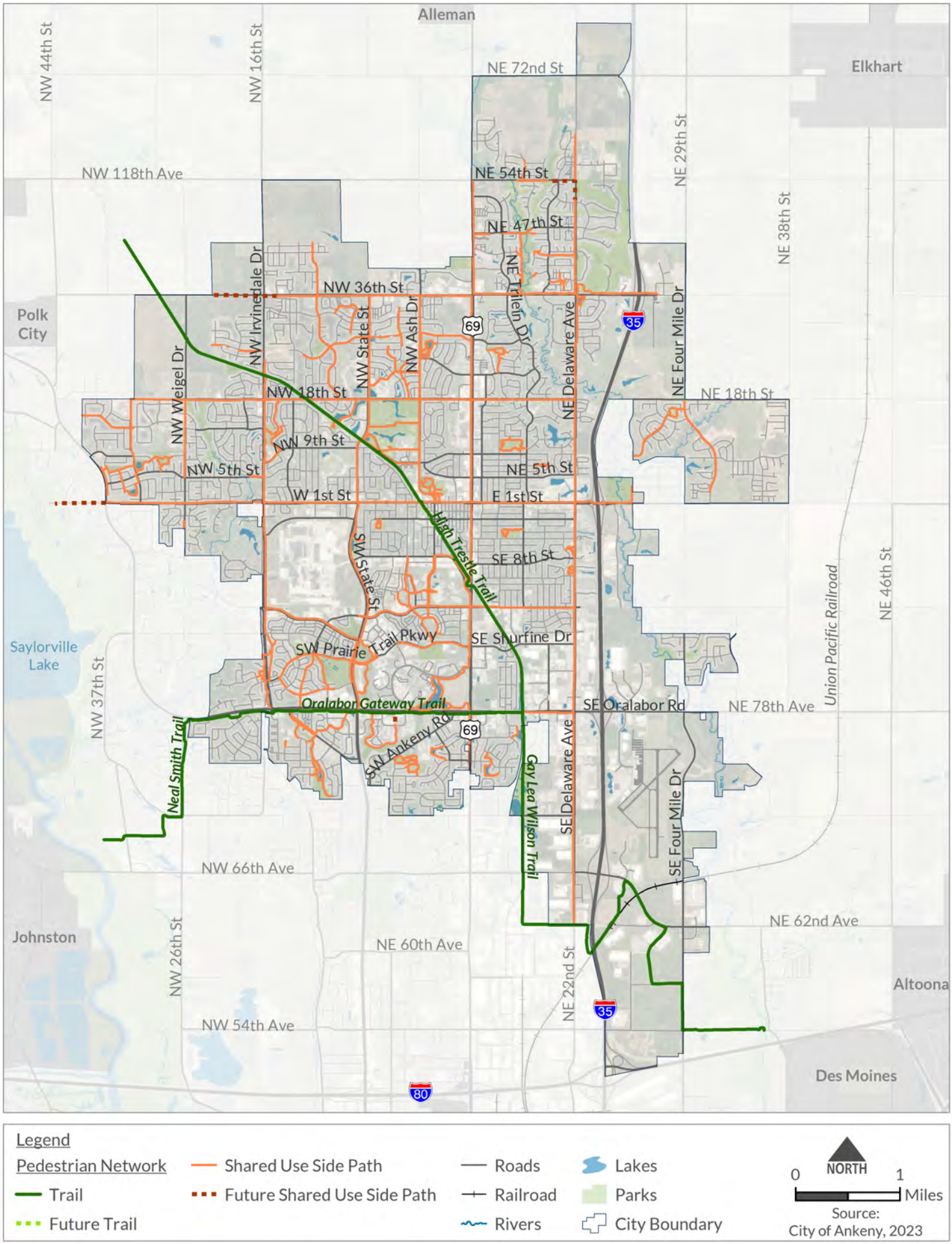


Figure 29: Pedestrian and bicycle network map, City of Ankeny

Sidewalks and Pedestrian Crossings

Ankeny has a comprehensive sidewalk network–approximately 1,500 miles total–that provides pedestrian access to most homes, businesses, and other destinations in the City. The shared use sidepaths and trails system complement this robust network of sidewalks.

The presence of sidewalks alone is not enough to create a quality pedestrian experience, however. Proper and regular maintenance of sidewalks is critical. A system of sidewalks with many cracks and heaving pavement offers limited mobility, particularly for people with disabilities, regardless of the system's accessibility. As the majority of Ankeny's residential developments are relatively new, the sidewalk infrastructure is in fair condition, with minimal cracking and heaving throughout the city's sidewalk system.

As with bicycle travel, the region's major arterials are often the most significant barriers to pedestrian travel. At intersections without traffic control, crossing safely on foot is difficult, if not impossible. The trail network includes numerous grade-separated crossings of these barriers, but access by foot to these trails from some areas is limited. There are three grade-separated crossings, two High-Intensity Activated Crosswalks (HAWKs), and 9 Rectangular Rapid Flashing Beacons (RRFB's) currently serving mid-block or non-signalized crossings. High-traffic volume corridors can be challenging to cross if there are long segments of uncontrolled crossings.

Many of the areas with high levels of foot traffic are near recreation facilities, schools, trails, parks, and sports complexes. One notable example is the intersection of NW State Street and NW 18th Street, where the Prairie Ridge Sports Complex and Ankeny Centennial High School are on the southeast and northwest corners, respectively. There are many shared use trails and sidewalks providing access to nearby residential developments. Many newly developed areas also have high levels of foot traffic, such as the NE 47th Street and NE Briarwood Drive neighborhood, where the sidewalks are heavily utilized.

Transit

Ankeny is currently served by the DART for public transit services. DART provides bus services in the Greater Des Moines Metropolitan Area, which includes Ankeny. DART's services are designed to connect people to various destinations within the City and the surrounding region. These services include fixed-route buses, paratransit services, and other specialized transportation options. The travel zone includes several destinations in Ankeny including Des Moines Area Community College's (DMACC) campus, locations along Ankeny Boulevard and Delaware Avenue, transfer points for Express Route 98 and Local Route 4, Easter Seals Iowa and the Iowa DOT Motor Vehicle Division offices along SE Corporate Woods Drive.

Railroad Crossings and Corridors

There are currently two railroad crossings in Ankeny with no grade-separated crossing. Railroad corridors provide a means for freight and goods movement in and through communities while also offering potential for connections to industrial tracts. They can also, however, create challenges to street and highway connections at their crossing locations. As traffic volumes increase on routes impacted by rail corridors, grade-separated crossings must be considered to improve mobility. The Union Pacific Railroad traverses through Ankeny, with at-grade crossings in the southeast portion of the community. These current crossing locations are illustrated in *Figure 30* on the next page.

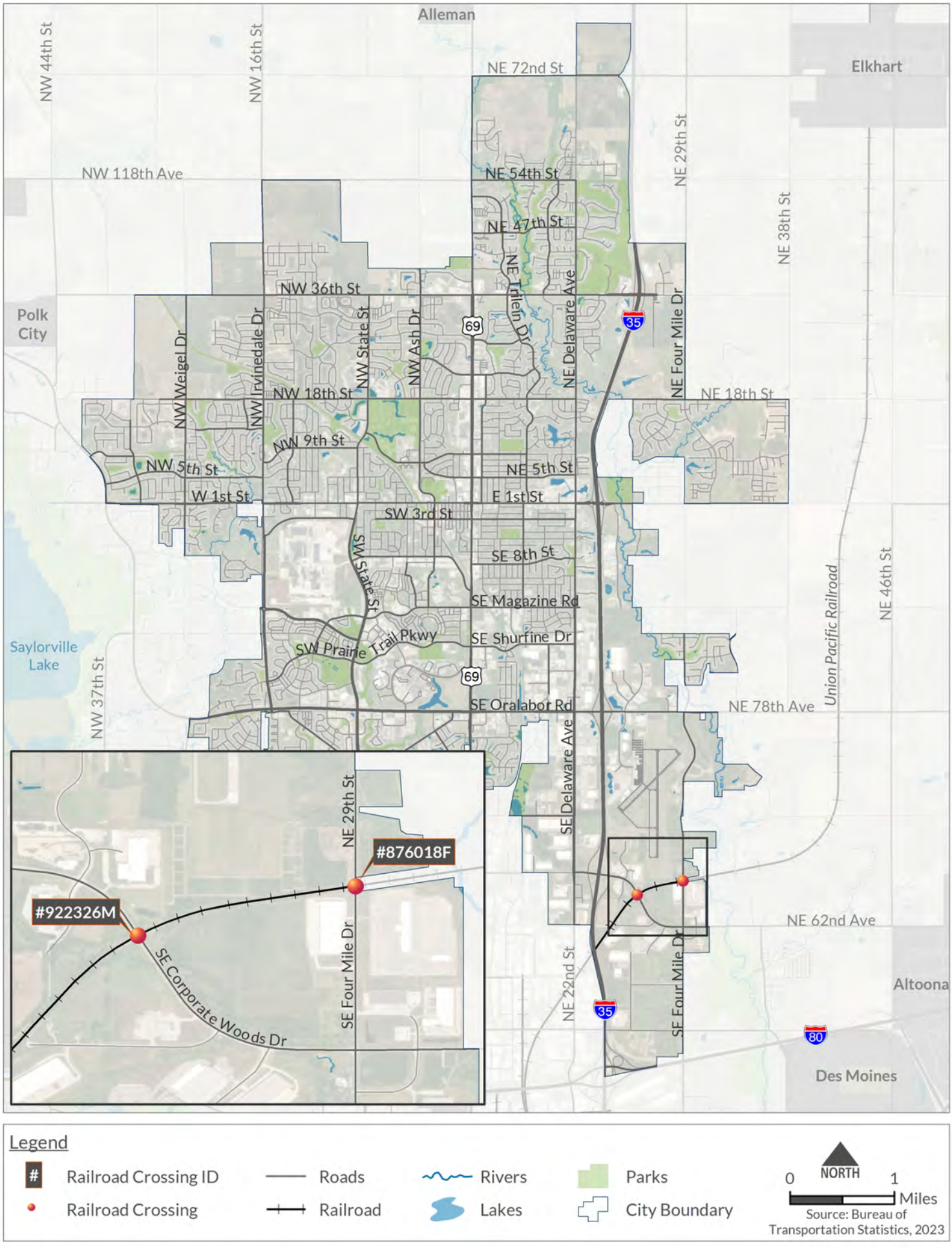


Figure 30: Railroad at-grade crossing map, City of Ankeny

CURRENT AND FUTURE TRAFFIC CONGESTION

This section summarizes current and future traffic operations and congestion on the base transportation network.

Existing Traffic Operations

The existing network of streets and intersections in the City of Ankeny provides a mix of arterial and collector streets and various intersection traffic controls for the safe and efficient movement of traffic, as previously referenced. An evaluation of intersection operations was provided to summarize day-to-day operations at key locations throughout the City.

Figure 31, *Figure 32*, and *Figure 33* are current maps of traffic signal-controlled intersection congestion during the morning, noon, and afternoon peak hours, respectively. The maps summarize the signalized intersection level of service (LOS) which provides a letter grade (A to F) for overall intersection performance based on the amount of delay experienced at the intersections. LOS A represents positive, free-flow traffic operations, while LOS F represents highly congested, failing operations.

Future Travel Demand

The DMAMPO maintains the regional travel demand model used to forecast traffic growth in communities in the Greater Des Moines Metro area. The City of Ankeny provides growth assumptions based on regional allocation for the DMAMPO modeling efforts during regional Long Range Transportation Plan updates. This plan includes 2023 travel demand modeled volumes and future full-bid-out projections. Future growth forecasts are estimated by modeling future land uses with the current street network to identify segments that may need enhancements to support future traffic volumes and multimodal capacity.

As described in the Land Use and Demographics section, the future travel demand patterns in Ankeny are primarily a function of the household and employment growth in the area and the future street network. To begin understanding the future needs of the street network, future year models were developed using the Existing + Committed (E+C) street network—that is, the existing network plus those improvement projects with committed funding to begin construction over the next five years (base network).

An important aspect of determining transportation needs is the capacity of the street system to meet traffic demand. Several factors influence street capacity, including the number of through lanes, signal timing and priority, the presence of turn lanes and medians, and the presence of on-street parking. The frequency of driveways and intersections can also play a role in street capacity by introducing side friction.

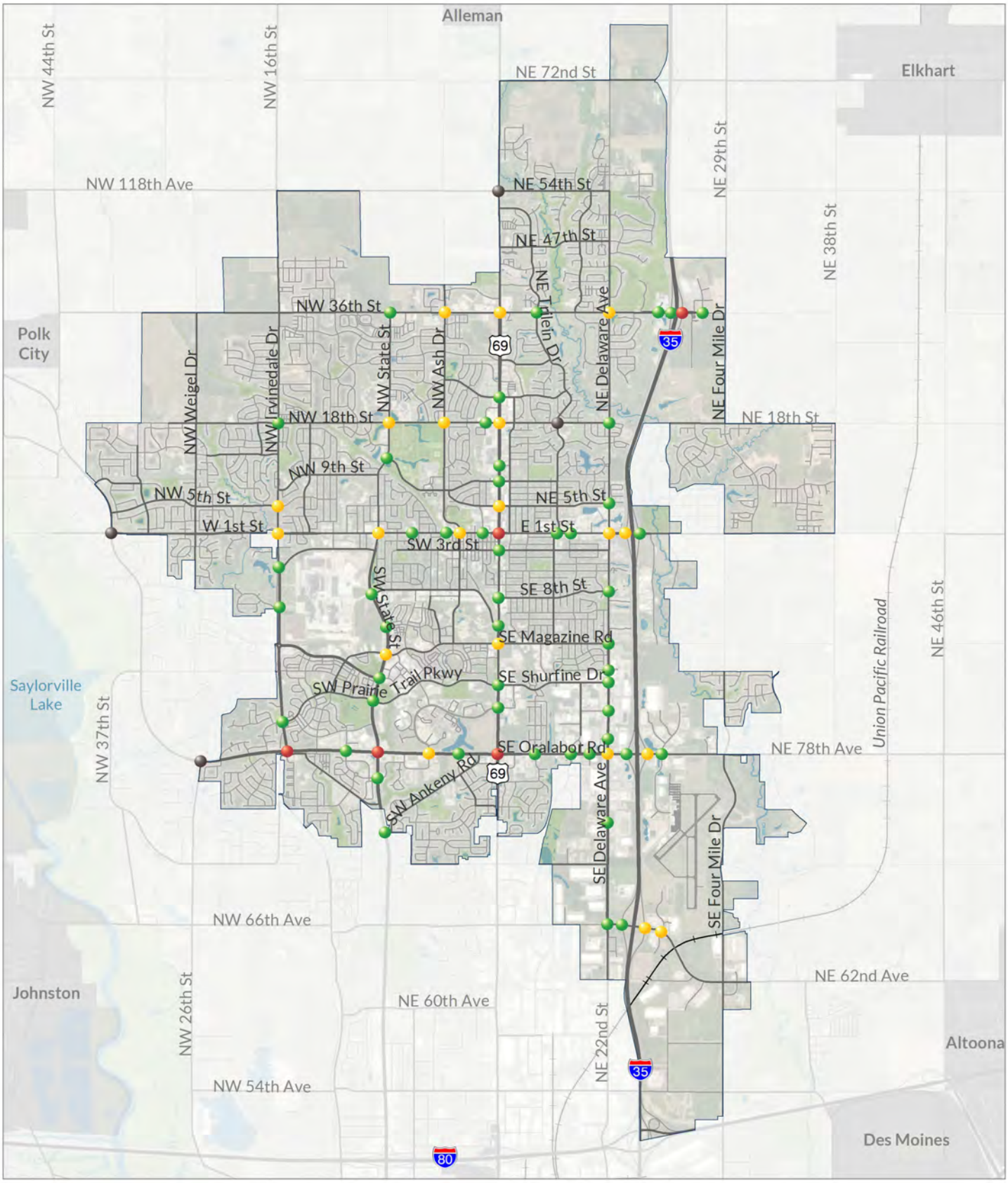


Figure 31: Intersection level of service (LOS) - AM, City of Ankeny

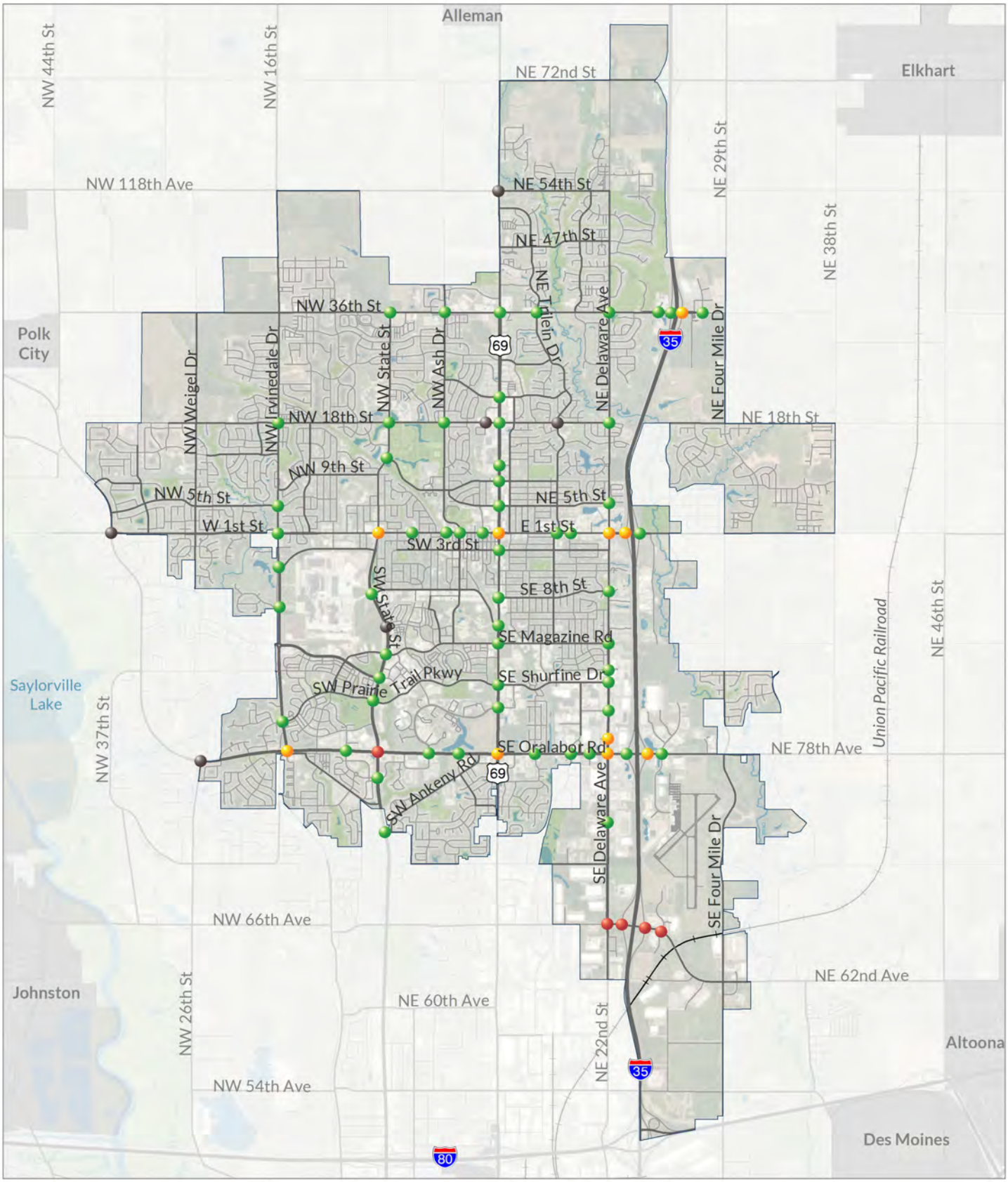


Figure 32: Intersection level of service (LOS) - Noon, City of Ankeny

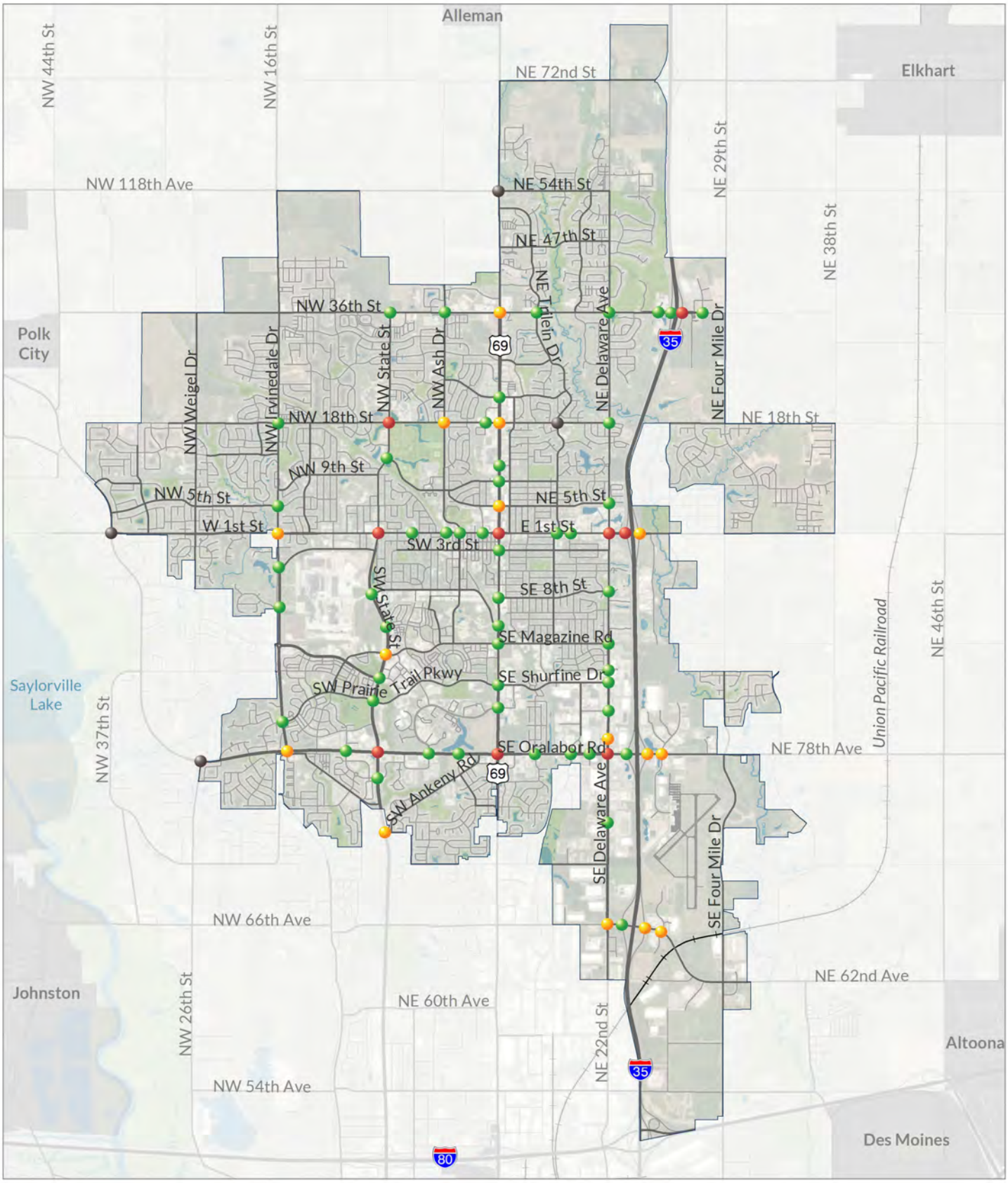


Figure 33: Intersection level of service (LOS) - PM, City of Ankeny

In a general sense, the approach to capacity for transportation planning purposes considers street facility type (e.g., principal vs. minor arterial) and area type (e.g., urban vs. suburban). Streets with higher facility types are assumed to have more consistent turn lanes, less frequent driveways and intersections, and higher signal timing priority than lower facility types. Similarly, streets in denser areas, such as downtown and the surrounding urban areas, are assumed to have a reduced capacity compared to streets in suburban and rural areas due to additional side friction, narrower lanes, and shorter intersection spacing. For this plan, capacities are considered on an hourly basis, helping to identify facilities expected to become congested during the busiest hour of the day, typically the PM peak hour.

DMAMPO travel demand model has been utilized to project future daily traffic volumes and congestion levels on Ankeny's streets. *Figure 34* shows the projected daily number of vehicles based on 2050 land use within the City's planning boundary and the base transportation network (i.e. existing streets and committed projects from the 2024 - 2028 CIP). The forecast was provided by DMAMPO as a planning level tool in the regional travel area. The forecast does not include a northeast expressway which was considered by Iowa DOT and is also included in the Polk County Comprehensive Plan. While the model is a high-level planning tool to help provide a more regional, macroscopic snapshot of travel demand, it does provide insights into anticipated traffic growth on corridors in Ankeny.

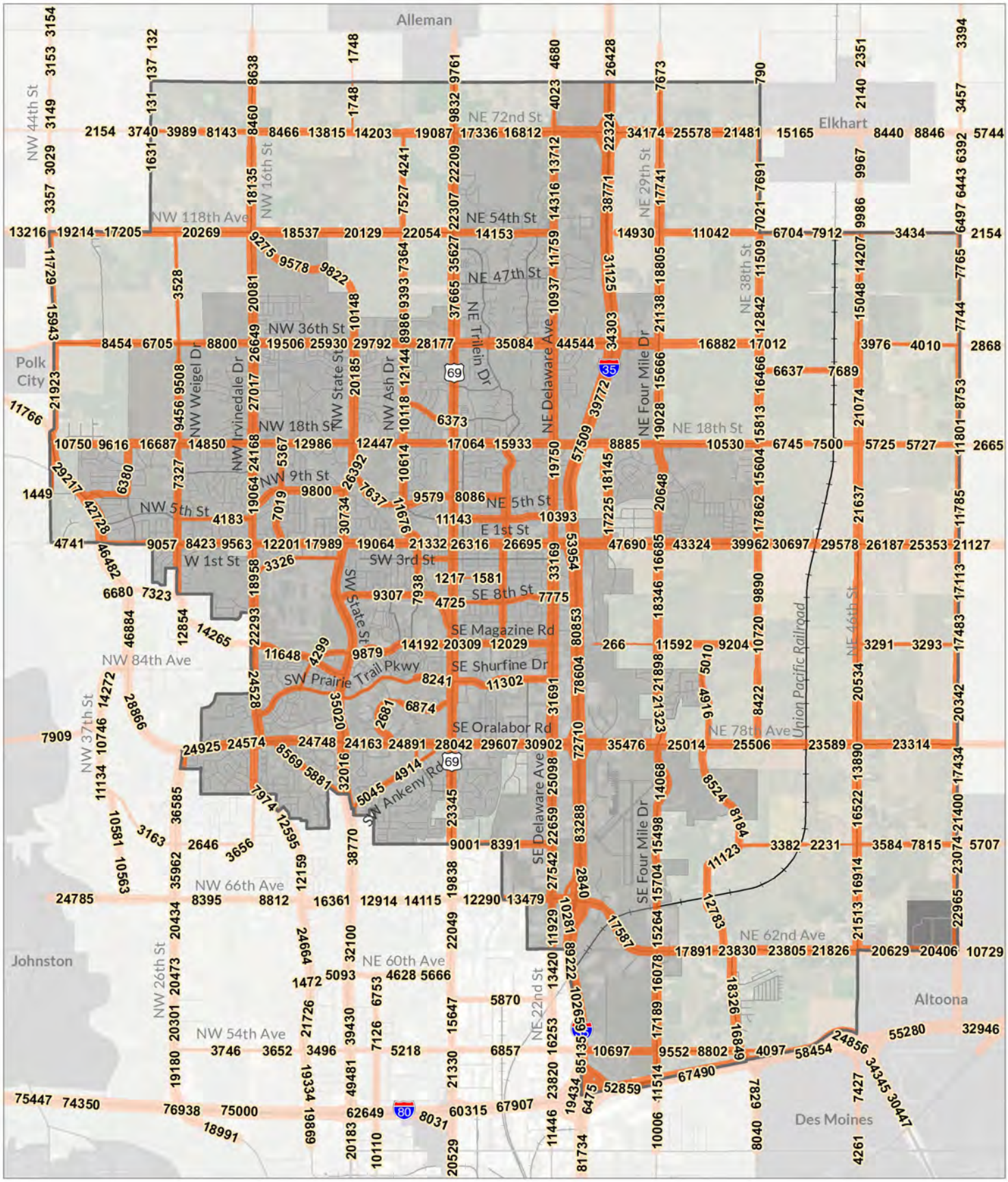


Figure 34: Future travel demand forecasts - 2050 land use, City of Ankeny

KEY CORRIDORS

This section provides a brief summary of key transportation corridors that have been topics of discussion and interest during the planning process. These corridors provide enhanced mobility across Ankeny and are important facilities to consider for future improvement opportunities and growth impacts as the community develops.

NW 36th Street – NW Ash Drive to NW Irvinedale Drive

The NW 36th Street corridor travels east/west in the northern part of Ankeny. The street is in a new growth area of the City. NW 36th Street is currently four lanes divided to the east of NW Ash Drive and transitions to a 2-lane urban curb and gutter segment to the west of NW Ash Drive. This 2-lane urban section has been constructed along the south side of the street ROW to serve as the future eastbound lanes of a 4-lane arterial street. The trails and sidewalk facilities have already been set back, and grading has been completed for much of this section – all the way to NW Abilene Road, where it then transitions back to a 2-lane rural roadway (without curb and gutter), headed west to Polk City. The street is posted at 35 mph in this area and provides access to residential development and additional new commercial development. The 2023 average daily traffic (ADT) ranges from 4,000 vehicles per day (vpd) at NW Irvinedale Drive to 9,000 vpd at NW Ash Drive. The anticipated 2050 ADT is projected to range from 9,000 vpd at NW Irvinedale Drive to 29,000 vpd at NW Ash Drive.

NE Delaware Avenue – NE 18th Street to NE 54th Street

The NE Delaware Avenue corridor travels north/south in the northeast part of Ankeny. The street is in a mature residential area. NE Delaware Avenue is currently a 2-lane rural street segment in this location north of NE 18th Street and is characterized by narrow gravel shoulders and open ditches on each side for drainage. Beginning at NE 18th Street, this 2-lane rural section has an 8-foot trail along the west side that transitions over to the east side of the street at NE 28th Street. No other sidewalk facilities are located along this segment between NE 18th Street and NE 36th Street. North of NE 36th Street, the 8-foot trail is on the west side of NE Delaware Avenue. The street is posted at 45 mph in this area and provides access to residential development. The 2023 ADT ranges from 6,000 vpd at NE 18th Street to 7,000 vpd at NE 36th Street. The anticipated 2050 ADT is projected to range from 11,000 vpd at NE 54th Street to 19,000 vpd at NE 18th Street.

NW Irvinedale Drive – W 1st Street to NW 36th Street

The NW Irvinedale Drive corridor travels north/south in the northwest part of Ankeny. The street is in a mature residential area. NW Irvinedale Drive is currently 2-lane and 3-lane urban street segments with curb and gutter between W 1st Street and NW 9th Street and then transitions to a 2-lane rural section to the north. In this section north of NW 9th Street, the street is characterized by narrow gravel shoulders and open ditches on each side for drainage. This 2-lane rural section has a trail along the east side and sidewalk along the west side with some gaps in the trail and sidewalk along undeveloped land parcels. A 2025 project will widen and reconstruct the intersection of NW Irvinedale Drive and NW 18th Street. The street is posted at 35 mph in this area, provides access to residential development and traverses by Westwood Elementary School. The 2023 ADT ranges from 7,000 vpd at NW 18th Street to 10,000 vpd at W 1st Street. The anticipated 2050 average daily traffic (ADT) is projected to range from 19,000 at W 1st Street to 20,000 vpd at NW 18th Street, and 26,000 vpd at NW 36th Street.

NW State Street Extension – North of NW 36th Street

The NW State Street Extension would implement a continuation of the street north of NW 36th Street up to the current intersection of NW 54th Street and NW Irvinedale Drive as shown in *Figure 35.* The current segment of NW State Street in this vicinity travels north/south in the north-central part of Ankeny and terminates at NW 36th Street. The proposed NW State Street Extension cross-section is a 4-lane divided urban arterial street with a trail along the east side and sidewalk along the west side. The street is proposed to be posted at 35 mph in the south half and 45 mph in the north half. The NW State Street Extension will provide access to primarily low-density residential land uses, as well as a neighborhood mixed use and neighborhood commercial node surrounded by medium density residential development according to The Ankeny Plan 2040. The 2023 ADT is around 6,000 vpd just south of NW 36th Street. The anticipated 2050 ADT is projected to range from 9,000 at NW Irvinedale Drive to 10,000 vpd at NW 36th Street.

Figure 35: NW State Street Extension – North of NW 36th St

NW/NE 18th Street – NW Irvinedale Drive to NE Delaware Avenue

The NW/NE 18th Street corridor travels east/west in the north part of Ankeny. The street is within a developed part of the City. NW/NE 18th Street is a 2-lane urban section with auxiliary lanes at 13 intersections. This section has a trail along the south side connecting to the High Trestle Trail. It provides access to Ankeny Centennial High School and the Prairie Ridge Sports Complex and established residential and commercial areas. The street is posted at 35 mph. The 2023 ADT ranges from 7,000 vpd at NW Irvinedale Drive to 12,000 vpd at N Ankeny Boulevard, and 8,000 vpd at NE Delaware Avenue. The anticipated 2050 ADT is projected to range from 12,000 vpd at NW Irvinedale Drive to 17,000 vpd at N Ankeny Boulevard and 16,000 vpd at NE Delaware Avenue.

NW 18th Street – NW Spruce Drive to Iowa Highway 415

The NW 18th Street corridor travels east/west in the northwest part of Ankeny. The street is in a new growth area of the City. NW 18th Street has recently been constructed as a 3-lane section with a center two-way left turn lane in this vicinity as it heads west of NW Weigel Drive, with plans to make a future connection to Iowa 415. This 3-lane urban section has a trail along the south side and provides access to new residential areas, proposed commercial development, and a new elementary school which opened in Fall 2024. The street is posted at 35 mph. The anticipated 2050 ADT is projected to be 10,000 vpd at Iowa 415.

Iowa Highway 415 – Northwest of SW Oralabor Road

The Iowa 415 corridor travels north/south along the west corporate limit of Ankeny and bends to the east as it enters the City limits near NW 26th Street and transitions to SW Oralabor Road. The current segment of Iowa 415 in this vicinity is in a suburban area adjacent to Ankeny and is primarily rural in nature but provides key connectivity to areas north and west, such as the City of Polk City and the Saylorville Recreation Area. Iowa 415 is currently a 2-lane rural roadway west of NW 26th Street with both paved and gravel shoulders and open ditch drainage. The roadway is posted at 55 mph in this area and provides access to larger acre residential development. The 2023 ADT ranges from 9,100 vpd northwest of NW 26th Street. The anticipated 2050 ADT is projected to be 29,000 vpd between the intersections of Iowa 415 & NW 84th Avenue and Iowa 415 & NW 26th Street. While this segment is not currently proposed to be in the City limits, it is a major connecting roadway providing mobility to the northwest and southwest areas of Ankeny.

SE/NE Four Mile Drive – SE Oralabor Road to NE 54th Street

SE/NE Four Mile Drive and NE 29th Street, between SE Oralabor Road and NE 54th Street, provides a continuous north/south corridor in the eastern portion of Ankeny. The current segments of SE Four Mile Drive and NE 29th Street are 2-lane rural street sections with open ditches and sparse land use. These segments are posted at 40 mph near SE Oralabor Road, 50 mph south of E 1st Street, 35 mph north of E 1st Street with an urban curb and gutter section, and 55 mph in the northern segments near NE 54th Street. The road provides access to agricultural land uses outside of the existing subdivision area as well as new commercial sites near the Spectrum 36 development at NE 36th Street. This corridor is within a developing residential and commercial area, including the Deer Creek development north of E 1st Street and additional developments near NE 18th Street, including Pine Lake Estates. The anticipated 2050 ADT is projected to range from over 21,000 vpd at SE Oralabor Road to nearly 19,000 vpd at NE 54th Street.

SE Corporate Woods Drive – SE Delaware Avenue to East City Limits

The SE Corporate Woods Drive corridor travels east/west in the southeast part of Ankeny. The street serves an industrial area and provides connectivity between the I-35 interchange area and neighboring communities as it heads east. SE Corporate Woods Drive is an urban 2-lane section with curb and gutter in this vicinity, with an at-grade railroad crossing at the Union Pacific railway line. This section includes the Gay Lea Wilson trail along the south side of the street and provides access to several industrial development areas. The street is posted at 35 mph. The 2023 ADT ranges from 18,000 vpd at SE Delaware Avenue to 16,000 vpd at I-35 and 4,000 vpd at East City Limits. The anticipated 2050 ADT is projected to range from 24,000 vpd at I-35 to 18,000 vpd at current east City Limits.

In addition to the above summarized corridors, there are also several other locations along corridors in Ankeny that were further evaluated based upon access management needs. Some examples include Oralabor Road, Delaware Avenue, potential overpass opportunities at SE Magazine Road, NE 18th Street, and NE 54th Street over I-35, and lane geometry considerations to improve safety and operations.

city of Ankeny

PUBLIC INVOLVEMENT & STAKEHOLDER ENGAGEMENT

Public Involvement & Stakeholder Engagement

PURPOSE & GOAL

Meaningful community engagement reflects the community's values and goals, and this ultimately creates a more relevant and useful plan focused on the customers. Community engagement played a large role in shaping the City of Ankeny's final Transportation Master Plan (TMP), including the recommended programs, policies, and projects. This chapter summarizes the community engagement approach for the TMP, how the community directly influenced the plan goals and prioritization of projects, and key lessons and takeaways.

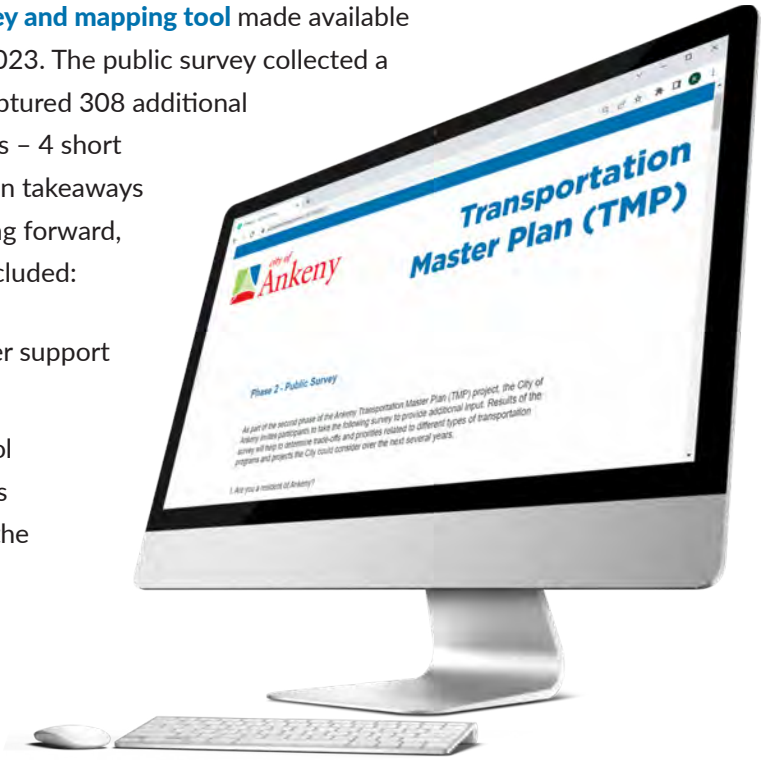
COMMUNITY ENGAGEMENT APPROACH

Phase 1 – Values & Needs

Phase 1 of the TMP public engagement consisted of 3 primary elements: an interactive pin map available on the project website, focus group interviews with various community leaders, and a public open house event. Together, these efforts resulted in key takeaways that would help to inform future transportation decision-making for the City of Ankeny.

A **project website** was established to engage the public continuously throughout the project and update both the public and stakeholders on the latest project news and progress. The project website was utilized throughout the entirety of the community engagement process, and it provided direct access to resources such as project announcements, the online survey, and presentations throughout each phase of the project.

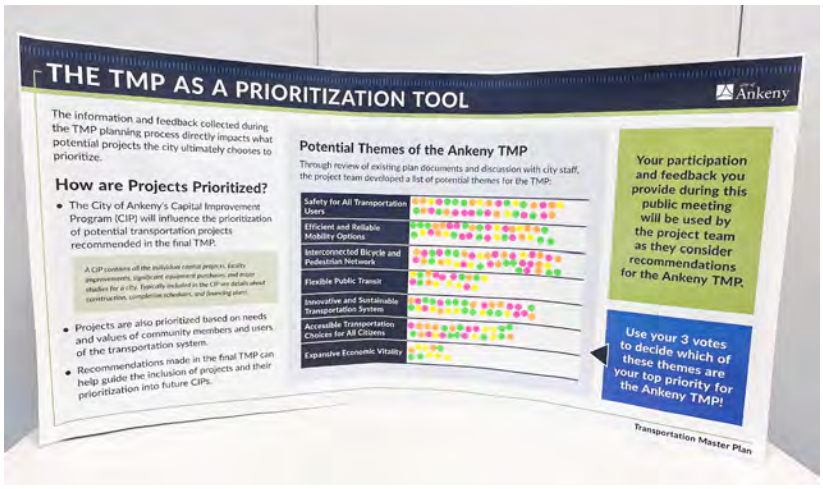
Public comment was captured through an **online survey and mapping tool** made available on the project website from June 1 through July 31, 2023. The public survey collected a total of 185 responses, and the interactive pin map captured 308 additional comments. The survey consisted of seven (7) questions – 4 short answer and 3 multiple choice. Prominent public opinion takeaways from the survey influenced the path of the TMP moving forward, and the top results of the 4 short answer questions included:



- Promoting new construction and growth will better support all modes of transportation.
- The physical condition, alignment, and traffic control of streets in Ankeny, as well as the big picture issues that stem from the rapid expansion of the City are the biggest challenges that the City needs to address within its transportation system during the next 25 years.
- General concern was noted to improve safety for active transportation users, with suggestions of how to improve safety for bicyclists and pedestrians.
- Planning for scalable growth was an overarching theme regarding what the top transportation priorities for the City should be. This included priorities such as street widening, updating traffic signal timing, multimodal connectivity and safety, and more.

A **public open house** for the TMP was held on June 8, 2023. The purpose of the open house was to allow attendees to review existing conditions within Ankeny's current transportation system, provide feedback on the existing transportation network, and speak with project team members about the future TMP. A total of 87 attendees signed into the meeting, and public comments were collected during the open house with written comment forms and with the support of two laptops for attendees to access the online interactive map at the public comment station. Twenty-seven comment forms were submitted at the open house event. The meeting was arranged in three

information stations, followed by the public comment station. These displays provided attendees an overview and description of the project, potential themes for the TMP with an opportunity to vote for their top themes, and a series of six maps that analyzed the existing conditions within Ankeny's transportation system.



City of Ankeny staff also attended the Ankeny's Farmers Market during the summer of 2023 where they hosted a project pop-up table and collected public feedback on the draft TMP goals and objectives.

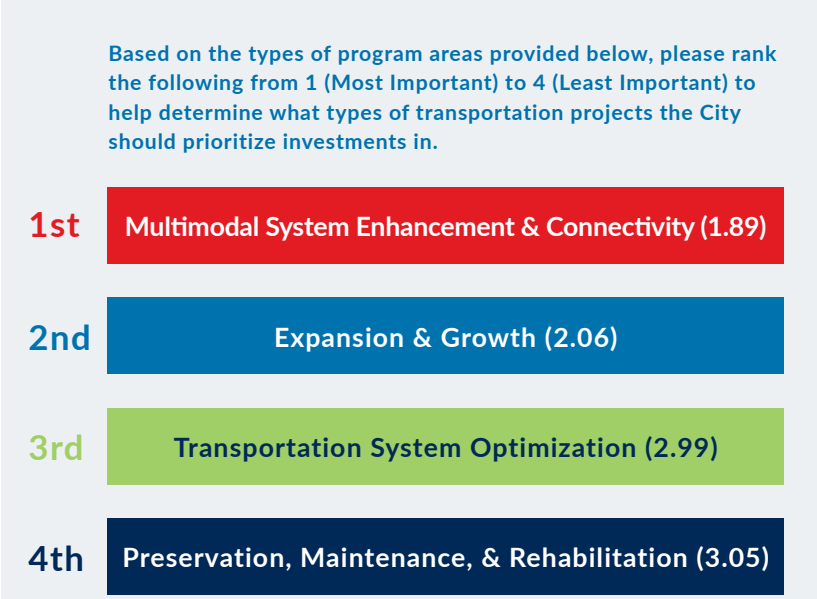
The TMP project team held three one-hour **focus group meetings** with stakeholders representing various community interests from July 11 to July 13, 2023. The purpose of the meetings was to gather insight on key transportation issues and concerns. The three groups represented the focus areas of community and business development, advocacy for bikes/pedestrians, and local schools and neighborhoods, respectively. These meetings utilized the Mentimeter application to conduct live engagement with stakeholders. Mentimeter is a digital tool that allows presenters to share live, interactive polls and questionnaires with participants to better engage them in the content being presented. Two primary areas of discussion were the focus of the Mentimeter presentation with stakeholders. These areas were the approval and accuracy of the proposed TMP Goals, and the challenges observed by each of the different groups.

Phase 2 - Considering Trade-offs

Phase 2 public engagement of the TMP consisted of four primary elements: a public survey available on the project website, focus group discussions, two pop-up table events, and a

virtual presentation of the Current and Future Needs Assessment Chapter findings. All of these outreach methods contributed to achieving the overall goal of Phase Two - evaluating trade-offs and identifying priorities.

A **public survey** was made available on the project website from November 14, 2023 through January 3, 2024, and collected a total of 558 responses. The survey consisted of eight (8) questions – 1 ranking and 7 multiple choice. An example of the evaluated public survey data is shown to the right. In this survey, the participants were encouraged to prioritize transportation focus areas to help determine what types of projects the City should pursue. This feedback was used to help determine final plan recommendations and alternatives for the TMP.



Evaluated data from the public survey shows the prioritization desires from the community. The number to the right of each focus area is the average score it received from survey participants as they ranked them from Most Important (1) to Least Important (4).

Two **focus group discussions** were conducted during Phase 2. In this second phase, focus group members were mixed up from their original Phase 1 groups. Stakeholders who participated in this project included school administrators, local developers, bike and trail advocates, social service groups, non-profits, and public agency staff. Conversations among stakeholders during the focus group meetings centered on providing an update for the TMP planning process and identifying potential program areas. Participants were engaged in activities that prompted them to vote on which transportation projects fit under program areas proposed by project team members, brainstorm possible action items for the TMP's established goals, and encouraged them to promote the Phase Two Public Survey in their respective areas of the community.

An **existing conditions presentation** was made available on the project website for the public. The presentation outlined a project overview, progress made based on community feedback, an existing conditions analysis, and next steps looking forward. It also prompted viewers to take the Phase Two Public Survey and advertised an additional, upcoming way for people to get plugged into the project with an open house opportunity to come in Phase Three.

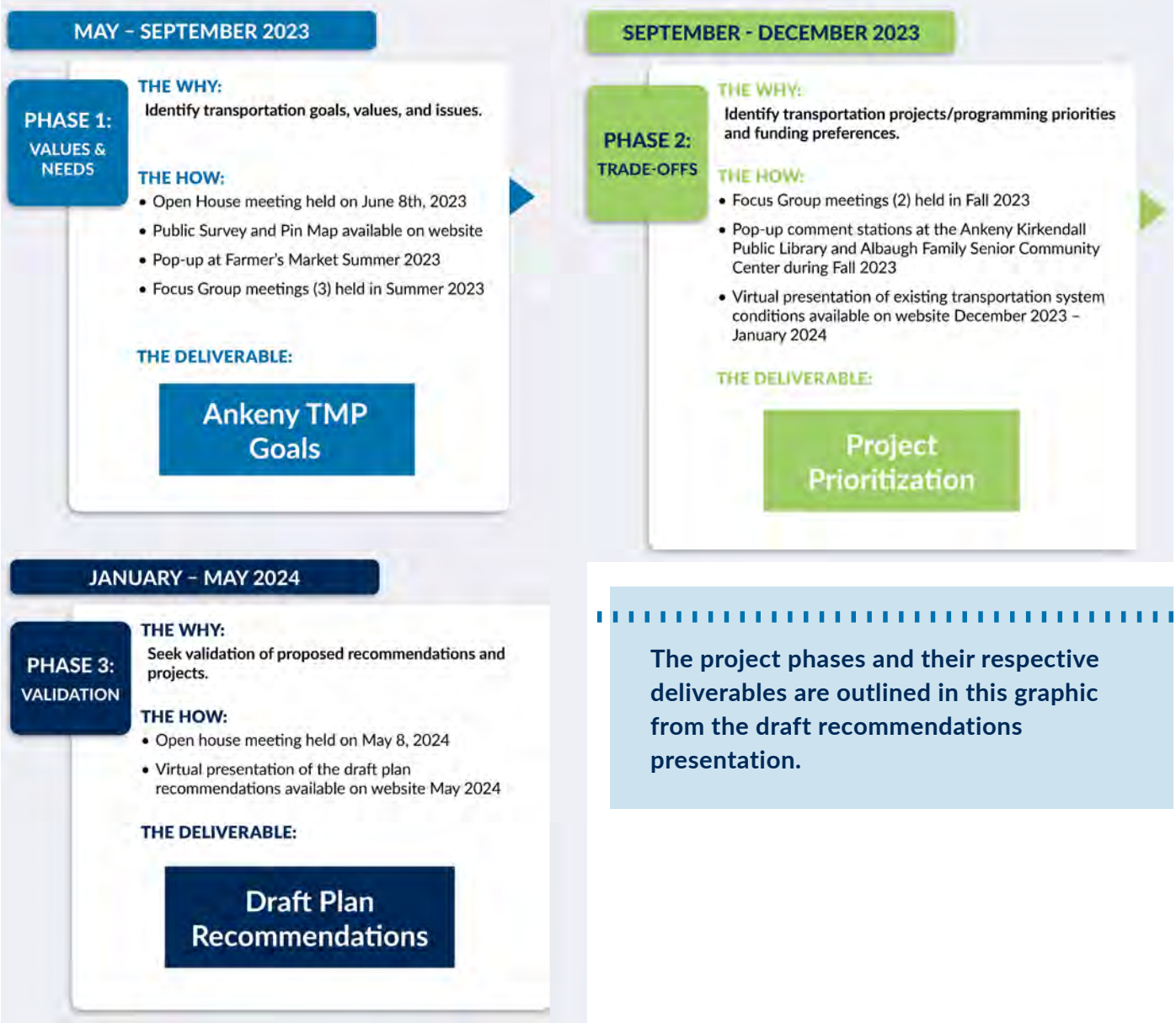
Two **pop-up table events** at the Albaugh Family Senior Community Center and Ankeny Kirkendall Public Library were held to engage the public and provide an opportunity to learn about the TMP. These table events included a display of the project area, information sheets, and public survey forms for individuals to complete. A total of 12 comment forms were submitted as a result of these table events. These results were included in the overall Public Survey Summary provided to City Staff.

A table set-up during the pop-up events.

Phase 3 – Validation

Phase 3 public engagement of the TMP consisted of two elements: a public open house and a draft recommendations presentation on the project website. Both outreach methods contributed to achieving the overall goal of Phase Three – validating final plan recommendations with community input.

A **public open house** on May 8, 2024, was held at the Ankeny Kirkendall Public Library. The purpose of the open house was to allow attendees to review the planning process that led to the development of the draft TMP and its recommendations, provide feedback, comments or concerns about the presented recommendations, and speak with the project team about the TMP or other transportation-related topics. This meeting was arranged in ten information displays for attendees to view in a sequence. These displays showcased timelines for recommended projects, the five TMP goals, project prioritization areas and their proposed weights, information about shared-use trail improvements, and more. A total of 51 members of the public signed in and a total of 18 comment forms were completed and submitted during the meeting.



The project phases and their respective deliverables are outlined in this graphic from the draft recommendations presentation.

A presentation of the **draft TMP recommendations** was posted on the project website following the final open house meeting. There was a 30-day public comment period between these events, with the purpose of allowing for more feedback from the public on the draft plan recommendations. The presentation included an overview of the planning process and details of its progression. Key take-aways from the presentation are the deliverables listed under each of the project phases.

Methods for each of the phases, including the public surveys, focus group meetings, open house events, pop-up table events, and presentations on the project website, all served to engage the community. Therefore, each of the phase deliverables was shaped by public input throughout the process.

TMP GOALS AND PROJECT PRIORITIZATION

Public and stakeholder feedback directly helped to decide the final goals presented in the Ankeny TMP. The TMP goals are as follows:

1. A **SAFE** multimodal transportation system for everyone
2. An **EFFICIENT,** reliable, and well-connected transportation system
3. A comprehensive **PEDESTRIAN AND BICYCLE NETWORK**
4. A **WELL-CONSTRUCTED AND MAINTAINED** transportation system
5. An accessible transportation system that **PROMOTES ECONOMIC VITALITY**

Feedback provided during the first open house meeting for this project led to the establishment of these goals and helped the City to better understand the community's priorities as it relates to transportation issues.

The prioritization of projects and how each goal is weighted was also a direct result of community feedback obtained during Phase 2 of the project.

SUMMARY

Engaging the public through the planning process helps to achieve relevant outcomes and overall more buy-in for future projects. Throughout the TMP, the public was engaged in many different ways. As the plan progressed, key methods for community involvement can be observed. From the **public surveys results, focus group meetings, open house events, pop-up events,** and **presentations on the project website,** it was clear that the public desired a prioritization of planning for scalable growth and the needs of Ankeny residents both today and in the future. This is directly reflected in both the project goals and prioritization, which includes the specific goals of a safe multimodal system for all users, efficiency, connectivity, maintenance, and economic vitality within the Ankeny transportation system. These goals directly influenced the final TMP recommendations.

city of Ankeny

GOALS, OBJECTIVES, & PERFORMANCE MEASURES

Goals, Objectives, & Performance Measures

GOALS & OBJECTIVES

The final City of Ankeny TMP Goals and Objectives were established based on feedback from community members, stakeholders, and City Staff. The Objectives and Performance Measures identified for each Goal can be used by City Staff to determine their effectiveness and whether they are being achieved.

Table 6: TMP Goals & Objectives

TMP GOALS	OBJECTIVES
1 A **SAFE** multimodal transportation system for everyone	1. Reduce the number and rate of severe crashes on the transportation system. 2. Identify and improve safe crossings for vehicles, bicycles, and pedestrians across major arterial streets and at intersections. 3. Reduce traffic speeds in neighborhoods near schools, parks, and commercial districts with a high number of vulnerable road users.
2 An **EFFICIENT,** reliable, and well-connected transportation system	1. Provide a network of arterials, collectors, and local streets that are interconnected, appropriately spaced, and provide adequate capacity for growth. 2. Implement traffic management systems to reduce delays and congestion and optimize traffic flow. 3. Maintain appropriate functional classification and street operation integrity through management of access and the right-of-way in context with adjacent land use.
3 A comprehensive **PEDESTRIAN AND BICYCLE NETWORK**	1. Increase connectivity of the pedestrian and bicycle network of sidewalks and trails to key destinations such as employment centers, education facilities, and retail/ entertainment districts. 2. Eliminate sidewalk gaps and non-ADA-compliant pedestrian curb ramps within the community. 3. Integrate desirable features and amenities into the sidewalk and trail networks as appropriate (expanded widths, lighting, benches/ landscape).
4 A **WELL-CONSTRUCTED AND MAINTAINED** transportation system	1. Preserve and maintain the existing transportation system assets to extend their useful life. 2. Implement robust asset management practices to track transportation system asset conditions and program necessary preservation and maintenance projects. 3. Evaluate and implement cost-effective, sustainable materials and design approaches.
5 An accessible transportation system that **PROMOTES ECONOMIC VITALITY**	1. Promote land development that supports the needs of all transportation modes, ensuring citizens can easily access job opportunities to foster economic growth. 2. Expand and optimize transit coverage opportunities throughout the community. 3. Continue to involve citizens and community organizations in the transportation planning process, gathering feedback to ensure transportation choices align with the community.

Goals were finalized during Phase 1 of the planning process – Establishing Values and Needs. At the first open house, hosted in summer 2023, attendees had the opportunity to vote on TMP themes that would determine the final plan Goals. The themes presented at this open house included:

- Safety for All Transportation Users
- Efficient and Reliable Mobility Options
- Interconnected Bicycle and Pedestrian Network
- Flexible Public Transit
- Innovative and Sustainable Transportation System
- Accessible Transportation Choices for All Citizens
- Expansive Economic Vitality

Open house attendees vote on their top themes for the Ankeny TMP.

Based on the input open house attendees provided on what themes were most important to them, City Staff were able to develop the final list of TMP Goals.

Final Objectives for each Goal were identified through focus group meeting conversations with stakeholders and discussions with City Staff during both Phase 1 and Phase 2 of the Ankeny TMP planning process. During these conversations, project team members asked stakeholders what specific actions the City could take to help achieve these Goals and support their current and future transportation needs.

PERFORMANCE MEASURES

After the establishment of the TMP Goals and Objectives, Performance Measures were then determined by the project team to evaluate the success of the implementation of the TMP and its recommendations. These Performance Measures can be evaluated and monitored in the future by City Staff to determine their relevance to the community's current transportation system and to determine the impact of constructed projects and adopted transportation policies over time.

The following were identified as the final TMP Performance Measures at the time of adoption.

Table 7: TMP Goals & Performance Measures

TMP GOALS	PERFORMANCE MEASURES
1 A **SAFE** multimodal transportation system for everyone	▸ Number of Fatalities and Serious Injuries ▸ Fatalities/Serious Injuries in Vehicles per 100 million vehicle miles traveled (VMT) ▸ Fatalities/Serious Injuries for Bike/Pedestrian
2 An **EFFICIENT,** reliable, and well-connected transportation system	▸ Percentage of person miles traveled on non-interstate NHS that are reliable ▸ Non-interstate NHS Truck Travel Time Reliability Index ▸ Annual Hours of Peak Hour Excessive Delay per Capita ▸ Congested Roadways ▸ Traffic Signal Detection Reliability
3 A comprehensive **PEDESTRIAN AND BICYCLE NETWORK**	▸ Mode Split Work Trips Percentage Walk/Bike/Transit/Other ▸ Miles of shared-use trail ▸ Gaps per mile of shared-use trail ▸ Number of curb ramps improved annually to satisfy ADA requirements
4 A **WELL-CONSTRUCTED AND MAINTAINED** transportation system	▸ Percentage of non-interstate Bridges in Fair/ Good/ Excellent Condition ▸ Percentage of Pavement on City streets in Fair/ Good/ Excellent Condition ▸ Average Pavement Condition Index (PCI) of City arterials and collectors (exclude any highways) ▸ Percentage of shared-use trail pavement in Fair/ Good/ Excellent Condition
5 An accessible transportation system that **PROMOTES ECONOMIC VITALITY**	▸ Multimodal Route Connectivity to Grocery (3-mile area percent of housing connected within ¼ mile) ▸ Multimodal Route Connectivity to Schools (3-mile area percent of housing connected within ¼ mile) ▸ Multimodal Route Connectivity to Job Access (percent of all employment within ¼ mile) ▸ Miles of Shared Use Trail Gaps within the City

Through this plan's multi-step planning process, residents and users of Ankeny's transportation system were engaged frequently and provided numerous opportunities to speak directly with project team members and City Staff about their ideas, concerns, and opportunities related to transportation issues in the community. Because of this open communication throughout the planning process, the Goals, Objectives, and Performance Measures presented in this chapter were directly influenced by those conversations.

city of Ankeny

FUNDING OUTLOOK

Funding Outlook

For the City of Ankeny, developing resilient and effective transportation infrastructure requires a multifaceted funding strategy. This chapter provides an overview of projected revenue sources, discusses the challenges posed by construction cost inflation and economic variability, and explores the enhancement of funding through federal grants and local initiatives.

REVENUE SOURCES

Ankeny's transportation funding stems from various sources, which are projected to grow over the next 25 years. Primary revenue streams that are used to invest in transportation programs and infrastructure included in the Capital Improvement Program (CIP) are summarized below:

General Obligation Bonds

- **Description:** These are bonds backed by the full faith and credit of the City, meaning they are repaid through property taxes. They are a common method for financing large capital projects.
- **Usage:** Funds from general obligation bonds are typically used for significant infrastructure projects, including street construction and improvements, bridge repairs, and other major transportation initiatives.

Tax Increment Financing (TIF)

- **Description:** TIF is a financing method that is used for redevelopment, infrastructure, and other community improvement projects. The increased property tax revenue from rising property values in a TIF district is used to fund projects.
- **Usage:** In Ankeny, TIF funds are often directed towards infrastructure improvements in designated redevelopment areas, promoting economic development and addressing specific transportation needs within these districts.

Road Use Taxes (RUT)

- **Description:** RUT consists of revenues collected from fuel taxes, vehicle registration fees, and other transportation-related fees at the state level. The funds are distributed to cities and counties based on population.
- **Usage:** RUT are allocated for the construction, maintenance, and repair of public streets, ensuring the City's street network remains safe and functional.

Federal and State Grants

- **Description:** These grants are provided by federal and state agencies for specific types of projects, often with a focus on transportation. Examples include the INFRA Program, RAISE Program, Bridge Investment Program, and local sources such as the Transportation Alternatives Program, Surface Transportation Block Grants, and Traffic Safety Improvement Program.
- **Usage:** Grants are used to fund large-scale projects that align with federal and state transportation priorities, such as improving infrastructure resilience, enhancing safety, and expanding multimodal transportation options.

Developer Contribution

- **Description:** These are funds provided by developers as part of development agreements. Developers contribute to the cost of public infrastructure improvements needed to support their projects.
- **Usage:** Contributions from developers are used to fund public transportation infrastructure directly related to new developments, ensuring that the City's transportation network can accommodate growth without placing undue burden on existing resources.

Special Assessments

- **Description:** Special Assessments are added to the property taxes of properties adjacent to a public improvement project because the properties are specially benefited by the improvement.
- **Usage:** The amounts collected through these special assessments are utilized to pay for the engineering construction costs of the adjacent public infrastructure improvements.

REVENUE PROJECTIONS

Revenue projections for transportation infrastructure, as included in the CIP, were provided by the City of Ankeny Finance Department. The information included in the 2024-2028 CIP was utilized to detail transportation revenue sources and amounts for the near-term five-year period. In addition, projections and best available information about anticipated growth assumptions were provided for the ensuing years out to a planning horizon of 2050. This information was utilized to provide planning level revenue projections for a "mid-term" period (the next 10-year time frame following the 2024-2028 5-year CIP), and a "long-term" period (another 10-year time frame following the mid-term period). These high-level projections were utilized as a baseline to gain insight into the potential level of investments for these future time frames. *Table 8* below illustrates the overall revenue projections for these three (3) separate planning windows as described.

Table 8: Transportation Revenue Projections

Near Term (2024-2028 5-year CIP period)	Mid Term (Next 10-year period after CIP)	Long Term (10-year period after Mid Term)
$170,593,000	$263,279,000	$344,733,000

An overall summary of revenue sources and projections, by year, is included in *Appendix G.* Modest increases (3% or less) in annual projections were included by the Finance Department as relevant to the various sources of revenue streams. In addition, increases to annual operating budgets are expected to continue to rise, which provides for funding challenges of transportation system projects as described in the next section.

CHALLENGES IN FUNDING

Transportation infrastructure is the backbone of any thriving community, facilitating the movement of people and goods, supporting economic growth, and enhancing the quality of life for residents. However, securing adequate funding for maintaining, upgrading, and expanding transportation systems has become increasingly challenging for agencies across the United States. The complexity of transportation funding is exacerbated by several key factors, including fluctuating revenues, rising construction costs, and the evolving demands of modern transportation networks.

Fluctuating Revenues and Funding Sources

One of the primary challenges facing municipalities and transportation agencies is the volatility of traditional funding sources. Revenues from fuel taxes, which have historically been a significant source of funding for transportation projects, have become less reliable. This volatility is driven by increased fuel efficiency, the growing popularity of electric vehicles, and changing travel behaviors. As a result, agencies are experiencing a gap between the funds available, and the investment needed to maintain and expand transportation infrastructure.

Rising Construction Costs

Another significant hurdle is the escalating cost of construction materials and labor. Inflation in the construction sector typically outpaces general inflation, driven by factors such as global supply chain disruptions, increased demand for materials, and a shortage of skilled labor. These rising costs impact the ability of agencies to deliver projects on time and within budget, often leading to delays, scope reductions, or the need for additional funding.

As part of the development of prioritized transportation programs and projects discussed later in this plan, inflation costs were included and can have significant budget impacts over the long term. This is in part due to the significance of the effects of compounding year-over-year inflation. To calculate the impact of annual construction inflation accurately, especially for long-term financial planning like transportation infrastructure projects, it is more appropriate to use exponential growth rather than linear growth. Exponential growth accounts for the compounding effect of inflation over time, which is more realistic when dealing with annual percentage increases.

With exponential growth, each year's inflation is applied to the new base amount from the previous year, which includes all prior inflation. This reflects the reality of how inflation compounds over time. For example, a project cost starts at $100 and inflation is 4% per year,

the first year's cost will increase to $104. The second year, inflation is calculated at $104, not the original $100, and so on. Each year, the cost base on which inflation is calculated increases. For realistic and accurate financial projections in contexts like City planning and infrastructure, where costs are impacted by inflation over multiple years, exponential growth is the preferred and recommended method. This approach provides a more precise understanding of future costs and is crucial for budgeting and securing appropriate funding. Unfortunately, this can make long-term project cost projections daunting, especially when the anticipated growth in revenue streams is less than the growth of inflation. It is difficult to relay the message that "we will accomplish less next year than this year, even though we have a larger budget." This is why it is important to try and find efficiencies in programs.

Competing Priorities and Limited Resources

Municipalities and transportation agencies must also navigate competing priorities and limited financial resources. With the need to address aging infrastructure, enhance safety, improve connectivity, and support sustainable practices, agencies face difficult decisions in prioritizing projects. Balancing immediate maintenance needs with long-term investments in new infrastructure adds another layer of complexity to the funding challenge. This can be especially true in high-growth communities like Ankeny. While expansion and growth can bring many positive benefits, the need to extend services and costly infrastructure at the right time can be challenging when faced with multiple priorities within the existing system.

Federal and State Funding Uncertainties

Federal and state funding programs provide crucial support for transportation projects, but uncertainties in budget allocations and shifting policy priorities can create additional challenges. Agencies must stay adaptable and proactive in seeking out available grants and funding opportunities while aligning their projects with the criteria and goals of these programs.

Innovative Funding Solutions

To address these challenges, transportation agencies are increasingly exploring innovative funding solutions. Public-private partnerships (PPPs), local option sales tax, Congestion Pricing Programs, and the implementation of smart technologies are some of the strategies being adopted to supplement traditional funding sources. Additionally, agencies are advocating for legislative changes to establish more sustainable and predictable revenue streams.

The challenges of transportation funding require a multifaceted approach that combines traditional funding methods with innovative solutions and strategic planning. By understanding and addressing the complexities of fluctuating revenues, rising construction costs, and competing priorities, municipalities can better navigate the financial landscape and continue to deliver essential infrastructure improvements. It is crucial that agencies are able to compete for discretionary funding (grants) for transportation infrastructure projects. As summarized in the next section, there continues to be an increasing portion of funding that is based on competitive awards.

Enhancing Funding Through Grants

Federal grants are a significant component of funding for transportation infrastructure. Ankeny can utilize a variety of grant programs offered by the United States Department of Transportation (USDOT) and Federal Highway Administration (FHWA), each designed to support specific facets of transportation development. A summary of several of these programs and sources is highlighted below.

Active Transportation Infrastructure Investment Program

This program focuses on funding projects that promote non-motorized transportation modes, such as biking and walking paths. Ankeny could leverage this grant to enhance or build new trails and bike lanes, improving connectivity and promoting healthy lifestyle choices among residents.

Bridge Investment Program

Funds from this program can be used for the rehabilitation, replacement, and preservation of bridges. This is particularly relevant for maintaining and upgrading Ankeny's existing bridge infrastructure to ensure the safety and continuity of transportation routes. A structure (culvert) is considered a bridge if it is longer than twenty (20) feet.

Infrastructure for Rebuilding America (INFRA) Program

The INFRA program provides funds for projects that aim to address critical issues facing the nation's highways and bridges. Ankeny could use these funds for major projects that improve key freight corridors, increase safety, and support economic vitality.

Mega Program

This program is designed for large-scale projects costing over $500 million that are of national or regional significance. While the scale may be beyond typical City projects, Ankeny could explore partnerships with state or regional agencies to participate in relevant initiatives.

Neighborhood Access and Equity Grant Program

This grant supports projects that remove barriers to opportunity and improve transportation infrastructure in underserved communities. Ankeny can apply these funds to enhance access to public transportation, reduce transportation costs, and improve safety in targeted neighborhoods.

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program

PROTECT focuses on projects that improve infrastructure resilience to natural disasters and other disruptions. Ankeny could use this funding to adapt its transportation network to better withstand extreme weather-related events, flooding, and other emergencies.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program

RAISE grants are used for street, rail, transit, and port projects that promise to achieve national objectives. Ankeny could benefit from these funds by integrating sustainable practices into its transportation projects, focusing on long-term economic and environmental benefits.

Reconnecting Communities Pilot Program

This initiative funds the planning, design, and construction of infrastructure projects that reconnect communities cut off from economic opportunities by previous infrastructure investments. Ankeny could use it to bridge divides created by highways or other barriers (such as Interstate 35), enhancing community integration.

Recreational Trails Program

This program provides funds to develop and maintain recreational trails for both non-motorized and motorized trail use. Ankeny could expand its network of recreational trails, enhancing leisure and tourist attractions, helping to make Ankeny a tourist destination, consistent with goals identified in the Bicycle Tourism Plan.

Safe Streets for All (SS4A)

SS4A aims to prevent deaths and serious injuries on the transportation network. Ankeny can apply this funding to implement safety measures such as improved intersection control (e.g. roundabouts), pedestrian crossings, traffic calming techniques, and other multimodal safety solutions, including those project areas highlighted in the DMAMPO Safety Plan.

STBG Set-Aside or Transportation Alternatives Program (TAP)

TAP supports diverse transportation projects such as on- and off-road pedestrian and bicycle facilities, community improvement activities, and environmental mitigation. This aligns well with Ankeny's goals to promote active transportation and enhance community aesthetics.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ program provides funding for transportation projects that improve air quality and reduce traffic congestion. Eligible projects include public transit improvements, carpooling and vanpooling programs, traffic flow improvements, and pedestrian and bicycle facilities. Ankeny can use CMAQ funds to implement projects that reduce vehicle emissions, promote alternative transportation modes, and improve overall air quality. In Iowa, CMAQ is administered by Iowa Department of Transportation (Iowa DOT).

Highway Safety Improvement Program (HSIP)

HSIP funds projects that aim to significantly reduce traffic fatalities and serious injuries in all public transportation facilities. This includes a wide range of safety improvements, from intersection safety enhancements to road safety audits. Ankeny can apply for HSIP funds to address high-risk areas identified through safety data analysis, implementing measures such as improved signage, markings, and traffic signal upgrades.

National Highway Performance Program (NHPP)

The NHPP supports the condition and performance of the National Highway System (NHS). It provides funding for the construction of new facilities on the NHS and projects to ensure that the system meets federal performance requirements. Ankeny can use NHPP funds for projects that enhance the NHS within the City, such as major roadway expansions or improvements that support increased traffic capacity and safety.

Surface Transportation Block Grant Program (STBG)

The STBG provides flexible funding that may be used by states and municipalities for projects to preserve and improve the conditions and performance of any Federal-aid highway, bridge, and tunnel projects on any public street, pedestrian and bicycle infrastructure, and transit capital projects. Ankeny can leverage STBG funds for a variety of transportation projects, including street improvements and maintenance, bridge repairs, and the development of pedestrian and bicycle pathways.

Congestion Relief Program

This program provides funding for innovative solutions to congestion problems, focusing on projects that can demonstrate improved traffic flow and reduced congestion. Ankeny can use these funds to implement smart traffic management systems, develop alternative routes, and enhance public transit options to alleviate congestion.

Carbon Reduction Program (CRP)

This program aims to reduce transportation-related carbon emissions by funding projects that support alternative fuel vehicles, non-motorized transportation, and other sustainable practices. Ankeny can apply for funds to support operational efficiency improvements at intersections, electric vehicle infrastructure, develop bike lanes, and promote public transit to reduce carbon emissions.

Rural Surface Transportation Grants

This program provides funding for transportation projects in rural areas, focusing on improving access and connectivity in less populated regions. Ankeny can utilize these funds for projects that improve fringe area roadways, enhance safety, and improve connectivity between rural and urban areas.

Advanced Transportation Technologies and Innovative Mobility Deployment (ATTAIN)

ATTAIN grants support the deployment of advanced transportation technologies and innovative mobility solutions. This includes projects that integrate technology to improve transportation efficiency, safety, and accessibility. Ankeny can use these funds to implement smart traffic systems, develop autonomous vehicle infrastructure, and enhance real-time traffic management solutions.

LOCALIZED GRANT PROGRAMS IN IOWA

In addition to federal programs, several state programs in Iowa provide funding opportunities specifically tailored to the needs of communities like Ankeny. Here are some key programs:

Iowa Clean Air Attainment Program (ICAAP)

The Iowa DOT administers ICAAP, a program that provides funding for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available for projects with high potential for reducing transportation-related congestion and air pollution. Ankeny could use this funding to make improvements aimed at reducing congestion on key corridors and at major intersections throughout the City.

Traffic Safety Improvement Program (TSIP)

TSIP provides safety funds to cities, counties, and the Iowa DOT for use on transportation safety improvements, traffic control devices, studies, and outreach. Ankeny could use this funding to make site specific safety improvements or to purchase traffic control device materials such as signs, traffic signals, or pavement markings.

Urban-State Traffic Engineering Program (U-STEP)

U-STEP is a program which provides funding to Iowa cities to solve traffic operation and safety problems on primary streets. This funding could be used to further Ankeny's vision to facilitate the efficient movement of citizens, students, visitors, and commerce within and through the City on a safe, well-maintained, convenient, coordinated, and fiscally responsible network of streets.

Resource Enhancement and Protection (REAP)

REAP is a State of Iowa grant program that invests in the enhancement and protection of the state's natural and cultural resources. These grants cover various project types including City parks and open spaces, roadside vegetation (including community gateways), soil and water enhancements, and conservation education programs. These grants could help support Ankeny's goals for the environment and for parks and recreation.

Revitalize Iowa's Sound Economy Program (RISE)

The RISE program is an initiative by the Iowa Department of Transportation aimed at promoting economic development through the establishment, construction, and improvement of public roads and streets. The program focuses on value-adding activities that introduce new funds into the economy, thereby maximizing economic impact across the state. Funding is available for Immediate Opportunity Projects and Local Development Projects that are typically categorized as industrial, manufacturing, warehousing, distribution, and professional office uses.

Sign Replacement Program for Cities and Counties

The Iowa DOT Sign Replacement Program is intended to replace damaged, worn out, obsolete or substandard signs and signposts in Iowa cities and counties. This program supports Ankeny's transportation goal to protect and enhance the transportation system and would reduce the cost of maintenance of signs.

Pedestrian Curb Ramp Construction Program

This Iowa DOT program assists cities in complying with the Americans with Disabilities Act (ADA) on primary roads in Iowa cities. The City must engineer and administer the project, and all curb ramps shall meet ADA Standards. The program allows for up to $250,000 in funding per city, per year.

FUNDING AND REVENUE SOURCES TAKEAWAYS

A comprehensive funding strategy that anticipates future needs, adjusts to economic conditions, and explores all avenues for revenue generation is essential for Ankeny. By strategically managing and expanding its revenue sources, Ankeny can ensure the development of a robust transportation network that supports the City's growth and enhances the quality of life for all its residents.

city of Ankeny

PROGRAMS & POLICIES

Programs & Policies

The City of Ankeny's TMP aims to create the foundation for a comprehensive, safe, efficient, and sustainable transportation network that meets the evolving needs of the community. Central to achieving this vision are the programs and policies that guide the planning, development, and management of a well-rounded transportation system. The City has many existing programs, policies, and processes in place that promote the development and delivery of desirable transportation infrastructure and support the continued high rate of growth. Through the development of the TMP, and the engagement conducted, a number of additional program and policy areas have been highlighted and recommended based on the existing state of transportation systems and infrastructure in Ankeny.

Developing and implementing robust programs and policies in key areas is essential for several reasons:

- **Strategic Coordination and Planning:** Formalized policies can help ensure that all transportation initiatives are aligned with the City's long-term vision. They provide a framework for coordinating efforts across different departments and stakeholders and reducing inefficiencies and redundancies.
- **Data-Driven Decision Making:** Programs that emphasize data collection and analysis allow the City to make informed decisions. By understanding existing conditions, performance metrics, and future needs, Ankeny can prioritize projects that offer the greatest benefits and address critical issues effectively.
- **Safety and Efficiency:** Targeted programs focusing on safety and technology integration help optimize traffic and pedestrian flow and enhance the overall safety of the transportation system. Policies that address high-risk areas and incorporate advanced technologies can significantly reduce crashes and improve travel experiences for all users.
- **Sustainability and Environmental Stewardship:** Implementing policies that promote sustainable practices and environmental stewardship is vital for minimizing the ecological impact of the transportation network. These initiatives help reduce carbon emissions, protect natural resources, and ensure a healthy environment for future generations.

- **Accessibility and Mobility:** Programs that enhance multimodal transportation services help ensure that all residents, regardless of age, ability, or socioeconomic status, have access to reliable and convenient transportation options. This fosters greater inclusivity and mobility within the community.
- **Economic Growth and Quality of Life:** Transportation systems are fundamental to economic development. By improving infrastructure, reducing congestion, and enhancing connectivity, an environment is created that supports local businesses, attracts investment, and improves the overall quality of life for Ankeny residents.

The various program and policy areas further described below, are suggested to help achieve Ankeny's transportation goals. The areas of focus include:

- Access Management Policy
- Asset Management Program
- Transportation Safety
- Transit Service
- Technology Integration
- Mobility as a Service (MaaS)
- Environmental Stewardship
- Capital Improvement Program (CIP) Streamlining

These items are summarized with background information, objectives, key actions, and expected outcomes, offering a path forward for the development and implementation of these initiatives.

ACCESS MANAGEMENT POLICY

Background:

Access management involves the careful planning and regulation of access points, such as driveways and intersections, to streets. Effective access management improves traffic flow and safety by minimizing conflict points, reducing congestion, and facilitating efficient use of the transportation network.

Objective:

Develop and adopt a formal Access Management Policy to enhance the coordination of development projects and improve the overall transportation system planning in Ankeny. This would include the development and adoption of a stand-alone policy document that details the existing and future street network by "access management category" in a detailed map and associated set of standards and process requirements. This document would be used during programming and future development of the street network; and in coordination with developers to promote safe, efficient transportation corridors with defined access spacing requirements.

Key Actions:

- Develop necessary documentation and associated mapping that summarizes the arterial and collector network, both existing and proposed, in terms of "access management categories." Enact a standards-based approach, by facility type, to clearly delineate minimum access spacing, type, and configuration requirements for the various corridors and define acceptable operations and design expectations.
- Traffic Impact Study (TIS) Standards: The City established TIS Standards in 2015 to assess potential effects on the transportation network and identify necessary improvements in new development areas. These standards have been consistently applied since their adoption within City limits. It is recommended to incorporate these TIS standards into the Access Management Policy.
- Street Construction Responsibilities: Define clear responsibilities and requirements for street construction, ensuring developers contribute to the necessary infrastructure improvements.
- Coordination and Planning: Foster collaboration between developers, City planners, and City transportation engineers to align projects with the City's transportation objectives.

Expected Outcomes:

- Improved traffic flow and safety on major transportation corridors.
  - » Enhanced coordination between public and private sector projects.
  - » Optimized use of existing and future transportation infrastructure.

- Improved trust, relationships, and expectations between the City and development community.

Implementation of sound access management policy can help provide improved network connectivity with desirable access and mobility, while reducing conflicts and congestion on major streets. This is illustrated in *Figure 36,* below.

PREFERRED

- Good local circulation
- Parallel local road distributor
- Fewer access conflicts on highway
- Local circulation to retail, school, neighbors without using the highway
- Supports safe walking, cycling

AVOID

- No parallel local streets
- Isolated lots
- More connections to highway
- Frequent left turns
- Adverse impacts to highway
- Must use highway to visit school or retail
- Impedes local walking, cycling

Figure 36: Access management - example characteristics

(Source, IaDOT Access Management Manual)

An example of primary topic areas and components to include in an Access Management policy are shown below:

1. **Introduction describing access management and its importance.**
2. **Functional classification of municipal streets to define driveway and intersection spacing requirements and development of "access management categories."**
3. **Driveway and Intersection spacing**
   a. Full movement vs. partial movement
   b. Traffic signal spacing
   c. General driveway spacing
   d. Opposing driveway spacing
   e. Number of driveways needed
4. **Defining driveway geometric requirements**
   a. Throat length/width/curb types
   b. Allowable skew
   c. Lane geometry requirements
   d. Sight distance and obstructions per AASHTO Green Book
5. **Auxiliary lane needs**
   a. Establish guidelines to determine the need for right and left turn lanes
   b. Turn lane length requirements
   c. Tapers
6. **Process for stop sign, traffic signal, and roundabout warrants**
7. **Traffic Impact Study Procedures**
   a. Define minimum trip generation requirements for varying tiered study efforts
   b. Define a procedure for scoping
   c. Define analysis requirements and resources
   d. Conditions for approval
   e. Documentation of forms for the scoping and review process
8. **Define deviation request procedures, including temporary access requests**
9. **Glossary**

As part of the policy, Ankeny should identify minimum spacing standards by facility type that set the expectations for promoting good travel corridor safety and operations. An example of such spacing is identified in *Figure 37* below.

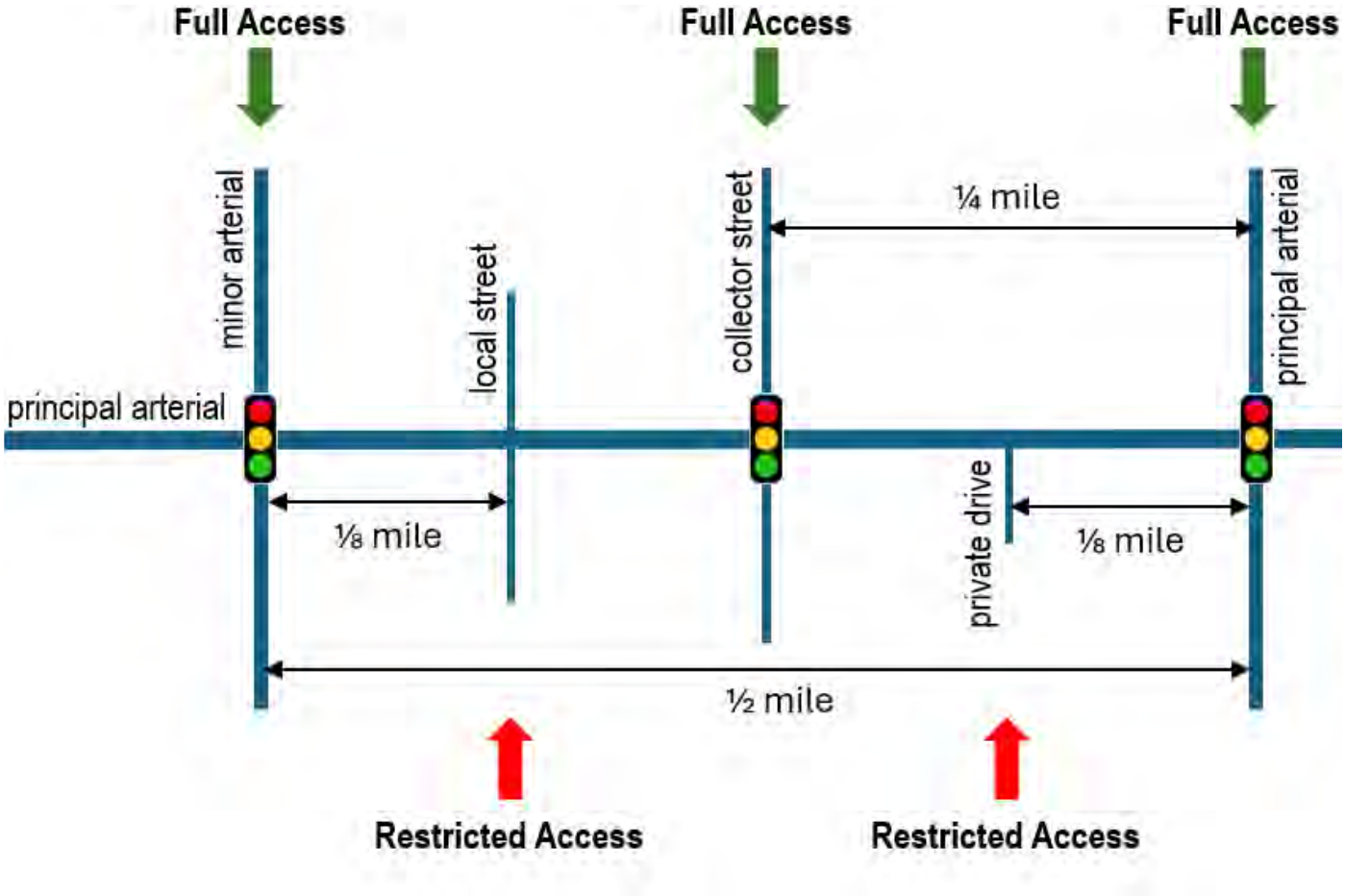


Figure 37: Access management - example intersection spacing criteria

ASSET MANAGEMENT PROGRAM

Background:

An asset management program systematically monitors and maintains transportation infrastructure, ensuring optimal performance and longevity. This includes, but is not limited to, streets, bridges, traffic signals, signage, pavement markings, sidewalks, and transit facilities, with an emphasis on evaluating conditions, prioritizing repairs, and managing resources efficiently.

Objective:

Formalize a comprehensive transportation asset management program to enhance infrastructure longevity through systematic evaluation, documentation, and funding.

Key Actions:

- Evaluation and Documentation: Implement a robust system for evaluating and documenting the condition of existing transportation assets, including pavements, bridges, traffic signals, signing, pavement markings, sidewalks, and transit facilities.
- Pavement Management Systems: Utilize pavement management systems to monitor existing pavement conditions, predict deterioration, and plan maintenance and rehabilitation activities.
- Infrastructure Condition Rating: Develop a standardized rating system for assessing the condition of infrastructure components, prioritizing those in critical need of repair.
- Data-Driven Analysis: Leverage data-driven analysis to inform decision-making, optimize maintenance schedules, and allocate resources efficiently.

Expected Outcomes:

- Prolonged lifespan of transportation assets.
- Reduced maintenance costs through proactive management.
- Data-informed investment decisions ensuring optimal use of funds.
  - Improved budget reliability
  - Increased benefit to other departments within the City of Ankeny
  - Potential reduction in emergency repairs

TRANSPORTATION SAFETY POLICY

Background:

Transportation safety policies play a crucial role in safeguarding all users and work to reduce traffic fatalities and severe injuries. By proactively assessing safety data and performance metrics, these policies identify high-risk areas, and possible mitigation strategies. Through strategic planning, infrastructure improvements, and community involvement, Ankeny strives to create safer, more equitable, and reliable transportation environments. Community engagement plays a crucial role in identifying local safety concerns and garnering public support. Adequate funding and effective project implementation are vital aspects of these policies.

Objective:

Recognize that fatal and severe crashes are preventable. Prioritize transportation safety by regularly reviewing safety data, identifying high-risk areas, and implementing targeted infrastructure enhancements and community engagement efforts.

Key Actions:

- Establish a framework that prioritizes transportation safety in project planning, design, construction, and maintenance activities.
- Safety Data Review and Performance Analysis: Establish a system for regularly reviewing safety data and performance metrics to identify high-risk areas and ensure effective resource allocation.
- Funding Prioritization: Adopt a framework for prioritizing funding towards high-risk areas and critical safety improvements to maximize impact.
- Project Safety Reviews: Conduct safety reviews of planned CIP projects to ensure safety-related modifications are included. This can include key location strategies such as safe pedestrian crossing infrastructure, pedestrian and vehicle safety during construction, and roundabout intersection control.
- Project Implementation: Support the implementation of safety projects and infrastructure enhancements based on identified needs and prioritized funding.
- Community Engagement and Support: Engage with the community to build support for safety initiatives and gather feedback on local safety concerns.

Expected Outcomes:

- Enhanced Safety for All Users: Transportation safety policies create safer streets for drivers, cyclists, pedestrians, and public transit users, reducing crashes and fatalities.
- Data-Driven Decision Making: Regularly reviewing safety data and performance measures allows policymakers to identify high-risk areas and allocate resources effectively.
- Comprehensive Planning: Integrating safety into transportation planning ensures that safety considerations are central to the development of infrastructure projects.
- Informed Citizens: Engaging with the community helps identify local safety concerns and may garner public support for safety initiatives.
- Multimodal Safety: Addressing safety across all transportation modes ensures that every segment of the population is considered, promoting equity in transportation safety.
- Cost Savings: Reducing crashes and improving safety leads to significant societal cost savings in medical expenses, property damage, and lost productivity.
- Compliance with Regulations: Ensuring that transportation systems meet safety standards helps avoid legal liabilities and penalties.
- Long-Term Sustainability: Prioritizing safety in transportation planning contributes to the long-term sustainability of the transportation network, ensuring it remains safe and reliable for future generations.

TRANSIT SERVICE PROGRAM

Background:

Public transit is essential for building a sustainable and accessible transportation network that prioritizes user needs. By coordinating with DART and continuing to explore expanded transit services, Ankeny can enhance its transit options to better serve the community. This includes evaluating and adjusting services/routes to meet seasonal demands, major destinations, and specific demographics such as seniors and youth. Improved transit infrastructure and practices will provide residents with convenient and reliable transportation, reducing reliance on personal vehicles, easing traffic congestion, and ensuring equitable access to mobility for all Ankeny residents.

Objective:

Expand and enhance transit services in collaboration with DART to meet the diverse needs of Ankeny's residents, fostering accessibility, connectivity, inclusivity, and mobility.

Key Actions:

- Continued Coordination with DART on System Improvements: As a follow-up to the previous 2021 Evaluation of Transit Service Study, which highlighted multiple service, financial, and route opportunities, continued coordination with DART is necessary to refine the focused delivery of transit services, capitalize on seasonal needs, serve major destinations, and target service needs of specific demographics such as seniors and youth. An evaluation of the DART On Demand pilot project integration will be needed to document Mobility as a Service (MaaS, discussed later) options. This service helps fixed routes address "first and final mile" connectivity, providing lower-cost, flexible, on-demand solutions. This approach improves accessibility, connectivity, and mobility, ensuring equitable and reliable transportation for all residents.
- Tailor Transit Services: Develop and implement transit services tailored to seasonal needs, major destinations, and specific demographics such as seniors and youth, ensuring convenient and reliable transportation options. Collecting data on transit needs through the current services and additional surveys can help highlight additional microtransit opportunities with lower cost options such as vans and even cars to provide nimble service.
- Planning and Implementation of Supporting Infrastructure: Be cognizant of new opportunities for supporting infrastructure as street projects and new development areas are constructed. This includes sidewalk extensions, dedicated transit stops, benches,

shelters, pullouts, or safe crossings. Early coordination with adjacent projects can leverage enhanced transit operations – both existing and future.

- Expand Service in Disadvantaged Areas: Expand transit services to any disadvantaged areas, ensuring all residents have access to essential transportation, particularly where traditional fixed routes are less effective.
- In November, 2024, members from Des Moines and the area suburbs served by DART committed to reimagine regional transit service over the next 18 months. It will be critical as a part of this effort that Ankeny stay engaged with the study process and possible alternatives to maximize public transit service and efficiency for the community.

Expected Outcomes:

- Increased Accessibility: Policies that enhance transit services ensure that all community members, including seniors, youth, and those without access to personal vehicles, have reliable transportation options. This fosters greater inclusion and independence for these groups.
- Enhanced Connectivity (Microtransit): By expanding and improving transit routes, including microtransit options, these programs help connect residents to major destinations such as schools, workplaces, healthcare facilities, and recreational areas. This connectivity supports economic growth and community engagement. Microtransit offers flexible routing and scheduling, making it ideal for areas where traditional fixed-route services are less effective.
- Environmental Benefits: Improved public transit, including microtransit, reduces the reliance on personal vehicles, leading to decreased traffic congestion and lower greenhouse gas emissions. This contributes to a more sustainable and environmentally friendly community.
- Economic Efficiency: Reliable and efficient public transit can reduce transportation costs for residents, particularly for low-income households. Additionally, it can support local businesses by facilitating easier access for customers and employees. Microtransit can offer cost-effective solutions in areas with lower demand or when traditional services are not economically viable.
- Public Health and Safety: Enhanced transit services can reduce the incidence of traffic crashes and related injuries by providing a safer alternative to driving. Moreover, increased physical activity associated with walking to and from transit stops can improve public health.

TECHNOLOGY INTEGRATION

Background:

Integrating advanced technologies into transportation infrastructure can significantly improve efficiency, safety, and user experience. Intelligent Transportation Systems (ITS), advanced signal systems, and data analytics are key components of a modern, resilient transportation network.

Objective:

Embrace technology integration in transportation infrastructure to enhance efficiency, optimize traffic flow, and prepare for future needs. This includes staying abreast of new technologies and leveraging opportunities to learn what peer cities are doing regionally and nationally.

Key Actions:

- Integration of Intelligent Transportation Systems (ITS): Continued planning and implementation of ITS solutions, including real-time traffic monitoring, adaptive signal control, and traveler information systems should be commonplace as the market pushes these technologies further.
- Advanced Signal System Enhancements: Ankeny has continued to implement signal system technologies and upgrade relevant hardware and software components such as controllers, detection systems, and management software. This program should continue to be prioritized in order to stay ahead of the technology curve and improve coordination and reduce congestion along commuter corridors.
- Formal Traffic Signal Timing Program: Continued cyclical evaluation and implementation of traffic signal timing modifications on major corridors should be performed. This can be enhanced with private sector partnerships to allow staff to focus on priority operations and maintenance needs and deployment of new signal and communications equipment.
- Data-Driven Solutions: Utilize data analytics and performance measures, such as signal performance measures (SPMs) and automated traffic counting to optimize traffic management and predict future transportation needs.

Expected Outcomes:

- Smoother traffic flow, reduced congestion, and improved commuter satisfaction.
- Enhanced capability to manage and respond to traffic incidents.
- Future-ready transportation infrastructure and lower capital rehabilitation costs in the future.
- Lowered carbon emissions and overall carbon footprint.

MOBILITY AS A SERVICE (MaaS) PROGRAM

Background:

Mobility as a Service (MaaS) works to support a seamless, integrated transportation system that prioritizes user-centric solutions. By promoting infrastructure and practices that support MaaS, Ankeny can offer a variety of transportation options, such as rideshare, bike share, car share, scooters, public transit, and other mobility options. This integration allows residents and visitors to access diverse, convenient transportation methods, reducing dependency on personal car ownership or use.

Objective:

Establish rules, standards, and guidelines that enable future MaaS providers to provide integrated, user-centric transportation options within the City of Ankeny.

Key Actions:

- Promote infrastructure and practices that support MaaS to offer integrated, user-centric transportation options such as rideshare, bike share, scooters, and public transit. This enables residents and visitors to have convenient access to diverse transportation options, improving connectivity, reducing congestion, and promoting flexible and economical travel choices throughout Ankeny.
- Mobility Task Force: Organize a short-term task force comprising public officials and private stakeholders. Their mission is to explore opportunities and identify barriers to implementing MaaS in the City of Ankeny.
- Establish Operating Rules: It is not recommended that Ankeny directly own and operate MaaS services; however, it must establish clear operating rules. These operating rules should cover aspects such as data sharing, safety standards, and service quality.
- Organize Engineering Standards for Infrastructure: Adopt engineering standards for the placement and materials of future MaaS infrastructure components. This includes kiosks, hubs, parking facilities, and power supply.
- Plan Strategic Locations: Support the placement of shared mobility kiosks and parking near key public services, such as parks, schools, and transit hubs.
- Promote Unified Digital Access and Payment: Encourage MaaS operators to provide unified digital access platforms. Users should be able to seamlessly plan, book, and pay for various transportation modes through a single interface. Streamlined payment options enhance user convenience.

Expected Outcomes:

- Increased Accessibility: MaaS ensures that diverse transport options are available to all community members, including those who do not own personal vehicles. This inclusivity promotes independence and enhances the quality of life for vulnerable populations such as the elderly, youth, and low-income households.
- Enhanced Connectivity: By integrating multiple transportation modes, MaaS enhances the connectivity of urban areas. It simplifies the movement between different locations, making it easier for residents to access essential services such as healthcare, education, and employment. This improved connectivity supports economic development and social cohesion.
- Environmental Benefits: MaaS encourages the use of shared and public transportation over personal vehicle use, which helps to reduce traffic congestion and lower greenhouse gas emissions. This shift contributes to a cleaner, more sustainable urban environment, aiding efforts to combat climate change and improve air quality.
- Economic Efficiency: MaaS can lower transportation costs for users by offering more cost-effective travel options. This is particularly beneficial for low-income individuals who can save money on transportation. Additionally, businesses benefit from enhanced accessibility, which can lead to increased customer traffic and employee punctuality.
- Public Health and Safety: By providing safer alternatives to driving, MaaS can reduce the number of traffic crashes and related injuries. Rideshare options have been shown to lower crash rates and intoxicated driving offenses. Furthermore, the system promotes active transportation modes such as biking and walking, which can lead to better public health through increased physical activity.
- Technological Innovation: Implementing MaaS drives the adoption of advanced technologies like mobile apps, real-time data analytics, and integrated payment systems. These innovations enhance the user experience by making transportation services more efficient, responsive, and user-friendly while also positioning cities as leaders in smart mobility solutions.

ENVIRONMENTAL STEWARDSHIP PROGRAM

Background:

Environmental stewardship in transportation involves adopting practices that reduce the ecological footprint of transportation infrastructure and operations. This includes minimizing carbon emissions, conserving natural resources, and ensuring that transportation projects enhance rather than detract from environmental quality.

City Code supports installation of street trees with new residential subdivisions, and City capital improvement projects often include plantings, bioswales, or landscape elements.

Objective:

Integrate environmental stewardship in transportation planning, design, construction, and operations to minimize carbon emissions, protect natural resources, and enhance Ankeny's ecological health.

Key Actions:

- Leverage Sustainable Practices: Use sustainable practices in transportation projects, including the use of eco-friendly materials and construction methods.
- Reduce Carbon Emissions: Implement measures to reduce carbon emissions from transportation, such as promoting public transit and non-motorized transport options and implementing enhanced traffic signal management solutions that reduce stops and delays.
- Protect Natural Resources: Ensure transportation projects do not adversely affect natural resources, incorporating green spaces and preserving biodiversity.

Expected Outcomes:

- Reduced environmental impact of transportation projects.
- Enhanced quality of life through improved air quality and preserved natural areas.
- Leadership in sustainable transportation practices.

CAPITAL IMPROVEMENT PROGRAM STREAMLINING

Background:

Capital improvement programs are essential for maintaining and upgrading transportation infrastructure. Streamlining these programs can improve efficiency, reduce costs, enhance safety, and accelerate the completion of critical projects.

Objective:

Streamline and combine components of annual street rehabilitation programs to improve budgeting, project prioritization, provide flexibility, and eliminate restrictions within transportation system improvement categories.

Key Actions:

- Program Integration: Combine components of the Annual PCC Street Patching, Asphalt Street Resurfacing, Pavement Preservation, and Street Replacement Programs to streamline processes and eliminate redundancy.
- Improved Budgeting: Develop a unified budgeting approach for these programs to ensure efficient allocation of funds and resources.
- Project Prioritization: Establish clear criteria for prioritizing projects based on condition assessments and strategic importance.

Expected Outcomes:

- Increased efficiency in project delivery.
- Optimized use of financial and material resources.
- Enhanced ability to address critical infrastructure needs promptly.

city of Ankeny

PROPOSED PROJECTS & PRIORITIZATION

Proposed Projects & Prioritization

The Transportation Master Plan process incorporates various goals and objectives within the CIP, translating the community's values into specific projects. This process aims to optimize public funds for maximum public benefit, aligning with the needs and preferences of the public, City Staff, elected officials, and other stakeholders. These values were discussed and expressed through the TMP goals, priorities, and tradeoffs, producing a list of projects and programs to help guide Ankeny's transportation system well into the future.

In order to categorize these improvements, they were placed into overall groupings to align with the planning level time frames for proposed implementation to support continued growth and enhancement of the system. Project work associated with current Annual Programs was also evaluated for long-term cost implications based on potential inflation (as discussed previously) and those costs were extended to illustrate ongoing program needs as well. For other specific projects and studies associated with the CIP, a lengthy list of improvements was proposed, including a review and confirmation of current Near-Term initiatives in Ankeny's CIP. In addition, subsequent 10-year planning horizons were utilized to develop a set of projects for both Mid-Term and Long-Term buildout scenarios. Finally, a set of future, shared-use trail projects was identified in addition to project efforts associated with the City's traffic signal system. All components are highlighted below.

- Annual Programs - Current categories in the 2024-2028 Ankeny CIP that accomplishes work in multiple areas.
- Near-Term Projects - A 5-year time frame from 2024-2028 that includes proposed CIP projects.
- Mid-Term Projects - Next 10-year time frame following after the Near-Term CIP period.
- Long-Term Projects - A 10-year time frame following after the Mid-Term period.
- Shared-Use Trail Projects - A set of future projects to help fill in gaps and extend facilities.

- Traffic Signal Timing Improvement Corridors - Identified priority corridors for signal retiming.
- Fiber Optic Network Upgrades - Phased plan for fiber optic communications upgrades.

The process of project prioritization, which enables the City to better evaluate and program projects, is discussed below. In addition, the proposed programs and projects that were developed are further described on the following pages, along with planning level cost projections. Additional details are also provided in their relevant appendices. The Near-Term projects are closely aligned with City's prioritization listed in the 2024-2028 CIP. Recommended Mid-Term and Long-Term projects were further prioritized through weighting and scoring criteria to help define priorities within each category. While this is a somewhat dynamic process, the scoring criteria calculations can be used by staff in subsequent years to help identify and update project priorities based on the greatest need.

PROJECT PRIORITIZATION

The prioritization of projects within a TMP can help agencies more systematically plan for improvements and better compare potential project benefits against one another. As part of the public engagement process, several initial themes helped guide the development of goals and objectives for the plan as previously discussed. These goals and objectives are then strongly considered when identifying potential future projects. To help provide a process for comparing and contrasting projects, a planning level methodology was used to score projects by evaluating them against a set of five criteria: safety, mobility, pedestrian and bike access, maintenance, and economic vitality. These criteria were chosen by the project team to align with the overarching goals of the TMP. The weighting of these goals was determined through a collaborative effort involving a focus group composed of various stakeholders, including representatives from the development and business communities, downtown interests, bicycle and pedestrian advocates, healthy living and environmental groups, human services providers, institutions, and neighborhood representatives. Additionally, feedback from public open house meetings and the stakeholder group itself played a crucial role in shaping the priorities.

During the Phase 2 focus group meetings in November 2023, attendees ranked the projects based on four main categories: expansion and growth, transportation system optimization, multimodal system enhancement and connectivity, and preservation, maintenance, and rehabilitation. The final rankings from attendees reflected the community's goals and vision for Ankeny's future transportation system. Furthermore, a public survey was distributed to gather broader community input on project prioritization. The survey results indicated that the top priority for residents was multimodal transportation improvements, followed by expansion and growth, transportation system optimization, and preservation, maintenance, and rehabilitation.

After gathering input from the public survey and focus groups, the City stakeholder team evaluated and aligned these priorities with the overall transportation goals of the City. This comprehensive evaluation process helped to finalize the project ranking. The final weighting for each of the criteria was established as:

- 25% for safety,
- 25% for mobility,
- 15% for pedestrian and bike access,
- 25% for maintenance,
- and 10% for economic vitality.

Each project was then scored on a scale from 0 to 2 based on how well it met each of these five (5) criteria. The weighted average of these scores determined the total score for each project, which in turn determined its final rank in the various project listings.

Mid-term and long-term projects were ranked based on these criteria, ensuring that the most critical and impactful projects were prioritized. The project scoring is shown in *Table 9* and *Table 10.* In addition, to break out the corridor study projects separately from infrastructure projects, *Table 11* was developed to compare and prioritize the mid-term and long-term studies together. Near-term projects, on the other hand, were already included in the 2024-2028 CIP and were not included in the additional scoring exercise. This structured approach to project prioritization helps to ensure that Ankeny's infrastructure investments are aligned with the City's growth and development goals, addressing immediate needs while also preparing for future challenges. Through this systematic process, the City can best manage its resources and implement projects that enhance safety, mobility, and overall quality of life for its residents. A comprehensive description of the listed projects, along with scoring and additional program focus areas is included in *Appendices A, B,* and *C.*

The spreadsheet scoring criteria have been provided the City of Ankeny staff for use in evaluating future programs and projects. It should be noted that while there are defined rankings that have been documented, transportation projects, especially in future decades, and their prioritization are fluid in nature due to various factors. Thus, these rankings can provide good insight but are not a replacement for the annual and continual evaluation of transportation system needs in a community based on the pace of development and condition of infrastructure. These things can quickly readjust priorities in subsequent versions of a CIP.

Table 9: Mid-Term (2029-2038) Project Scoring

#	Project Name	#1 Safety Score (25%)	#2 Mobility Score (25%)	#3 Ped & Bike Score (15%)	#4 Maint. Score (25%)	#5 Economic Vitality Score (10%)	Total Score	Project Cost (Current)	Project Cost (Future 2034)
M1	NW 36th St Widening - NW State St to NW Ash Dr	2	2	1	0	1	1.25	$5,125,000	$7,587,000
M2	NW 18th St - NW Weigel Dr to NW State St	2	1	2	1	1	1.40	$19,000,000	$28,125,000
M3	NW State St Extension - NW 36th St to NW Abilene Rd	1	2	1	0	2	1.10	$10,200,000	$15,099,000
M4*	NW 18th St Extension - NW Spruce Dr to Iowa Highway 415	1	2	1	0	1	1.00	$9,000,000	$13,323,000
M5*	NE 18th St Bridge over Interstate 35	1	2	1	0	2	1.10	$16,850,000	$24,943,000
M6	NW State St - W 1st St to NW 18th St	2	2	1	2	1	1.75	$5,900,000	$8,734,000
M7*	NE Delaware Ave Reconstruction-Four Mile Creek to NE 36th St	2	1	2	2	1	1.65	$9,950,000	$14,729,000
M8	NE Four Mile Dr - NE 18th St to NE 36th St	2	1	2	0	2	1.25	$12,000,000	$17,763,000
M9	E 1st St Widening - NE Frisk Dr to NE Four Mile Dr	2	2	2	1	2	1.75	$12,250,000	$18,133,000
M10	S Ankeny Blvd Improvements-SW Ordnance Rd to SE Peterson Dr	2	2	1	2	1	1.75	$7,000,000	$10,362,000
M11	SE Corporate Woods Dr - Railroad Overpass	2	2	1	1	2	1.60	$23,500,000	$34,786,000
M12	SE Delaware Ave Capacity Improvements - SE Oralabor Rd to SE 16th Ct	2	2	1	2	1	1.75	$1,970,000	$2,917,000
M13	NW Irvinedale Dr - W 1st St to NW 18th St	2	2	2	1	1	1.65	$13,000,000	$19,244,000
M14	NW Irvinedale Dr - NW 18th St to NW 36th St	2	2	2	1	1	1.65	$13,000,000	$19,244,000
M15	NE 18th St Reconstruction - N Ankeny Blvd to NE Delaware Ave	2	1	1	1	1	1.25	$12,000,000	$17,763,000
M16	SE Four Mile Dr Connector at E 1st St	2	2	1	0	2	1.35	$6,000,000	$8,882,000
M17*	S Ankeny Blvd and SE Oralabor Rd Safety Improvements	2	2	2	1	1	1.65	$8,200,000	$12,139,000
M18	SE Delaware Ave Corridor Study - SE Magazine Rd to E 1st St	(See Corridor Study Scoring Summary)						$150,000	$223,000
M19	SE Magazine Rd Corridor Study - SE Delaware Ave to NE 38th St	(See Corridor Study Scoring Summary)						$300,000	$445,000
M20	SE Corporate Woods Dr and SE Four Mile Dr Intersection Improvements	2	2	1	0	1	1.25	$4,000,000	$5,921,000
M21	NE 36th St Reconstruction - NE Four Mile Dr to NE 38th St	2	1	1	0	2	1.10	$13,000,000	$19,244,000
M22	NE 54th St Corridor Study - NE Delaware Ave to NE 38th St	(See Corridor Study Scoring Summary)						$300,000	$445,000
M23	NE 54th St and NE Delaware Ave Intersection Improvements	2	1	1	0	1	1.00	$4,000,000	$5,921,000
M24	NE 72nd St and NE Delaware Ave Intersection Improvements	2	1	1	0	2	1.10	$4,000,000	$5,921,000
M25	NE 72nd St and N Ankeny Blvd Intersection Improvements	2	2	1	0	1	1.25	$4,000,000	$5,921,000
M26	W 1st Street Corridor Study - State St to Scott St	(See Corridor Study Scoring Summary)						$150,000	$223,000
M27	E 1st St Corridor Study - Ankeny Blvd to Trilein Dr	(See Corridor Study Scoring Summary)						$150,000	$223,000
M28	NW 36th St Corridor Study - NW Irvinedale Dr to IA 415	(See Corridor Study Scoring Summary)						$300,000	$445,000
M29	SW 4th St Reconstruction - SW Maple St to SW Cherry St	1	0	1	2	1	1.00	$800,000	$1,185,000
M30	SE Four Mile Drive Corridor Study - SE Corporate Woods Dr to south corp limits	(See Corridor Study Scoring Summary)						$150,000	$223,000

** Indicates Project initiated in Near-Term. Portions of Project Costs Shown Are Anticipated To Be Incurred in Near-Term Period.*

Table 10: Long-Term (2039-2048) Project Scoring

		25%	25%	15%	25%	10%			
#	Project Name	#1 Safety Score	#2 Mobility Score	#3 Ped & Bike Score	#4 Maint. Score	#5 Economic Vitality Score	Total Score	Project Cost (Current)	Project Cost (Future 2034)
L1	NW 36th St Widening - NW Irvinedale Dr to NW State St	2	2	1	0	1	1.25	$11,000,000	$24,103,000
L2	NW State St Extension - NW Abilene Rd to NW 54th St	1	2	1	0	2	1.10	$10,200,000	$22,350,000
L3	NE Delaware Ave - NE 36th St to NE 72nd St	2	1	1	0	1	1.00	$23,000,000	$50,396,000
L4	NE 72nd St - N Ankeny Blvd to NE Four Mile Dr	2	1	2	0	2	1.25	$22,000,000	$48,205,000
L5	NE Four Mile Dr - NE 36th St to NE 72nd St	2	1	1	0	2	1.10	$23,000,000	$50,396,000
L6	NE 54th St - N Ankeny Blvd to NE Delaware Ave	2	1	2	0	1	1.15	$11,000,000	$24,103,000
L7	NE 54th St - NE Delaware Ave to NE Four Mile Dr	1	2	1	0	2	1.10	$30,000,000	$65,734,000
L8	NW Irvinedale Dr - NW 36th St to NW 54th St/State	2	1	1	0	1	1.00	$8,000,000	$17,529,000
L9	NE 38th St - E 1st St to NE 36th St	2	1	1	0	2	1.10	$22,000,000	$48,205,000
L10	E 1st St - NE Four Mile Dr to NE 38th St	2	2	2	1	2	1.75	$11,000,000	$24,103,000
L11	SE Oralabor Rd Corridor Study - SE Four Mile Dr to NE 38th St	(See Corridor Study Scoring Summary)						$150,000	$329,000
L12	NE 38th St Corridor Study - SE Corporate Woods Dr to E 1st St	(See Corridor Study Scoring Summary)						$300,000	$658,000
L13	SE Oralabor Rd and NE 38th St Intersection Improvements	2	1	1	0	2	1.10	$4,000,000	$8,765,000
L14	NW 54th St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	(See Corridor Study Scoring Summary)						$150,000	$329,000
L15	NW 72nd St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	(See Corridor Study Scoring Summary)						$150,000	$329,000

Table 11: Corridor Study Project Prioritization Scoring

Mid-Term Corridor Studies

#	Project Name	#1 Safety Score (25%)	#2 Mobility Score (25%)	#3 Ped & Bike Score (15%)	#4 Maint. Score (25%)	#5 Economic Vitality Score (10%)	Total Score	Project Cost (Current)	Project Cost (Future 2034)
M18	SE Delaware Ave Corridor Study - SE Magazine Rd to E 1st St	2	1	1	1	1	1.25	$150,000	$223,000
M19	SE Magazine Rd Corridor Study - SE Delaware Ave to NE 38th St (includes overpass)	1	2	1	0	2	1.10	$300,000	$445,000
M22	NE 54th St Corridor Study - NE Delaware Ave to NE 38th St (includes overpass)	1	2	1	0	2	1.10	$300,000	$445,000
M26	W 1st Street Corridor Study - State St to Scott St	2	1	1	1	1	1.25	$150,000	$223,000
M27	E 1st Street Corridor Study - Ankeny Blvd to Trilein Dr	2	1	1	1	1	1.25	$150,000	$223,000
M28	NW 36th Street Corridor Study - NW Irvinedale Dr to IA 415	1	2	1	0	1	1.00	$300,000	$445,000
M30	SE Four Mile Drive Corridor Study - SE Corporate Woods Dr to south corp limits	2	1	1	1	2	1.35	$150,000	$223,000

Long-Term Corridor Studies

#	Project Name	#1 Safety Score (25%)	#2 Mobility Score (25%)	#3 Ped & Bike Score (15%)	#4 Maint. Score (25%)	#5 Economic Vitality Score (10%)	Total Score	Project Cost (Current)	Project Cost (Future 2034)
L11	SE Oralabor Rd Corridor Study - SE Four Mile Dr to NE 38th St	2	1	2	1	2	1.50	$150,000	$329,000
L12	NE 38th St Corridor Study - SE Corporate Woods Dr to E 1st St	2	1	1	1	2	1.35	$300,000	$658,000
L14	NW 54th St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	2	1	1	1	1	1.25	$150,000	$329,000
L15	NW 72nd St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	2	1	1	1	1	1.25	$150,000	$329,000

PROPOSED PROJECTS

Annual Programs:

The Annual Programs detailed in Ankeny's CIP are a fundamental part of the City's infrastructure improvement strategy. Each program, from the Annual Traffic Signal Improvement Program to several maintenance and rehab initiatives, to the Annual Sidewalk/ Trail Construction Program, is designed to keep the City's multimodal transportation network safe, efficient, and accessible.

Achieving efficiencies within these programs is critical for sustainable asset management, especially when considering the life cycle of pavement assets. Regular maintenance and timely repairs, which are a focus of the Annual PCC Street Patching Program, Annual Pavement Preservation Program, and Annual Asphalt Street Resurfacing Program, significantly benefit the overall infrastructure budget. For instance, investing funding in the near term on concrete street patching prevents minor issues from escalating into major problems, avoiding substantially higher costs later. Similarly, the funds allocated for asphalt street routine and preventive maintenance activities extend the lifespan of these assets. These programs allow for timely repairs, provide a means to dynamically adjust priorities on pavement issues that occur, and help keep "the good streets good," which is a major component of asset management.

The Annual Street Replacement Program, with a near-term budget of $9,250,000 for the five-year period, includes full-depth pavement removal and replacement for street segments in poor or very poor condition. These projects may include improvements to failing subgrades and public utilities that are along and/or crossing these street segments. This approach to getting more complete work done in the vicinity all at one time helps to promote the "OHIO" principle of "only handle it once." This avoids rework in the same project areas multiple times and eliminates the cyclical street closures that can frustrate the public.

Another annual program, targeted at pedestrian and bicyclist mobility is the Annual Sidewalk/ Trail Construction Program. This program includes the reconstruction of pedestrian ramps within existing neighborhoods to bring them into ADA compliance, fill in connectivity gaps adjacent to and within City-owned properties, and provide funding for upsizing adjacent development sidewalks.

These annual programs promote the continuous cycle of assessment, planning, and implementation of system improvements. These flexible annual programs enhance the effectiveness of infrastructure investments, promoting long-term sustainability and fiscal

responsibility. A list of these programs and recommended funding ranges based on anticipated inflation are shown in *Table 12.*

Table 12: Annual Program Projected Costs

Annual Program	Description	Near-Term Costs (2024-2028)	Mid-Term Costs (2029-2038)	Long-Term Costs (2039-2048)
Traffic Signal Improvement Program	Traffic Signal Equipment, Operations, Construction, and Planning	$6,974,000	$20,724,000	$30,676,000
PCC Street Patching Program	Concrete Street Patching	$8,875,000	$26,645,000	$39,441,000
Asphalt Street Resurfacing Program	Asphalt Street Rehabilitation	$1,975,000	$5,921,000	$8,765,000
Pavement Preservation Program	Asphalt and Concrete Street Routine and Preventative Maintenance	$4,000,000	$11,842,000	$17,529,000
Street Replacement Program	Concrete Street Replacement	$9,250,000	$29,605,000	$43,823,000
Sidewalk/Trail Construction Program	Pedestrian and Bicycle Facility Construction and Upgrades	$2,875,000	$8,882,000	$13,147,000

Near-Term Projects:

The 2024-2028 Capital Improvement Program (CIP) for Ankeny outlines a comprehensive strategy for infrastructure development, comprising 26 specific transportation projects (in addition to those within annual programs) with a total investment level of more than $150 million in transportation funding. This plan, previously adopted as the approved 5-year plan for City infrastructure, aims to upgrade essential infrastructure, exercise fiscal responsibility, and improve residents' quality of life. Key goals include providing a safe multimodal transportation system, creating an efficient and reliable network, and supporting economic vitality. These projects are planned to help meet the City's growing needs while promoting sustainable and efficient resource use. A map of Near-Term projects is shown in *Figure 38,* and the corresponding full list of these projects is provided in *Appendix A.*

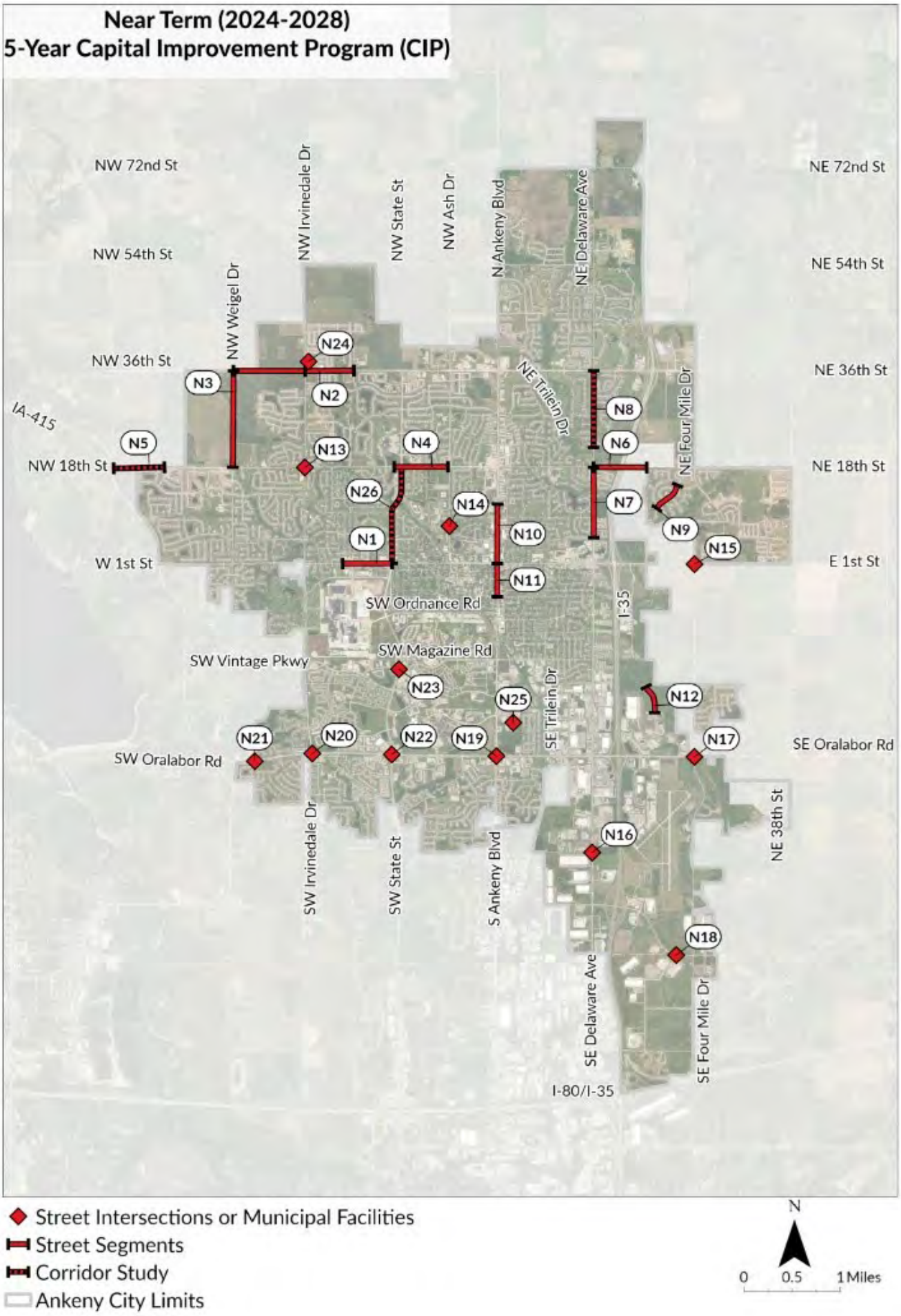


Figure 38: Near-Term Projects

Proactive asset management is a guiding philosophy for these projects, emphasizing the importance of addressing infrastructure needs before they become more costly due to deferred maintenance. In addition, new paving of street segments and expansion of corridor facilities are also included in the proposed projects. For example, the NW 36th Street and NW Weigel Drive Asphalt Overlay project allocated funds for the surfacing of gravel streets to provide connectivity and circulation. Similarly, the NE Delaware Avenue Reconstruction from NE 5th Street to NE 18th Street improved a two-lane rural roadway to a four-lane urban street with modern utilities and traffic signals, enhancing overall transportation network efficiency and safety.

The Near-Term project listing underscores the theme of proactive urban street improvements and intersection safety. For instance, the NW 18th Street Reconstruction from NW State Street to NW Ash Drive involves significant pavement upgrades and new traffic signals, promoting long-term operations and safety. In addition to these segment projects, several stand-alone intersection projects are also being conducted during this initial time frame. Several beneficial projects to enhance turn lanes and traffic signal infrastructure are being conducted along the Oralabor Road corridor.

By addressing infrastructure issues in a systematic manner, the City reduces the risk of overcapacity streets, safety issues, and deteriorating pavements that can result in higher repair costs in the future. This ongoing cycle of assessment, planning, implementation, and evaluation supports Ankeny's infrastructure investments, fostering growth and development.

Mid-Term Projects (5-15 Years, 2029-2038):

The Mid-Term project timeline represents planned projects over the next 10 years continuing after the Near-Term period. The Mid-Term projects reflect Ankeny's dedication to its five key transportation goals. These initiatives are essential for maintaining a safe, efficient, and well-maintained transportation system that promotes economic vitality and enhances pedestrian and bicycle networks. For this category, 30 specific transportation projects (in addition to those within annual programs) have been identified over the total period to help address future growth and mobility needs while strengthening existing City infrastructure. It is noted that over $65 million of investment during the Mid-Term period includes overlapping projects that begin in the near-term period. A map of Mid-Term projects is shown in *Figure 39,* and the corresponding full list of these projects is provided in *Appendix B.*

Several Mid-Term projects continue on from the Near-Term project list, demonstrating ongoing efforts to enhance infrastructure in response to new development and increased traffic. For example, the NW 18th Street extension between NW Spruce Drive and IA Highway 415 will include new paving, a center two-way left-turn lane, a sidewalk, utilities, and new intersection traffic controls. This type of project highlights a continued approach to serve planning and development activity.

Top-ranked projects, based on criteria such as safety, mobility, pedestrian and bicycle access, maintenance, and economic vitality, reveal the TMP's strategic priorities. The NW State Street - W 1st Street to NW 18th Street project was shown to be one of the highest-scoring projects across all the criteria. The project focuses on improving safety and capacity by widening the roadway and adding turn lanes. This project addresses critical safety concerns and enhances mobility, making it a priority. Another project that scored high in the criteria ranking was the E 1st Street Widening – NE Frisk Drive to NE Four Mile Drive. This project involves the construction of a 4-lane urban arterial, east to the Four Mile Drive intersection, reflecting its importance for traffic safety, capacity, and economic development.

In addition to proposed construction projects, the Mid-Term Projects listing includes several corridor studies to further analyze improvement needs for number of lanes (capacity), and intersection traffic control treatments (signals, roundabouts, etc.). A few of the key studies identified also focus on providing east-west connectivity across Interstate 35. These include both NE 54th Street, and SE Magazine Road, which would improve mobility and promote economic development.

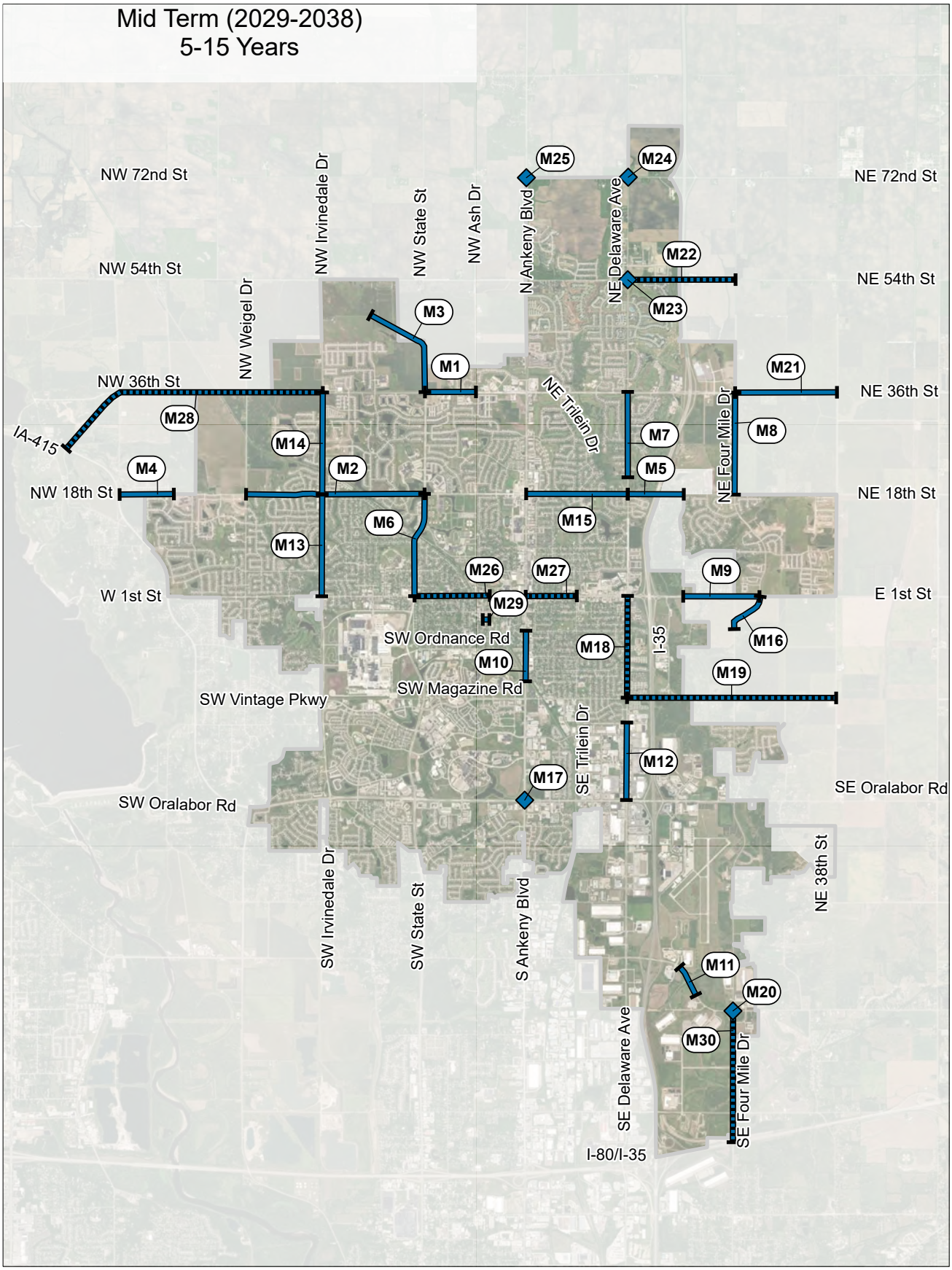


Figure 39: Mid-Term Projects

Long-Term Projects (15-25 Years, 2039-2048):

The Long-Term projects in the TMP further demonstrate Ankeny's commitment to growth and opening up new areas on the fringe of the City. These initiatives are crucial for developing a network of streets and sidewalks that serve new mobility while also maintaining a safe, efficient, and well-maintained transportation system that supports economic growth. Addressing long-term infrastructure needs, these projects prepare Ankeny for future growth and mobility demands. The 15 projects are expected to cost approximately $385 million factoring in future impacts of inflation. A map of Long-Term projects is shown in *Figure 40,* and the corresponding full list of these projects is provided in *Appendix C.*

Several Long-Term projects build on efforts from the Near-Term and Mid-Term project lists, continuing the enhancement of infrastructure in response to new development and increased traffic. For example, the NW 36th Street Widening from NW Irvinedale Drive to NW State Street involves adding lanes and turn lanes to complete a four-lane arterial, improving traffic flow and safety. Similarly, the NW State Street Extension from NW Abilene Road to NW 54th Street extends the roadway to support new developments, ensuring efficient connectivity and access.

Top-ranked Long-Term projects, based on criteria such as safety, mobility, pedestrian and bicycle access, maintenance, and economic vitality, illustrate future opportunities as the transportation network grows. The NE Delaware Avenue project, from NE 36th Street to NE 72nd Street, reconstructs the roadway from a rural county road section to an urban street section, addressing critical safety and mobility needs. The NE 72nd Street project, from N Ankeny Boulevard to NE Four Mile Drive, similarly transitions a rural roadway to an urban section, enhancing safety and accommodating future traffic demands. It is evident from looking at the map of these long-term projects, that much focus of the infrastructure is anticipated to support the future land use projections in the north and east portions of Ankeny.

In addition to proposed construction projects, the Long-Term Projects listing also includes potential corridor studies to examine future growth patterns, traffic volumes, and new investments in traffic technology. A few of these strategic study locations include NE 38th Street (current Polk County designation) in the southeast portion of Ankeny, and segments of both NW 54th Street and NW 72nd Street in the northwest part of the community. These studies would be conducted due to their significant impact on overall transportation connectivity and expansion of the multimodal arterial network.

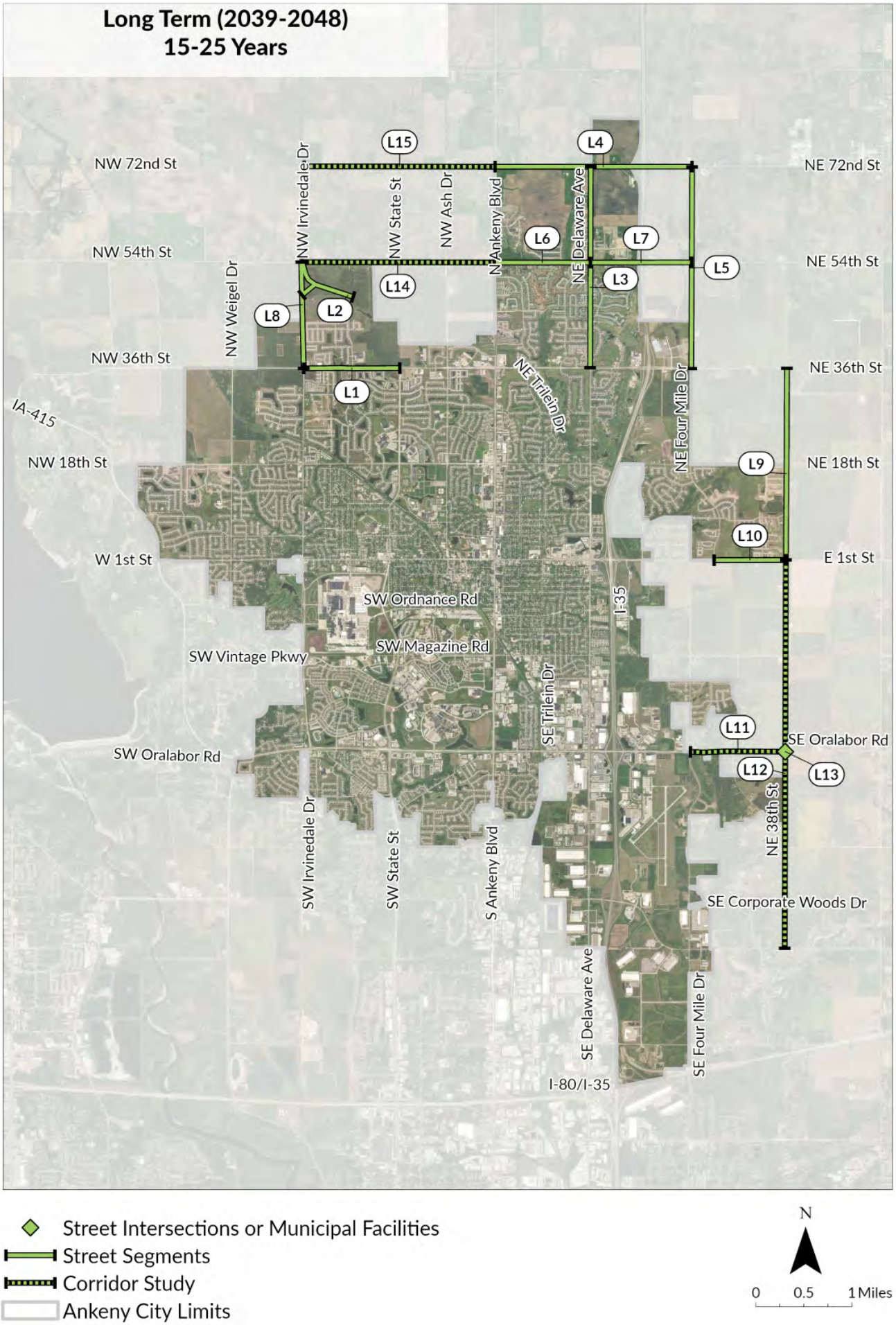


Figure 40: Long-Term Projects

Shared-Use Trail Projects:

Shared-use trails are an integral part of maintaining a strong, connected multimodal network, aligning with the USDOT Safe Streets and Roads for All (SS4A) program's objectives. This program shows 19 projects representing an anticipated $4 million investment (approximately $8 million in future year dollars). These trails bolster Ankeny's reputation as a biking community, enhancing the local economy and providing crucial connectivity for residents of all ages. By incorporating these trails into the City's infrastructure, Ankeny promotes safe and efficient routes for cyclists, which alleviates traffic congestion, encourages healthier lifestyles, and supports sustainable transportation options. A map of Shared-Use Trail projects is shown in *Figure 41,* and the corresponding full list of these projects is provided in *Appendix E.*

The significance of a comprehensive bicycle network extends beyond transportation. It links residents to work, school, recreation, and community resources, fostering a vibrant and active community life. Projects like the SE Corporate Woods Drive shared-use path and the NW Irvinedale Drive shared-use path from NW 25th Street to NW 36th Street underscore the City's commitment to creating accessible and convenient pathways for pedestrians and cyclists. These investments not only boost local businesses by increasing foot traffic but also provide critical connections for students commuting to school and families accessing recreational areas. By nurturing a robust shared-use path and trails network, Ankeny continues to present itself as a dynamic and livable City, enhancing residents' quality of life and ensuring seamless connectivity.

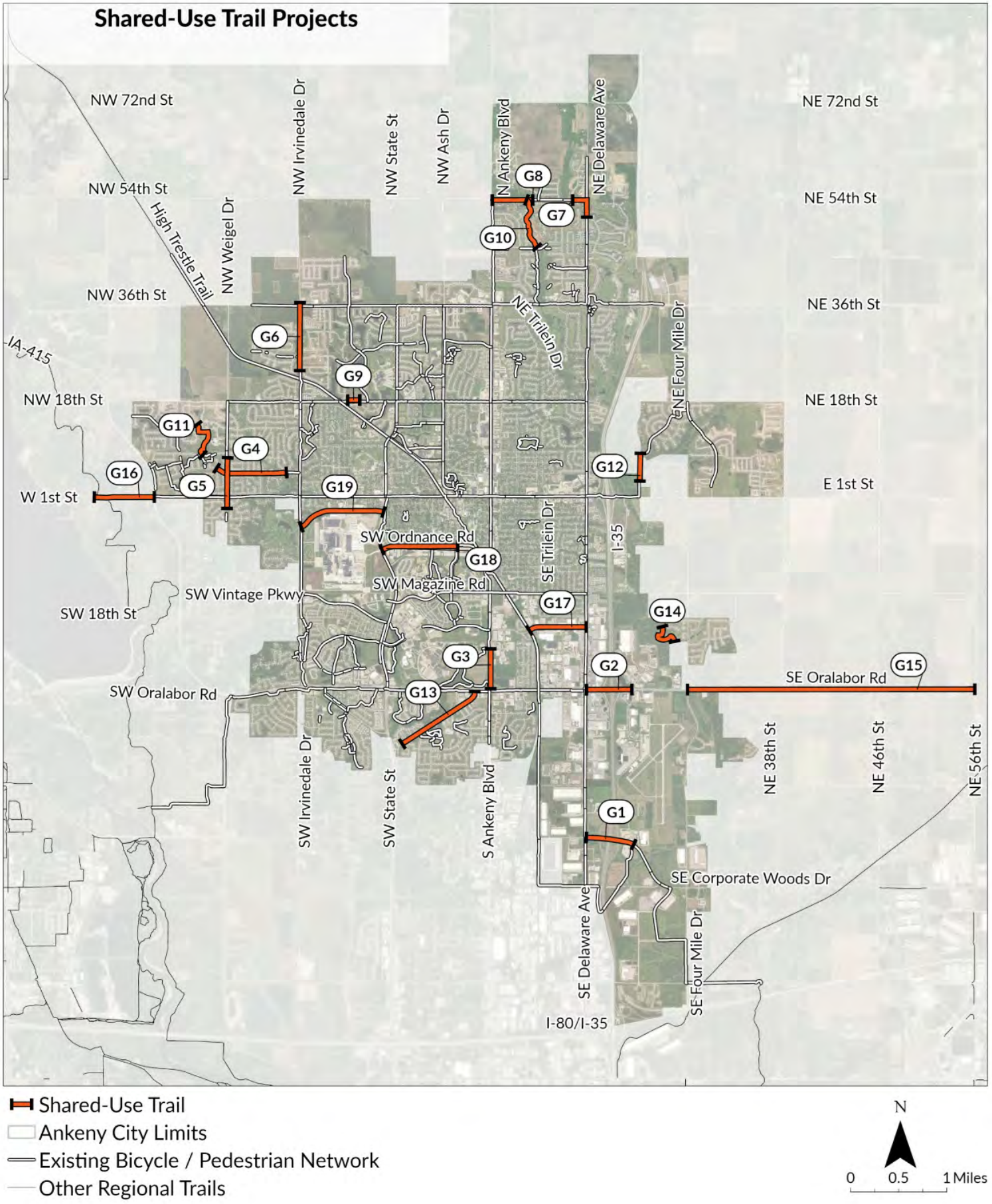


Figure 41: Shared-Use Trail Projects

Traffic Signal Timing Improvement Corridors:

Based upon feedback received throughout the project and the continued growth of traffic along Ankeny's busiest arterial corridors, projects have been proposed to cyclically update traffic signal timings at intersections in Ankeny. The Signal Timing Improvement Corridors, as shown in *Figure 42*, play a crucial role in meeting the goals outlined in Ankeny's TMP. By updating and optimizing signal timing along busy commuter routes, the City aims to reduce congestion, improve traffic flow, and enhance safety at intersections. Projects to complete traffic signal timing updates can typically range from $5k to $10k per intersection, depending on the scope of work and data collection needs. In most cases, desirable benefit-to-cost ratios, from 20:1 or higher, can be achieved with these investments.

Traffic signal timing updates and associated data collection are proposed to be conducted along strategic arterial routes on a regular basis. The corridors are divided into four phases from 2026 to 2029, forming part of the Annual Traffic Signal Improvement Program. Each phase focuses on different City sections, adopting a systematic and comprehensive approach to traffic management. For example, the 2026 phase covers key areas like SW/SE Oralabor Road and NE/SE Delaware Avenue, which are significant for both commuter traffic and local accessibility to retail, residential, and industrial areas. This phased approach allows the City to allocate resources effectively while progressively enhancing the traffic signal network across Ankeny.

In addition to the signal timing effort, the City of Ankeny is also proposing to evaluate and implement Adaptive Signal Control Technology (ASCT) at key intersections, as illustrated in *Figure 42*. ASCT is an advanced traffic management system that adjusts the timing of traffic signals based on real-time traffic conditions. Unlike traditional signal systems that operate on fixed timing plans, ASCT systems use sensors and algorithms to continuously monitor traffic flow and optimize signal timings to improve traffic efficiency and reduce congestion. While not cost-beneficial everywhere, ASCT can be a powerful tool for modern traffic management, offering significant benefits in terms of efficiency, safety, and environmental impact. Its implementation can be a valuable investment for cities looking to improve their transportation infrastructure and quality of life for residents. Implementation of ASCT can be in the range of $30k per intersection, and vary widely, depending on needed equipment upgrades and software integration.

It is envisioned that the traffic signal timing improvement projects will be completed over the next few years, and the benefits can be reported on and shared with the public. The results of these projects can have profound public benefits and receive positive feedback.

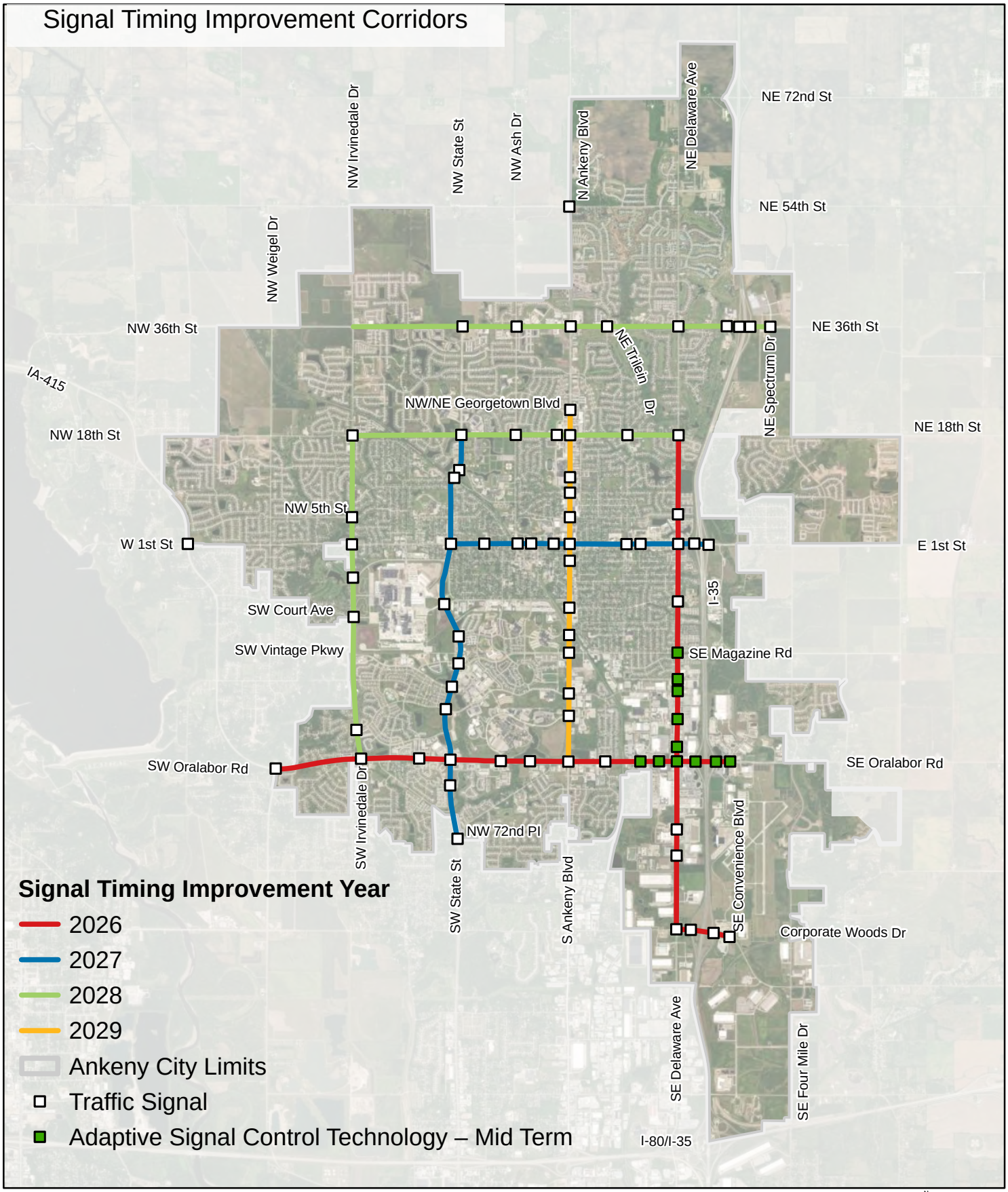


Figure 42: Signal Timing Improvement Corridors

Fiber Optic Network Upgrades:

The expansion of Ankeny's fiber optic network is pivotal in creating a resilient and reliable communications infrastructure. The City of Ankeny adopted a Fiber Optic Network Master Plan in March 2023. As seen in *Figures 43* and *44* on the following pages, the Fiber Optic Network Upgrade involves both near-term and future-year expansions, establishing a robust framework that supports the City's growing connectivity needs. By integrating redundant loops, this network ensures continuous and reliable operations, even in the case of individual segment failures. This redundancy is crucial for maintaining uninterrupted communication and control across the City, particularly during emergency situations, thereby enhancing Ankeny's overall resilience.

A robust fiber optic network is essential for supporting the City's critical infrastructure systems, including traffic management, emergency services, and municipal operations. The expansion plan includes significant enhancements in key areas, such as SW/SE Oralabor Road, NE/SE Delaware Avenue, and NW/NE 36th Street, ensuring that these high-traffic zones benefit from improved connectivity and reliability. This comprehensive approach to upgrading the fiber optic network not only boosts the efficiency and reliability of current services but also positions Ankeny to better handle future demands and emergencies, reinforcing the City's commitment to creating a resilient and sustainable urban environment. The planning level opinions of probable cost for the fiber optic improvements (as identified in the prior plan) include approximately $3 million for the initial Phase 1 deployment, and approximately $6 million for completion of the remaining phases.

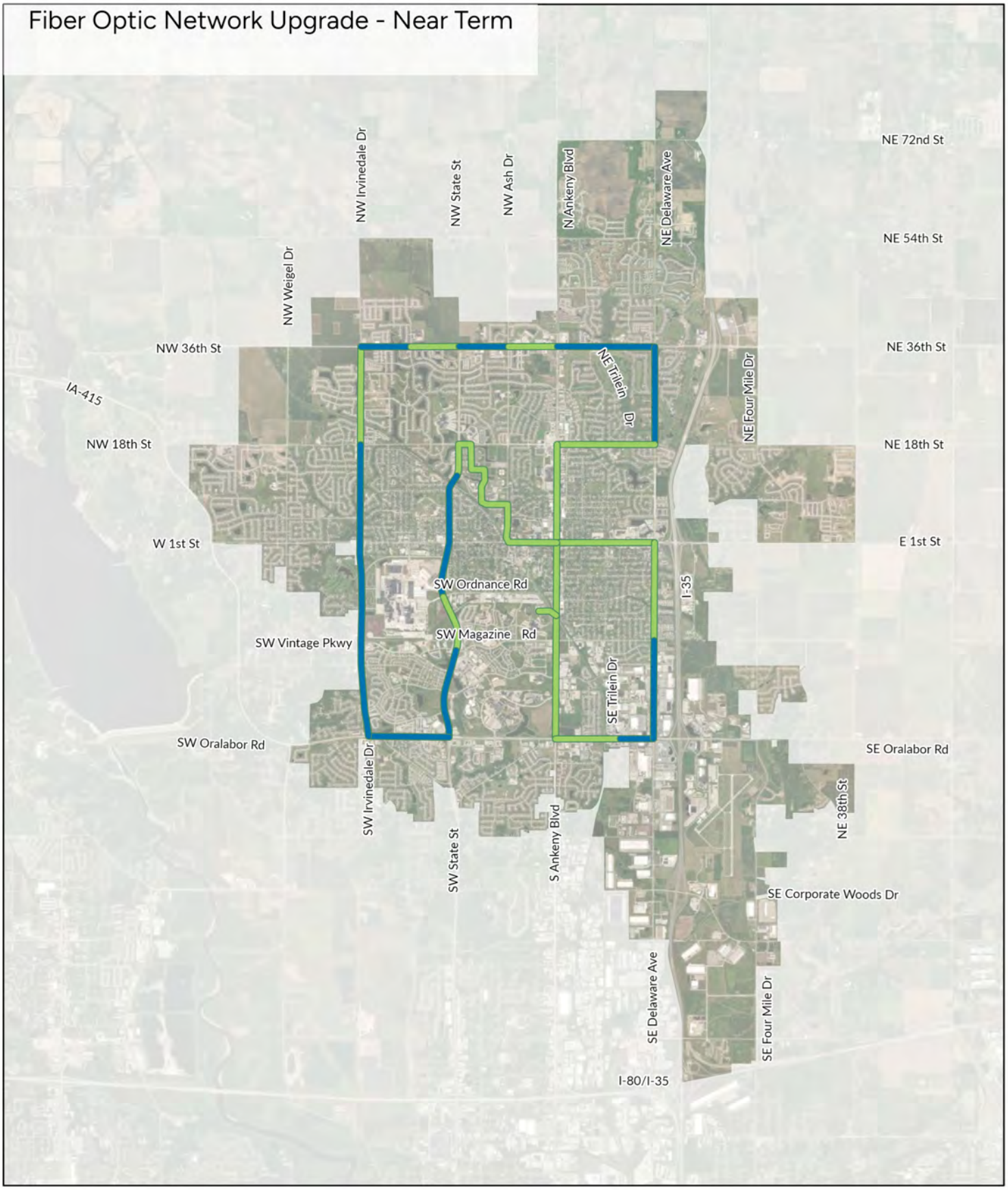


Figure 43: Near-Term Expansion of Ankeny Fiber Optic Network

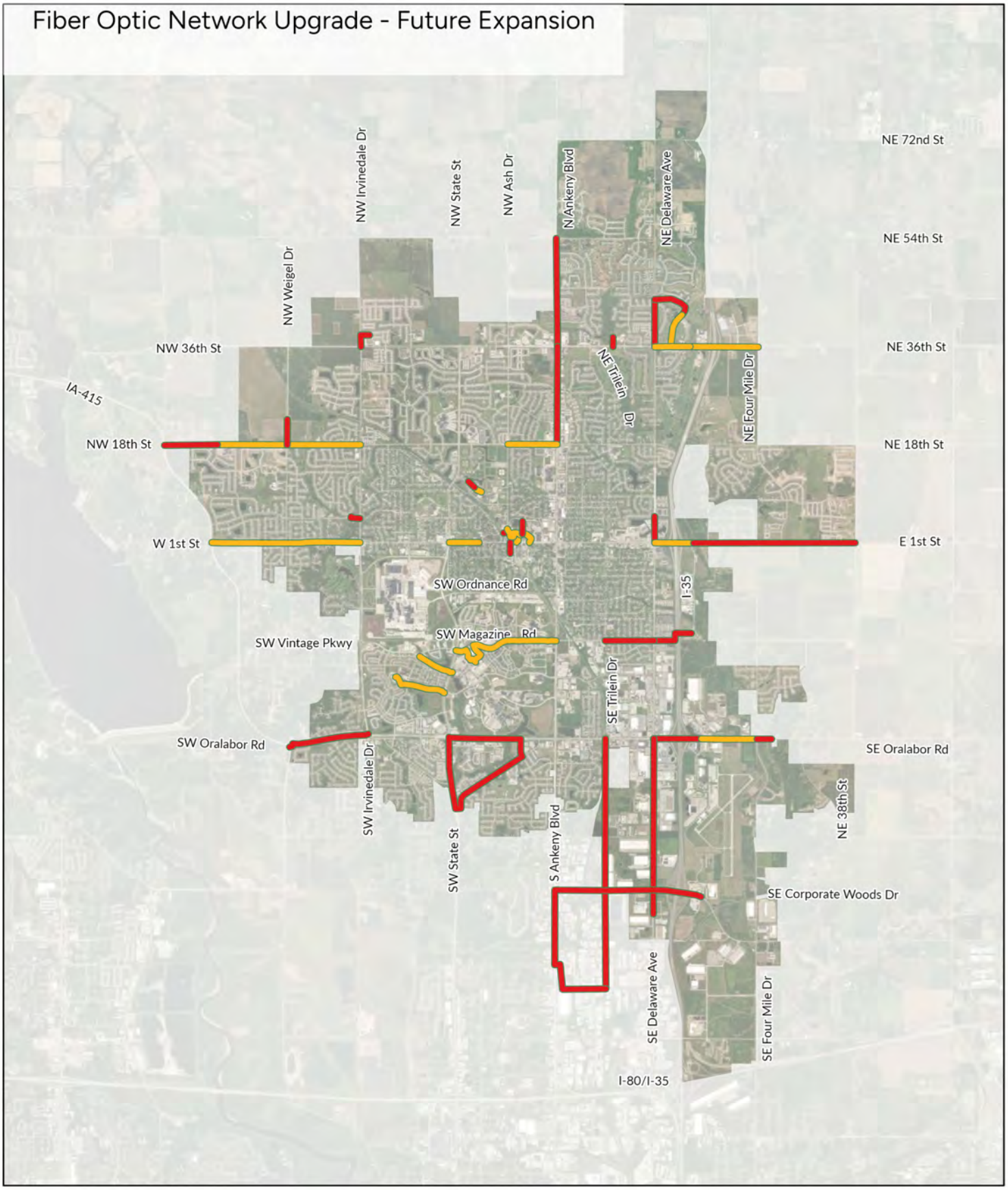


Figure 44: Future Expansion of Ankeny Fiber Optic Network

city of Ankeny

SUMMARY

Summary

The City of Ankeny's TMP provides a clear and strategic vision for the development and management of the City's transportation infrastructure over the next 25 years. Grounded in community input, data-driven analysis, and collaboration with stakeholders, the plan establishes goals that prioritize safety, efficiency, and sustainability while promoting a comprehensive, multimodal transportation system that supports Ankeny's rapid development and evolving needs of its residents. From improving pedestrian and bicycle infrastructure to maintaining existing assets and implementing innovative solutions, the TMP serves as a guide for addressing current needs and anticipating future demands as Ankeny continues to grow.

The TMP identifies actionable strategies, prioritized projects, and measurable performance indicators to ensure progress can be tracked over time and resources are effectively allocated. By emphasizing safety for all users, reducing congestion, enhancing mobility, and fostering sustainable development, this plan reflects the values and aspirations of the community. As a dynamic document, the TMP will adapt to evolving conditions and new opportunities, supporting Ankeny's commitment to building a transportation system that enhances quality of life and strengthening its role as a vibrant, connected, and future-ready City.

city of Ankeny

APPENDICES

city of Ankeny

APPENDIX A: NEAR-TERM PROJECT SUMMARIES

#	Project Name	Description	Project Cost (current)	Program Focus Areas			
				Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
N1	West 1st St Widening and Improvements-Phase 2	Reconstruction of W 1st St from NW Greenwood St to State St. 4-lane to 5-lane street improvement with center TWLTL.	$ 10,000,000	X	X	X	X
N2*	NW 36th St Reconstruction-Irvinedale Dr to Abilene Rd	Reconstruction of NW 36th St from NW Irvinedale Dr to NW Abilene Rd. Includes construction of a new two-lane concrete urban street (future EB lanes of 4-lane) Utilities, signals at both major intersections, and 8' sidewalk on south side.	$ 8,350,000	X	X		X
N3	NW 36th St and NW Weigel Dr Asphalt Overlay	Asphalt surfacing on NW 36th St from NW Weigel Dr to NW Irvinedale Dr and on NW Weigel Dr from NW 18th St to NW 36th St (2-lane w/ 1.5' shoulders).	$ 2,450,000		X		X
N4	NW 18th St Reconstruction-NW State St to NW Ash Dr	This project includes the reconstruction of the existing street pavement on NW 18th St from approximately 450 feet west of NW State St to approximately 350 feet west of NW Ash Dr. The project will include removing and replacing existing pavement, storm sewer intakes, and some sidewalk. New PCC pavement, modified subbase, subdrains, pavement markings, and left and right turn lanes will be constructed. The project also includes a new traffic signal at the entrance of the existing north parking lot of the Prairie Ridge Sports Complex (PRSC). The traffic study will determine the proposed cross-section and geometry for the street. The project also includes consultant survey, design, and construction services.	$ 5,100,000	X	X	X	X
N5*	NW 18th St Extension-NW Spruce Dr to Iowa Highway 415	Extension of NW 18th St from NW Spruce Dr west approximately 2,700 LF to Iowa Highway 415. It is proposed to be a 41-ft. wide concrete street with a two-way left turn lane and curb and gutter. The project will also include 8-ft. wide sidewalk on the south side, sanitary sewer, storm sewer, water main, street lighting, fiber optic and conduit, street trees, and signing. In addition, the proposed project includes traffic signals at the intersection of NW 18th St and Iowa Highway 415, and northbound and southbound turn lanes from Iowa Highway 415 onto NW 18th St.	$ 9,000,000	X	X	X	
N6*	NE 18th St Bridge over Interstate 35	Reconstruction and extension of NE 18th St from NE Delaware Ave across Interstate 35 to NE Frisk Dr. Includes a bridge over Interstate 35, a pedestrian bridge over Four Mile Creek, 8-ft. wide sidewalk on the south side, and lighting.	$ 16,850,000	X	X	X	X
N7	NE Delaware Ave Reconstruction - NE 5th St to NE 18th St	Reconstruction of NE Delaware Ave from a two-lane rural roadway to a four-lane divided urban street with left turn lanes at the intersections from just north of NE 5th St to 700 feet north of NE 18th St. The project also includes new permanent traffic signals at the NE Delaware Avenue and NE 5th St and NE 18th St intersections, fiber optic interconnect from East 1st St to NE 18th St, and removal of the existing reinforced concrete box (RCB) culvert and replacement with a triple 12 feet x 8 feet RCB culvert for Tributary A to Four Mile Creek.	$ 11,850,000	X	X	X	X
N8*	NE Delaware Reconstruction-Four Mile Creek to NE 36th St	Reconstruction of NE Delaware Ave from a two-lane rural roadway to an urban section (four-lane w/ left and right turn lanes), depending upon the results of a consultant-prepared traffic study in conjunction with conceptual design.	$ 9,950,000	X	X	X	X
N9	NE Chambers Pkwy Pavement & Ped Ramp Improvements	Reconstruction of deteriorated pavement in the street, in addition to sidewalks and pedestrian ramps.	$ 1,200,000	X			X
N10	N Ankeny Blvd Improvements-1st St to 11th St	This is a joint project with the Iowa Department of Transportation (DOT) to add right-turn lanes, repair failing pavement, replace aged traffic signal infrastructure, upgrade pedestrian ramps, and replace existing landscaping in the medians and at the intersections with low maintenance plantings on North Ankeny Blvd, between 1st St and 11th St.	$ 8,500,000	X	X	X	X
N11	S Ankeny Blvd Improvements-SE Peterson to 1st St	This is a joint project with the Iowa Department of Transportation (DOT) to reconstruct South Ankeny Blvd from SE Peterson Dr to 1st St. The anticipated work will include the replacement of the aging 4-lane, undivided urban section with a 5-lane, divided, urban section and right turn lanes where applicable. The project will include the replacement of pavement, sidewalk, storm sewer, water main, sanitary sewer, the traffic signal at SE 3rd Street and subsequent fiber optic interconnect.	$ 12,000,000	X	X	X	X
N12	SE Creekview Dr Extension	Extension of SE Creekview Dr into new development area to stimulate business growth. Public / private partnership utilizing RISE grant funds.	$ 2,025,000		X		

*** Indicates Project Completion in Mid-Term**

Red - Indicates Project's Construction Started in 2023

#	Project Name	Description	Project Cost (current)	Program Focus Areas			
				Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
N13	NW Irvinedale Dr and NW 18th St Intersection	Reconstruction of the NW Irvinedale Dr and NW 18th St intersection to improve traffic capacity, mobility, and safety. It is anticipated that a new traffic signal and dedicated left and right turn lanes will be provided at all four legs of the intersection. The reconstruction will provide an urban cross section on all legs of the intersection. Storm sewer infrastructure and subdrain are also included with the proposed improvements.	$ 4,400,000	X	X	X	X
N14	NW Prairie Ridge Dr and NW Ash Dr Intersection Improvements	Reconstruction to provide left- and right-turn lanes and traffic signal.	$ 4,575,000		X	X	X
N15	E 1st St and SE Four Mile Dr - Intersection	Intersection improvement (capacity and safety), w/ turn lanes and traffic signal (cost share).	$ 307,000		X	X	
N16	SE Delaware Ave and SE 54th St - Intersection	Intersection improvement (capacity and safety), new traffic signal.	$ 662,000		X	X	
N17	SE Oralabor Rd and SE Four Mile Dr - Intersection	Intersection improvement (capacity and safety), new traffic signal.	$ 710,000		X	X	
N18	SE Corporate Woods Dr and SE Crosswinds Dr Traffic Signal	Intersection improvement (capacity and safety), new traffic signal.	$ 485,000		X	X	
N19*	S Ankeny Blvd and SE Oralabor Rd Safety Improvements	Intersection improvement (capacity and safety), and construction of a grade-separated crossing at the south leg of the intersection for the Oralabor Gateway Trail.	$ 8,200,000	X	X	X	
N20	SW Oralabor Rd and SW Irvinedale Dr Intersection	Reconstruction of the SW Oralabor Rd (Iowa Highway 415) and SW Irvinedale Dr intersection. The project includes a traffic study, conceptual design, and surveying in 2025; design engineering services, right-of-way acquisition, and utility relocations in 2026; and construction engineering services and project construction in 2027. Due to SW Oralabor Rd (Iowa Highway 415) being a joint jurisdictional roadway, the proposed improvements would need to be coordinated with the Iowa DOT. The SW Oralabor Frontage Rd and SW 28th St intersection located directly south of the main intersection would also be included as a part of the traffic study, and may be improved with the project.	$ 5,400,000	X	X	X	X
N21	SW Oralabor Rd and SW Edgewood Ln Intersection	Add 150’ long eastbound and westbound left turn lanes on SW Oralabor Rd at the SW Edgewood Ln/SW Stonehaven Ln intersection. Since SW Oralabor Rd is also Iowa Highway 415, the project would be coordinated with the Iowa DOT.	$ 250,000		X	X	
N22	SW Oralabor Rd and SW State St Intersection	The proposed project will widen all legs of the intersection to provide right-turn lanes and dual left-turn lanes on all approaches. The project also includes traffic signal and pedestrian ramp upgrades, and a grade-separated trail crossing at the south leg of the intersection for the Oralabor Gateway Trail.	$ 7,000,000	X	X	X	
N23	SW Magazine Rd and State St Intersection Improvements	The project will widen SW Magazine Rd to provide a second eastbound through lane on the west leg approach to the intersection with SW State St. The widening will be on the south side of SW Magazine Rd, for approximately 400 feet, and will align with the two existing eastbound receiving lanes on the east side of SW State St. The median in the west leg will be modified and extended to provide additional left-turn storage, and it will convert the accesses immediately west of SW State St to right-in/right-out-only operation.	$ 475,000		X	X	
N24	Public Works Salt Storage Facility	Design and construction of structure for materials storage for winter maintenance operations. Located near NW Irvinedale Dr and NW 36th St intersection at the NW Water Tower site.	$ 525,000		X		X
N25	Public Works Maintenance Facility Expansion	Design and construction of consolidated field services building at the existing public works maintenance facility site.	$ 23,145,000		X		X
N26	NW State St - W 1st St to NW 18th St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	X	X	X	X

*** Indicates Project Completion in Mid-Term**

Red - Indicates Project's Construction Started in 2023

city of Ankeny

APPENDIX B: MID-TERM PROJECT SUMMARIES

#	Project Name	Description	Project Cost (Current)	Project Cost (Future 2034)	Program Focsus Areas			
					Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
M1	NW 36th St Widening - NW State St to NW Ash Dr	Addition of 2 lanes on north side (new WB through lanes), left turn lanes and traffic signals and/or RAB to complete the 4-lane arterial.	$ 5,125,000	$ 7,587,000		X	X	
M2	NW 18th St - NW Weigel Dr to NW State St	Reconstruction of NW 18th St from a two-lane roadway to an urban 3-lane section and intersection safety improvements at key locations.	$ 19,000,000	$ 28,125,000	X	X	X	X
M3	NW State St Extension - NW 36th St to NW Abilene Rd	Extension of NW State St north to NW Abilene Rd area (1/2mile) to serve development.	$ 10,200,000	$ 15,099,000	X	X	X	
M4*	NW 18th St Extension - NW Spruce Dr to Iowa Highway 415	Extension of NW 18th St from NW Spruce Dr west approximately 2,700 LF to Iowa Highway 415. It is proposed to be a 41-ft. wide concrete street with a two-way left turn lane and curb and gutter. The project will also include 8-ft. wide sidewalk on the south side, sanitary sewer, storm sewer, water main, street lighting, fiber optic and conduit, street trees, and signing. In addition, the proposed project includes a traffic signal at the intersection of NW 18th St and Iowa Highway 415, and northbound and southbound turn lanes from Iowa Highway 415 onto NW 18th St.	$ 9,000,000	$ 13,323,000	X	X	X	
M5*	NE 18th St Bridge over Interstate 35	Reconstruction and extension of NE 18th St from NE Delaware Ave across Interstate 35 to NE Frisk Dr. Includes a bridge over Interstate 35, a pedestrian bridge over Four Mile Creek, 8-ft. wide sidewalk on the south side, and lighting.	$ 16,850,000	$ 24,943,000	X	X	X	X
M6	NW State St - W 1st St to NW 18th St	Rehabilitation of pavement and widening to include left-turn lane capabilities to improve safety and capacity.	$ 5,900,000	$ 8,734,000		X	X	X
M7*	NE Delaware Ave Reconstruction-Four Mile Creek to NE 36th St	Reconstruction of NE Delaware Ave from a two-lane rural roadway to an urban section (four-lane w/ left and right turn lanes), depending upon the results of a traffic study in conjunction with the conceptual design of the project.	$ 9,950,000	$ 14,729,000	X	X	X	X
M8	NE Four Mile Dr - NE 18th St to NE 36th St	Reconstruction of NE Four Mile Dr from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations. Also includes extension of pedestrian facilities.	$ 12,000,000	$ 17,763,000	X	X		X
M9	E 1st St Widening - NE Frisk Dr to NE Four Mile Dr	Construction of 4-lane urban arterial east from Frisk Drive to the Four Mile Dr intersection, inlcuding pedestrian facilities.	$ 12,250,000	$ 18,133,000	X	X	X	X

*** Indicates Project initiated in Near-Term. Portions of Project Costs Shown Are Anticipated To Be Invested in Near-Term Period.**

#	Project Name	Description	Project Cost (Current)	Project Cost (Future 2034)	Program Focsus Areas			
					Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
M10	S Ankeny Blvd Improvements-SW Ordnance Rd to SE Peterson Dr	Continuation of prior project to north (SE Peterson Dr to 1st St) to replace aging 4-lane, undivided urban section with a 4-lane, divided, urban section with left and right turn lanes.	$ 7,000,000	$ 10,362,000	X	X	X	X
M11	SE Corporate Woods Dr - Railroad Overpass	Construction of railroad overpass on SE Corporate Woods Dr to provide grade separation of vehicle/train conflicts. Includes pedestrian connectivitiy.	$ 23,500,000	$ 34,786,000	X	X		
M12	SE Delaware Ave Capacity Improvements - SE Oralabor Rd to SE 16th Ct	Intersection capacity improvements, primarily involving the addition of right turn lanes on SE Delaware Avenue and the side streets.	$ 1,970,000	$ 2,917,000		X	X	
M13	NW Irvinedale Dr - W 1st St to NW 18th St	Reconstruction of NW Irvinedale Dr to an urban 3-lane or 4-lane section and intersection safety improvements at key locations. Included pedestrian improvements as needed.	$ 13,000,000	$ 19,244,000	X	X	X	X
M14	NW Irvinedale Dr - NW 18th St to NW 36th St	Reconstruction of NW Irvinedale Dr to an urban 3-lane or 4-lane section and intersection safety improvements at key locations. Included pedestrian improvements as needed.	$ 13,000,000	$ 19,244,000	X	X	X	X
M15	NE 18th St Reconstruction - N Ankeny Blvd to NE Delaware Ave	Reconstruction of segments of NE 18th St to an urban 3-lane section where not currently provided, and relevant intersection safety improvements at key locations.	$ 12,000,000	$ 17,763,000	X	X	X	X
M16	SE Four Mile Dr Connector at E 1st St	Realignment of SE Four Mile Dr from approximately 3,500 feet north of SE Magazine Rd to connect at E 1st St and align with the existing NE Four Mile Dr north of E 1st St. This project will also include relevant intersection safety improvements at key locations.	$ 6,000,000	$ 8,882,000		X	X	
M17*	S Ankeny Blvd and SE Oralabor Rd Safety Improvements	Intersection improvement (capacity and safety), and construction of a grade-separated crossing at the south leg of the intersection for the Oralabor Gateway Trail.	$ 8,200,000	$ 12,139,000	X	X	X	
M18	SE Delaware Ave Corridor Study - SE Magazine Rd to E 1st St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 223,000	X	X	X	X
M19	SE Magazine Rd Corridor Study - SE Delaware Ave to NE 38th St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations, including feasibility of I-35 overpass.	$ 300,000	$ 445,000	X	X	X	X

*** Indicates Project initiated in Near-Term. Portions of Project Costs Shown Are Anticipated To Be Invested in Near-Term Period.**

#	Project Name	Description	Project Cost (Current)	Project Cost (Future 2034)	Program Focsus Areas			
					Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
M20	SE Corporate Woods Dr and SE Four Mile Dr Intersection Improvements	Concept study, design and construction of intersection safety and capacity improvements.	$ 4,000,000	$ 5,921,000	X	X	X	X
M21	NE 36th St Reconstruction - NE Four Mile Dr to NE 38th St	Reconstruction of NE 36th St from a two-lane rural roadway to an urban three-lane or four-lane divided section, depending upon the results of a traffic study in conjunction with the conceptual design of the project, and intersection safety improvements at key locations.	$ 13,000,000	$ 19,244,000	X	X	X	X
M22	NE 54th St Corridor Study - NE Delaware Ave to NE 38th St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations, including feasibility of I-35 overpass.	$ 300,000	$ 445,000	X	X	X	X
M23	NE 54th St and NE Delaware Ave Intersection Improvements	Concept study, design and construction of intersection safety and capacity improvements.	$ 4,000,000	$ 5,921,000	X	X	X	
M24	NE 72nd St and NE Delaware Ave Intersection Improvements	Concept study, design and construction of intersection safety and capacity improvements.	$ 4,000,000	$ 5,921,000	X	X	X	
M25	NE 72nd St and N Ankeny Blvd Intersection Improvements	Concept study, design and construction of intersection safety and capacity improvements.	$ 4,000,000	$ 5,921,000	X	X	X	
M26	W 1st Street Corridor Study - State St to Scott St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 223,000	X	X	X	X
M27	E 1st St Corridor Study - Ankeny Blvd to Trilein Dr	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 223,000	X	X	X	X
M28	NW 36th St Corridor Study - NW Irvinedale Dr to IA 415	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 300,000	$ 445,000	X	X	X	X
M29	SW 4th St Reconstruction - SW Maple St to SW Cherry St	Reconstruction of segment due to pavement deterioration	$ 800,000	$ 1,185,000				X
M30	SE Four Mile Drive Corridor Study - SE Corporate Woods Dr to south corp limits	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 223,000	X	X	X	X

*** Indicates Project initiated in Near-Term. Portions of Project Costs Shown Are Anticipated To Be Invested in Near-Term Period.**

city of Ankeny

APPENDIX C: LONG-TERM PROJECT SUMMARIES

#	Project Name	Description	Project Cost (Current)	Project Cost (Future 2044)	Program Focus Areas			
					Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
L1	NW 36th St Widening - NW Irvinedale Dr to NW State St	Addition of 2 lanes on north side (new WB through lanes), left and right turn lanes and traffic signals and/or RAB, to complete the 4-lane arterial.	$ 11,000,000	$ 24,103,000		X	X	
L2	NW State St Extension - NW Abilene Rd to NW 54th St	Extension of NW State Street from NW Abilene Rd to NW 54th St to serve development.	$ 10,200,000	$ 22,350,000	X	X		
L3	NE Delaware Ave - NE 36th St to NE 72nd St	Reconstruction of NE Delaware Ave from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 23,000,000	$ 50,396,000	X	X		X
L4	NE 72nd St - N Ankeny Blvd to NE Four Mile Dr	Reconstruction of NE 72nd St from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 22,000,000	$ 48,205,000	X	X		
L5	NE Four Mile Dr - NE 36th St to NE 72nd St	Reconstruction of NE Four Mile Dr from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 23,000,000	$ 50,396,000	X	X		
L6	NE 54th St - N Ankeny Blvd to NE Delaware Ave	Reconstruction of NE 54th St from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 11,000,000	$ 24,103,000	X	X		
L7	NE 54th St - NE Delaware Ave to NE Four Mile Dr	Reconstruction of NE 54th St from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations. Includes overpass of I-35.	$ 30,000,000	$ 65,734,000	X	X		
L8	NW Irvinedale Dr - NW 36th St to NW 54th St/State	Reconstruction of NW Irvinedale Dr from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 8,000,000	$ 17,529,000	X	X	X	X
L9	NE 38th St - E 1st St to NE 36th St	Reconstruction of NE 38th St from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 22,000,000	$ 48,205,000	X	X	X	X
L10	E 1st St - NE Four Mile Dr to NE 38th St	Reconstruction of E 1st St from a two-lane rural roadway to an urban section (three-lane or four-lane divided pending corridor study) and intersection safety improvements at key locations.	$ 11,000,000	$ 24,103,000	X	X	X	X

#	Project Name	Description	Project Cost (Current)	Project Cost (Future 2044)	Program Focsus Areas			
					Multimodal	Expansion & Growth	Transportation System Optimization	Maintenance
L11	SE Oralabor Rd Corridor Study - SE Four Mile Dr to NE 38th St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 329,000	X	X	X	X
L12	NE 38th St Corridor Study - SE Corporate Woods Dr to E 1st St	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 300,000	$ 658,000	X	X	X	X
L13	SE Oralabor Rd and NE 38th St Intersection Improvements	Concept study, design and construction of intersection safety and capacity improvements.	$ 4,000,000	$ 8,765,000	X	X	X	
L14	NW 54th St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 329,000	X	X	X	X
L15	NW 72nd St Corridor Study - NW Irvinedale Dr to N Ankeny Blvd	Conduct corridor study of traffic and safety conditions to evaluate segment and intersection improvement opportunities for safety and operations.	$ 150,000	$ 329,000	X	X	X	X

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APPENDIX D: SHARED USE TRAIL PROJECT SUMMARIES

Project Number	Street Name	Limits	Type	Project Length (Miles)	Project Cost (Current)	Project Cost (Future)
G1	SE Corporate Woods Dr	SE Delaware Ave to SE Convenience Blvd	Shared-Use Trail	0.5	$ 197,106	$ 431,884
G2	SE Oralabor Rd	SE Delaware Ave to SE Convenience Blvd	Shared-Use Trail	0.47	$ 185,280	$ 405,971
G3	S Ankeny Blvd	SE Oralabor Rd to SE Lorenz Dr	Shared-Use Trail	0.41	$ 161,627	$ 354,144
G4	NW 5th St	NW Boulder Brook Pl to Watercrest Park	Shared-Use Trail	0.74	$ 291,717	$ 639,188
G5	SW/NW Weigel Dr	SW Camden Dr to NW 5th St	Shared-Use Trail	0.41	$ 161,627	$ 354,144
G6*	NW Irvinedale Dr	NW 25th St to NW 36th St	Shared-Use Trail	0.71	$ 279,891	$ 613,275
G7	NE Delaware Ave & NE 54th St	NE Briarwood Dr to 120 ft north of NE Bellagio Dr	Shared-Use Trail	0.33	$ 130,090	$ 285,043
G8	NE 54th St	N Ankeny Blvd to 250 ft west of NE Trilein Dr	Shared-Use Trail	0.42	$ 165,569	$ 362,782
G9*	NW 18th St	NW Beechwood St to NW Abilene Rd	Shared-Use Trail	0.15	$ 59,132	$ 129,565
G10	Fourmile Creek Trail	NW 54th St to NW 47th St	Shared-Use Trail	0.57	$ 299,250	$ 655,694
G11	Hidden Creek Trail	NW 13th St to NW 8th Ct	Shared-Use Trail	0.45	$ 236,250	$ 517,653
G12	NE Frisk Dr	NE 95th Ave to NE 97th Pl	Shared-Use Trail	0.3	$ 118,264	$ 259,130
G13	SW Ankeny Rd	SW Westview Dr to Oralabor Rd	Shared-Use Trail	0.95	$ 374,501	$ 820,579
G14	Clover Ridge Trail		Shared-Use Trail	0.4	$ 210,000	$ 460,136
G15	SE Oralabor Rd	SE Four Mile Drive to NE 56th St	Trail Connection Study	3	$ 300,000	$ 300,000
G16	W 1st St	Neal Smith Trail to IA 415	Trail Connection Study	0.42	$ 100,000	$ 100,000
G17	SE Shurfine Dr	High Trestle Trail to SE Delaware Ave	Trail Connection Study	0.6	$ 100,000	$ 100,000
G18	SW Ordnance Rd	SW State St to SW Cherry St	Shared-Use Trail	0.66	$ 260,180	$ 570,086
G19	SW 3rd St/3rd St Pl	SW Irvinedale Dr to SW State St	Shared-Use Trail	0.91	$ 358,733	$ 786,028
Total					**$ 3,989,216**	**$ 8,145,301**

*** Indicates Possible Completion with Development**

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APPENDIX E: COMMUNITY ENGAGEMENT SUMMARY

City of Ankeny Transportation Master Plan

Public Engagement Summary - Phase 1

Phase 1 of the Ankeny Transportation Master Plan (TMP) public engagement consisted of 3 primary elements: a 4-question survey available on the project website and interactive pin map, focus group interviews with various community leaders, and a public open house event. Together, these efforts resulted in key takeaways that will help to inform future transportation decision-making for the City of Ankeny. This document summarizes these takeaways.

Arc Hub Survey & Pin Map

A public survey made available on the project website from June 1st - July 31st, collected a total of 185 responses. The public was notified of the survey via local news stations, farmers market events, yard signs, and social media. The survey consisted of seven (7) questions - 4 short answer and 3 multiple choice. Prominent takeaways include:

- Improve interface between cyclists and motorists through better-marked crossings and delineation between infrastructure types, especially near schools and critical facilities.
- Update traffic signal timing to reflect the current degree of traffic and install turning lanes to improve mobility.
- Ensuring the roadway infrastructure accommodates the current level of traffic.
- Minimize vehicle stops to maintain traffic flow and reduce accidents.

The pin map was available for the same 2-month duration as the survey. Participants were able to provide comment on each of the following themes within the project area; Traffic, Safety, Road Condition, and Bike/Ped. The finalized map contained 308 responses. Summaries of each theme are listed here:

Traffic Pins

- Update traffic signal timing.
- Plan proactively to address congestion.
- Additional turn lanes to help traffic flow.
- Road narrowing along specific intersections.

Road Condition Pins

- Received the fewest pins of any theme.
- Roadway inefficiencies and deterioration (potholes, dips, and unevenness).

Safety Pins

- Inadequate signage at trail crossings and schools.

Bicycle and Pedestrian Pins

- Mount Trashmore-esque downhill bike track in the Diamond Hills Greenbelt.
- Desire for additional bike trails/alterations were made, such as more grade separations for primary intersections, and connectors to other nearby cities.

Public Open House

A public open house for the Ankeny TMP was held on June 8, 2023, from 4:30-7:30 p.m. at the Ankeny Kirkendall Public Library. The purpose of the open house was to allow attendees to review existing conditions within Ankeny's current transportation system, provide feedback on the existing transportation network, and speak with project team members about the future TMP.

A total of 87 attendees signed into the meeting, including a state legislative representative, city council members, and the city administrator. City staff members and five consultant team members were also in attendance.

Public comment was collected during the open house with written comment forms as well with the support of two laptops for attendees to access the online interactive map featured on the project storymap site. A total of 27 comment forms were submitted at the open house event. Attendees also had the opportunity to vote on their top goals for the TMP through an interactive voting activity hosted at the second display station. Top choices for attendees included "Interconnected Bicycle and Pedestrian Network" (41 votes), "Safety for All Transportation Users" (35 votes), and "Efficient and Reliable Mobility Options" (35 votes).

A project flyer was developed to help advertise the open house event. This flyer was displayed throughout the community, including at recreational fields, indoor facilities, the public library, city hall and other municipal service buildings. Other advertisement for this event included a series of social media graphics that were posted on the City of Ankeny's official Facebook page, a press release shared with local media sources, and yard signs that were posted around popular public spaces in town. Direct email invitations were also sent to citizens who subscribe to the City's road improvements updates.

Focus Groups

Three focus Groups were conducted from July 11th through July 13th. Group 1 was focused on community and business development, Group 2 consisted of advocates for bike/ped, and Group 3 inlcuded representatives of local schools and neighborhoods. The two primary areas of discussion were the approval and accuracy of the proposed TMP goals, and the challenges observed by each of the different groups. The presentation application Mentimeter was used to conduct live engagement during the focus group meetings.

A set of nine predefined challenges were presented during each focus group meeting and participants were prompted to select their top three concerns. 83% of the participants from all three focus groups placed 'Increasing Traffic/Congestion Delays' in their top three challenges, commenting that frontage roads are needed and traffic signal timing may need refining. 58% of participants placed 'Aging and Deteriorating Infrastructure' in their top three, requesting the use of road materials that last, and, again, that traffic signals be timed more efficiently. The remaining seven challenges (Rising Transportation Costs and Limited Funding, Increasing Travel Distances, Increasing Truck Traffic, Safety, Service Coverage, Lack of Multi-Modal Infrastructure, and Travel Needs for Vulnerable Populations) were all placed in less than 33% of participants' top three challenges.

Participants were then prompted to rate the goals as a whole on a scale of one (1) (Not Well At All) to five (5) (Very Well). The approval of the overall goals was high, with nearly 75% of respondents rating the approval as either "Well" or "Very Well". While no respondents rated the goals as "Not Well" or "Not Well At All", those who did rate them as a 3 (Undecided) typically did so because they felt they could not answer the question accurately without additional information.

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City of Ankeny Transportation Master Plan

Public Engagement Summary - Phase 2

Phase 2 public engagement of the Ankeny Transportation Master Plan (TMP) consisted of four primary elements: a public survey available on the project website, focus group discussions, two pop-up table events, and a virtual presentation of the Current and Future Needs Chapter findings. All of these outreach tactics contributed to achieving the overall goal of Phase Two - evaluating trade-offs and identifying priorities. This document summarizes these takeaways.

Phase Two Public Survey

A public survey made available on the project website from November 14th, 2023 - January 3rd, 2024, collected a total of 558 responses. The public was notified of the survey via the two pop-up events and a social media campaign hosted on the City's Facebook and "X" (formerly Twitter) pages. The survey consisted of eight (8) questions - 1 ranking and 7 multiple choice. Prominent takeaways include:

- Strong support expressed for growing and expanding the current Ankeny transportation system to accommodate current and future traffic volumes.
- Multi-modal transportation improvements were again ranked as a top priority for survey takers.
- Overwhelming majority of survey takers live in Ankeny, and there was about a 50/50 split between those who work in the community and those who commute outside of the community for work.
- Balancing growth and maintaining existing facilities will need to be a top priority for future transportation system improvements.

Pop-Up Events

Two pop-up events were hosted by project team members during Phase Two of the Ankeny TMP planning process. Locations of the pop-up events were decided by the City of Ankeny's Communication Department with the support of the project team.

The first pop-up event took place at the Albaugh Family Senior Community Center on Thursday, November 2nd from 11:00am to 1:00pm and then again from 3:30pm to 4:30 pm. Project team members hosted an information table during the lunch time period while visitors of the facility attended the free lunch program. The second pop-up table was hosted on Wednesday, December 27th at the Ankeny Kirkendall Public Library for a few hours that afternoon. Team members spoke with visitors about the Ankeny TMP, its planning process, identified goals, and encouraged them to take the public survey. Hard copies of the survey were available at the information table that day.

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Focus Group Discussions

Two focus group discussions were conducted on the following dates: November 7th and 8th. In Phase Two, members were broken out of their previously assigned focus group types. Instead, members were allowed to inter-mingle with other focus group members during Phase Two conversations.

Conversation was focused on providing an update of the TMP planning process and identified program areas, gathering input on engagement from phase one, introducing program areas and potenial alternatives, and obtaining input on strategies/action steps that could help achieve plan goals. The presentation application Mentimeter was used to conduct live engagement during the focus group meetings.

Four program areas were presented during the focus group meetings. These program areas were established by project team members to help categorize potential transportation project types. Program areas include “Multi-Modal System Enhancement & Connectivity”, “Expansion and Growth”, “Preservation, Maintenance, and Rehabilitation”. and “Transportation System Optimization”. During the focus group discussions, participants were tasked with prioritizing projects under each of these program areas. Project team members presented this as a “this or that” voting activity that allowed participants to vote on “Project A” or “Project B” under each program area to help determine which projects would potentially have the most support from the community when it comes time to fund and construct them.

Virtual Presentation

In Phase Two, community members were given the opportunity to learn more about Ankeny’s existing transportation system through a virtual presentation made available on the project website. Content for this presentation was based on the Current and Future Needs Chapter findings project team members had gathered and analyzed during phase one of the planning process. These findings provide insight into current traffic volumes, predicted traffic data modeling, key corridors and intersections, and community demographic information, as well as more metrics for evaluating the City’s transportation system.

This presentation was a pre-recorded 12-minute video that presented the Chapter’s findings and was made available on the project website during the month of December. The video also encouraged viewers to take the Phase Two Public Survey which was available on the website as well.

To view the Phase Two Virtual Presentation, visit this link.

City of Ankeny Transportation Master Plan

Public Engagement Summary - Phase 3

Phase 3 public engagement of the Ankeny Transportation Master Plan (TMP) provided a final opportunity for community members and stakeholders to provide their feedback on the recommended actions, goals, and policies of the plan. All of these outreach tactics contributed to achieving the overall goal of Phase 3 - validating final plan recommendations with community input. This document summarizes these takeaways.

Public Open House

The final public open house was held on May 8, 2024, from 4:30-7:30p.m. at the Ankeny Kirkendall Public Library. The purpose of the open house was to allow attendees to review the planning process that led to the development of the draft TMP and its recommendations, provide feedback, comments or concerns about the presented recommendations, and speak with the project team about the TMP or other transportation-related topics.

A total of 51 members of the public signed into the meeting. Additional attendees were noted that did not sign in. City staff members and four consultant team members were also in attendance.

The meeting was arranged in ten information displays for attendees to visit in a sequence, followed by a public comment station.

Public Comment

A total of 18 comment forms were completed and submitted during the May 8 open house meeting.

Seventeen of the respondents were Ankeny residents, and one was not a resident. Based on feedback from the comment forms completed at the meeting, the following results were concluded:

The TMP recommendations adequately address the needs of Ankeny residents, both now and in the future. 50% of open house comment forms mentioned the benefits of the plan, deeming it both forward thinking and proactive, which addresses the needs of Ankeny residents well.

Respondents expressed a desire for the opportunity to be involved in the implementation of this plan. About 44% of respondents mentioned wanting to be involved in the implementation of the TMP as it moves forward, listing desires such as continuous updates, feedback opportunities, volunteering and more.

When prompted to share feedback on the Near, Mid, and Long Term projects presented, the most common concern was the immediate need for improvements. Four respondents noted that the projects are helpful for residents, and they would like to encourage that these changes happen as soon as possible. This is desired for the near, mid, and long term projects alike.

Under the “additional comments” prompt, respondents expressed a desire for public transportation programs and pedestrian/cyclist safety to be given a higher importance within the plan. About 39% of respondents noted the importance of either expanding the existing public transit program or prioritizing safe bike ways and pedestrian sidewalks so that those means of transportation can be promoted within the community.

Virtual Presentation

For community members who were not able to attend the final open house meeting in person, a virtual presentation was shared on the City’s project website. This presentation featured the displays that were shared at the open house meeting and allowed viewers to fill out a comment form to share their feedback with the City and project team. This provided an extended opportunity for community members to review the Transportation Master Plan’s recommendations, actions, and policies.

This presentation was a pre-recorded 4.5-minute video that presented the TMP’s recommendations, actions, and policies. The video was made available during the month of June 2024 as well as the online comment form associated with the presentation. No online comments were submitted during this time.

To view the Phase Three Virtual Presentation, visit this link.

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APPENDIX F: REVENUE SOURCES AND PROJECTIONS

City of Ankeny TMP
Transportation System Revenue Sources and Projections

	Revenue Source	Annual Growth %	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
1	General Obligation Bonds Debt Service Fund	3%	$ 12,011,666	$ 8,325,666	$ 9,846,667	$ 9,931,000	$ 14,470,000	$ 16,139,000	$ 15,640,000	$ 15,185,000	$ 15,835,000	$ 24,515,000	$ 16,735,450	$ 17,237,514	$ 17,754,639	$ 18,287,278	$ 18,835,896	$ 19,400,973	$ 19,983,003	$ 20,582,493	$ 21,199,967	$ 21,835,966	$ 22,491,045	$ 23,165,777	$ 23,860,750	$ 24,576,573	$ 25,313,870	$ 26,073,286	$ 26,855,484	$ 27,661,149	$ 28,490,983	$ 29,345,713	$ 30,226,084	$ 31,132,867
2	General Obligation Bonds Tax Increment Financing Fund	3%	$ 10,630,000	$ 2,623,554	$ 2,160,000	$ 7,337,000	$ 272,000	$ 400,000	$ 1,000,000	$ 3,216,750	$ 6,607,750	$ 2,285,000	$ 3,068,550	$ 3,160,607	$ 3,255,425	$ 3,353,087	$ 3,453,680	$ 3,557,290	$ 3,664,009	$ 3,773,929	$ 3,887,147	$ 4,003,762	$ 4,123,875	$ 4,247,591	$ 4,375,019	$ 4,506,269	$ 4,641,457	$ 4,780,701	$ 4,924,122	$ 5,071,846	$ 5,224,001	$ 5,380,721	$ 5,542,143	$ 5,708,407
3	General Obligation Bonds Road Use Tax Fund	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ 506,499	$ 8,230,602	$ 2,985,809	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4	General Obligation Bonds Water Fund	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ 168,527	$ 2,738,567	$ 993,468	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	General Obligation Bonds Sewer Fund	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ 324,974	$ 5,280,831	$ 1,915,723	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Grants	1%	$ 3,925,000	$ 5,446,446	$ 4,992,000	$ 2,766,000	$ 4,327,913	$ 3,836,248	$ 4,000,000	$ 2,223,250	$ 5,523,250	$ 8,240,000	$ 3,082,400	$ 3,113,224	$ 3,144,356	$ 3,175,800	$ 3,207,558	$ 3,239,633	$ 3,272,030	$ 3,304,750	$ 3,337,798	$ 3,371,175	$ 3,404,887	$ 3,438,936	$ 3,473,325	$ 3,508,059	$ 3,543,139	$ 3,578,571	$ 3,614,356	$ 3,650,500	$ 3,687,005	$ 3,723,875	$ 3,761,114	$ 3,798,725
7	General Fund	0%	$ 200,000	$ 343,000	$ 340,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	Park Dedication Fund	0%	$ 50,000	$ 50,000	$ 80,000	$ 80,000	$ 80,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
9	Water Fund	0%	$ 791,234	$ 750,000	$ -	$ -	$ -	$ 66,000	$ -	$ 912,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Sewer Fund	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 912,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Cash on Hand	0%	$ 815,000	$ 6,600,000	$ 3,723,000	$ 2,437,000	$ 6,409,087	$ 3,477,752	$ 240,000	$ 500,000	$ 1,519,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Hotel/Motel Tax	0%	$ 105,000	$ 50,000	$ 200,000	$ 200,000	$ 300,000	$ 295,000	$ 100,000	$ 600,000	$ -	$ 500,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000
13	Road Use Tax Fund	0%	$ 1,670,000	$ 1,140,000	$ 1,800,000	$ 2,045,000	$ 2,275,000	$ 1,449,000	$ 785,000	$ 350,000	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Capital Reserve Fund	0%	$ 450,000	$ 4,439,700	$ 3,060,000	$ 50,000	$ 495,000	$ 6,765,000	$ 1,370,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
15	Civic Trust Fund	0%	$ 40,000	$ -	$ 1,555,000	$ 950,000	$ 2,615,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Private Contributions	0%	$ 2,445,000	$ 1,956,837	$ 993,000	$ 1,648,000	$ 360,000	$ 1,270,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	Special Assessments	0%	$ -	$ -	$ 1,114,000	$ -	$ 255,000	$ -	$ -	$ 200,000	$ 290,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	TOTAL		$ 33,132,900	$ 31,725,203	$ 29,863,667	$ 27,519,000	$ 31,859,000	$ 33,798,000	$ 24,235,000	$ 40,450,000	$ 36,120,000	$ 35,990,000	$ 23,286,400	$ 23,911,344	$ 24,554,420	$ 25,216,165	$ 25,897,134	$ 26,597,897	$ 27,319,041	$ 28,061,172	$ 28,824,912	$ 29,610,904	$ 30,419,807	$ 31,252,304	$ 32,109,094	$ 32,990,900	$ 33,898,466	$ 34,832,557	$ 35,793,963	$ 36,783,494	$ 37,801,989	$ 38,850,309	$ 39,929,341	$ 41,039,999
	Running 5-Year Totals (prior)											**$ 170,593,000**	**$ 160,081,400**	**$ 159,757,744**	**$ 143,862,164**	**$ 132,958,329**	**$ 122,865,463**	**$ 126,176,961**	**$ 129,584,658**	**$ 133,091,410**	**$ 136,700,157**	**$ 140,413,926**	**$ 144,235,836**	**$ 148,169,099**	**$ 152,217,021**	**$ 156,383,009**	**$ 160,670,572**	**$ 165,083,322**	**$ 169,624,981**	**$ 174,299,381**	**$ 179,110,470**	**$ 184,062,313**	**$ 189,159,096**	**$ 194,405,132**
	Running 10-Year Totals (prior)																					**$ 263,279,390**	**$ 270,412,797**	**$ 277,753,757**	**$ 285,308,431**	**$ 293,083,166**	**$ 301,084,498**	**$ 309,319,158**	**$ 317,794,080**	**$ 326,516,402**	**$ 335,493,479**	**$ 344,732,884**	**$ 354,242,418**	**$ 364,030,113**