
SOUTH JORDAN CITY PLANNING COMMISSION REPORT

Meeting Date: 7/9/24

Issue: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH, ADOPTING THE TRANSPORTATION MASTER PLAN FOR THE CITY OF SOUTH JORDAN

Submitted By: Brad Klavano / Jeremy Nielson
Presented By: Jeremy Nielson

Department: Engineering

Staff Recommendation (Motion Ready): Positive recommendation to City Council for the Approval of Resolution 2024-31 adopting the Transportation Master Plan for the City of South Jordan.

BACKGROUND: A Transportation Master Plan has been prepared by Wall Consulting Group and is now ready for review by the Planning Commission and adoption by City Council.

TEAM FINDINGS, CONCLUSIONS & RECOMMENDATIONS:

FINDINGS: The Transportation Master Plan will provide specific direction to South Jordan City based on City demand data and standards regarding traffic flow, for decisions that will be made over the next twenty years to help the City provide adequate transportation to residents and businesses to the City of South Jordan.

CONCLUSIONS: The Transportation Master Plan will ensure that a coordinated, master-planned effort is undertaken to plan for the transportation needs of the City given the current future land use planning.

RECOMMENDATIONS: For reasons outlined in the Transportation Master Plan and staff presentation, staff recommends that the Planning Commission forward a positive recommendation to City Council for the approval of Resolution 2024-31, the Transportation Master Plan for the City of South Jordan.

FISCAL IMPACT: As outlined in the Transportation Master Plan

ALTERNATIVES:

1. Recommend that City Council Adopt Resolution 2024-31
2. Recommend that City Council Deny Resolution 2024-31

SUPPORT MATERIALS:

1. Resolution 2024-31
2. Storymap of Transportation Master Plan
3. Master Transportation Plan, dated July, 2024 by Wall Consulting Group

RESOLUTION NO. 2024-31

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH, ADOPTING THE TRANSPORTATION MASTER PLAN FOR SOUTH JORDAN CITY

WHEREAS, a Transportation Master Plan has been prepared by Wall Consultant Group in July, 2024; and

WHEREAS, the Master Transportation Plan update will provide specific direction to South Jordan City, based on City demand data and standards regarding traffic flow, for decisions that will be made over the next twenty years to help the City provide adequate transportation to residents and businesses; and

WHEREAS, the City Council finds and determines that the Transportation Master Plan will support the best interests of the City and will promote the public health, safety, and welfare of the citizens and businesses of South Jordan City.

WHEREAS, the Master Transportation Plan update will replace the previous plan in Appendix B of the South Jordan General Plan, dated Sep, 2019.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF SOUTH JORDAN CITY, STATE OF UTAH that the document entitled Transportation Master Plan prepared by Wall Consultant Group, dated July, 2024, a copy of which is attached, is hereby adopted as the Master Transportation Plan of South Jordan City.

APPROVED BY THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, STATE OF UTAH, ON THIS _____ DAY OF _____, 2024, BY THE FOLLOWING VOTE:

	YES	NO	ABSTAIN	ABSENT
Patrick Harris	_____	_____	_____	_____
Kathie Johnson	_____	_____	_____	_____
Donald Shelton	_____	_____	_____	_____
Tamara Zander	_____	_____	_____	_____
Jason McGuire	_____	_____	_____	_____

Mayor: _____
Dawn R. Ramsey

Attest: _____
City Recorder

Approved as to form:

Office of the City Attorney



The following 21 pages are printed from the storymap webpage (<https://storymaps.arcgis.com/stories/d384f4a5f18c4db397402f2db1c36b9c>). The storymap will be used to present the plan to the Planning Commission and City Council.



South Jordan Transportation Master Plan

South Jordan City
July 3, 2024

Introduction

The South Jordan Transportation Master Plan (TMP) guides transportation infrastructure investments for the future by addressing deficiencies in the roadway network that will likely occur due to land development and the resulting population growth within South Jordan City.

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Future City Limits

Goals and Vision

This transportation master plan will be a guide for the City to properly plan, budget and maintain a safe and efficient multi-modal transportation network into the future by:

- Improving active transportation infrastructure (SC-4, RPI-3, DAOS-1, ED-4, FRG-6)
- Developing a connected road network (SC-4, RPI-3, ED-4, FRG-6)
- Improving the public transit network (SC-4, RPI-3, ED-4, SG-4, FRG-6)
- Enhancing transportation safety within the city (SC-4, RPI-3, FRG-6)
- Engaging and coordinating with the community and stakeholders through the planning process (SC-5, RPI-1, BRE-3, EC-3)

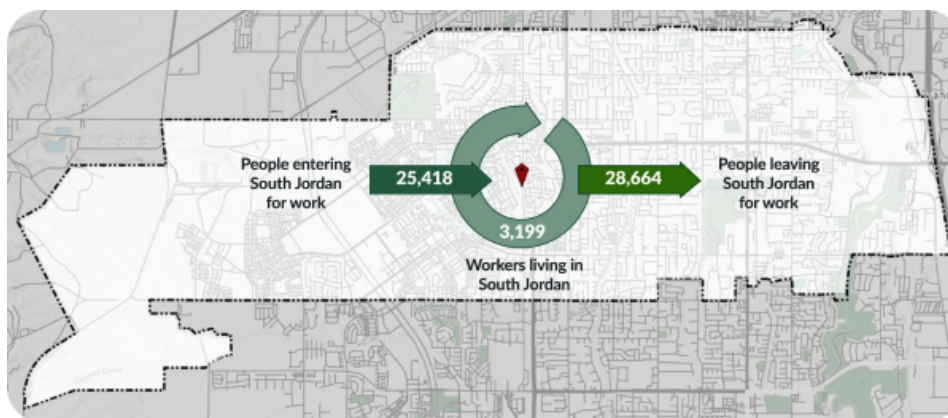
(The goal and vision corresponds with the South Jordan City Strategic Priorities which are listed on the City's [website](#).)

Demographics

South Jordan has experienced steady population growth over the past 40 years. The most recent 2020 census shows that South Jordan has a population of 77,487 and is expected to increase to 156,476 by the year 2050.



This image represents the worker in-flow and out-flow for South Jordan in 2020. This data is from the US Census Bureau’s Center for Economics. The number of workers who live in South Jordan and travel elsewhere for work is slightly greater than the number of workers who live outside of South Jordan and enter the city for work. 5.6% of the South Jordan City workforce both live and work in South Jordan.



Active Transportation

Existing Active Transportation

Active transportation includes any form of non-motorized transportation such as walking or biking. The active transportation network in South Jordan can be divided into facility types such as conventional bike lanes, buffered bike lanes, multi-use pathway, neighborhood byways, and cycle track.

This plan updates the active transportation plans from the previous TMP (2019) and the South Jordan AT (2020). Active transportation phasing recommendations were developed by the TMP project team together with South Jordan City and are found in the maps below.

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The following definitions are from the previous ATP which refer to the Salt Lake Count Bikeway Design guidance manual.

Bike Lane



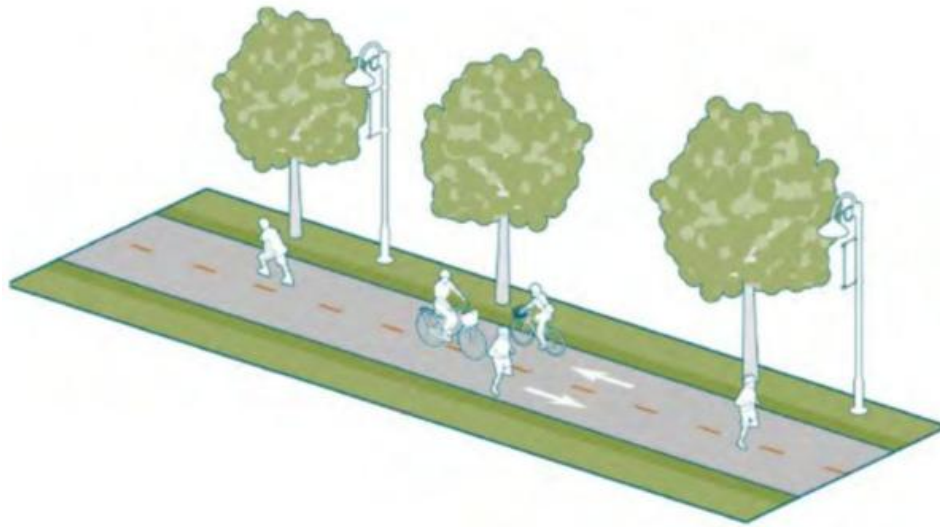
Bike lanes use signs and pavement markings to delineate street space that is exclusive for bicycling. Bike lanes can encourage predictable traffic flow from both cyclists and motorists.

Buffered Bike Lanes



Buffered bike lanes use painted buffers which improve bicyclist level of comfort by increasing the distance between traffic and cyclists. As with bike lanes, signs and pavement markings are to designate on-street space exclusive to bicycling.

Multi Use Pathway



Multi-use paths, also known as shared-use paths, paved trails or greenways, are off street, paved facilities for bicyclists and pedestrians that are physically separated from motor vehicle traffic. These facilities are preferred by less experienced cyclists, but more experienced cyclists may avoid them due to out of direction travel and slower users.

Byway



Neighborhood byways also known as bicycle boulevards or greenways, are shared streets optimized for bicycle travel. Signs and pavement markings are used to create a high comfort environment while traffic calming features manage motor vehicle speeds and volumes.

Cycle Track



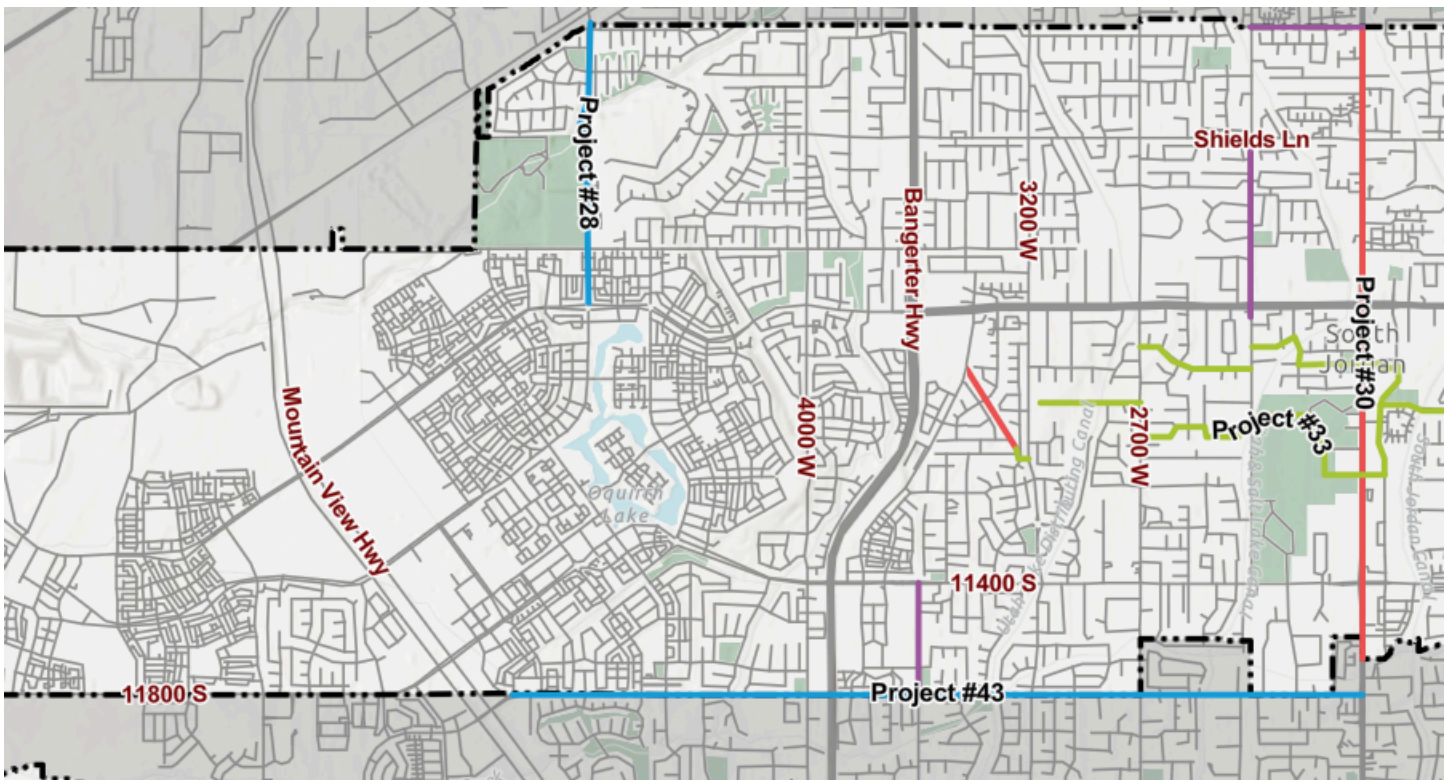
A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks.

Phase #1 Projects - Active Transportation

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Phase #1 Active Transportation Projects

Phase #2 Projects - Active Transportation



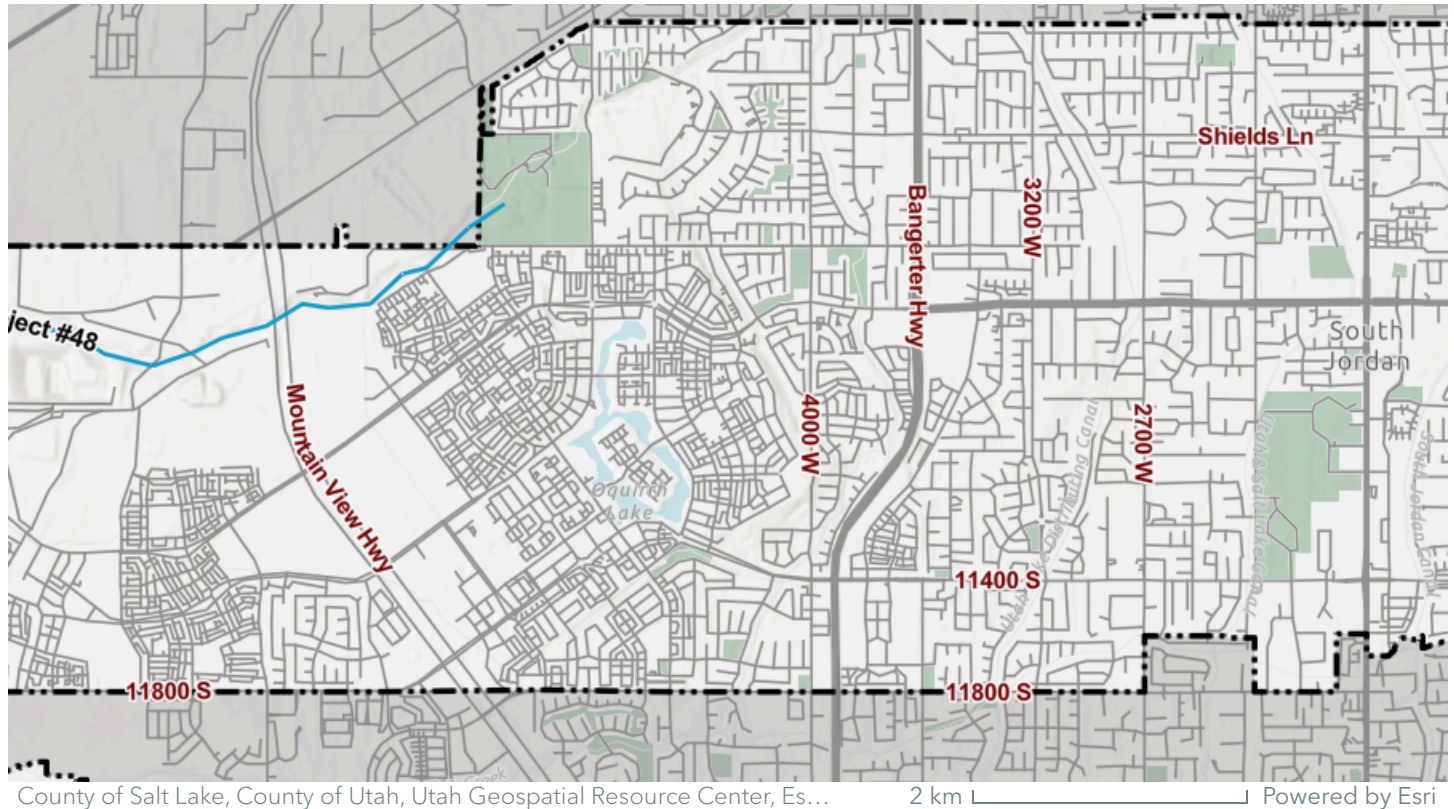
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Phase #2 Active Transportation Projects

Phase #3 Projects - Active Transportation



Phase #3 Active Transportation Projects

Transit

Public transit typically includes buses, light rail, and shuttle routes. Public transportation in South Jordan City is served by the Utah Transit Authority (UTA).

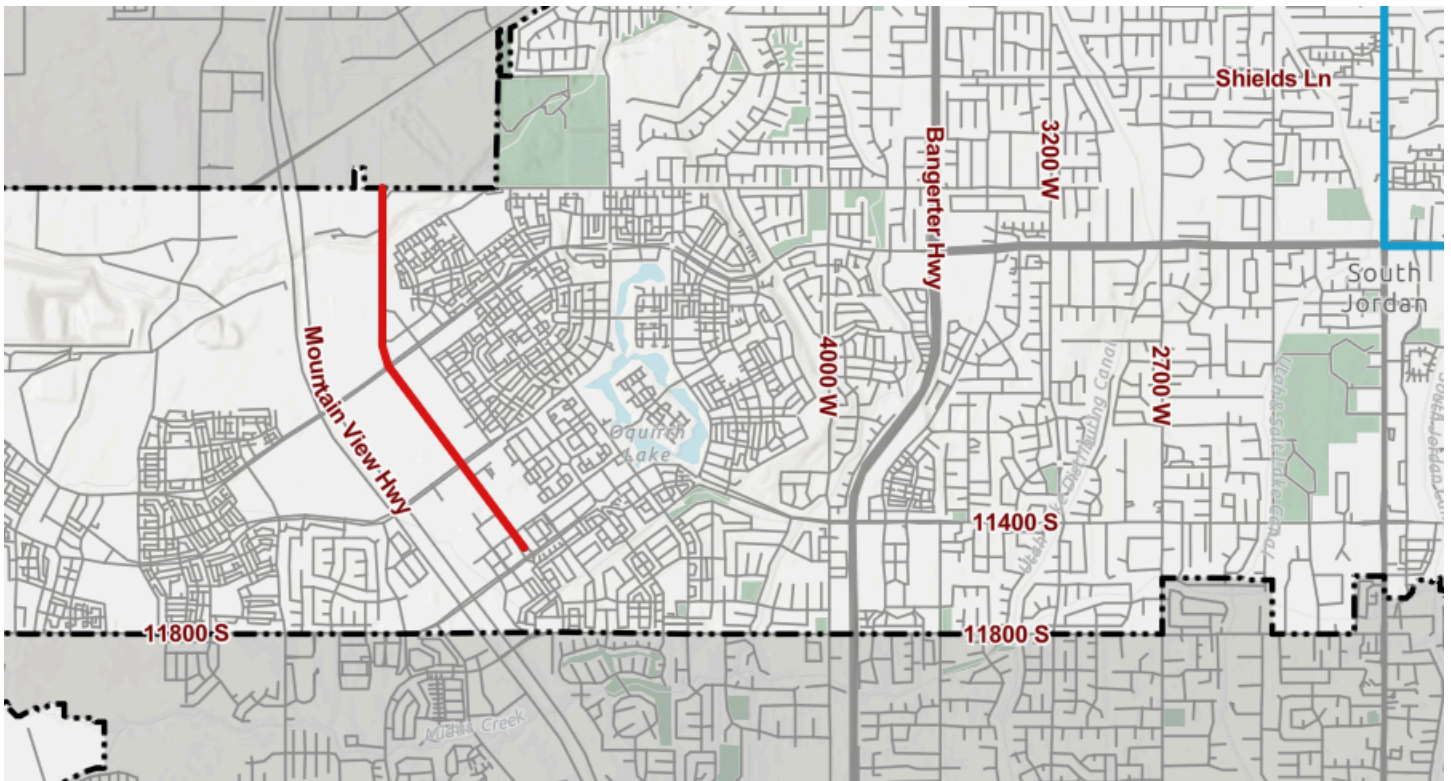
According to the American Community Survey (2022), 2.1% of South Jordan residents reported using public transit as their transportation mode to commute to work. This is compared to 1.8% of Utahns and 3.8% of people in the United States who use public transit as their transportation mode to commute to work.

UTA On Demand currently operates in parts of South Jordan, and has plans to expand its coverage for the entire city within

the next five years. UTA On Demand is an innovative form of transportation that connects riders with other transit services like TRAX, FrontRunner, or bus as well as to other destinations in the community.

Existing Transit Routes

UTA On-Demand Map

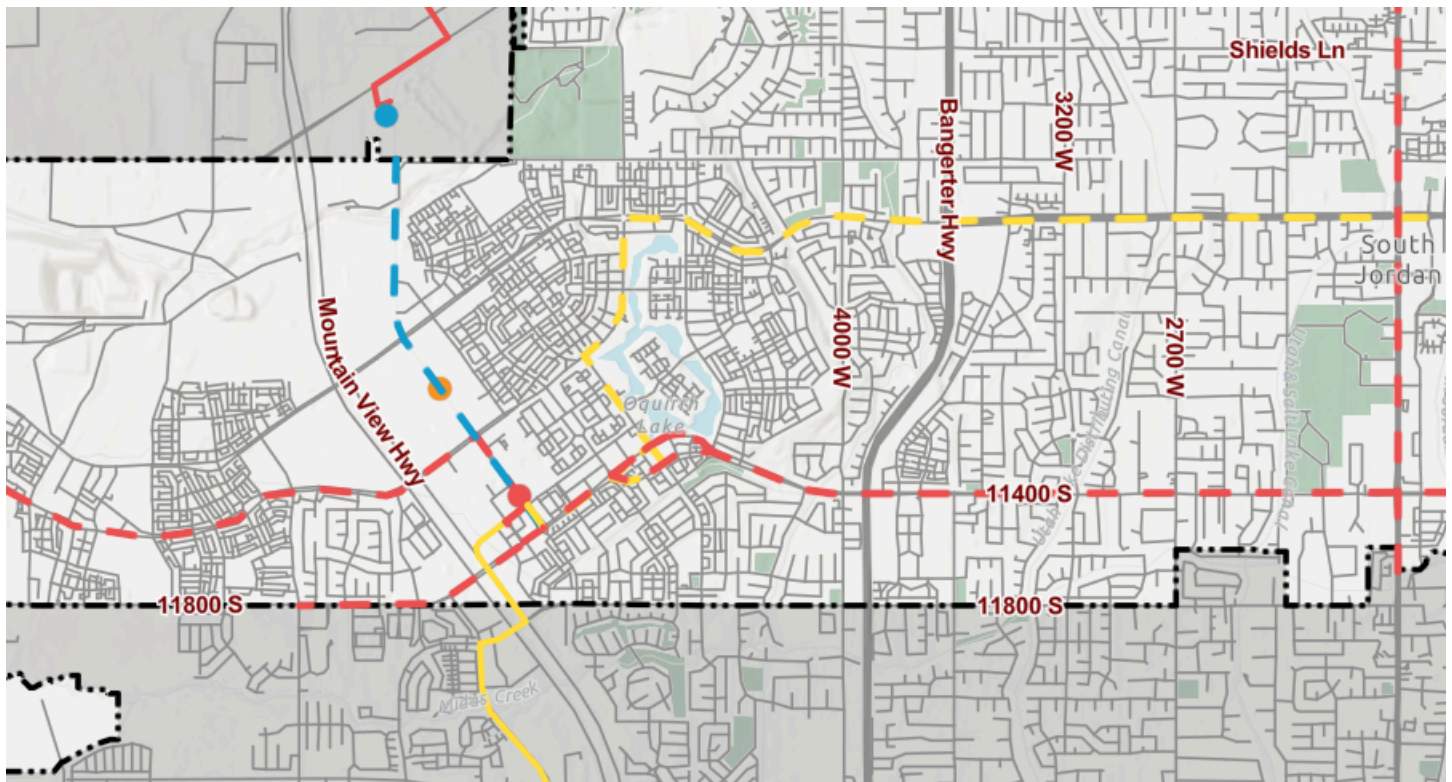


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WFRC and UTA Transit Projects

UTA RTP (2024-2050)

WFRC Transit RTP (2023-2050)



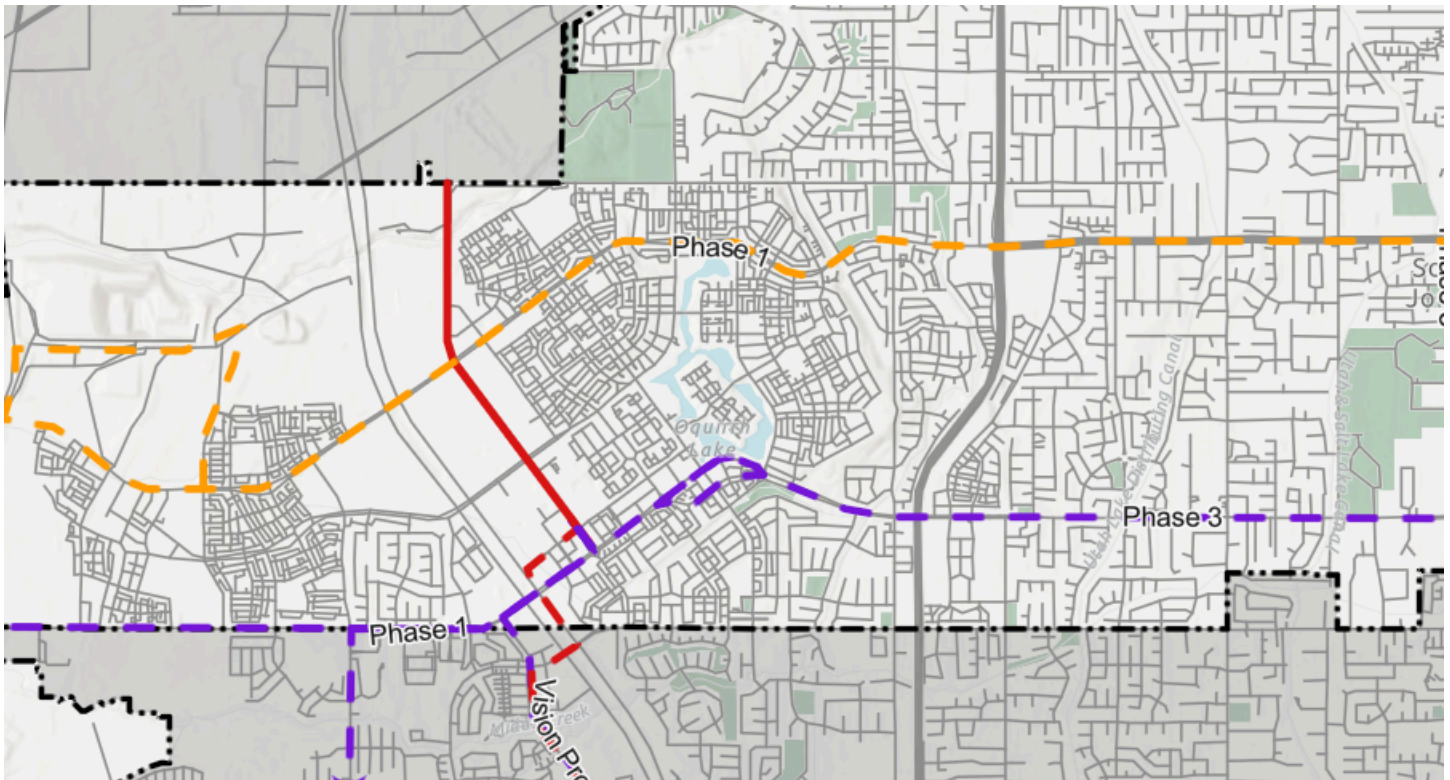
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Note: 5-year service plan bus route planned North to South on 4800 West/Lake Ave/Grandville. In addition, a 5-year service plan for on-demand Via transit is planned for the whole city.

South Jordan City Preferred Transit Plan

The South Jordan TMP team reviewed the previous transit plans and worked closely with the City to develop a preferred transit plan. Changes to the previous transit plans include:

- Re-routing the Lake Ave line to 11800 South and extending the route into Rio Tinto/Olympia
- Changing the Phasing on the 11800 South route from Phase 1 to Phase 2
- Re-routing the South Jordan Parkway/10600 South line to follow Grandville
- Changing the Phasing on the South Jordan Parkway/10600 South project from Phase 2 to Phase 1
- Extending the TRAX Red Line

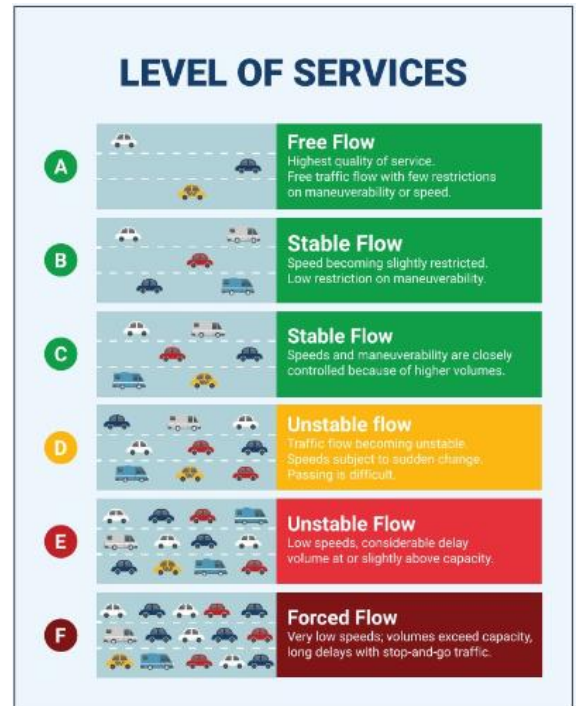


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Travel Demand Model

Roadway traffic congestion is reported using Level of Service (LOS), which is a planning term that describes the roadway operating performance. LOS for roadway segments is a categorical classification of roadway conditions assigned to degrees of congestion calculated quantitatively as the density of flow on a roadway, or the volume-to-capacity (VC) ratio. LOS is reported on a scale from A to F, with A representing free-flow conditions and F representing traffic congestion.

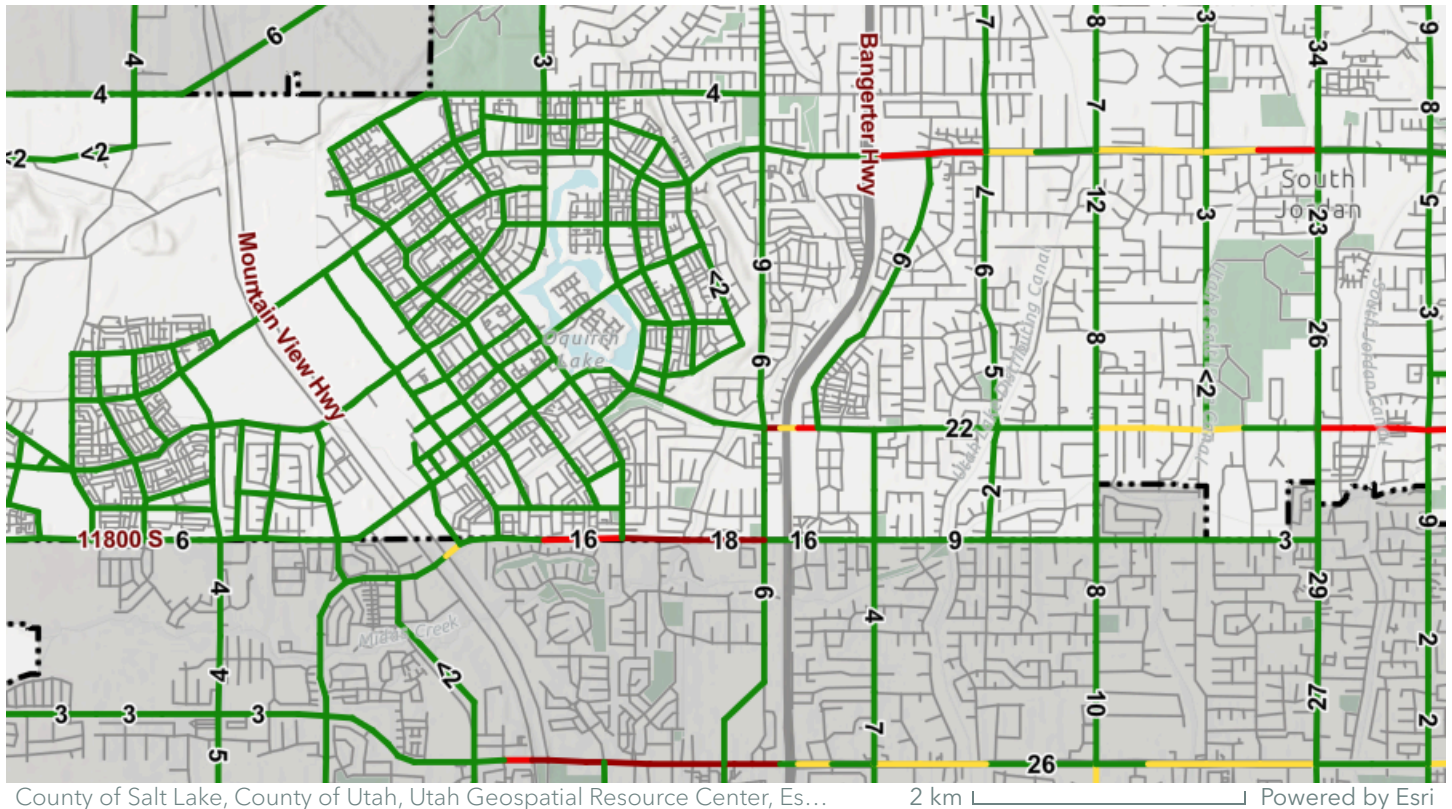


For the purposes of this study, a minimum overall roadway performance of LOS D is considered acceptable. If LOS E or F for a roadway is

calculated, explanations and/or mitigation measures are presented.

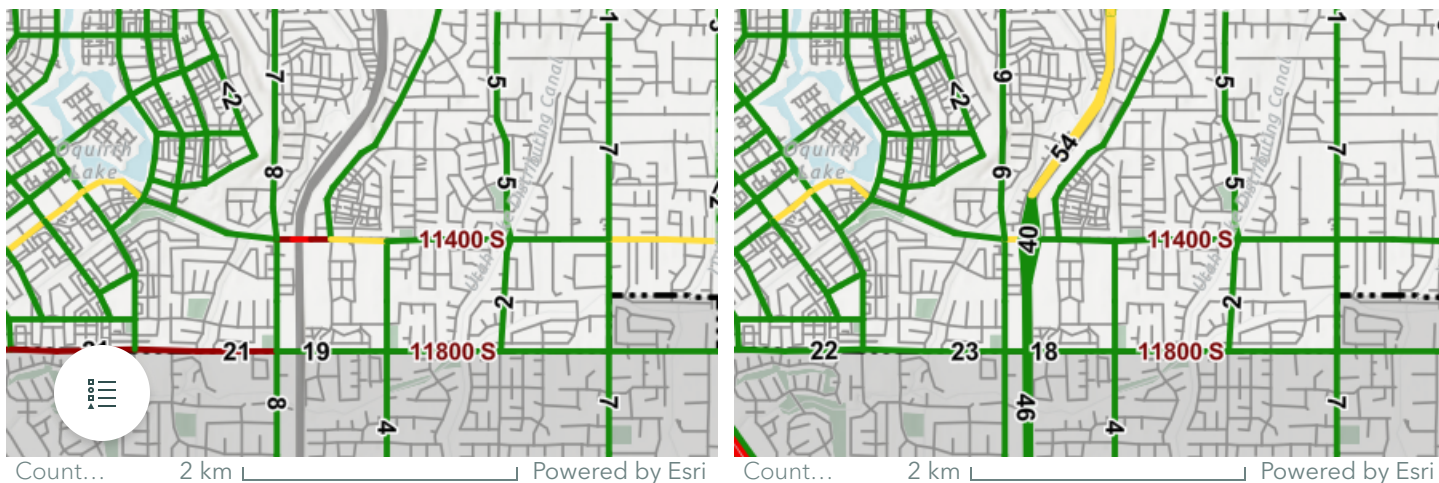
Details regarding modeling specifics such as roadway network, demographics, and scenario testing are described in the full Transportation Master Plan report.

2023 Existing Conditions



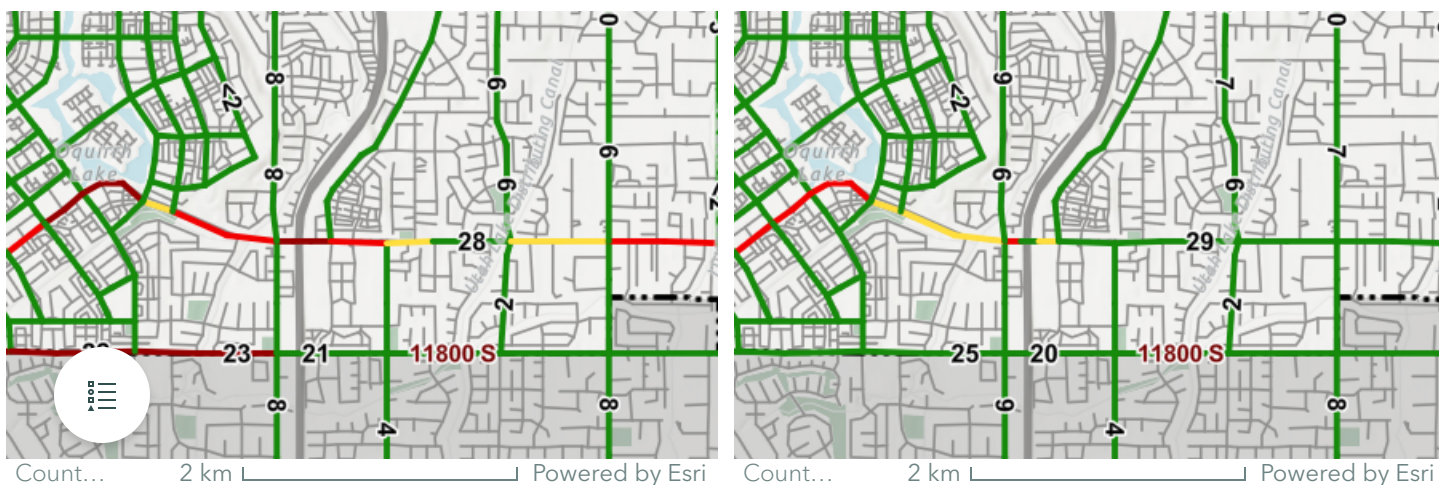
2023 Travel Demand Model Results

The no-build scenario (left) shows the projected traffic conditions if no roadway improvements are made before 2032. The build scenario (right) provides an analysis of traffic conditions including the roadway improvements listed in phase #1 in the roadway projects section.



2050 Travel Demand Model Results

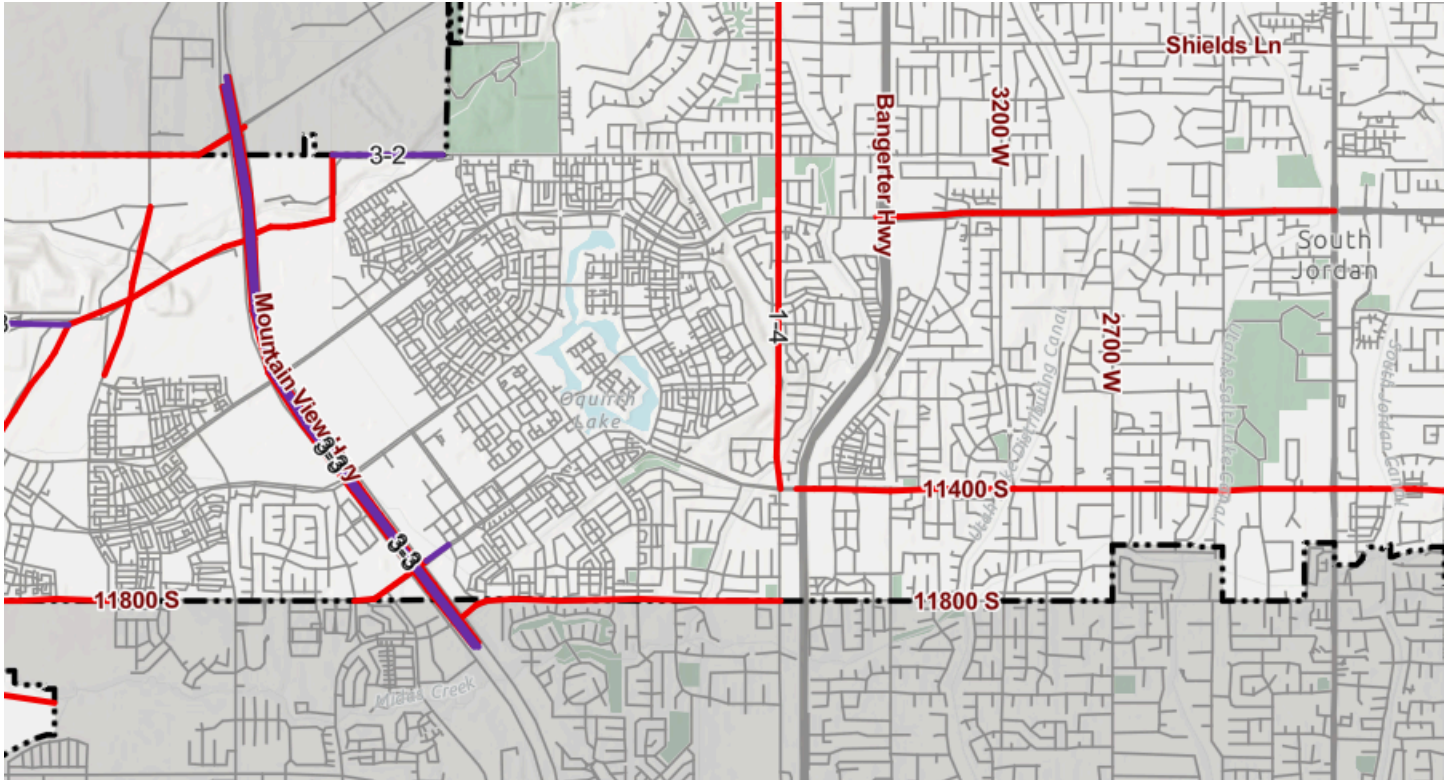
The no-build scenario (left) shows the projected traffic conditions if no roadway improvements are made before 2050. The build scenario (right) provides an analysis of traffic conditions including the roadway improvements listed in phase #1, #2 and #3 in the roadway projects section.



Roadway Projects

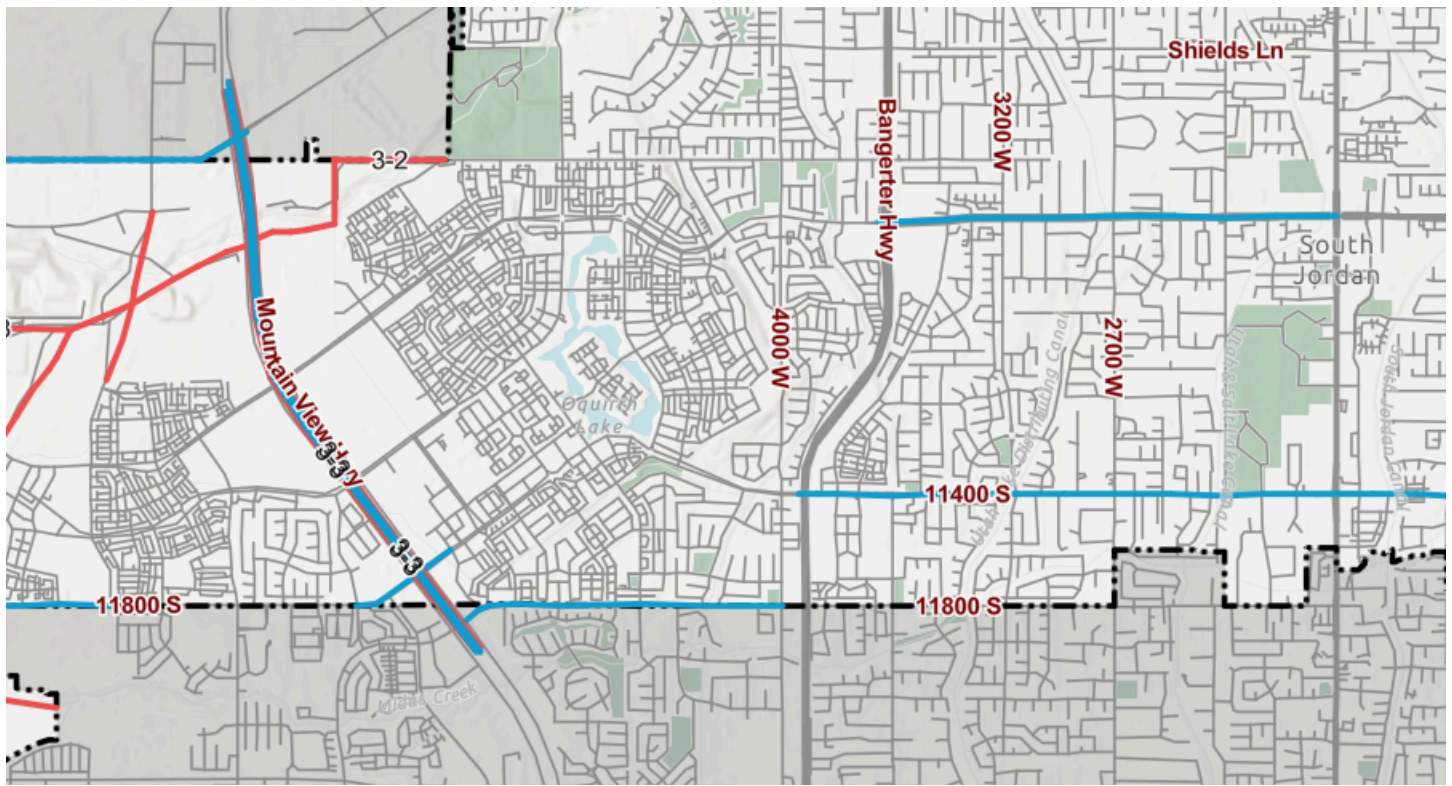
The following roadway projects are recommended between 2023 and 2050, and were developed as part of the South Jordan transportation master planning process to increase roadway capacity and accommodate future development. The project number listed is for identification only and is no indication of project prioritization.

By Phase



Roadway Projects by Phase

By Scope

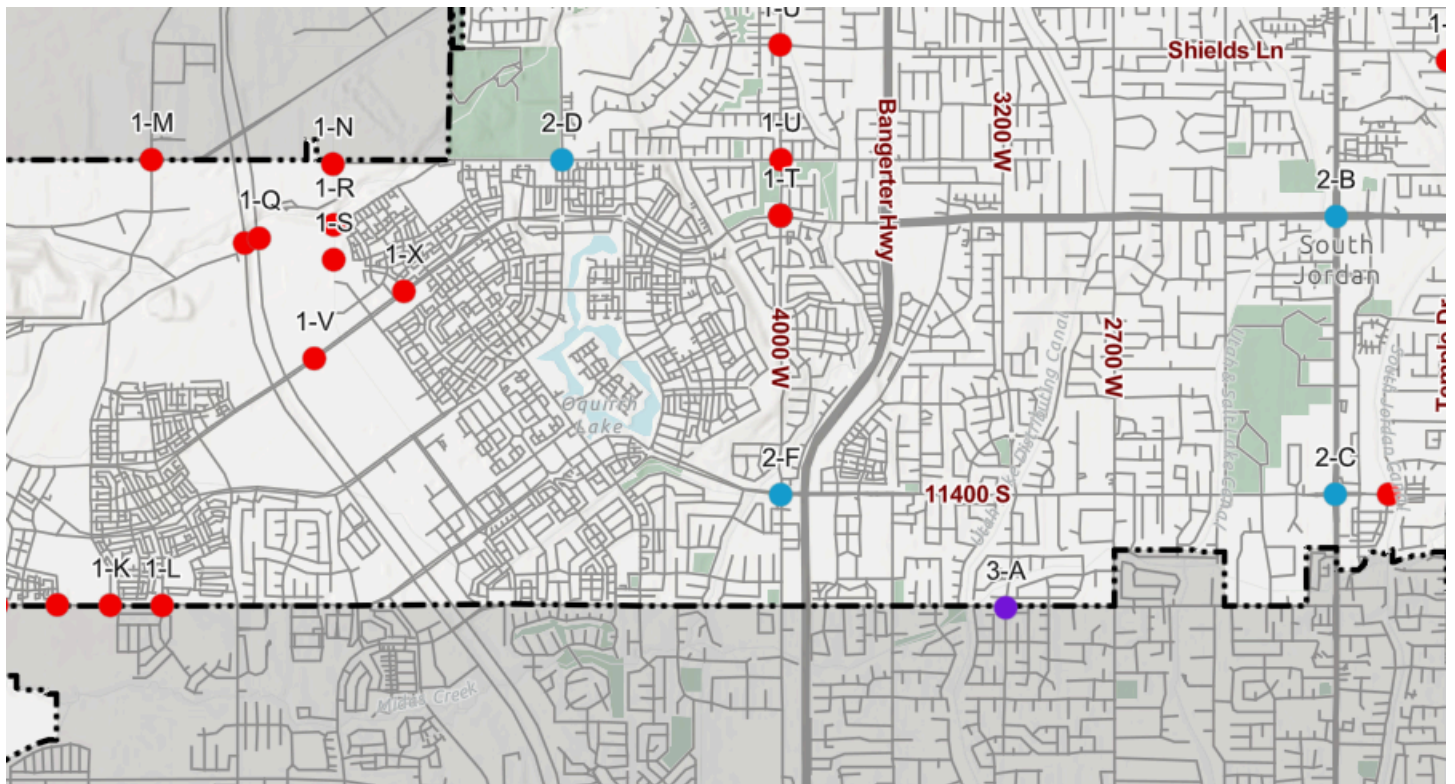


Roadway Projects by Scope

Intersection Projects

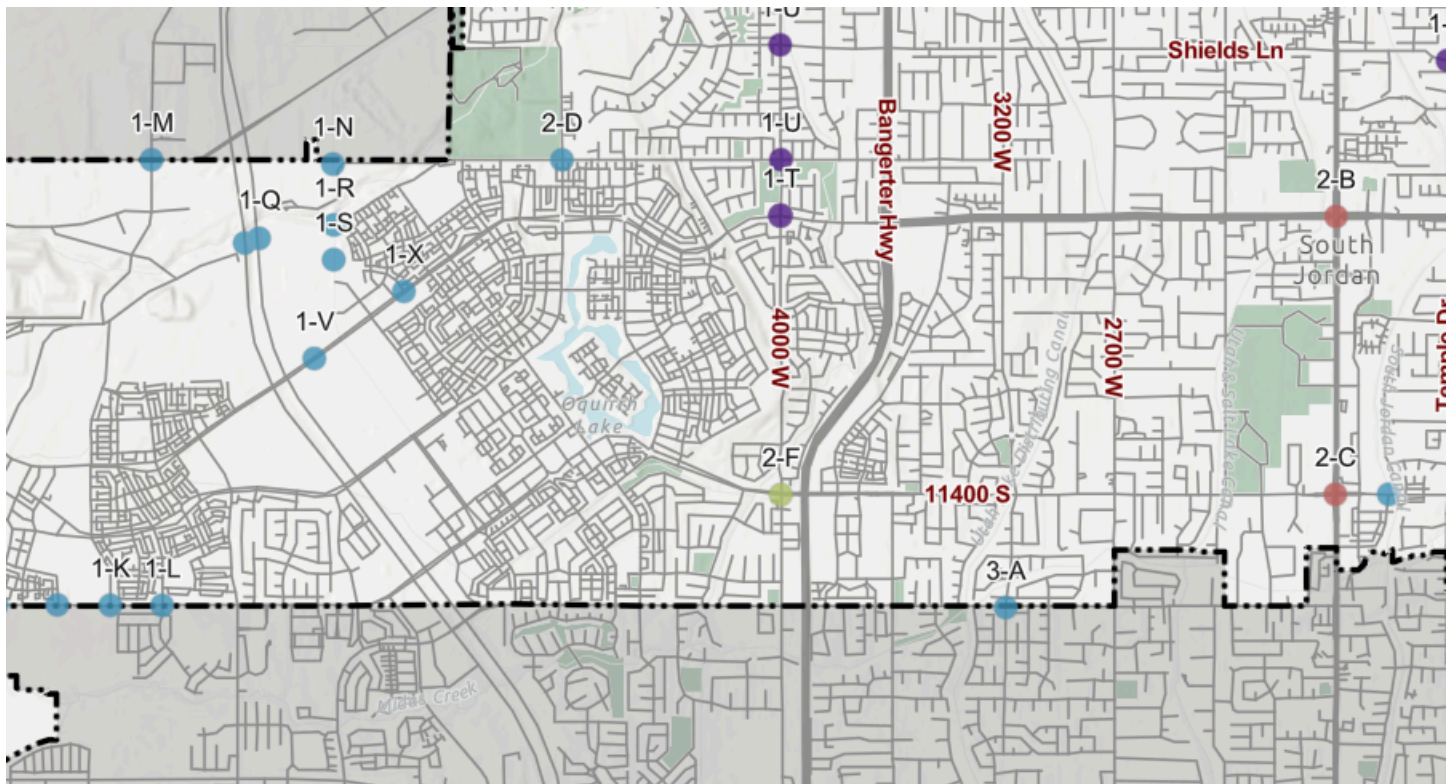
The following intersection projects are recommended between 2023 and 2050, and were developed as part of the South Jordan transportation master planning process to increase roadway capacity and accommodate future development. The project number listed is for identification only and is no indication of project prioritization.

By Phase



Intersection Projects by Phase

By Scope

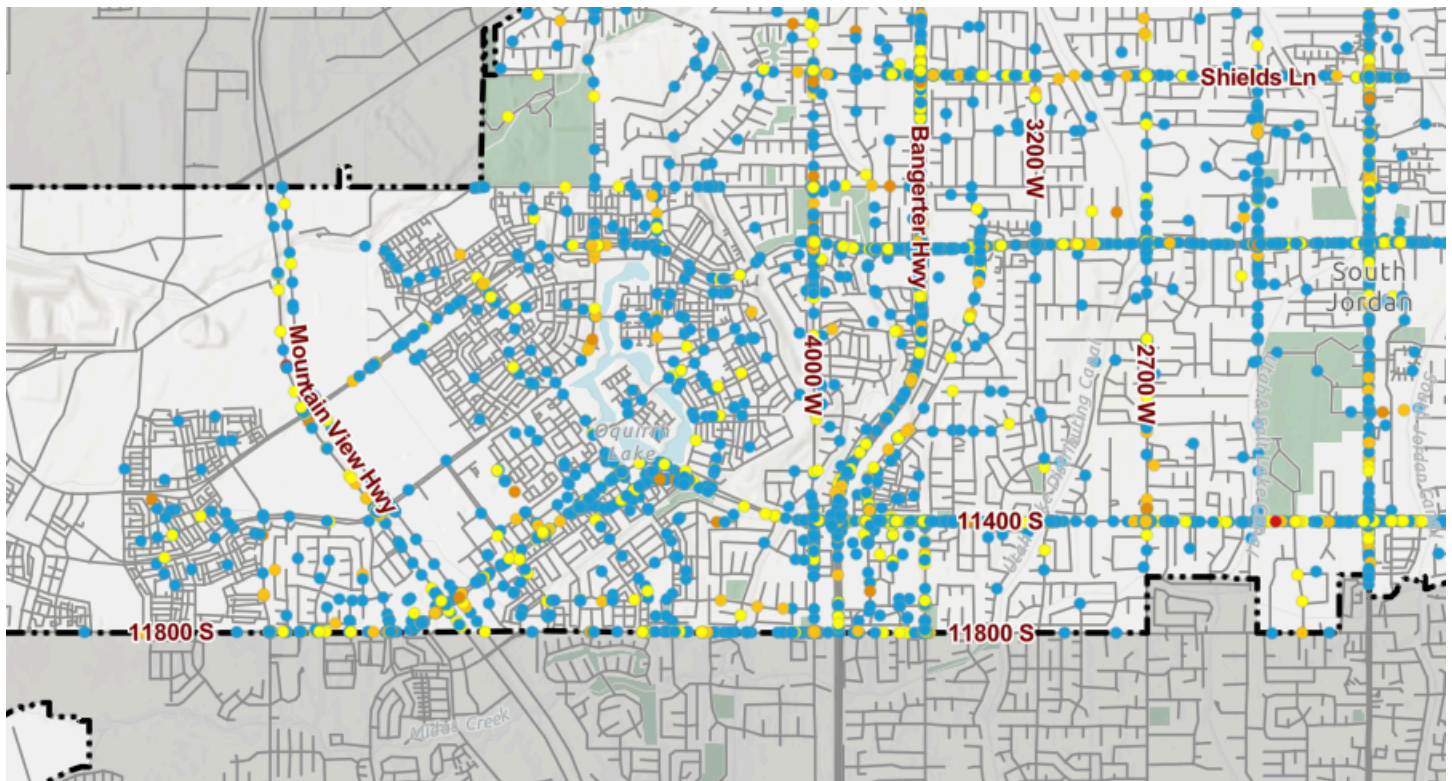


Intersection Projects by Scope

Safety Analysis

A safety analysis was performed for all roadways within South Jordan City. The most recent five full years of available crash data (January 1, 2018 to December 31, 2022) from UDOT Traffic & Safety were used to perform a safety analysis. Historic crash patterns were analyzed within South Jordan City to develop project and policy recommendations.

2018 to 2022 Crash Frequency Summary



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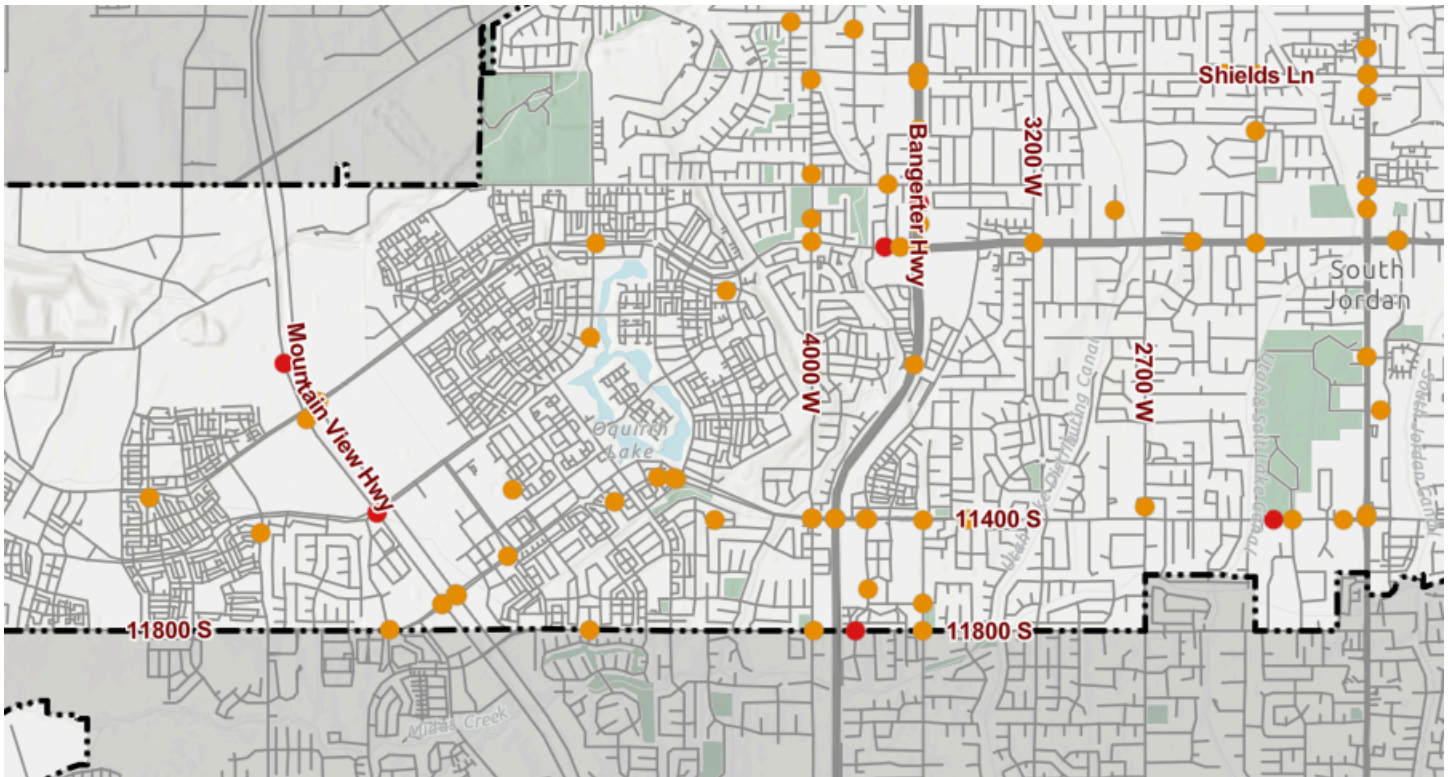
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2018 to 2022 Severe Crashes

The figure below illustrates the fatal and serious injury crashes in South Jordan City from 2018 to 2022. The number of fatal and serious injury crashes in South Jordan City as a percentage of total crashes is 1.87 percent, which is just below the Salt Lake County average of 1.93 percent during the same time frame. Of these 98 severe crashes, 48 were on UDOT roadways, and 50 were on City roadways.

SEVERE CRASH RATES IN SALT LAKE COUNTY CITIES	
City	Severe Crash Rate
South Jordan	1.87%
Midvale	1.29%
Draper	1.34%
Murray	1.40%
Sandy	1.76%
Bluffdale	1.76%
1.91%	1.34%
Taylorsville	1.93%
Herriman	2.29%
West Jordan City	3.01%



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TMP Map Application

This interactive map allows the user to interact with any map created for this transportation master plan.

End of Presentation

Wall Consultant Group

South Jordan TMP



TRANSPORTATION MASTER PLAN

JULY 2024



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I. INTRODUCTION

A. Overview

South Jordan City (City) continues to see rapid growth with the construction of the Daybreak Development and many other residential and commercial developments throughout the City. Additionally, significant growth in neighboring cities is also impacting South Jordan roadways and facilities. The most recent 2020 census shows that South Jordan has experienced a population increase of approximately 27,000 since the previous 2010 census, and this significant growth is expected to continue for the foreseeable future.

This Transportation Master Plan (TMP) guides transportation infrastructure investments for the future by addressing several goals identified by South Jordan City. Key to planning for South Jordan's transportation needs is an understanding of the roadway network's existing and future operation. Once existing conditions are established, roadway conditions are forecasted to future year 2033 and 2050 to identify deficiencies in the roadway network that may occur due to land development and the resulting population growth.

Additionally, this TMP also covers City transportation management-related best practices, such as access management standards, safety analyses, identifying policy and ordinance changes, truck routes, traffic calming, and livable street standards. This TMP meets all requirements outlined in the Utah State Code 10-9a-403. An [interactive online mapping website](#) has been created to summarize this TMP.

This transportation master plan will be a guide for the City to properly plan, budget and maintain a safe and efficient multi-modal transportation network into the future by:

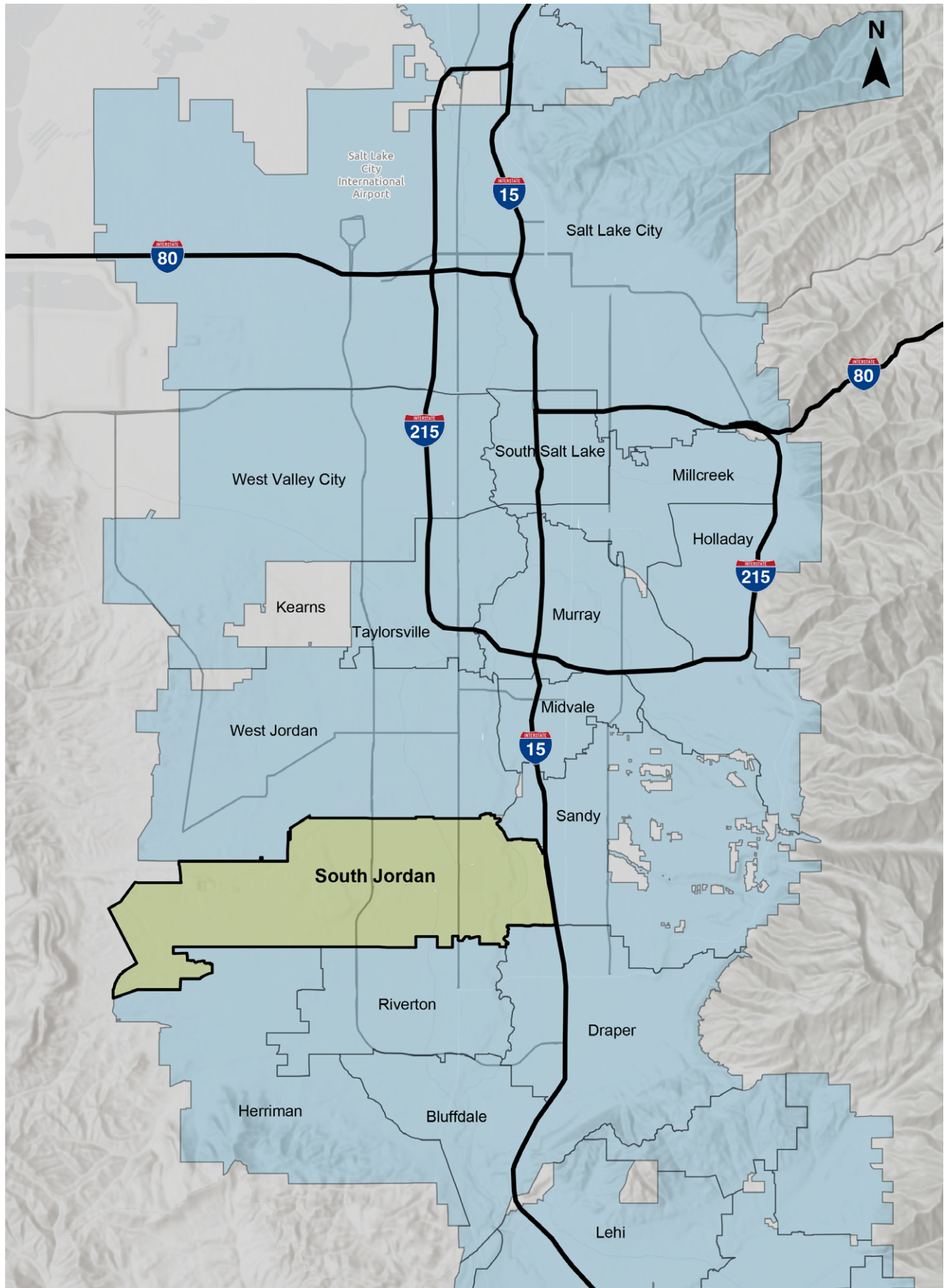
- Improving active transportation infrastructure (SC-4, RPI-3, DAOS-1, ED-4, FRG-6)
- Developing a connected road network (SC-4, RPI-3, ED-4, FRG-6)
- Improving the public transit network (SC-4, RPI-3, ED-4, SG-4, FRG-6)
- Enhancing transportation safety within the city (SC-4, RPI-3, FRG-6)
- Engaging and coordinating with the community and stakeholders through the planning process (SC-5, RPI-1, BRE-3, EC-3)

The goal and vision corresponds with the South Jordan City Strategic Priorities which are listed on the City's [website](#).

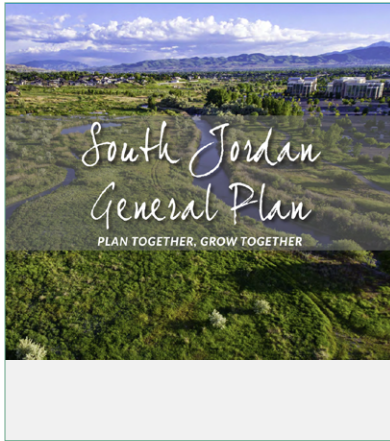
South Jordan City Mission

South Jordan City provides service-oriented, responsible government, consistent with the community's values, priorities, and expectations for a high quality of life, enhancing the City's fiscal health, providing professional and innovative services, and managing the City's resources, while planning for the future.

Figure 1: Vicinity Map



B. Previous Studies



South Jordan 2020 General Plan

The South Jordan General Plan serves as a guide for future growth and investment while preserving the City’s high quality of life and unique character. The 2020 South Jordan General Plan includes existing conditions, a vision statement, framework maps, and goals and strategies for South Jordan as it continues to develop. A future land use map is provided, as well as a discussion on future housing needs and growth patterns. The General Plan states that the transportation vision for South Jordan is to offer numerous choices for safe and efficient travel by creating connected development patterns and walkable destinations. Employment in South Jordan is discussed, such as employment centers and how many employees reside within South Jordan. Implementation actions for future growth are included at the end of the document.



South Jordan TMP (2019)

The 2019 South Jordan Transportation Master Plan assists in planning for the future multi-modal transportation needs of South Jordan City. These plans are based on the future land use plans. The document provides recommended projects for both 2024 and 2040 traffic conditions. The level of service for the roadways is determined for 2018, 2024, and 2040 conditions. Roadway functional classification, access management, traffic calming, transportation technology, and connectivity are all discussed.

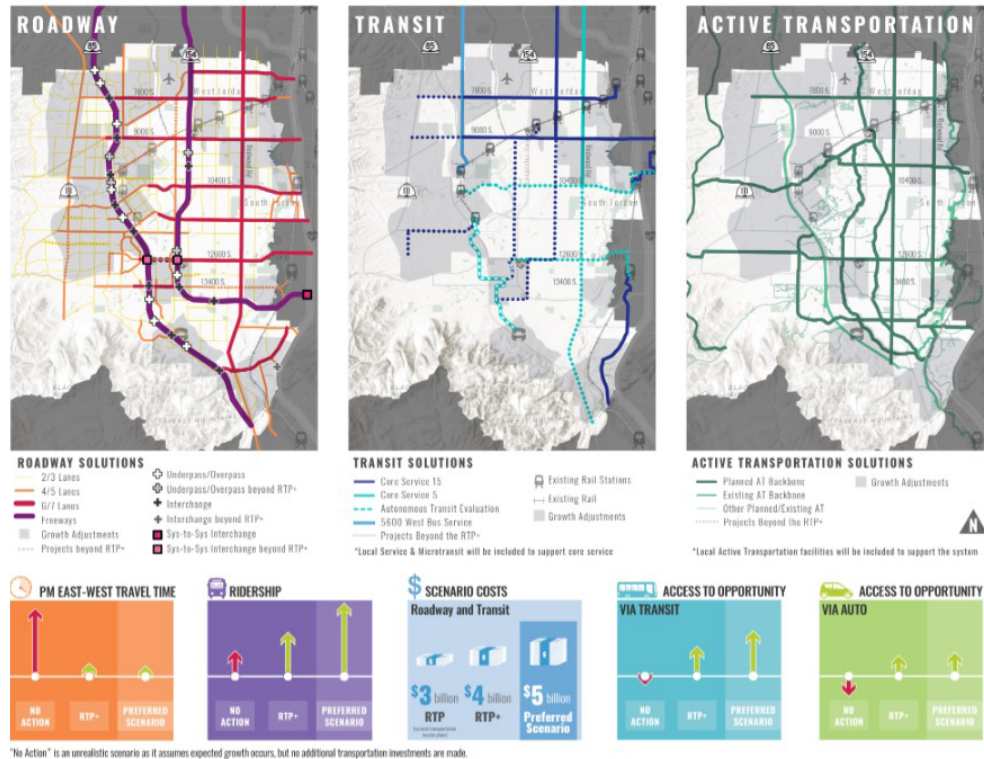


South Jordan Active Transportation Plan

The 2019 South Jordan Active Transportation Plan was created in a joint effort between West Jordan and South Jordan. This document discusses the existing active transportation infrastructure, how South Jordan residents feel about active transportation, existing plans, and planned projects. A prioritized list of active transportation projects in South Jordan is included. Pedestrian and bicycle data is also included, demonstrating which intersections have higher pedestrian volumes. Crash data involving pedestrians and bicyclists and a concept design for buffered bike lanes on 2700 West is also provided.

Southwest Salt Lake County – Transportation Solutions Story Map

The Southwest Salt Lake County Transportation Solutions study examines current and anticipated transportation challenges in the region along with suggested measures to address them. Traffic trends are identified, as well as the top traveled routes. The three alternative scenarios address a connectivity focus, a freeway focus, and a transit focus, with the preferred scenario representing a combination of all three. Costs associated with the preferred scenario are \$1-\$2 billion greater than the adopted WFRC Regional Transportation Plan.



C. TMP Development

To help ensure existing and future needs are met while providing a clear vision for South Jordan to grow and change, Wall Consultant Group (WCG) facilitated a TMP project team, coordinated with neighboring jurisdictions, met with the planning commission and city council, and held coordination meetings with additional entities. Each of these efforts are summarized below.

Project Team

A project team was established with City personnel and WCG. This group met throughout the planning process and conducted a kickoff meeting, monthly coordination meetings, neighboring jurisdiction coordination, and planning commission/city council coordination.

Neighboring Jurisdiction Coordination

The process of putting together this Transportation Master Plan involved a meeting with stakeholders in South Jordan and the surrounding region. This included a neighboring agency coordination meeting that occurred on Thursday October 5th, 2023, and included the following organizations: WCG, South Jordan City, Salt Lake County, Jordan School District, West Jordan City, Copperton Town, Sandy City, Draper City, Riverton City, Herriman City, UDOT, WFRC, and UTA. Meeting topics included future roadway plans in neighboring cities, coordinating cross section dimensions on regional roadways, outlining regional transit plans, discussing the regional active transportation network, and discussing plans for future schools in the City.

Planning Commission and City Council

To assist with the adoption of the TMP, IFFP, and IFA, WCG presented their analysis findings and recommendations to the City Council and Planning Commission.



Daybreak Coordination

WCG reached out to Larry H. Miller (LHM) regarding coordination on Daybreak specific transportation plans. Since WCG has managed all transportation master planning and traffic operations for LHM since 2009, LHM deferred to WCG to coordinate Daybreak's specific transportation planning efforts related to the TMP.

Rio Tinto

The TMP project team met with Rio Tinto on Thursday July 20, 2023. The purpose of this meeting was to understand the latest development plans and project phasing for this project area and how they may impact the City plans for future transportation facilities in this area. Rio Tinto's internal roadway network and signal/access locations were also discussed. Information provided by Rio Tinto was included in the travel demand modeling effort for the TMP. An additional follow-up coordination meeting with Rio Tinto was held on Monday December 4, 2023.

Shoreline Development Plan

The TMP project team met with the Shoreline development team on Tuesday August 1, 2023. The purpose of this meeting was to understand the latest development plans for this project area and how they may impact the City plans for future transportation facilities in this area. Potential future transit facilities and signal/access locations were also discussed. Information provided by the Shoreline team was included in the travel demand modeling effort for the TMP.

Herriman Coordination

The TMP project team met with engineering staff from Herriman City on February 29, 2024 to review project recommendations on the South Jordan / Herriman border. The location, scale, and phasing of projects along the two city's shared boundary were discussed and refined through this coordination.

D. South Jordan Characteristics

The purpose of this section is to discuss the existing and future land use and demographics of South Jordan City. The land use and demographic characteristics are used in the travel demand modeling process to project traffic volumes and determine future transportation needs.

Land Use

As land-use directly drives the quantity and location of new vehicle/bike/transit trips, it is essential to pinpoint changes in future land-use to understand the needs of the future transportation network. As new areas develop and existing areas redevelop over time, changes to the transportation network are often needed to accommodate the associated growth and changes in travel demand. The zoning and future land use maps can be found on the City's [website](#).

Given South Jordan's location in the Wasatch Front, direct access to Mountain View Corridor, Bangerter Highway, and I-15, and the large tracts of vacant land on the western side of the City, it is primed for continued development. Due to these factors, the Wasatch Front Regional Transportation Plan 2023-2050 forecasts that number of households in South Jordan will increase by approximately 25,000 by 2050—nearly doubling the existing number of households.

While a majority of South Jordan is either existing or planned residential, significant mixed-use, industrial, and commercial areas are also present and are expected to grow. It is expected that the City will build upon its existing mixed-use and commercial areas on the City's east side. Additional mixed-use growth is expected adjacent to the Mountain View Corridor and in the southwest areas of the City along 11800 South and the planned extension of U-111. Expanded industrial use is expected along 10200 South.

Demographics

This section discusses the demographics of South Jordan City and provides statistical characteristics of human populations, such as age, race, gender, income, education, and employment. These characteristics have a direct impact on the transportation needs of the City.

Population

South Jordan has experienced dramatic population growth over the past 40 years. The most recent 2020 census shows that South Jordan has a population of 77,487 (or an increase of approximately 27,069 since the previous 2010 survey). Historic population census data is shown below in Table 1. The population of South Jordan is expected to increase by 79% by 2050. This population growth projection is based on data from WFRC, Kem C. Gardner Policy Institute, and from a historical analysis of previous growth patterns within the City performed by South Jordan City staff. Table 2 below shows a breakdown of expected population growth between 2023 and 2050. Figure 2 shows a summary of the historical and projected South Jordan population.

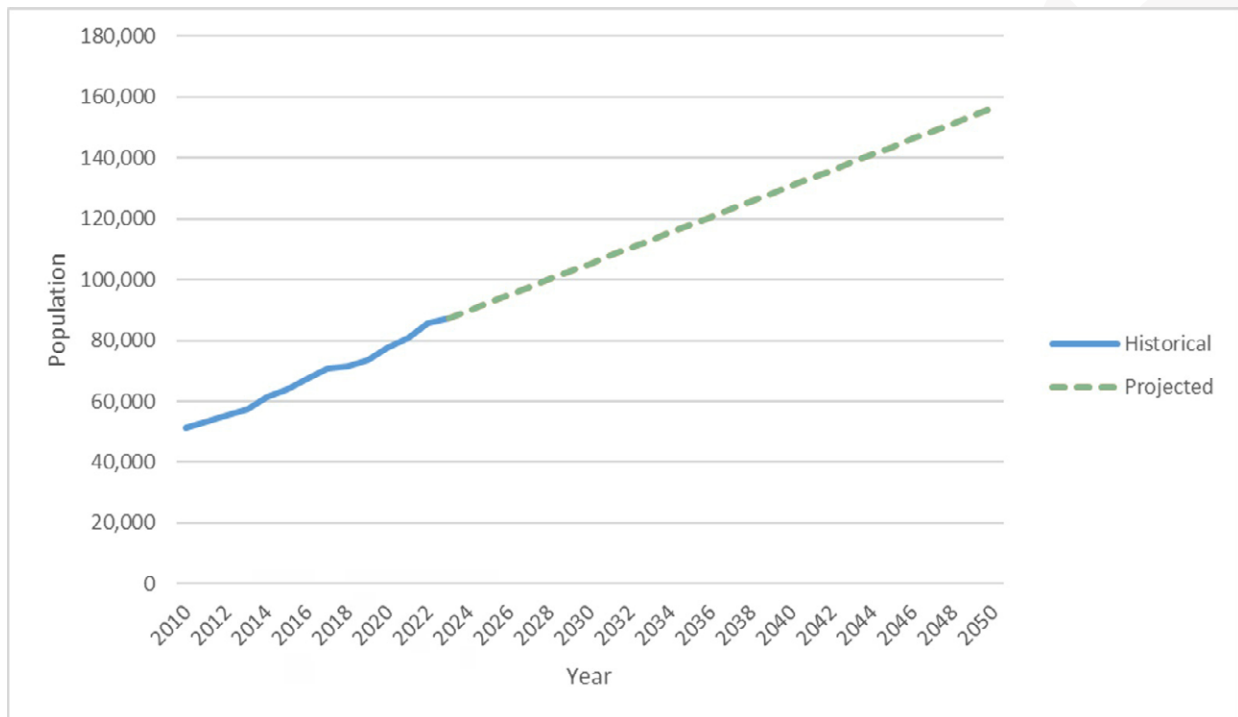


TABLE 1: HISTORIC POPULATION GROWTH	
Year	Population
1980	7,492
1990	12,220
2000	29,437
2010	50,418
2020	77,487

Population growth from 2010 to 2020 = **53.7%**

TABLE 2: PROJECTED POPULATION FORECAST		
Year	Population	% Change
2023	87,356	-
2033	112,956	29% (2.9% per year)
2050	156,476	79% (2.9% per year)

Figure 2: Historical and Projected South Jordan Population



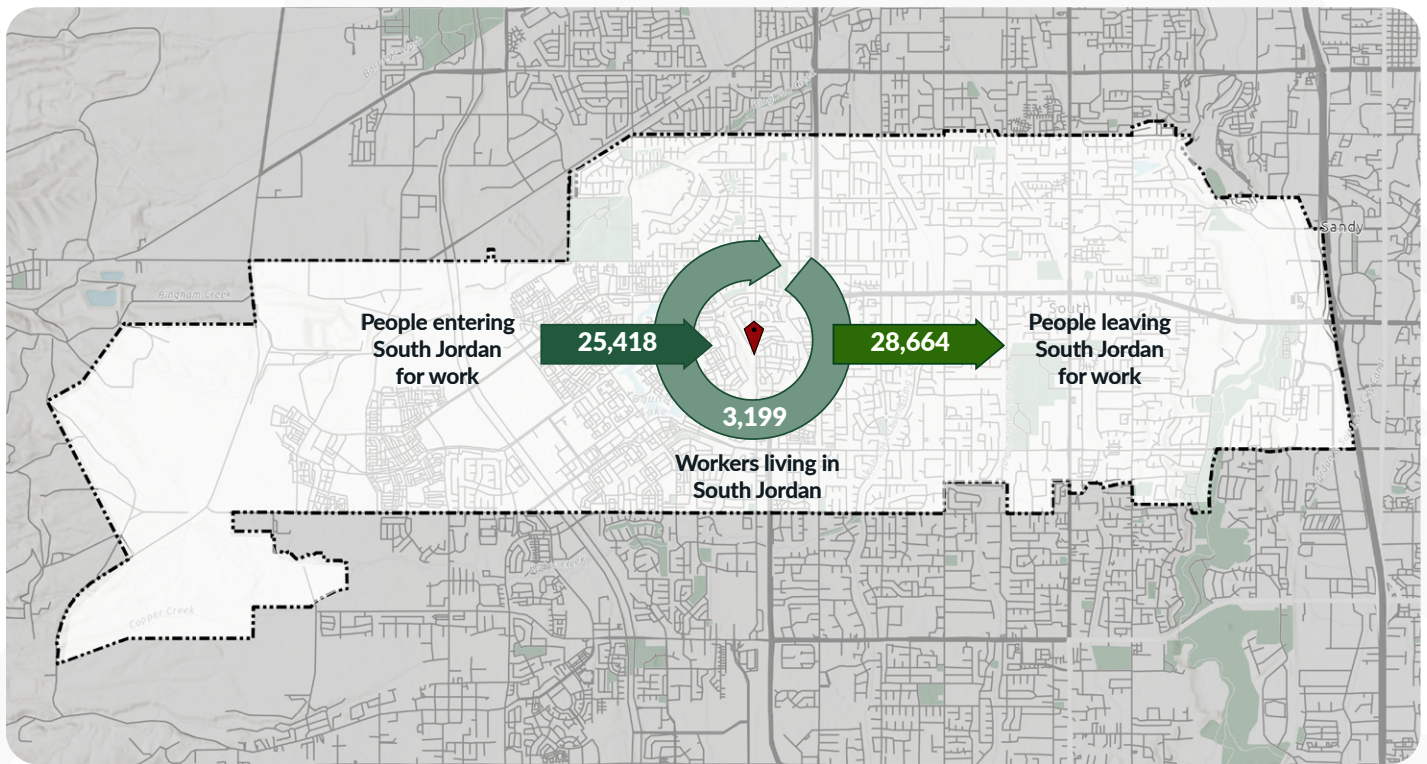
Households

In 2020 it was estimated there were 28,192 housing units. Most of the housing in South Jordan is single-family homes. As of the 2020 census, there is an average of 3.20 persons per household. Additionally, the median income for each household in 2022 was \$119,822 (2022 dollars). Approximately 93% of households have at least one vehicle available for use.

Employment & Journey to Work

The median income for each household in 2022 was \$119,822 (2022 dollars). The average travel time to work for those who are 16 and older is 24.4 minutes. Based on data from the US Census Bureau’s Center for Economics, Figure 3 shows that the number of workers who live in South Jordan and travel elsewhere for work is slightly higher than those workers living elsewhere who travel in to the City for work. 5.6% of the City’s workforce both live and work in the City.

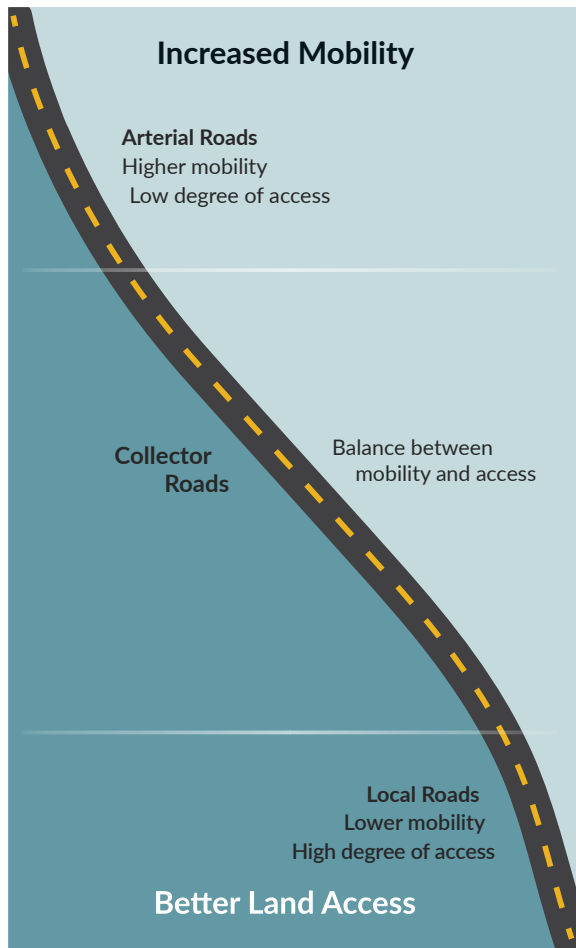
Figure 3: Worker In-Flow and Out-Flow (2021)



II. TRANSPORTATION NETWORK

A. Purpose

The purpose of the transportation network analysis is to identify existing and future deficiencies in the roadway network that may occur due to increased vehicular traffic associated with land development and population growth. Traffic conditions are examined for the base year (2023) and two future years (2033 and 2050), and recommendations for future improvements are discussed.



B. Roadway Functional Classification

Roads are categorized into a hierarchal system based on roadway attributes such as speed, access and right-of-way (ROW) width. The higher a street classification, the more mobility it provides with limited access. Lower street classifications have less mobility, but more access. The functional classification of a roadway indicates the road's role within the transportation system, which in turn helps determine when increased travel demand or change in the road's use could lead to negative impacts on its intended function in terms of speed, capacity, and relationship to existing and future land use (FHWA, 2013).

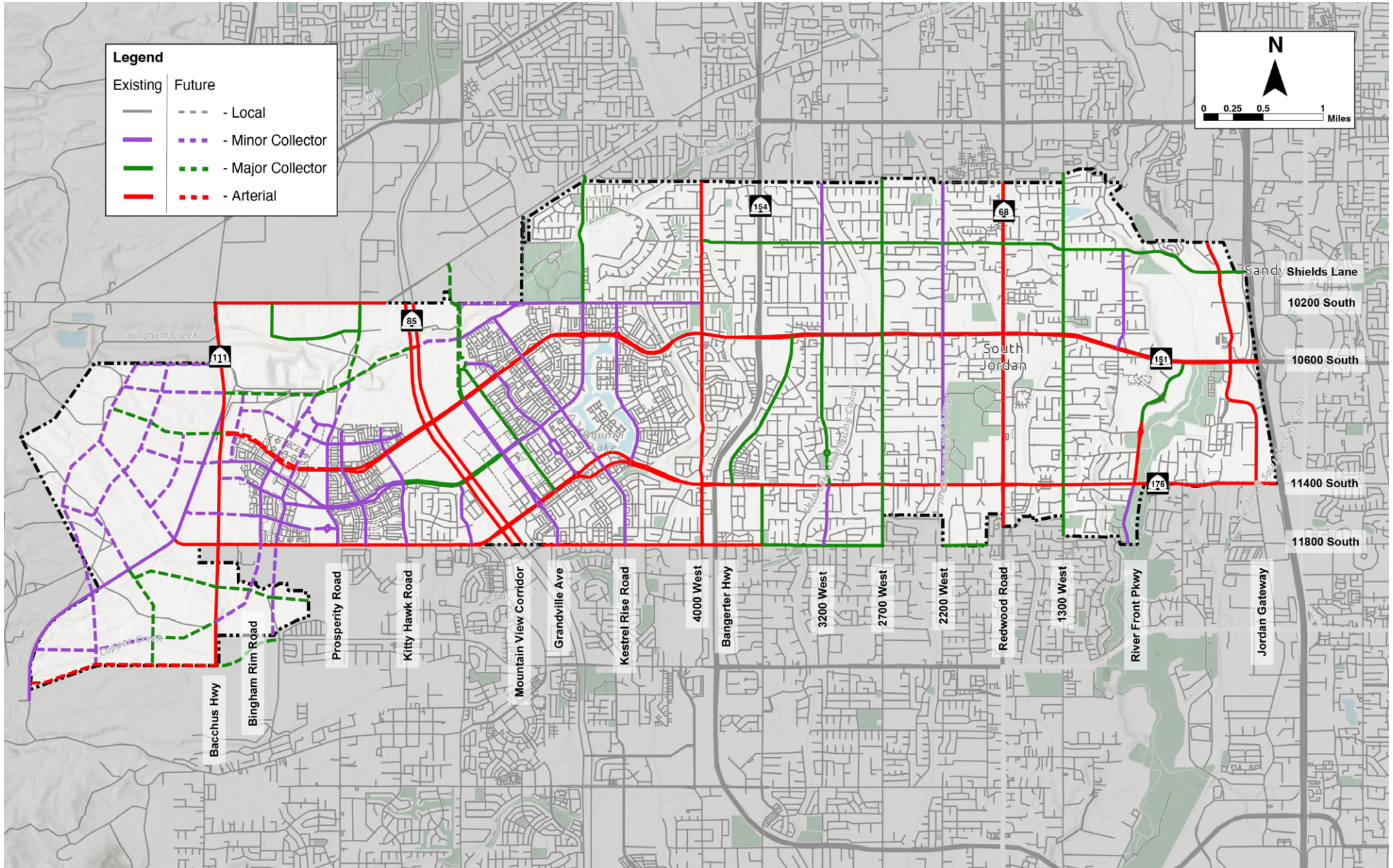
The City's functional classifications used in this TMP are arterial, major collector, minor collector, and residential streets. Key cross sectional elements for each of these classifications are summarized in Table 3 and are accurate as of the publication of this document. See the most recent South Jordan Standard Drawings for the most up-to-date cross sections. South Jordan City classifies street facilities based primarily on the right-of-way (ROW) widths provided. The future functional classification map is shown in the Figure below.

Roadways in the Daybreak Development have been designed with unique cross-sections that vary from the other roadways in the City. In general, the cross-sections are kept to minimum widths. Many of the roadways also have bulb-outs to calm traffic and provide safe crossings for pedestrians. Overall, these features promote walkability and safety in the unique Daybreak Development. Unlike the other City roadways, the Daybreak roadways have varying ROW widths.

TABLE 3: SOUTH JORDAN KEY CROSS SECTION ELEMENTS

Functional Classification	# Lanes	ROW Width (ft)	Asphalt Width (ft)
Arterial	5	111	84
Major Collector	3	85	58
Minor Collector	3/2	71	44
Residential	2	55 or less	28 or less

Figure 4: Future Functional Classification



C. Level of Service Definitions

Roadway traffic congestion is reported using Level of Service (LOS), which is a planning term that describes the roadways operating performance. LOS for roadway segments is a categorical classification of roadway conditions assigned to degrees of congestion calculated quantitatively as the density of flow on a roadway, or the volume-to-capacity (VC) ratio. LOS is reported on a scale from A to F, with A representing free-flow conditions and F representing traffic congestion. For this analysis, daily LOS is calculated for study roadway segments using the projected Average Daily Traffic (ADT) for the given roadway segments and capacities informed by lane count and functional classification. Level of service descriptions for each LOS letter designation and the accompanying range of volume-to-capacity ratios are shown below (Table 4).¹ Level of service standards for local roads and alleyways can be found in the [Livable Street Standards](#) section of the report.

For the purposes of this study, a minimum overall roadway performance of LOS D is considered acceptable. If LOS E or F for a roadway is calculated, explanations and/or mitigation measures are presented.

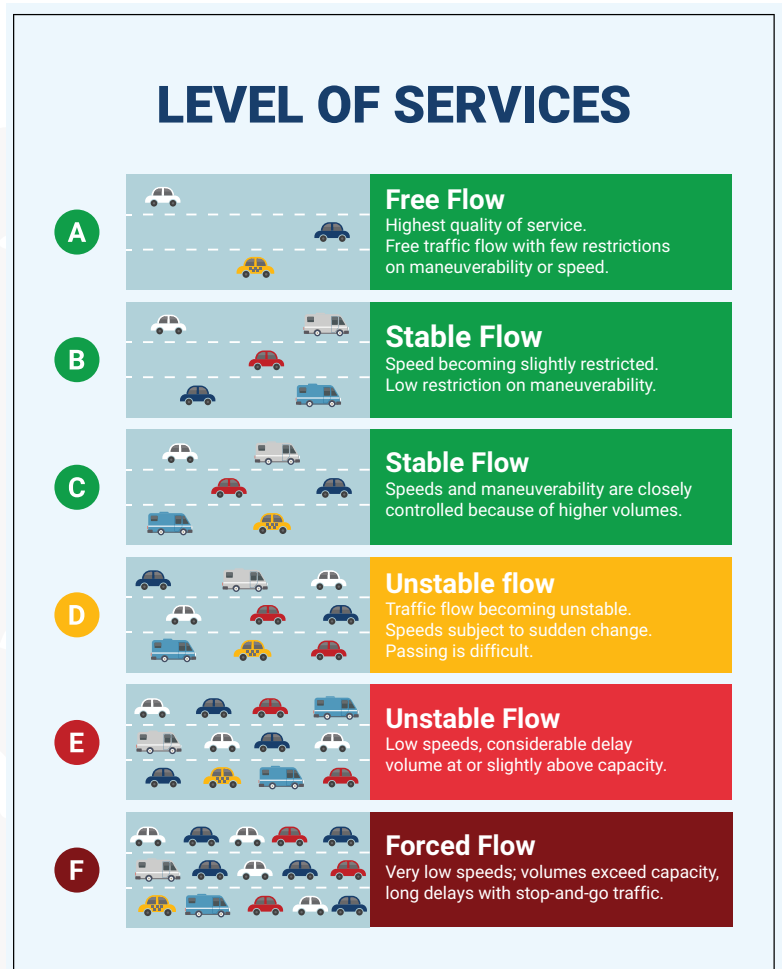


TABLE 4: LEVEL OF SERVICE CAPACITY RANGES

Functional Classification	Lanes	LOS A-C	LOS D	LOS E	LOS F
Collectors & Arterials	2	< 9,375	9,375 to 10,625	10,625 to 12,500	> 12,500
	3	< 13,350	13,350 to 15,130	15,130 to 17,800	> 17,800
	5	< 28,500	28,500 to 32,300	32,300 to 38,000	> 38,000
	7	< 43,500	43,500 to 49,300	49,300 to 58,000	> 58,000

¹Level of service volume ranges reflect assumed capacity levels for typical sections of the roadway type and cross-section indicated. In select locations, capacity adjustments are applied for this analysis based on local conditions including the presence of turn lanes, intersection spacing, access management, and engineering judgment.

D. Existing (2023) Conditions

In order to accurately identify existing conditions on the roadway network in South Jordan City, the consultant team gathered traffic data. South Jordan City maintains a robust annual [traffic count program](#) with short-term automatic traffic counts on City roadways. Figure 5 presents a map of the 169 individual traffic count locations from 2021, 2022, and 2023 that were reviewed for this analysis.

Traffic data from UDOT's Automated Traffic Signal Performance Metrics (ATSPM) were used to identify traffic volumes on state roads. Where City or UDOT data were not available, the consultant team used data collected for previous projects in the area. These data were collected in the form of two-way roadway counts or turning movement counts at intersections.

The volumes from these sources were compiled, and (2023) levels of service have been calculated for study area roadways using criteria from Table 4 and are presented below in Figure 6. All roadways in South Jordan are currently operating at an acceptable LOS D or higher with the exception of the following roadway segments, which operate at LOS E or F:

- 11800 South; Copper Rose Way to 4000 West
- 11400 South; 4000 West to River Heights Drive
- 11400 South; Redwood Road to 700 West
- 11400 South; Engelmann Drive to Jordan Gateway
- 10600 South; Bangerter Highway to 3200 West
- 10600 South; Culmination Street to Redwood Road
- 10600 South; River Front Parkway to I-15



Figure 5: South Jordan Traffic Count Coverage

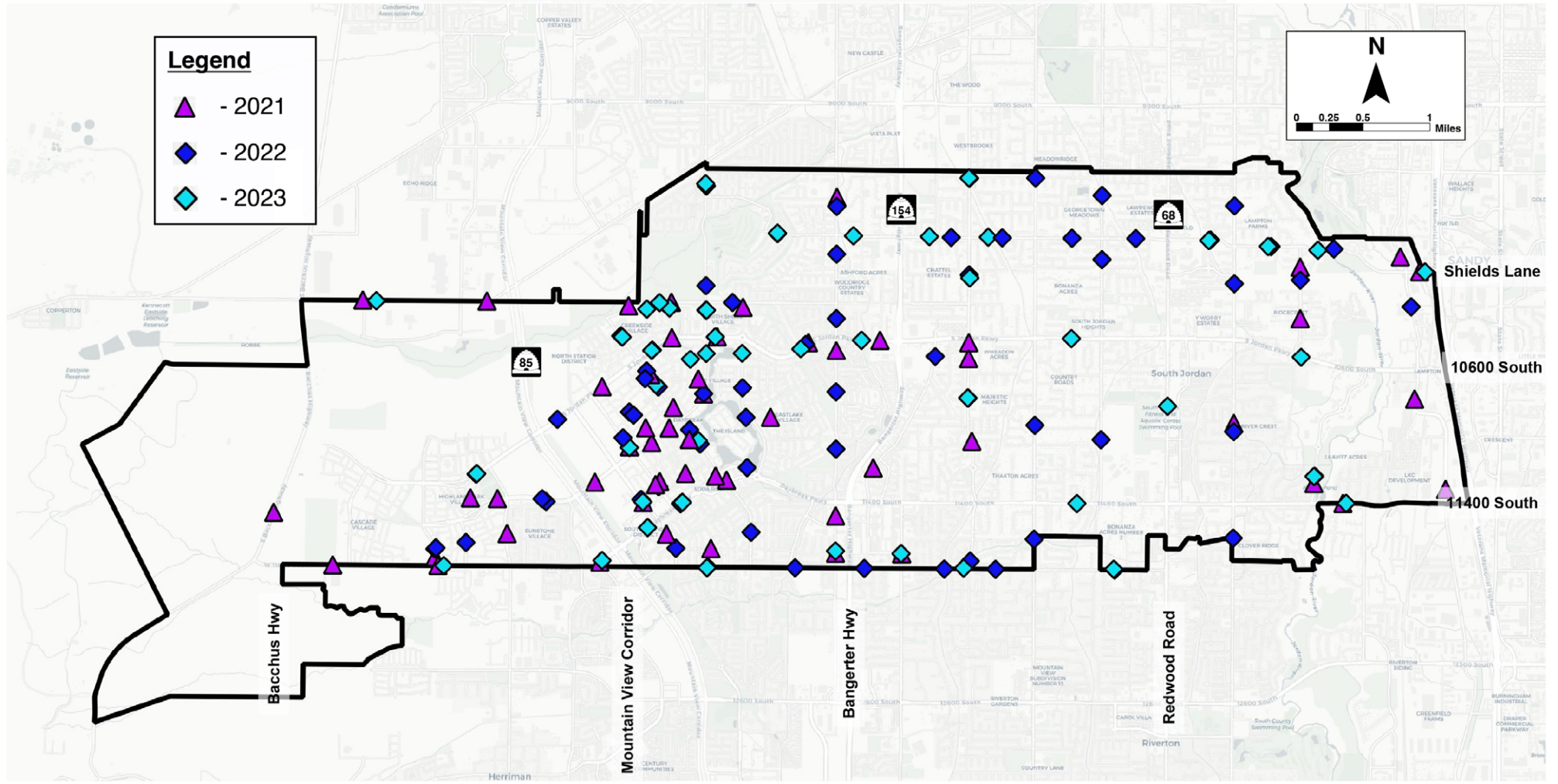
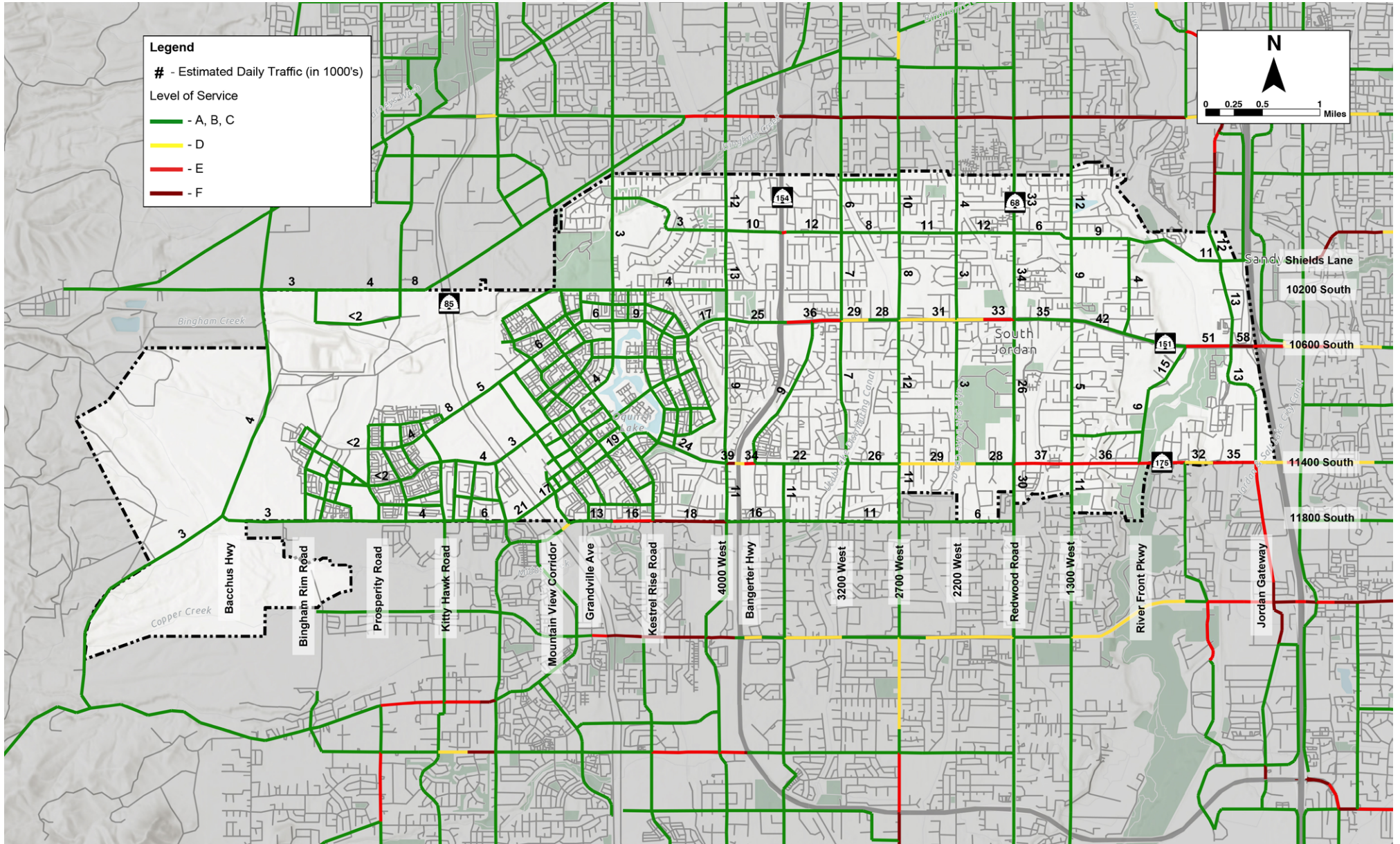


Figure 6: Existing (2023) Roadway LOS and ADT



E. Travel Demand Model

The transportation network analysis was performed using a locally-refined version of the latest Wasatch Front Regional Council (WFRC) model (v9.0.0, dated September 20, 2023). The WFRC model was updated to include a more detailed transportation analysis zone (TAZ) and roadway network, and more refined base and future-year socio-economic data for South Jordan and neighboring West Jordan. Specifically within Daybreak, significant TAZ and roadway network details were added to align with previous modeling efforts completed in this area. Travel demand modeling was performed in Bentley Cube version 6.5.0.

WCG reviewed and updated the roadway network to reflect 2023 conditions. This included adding recently constructed roadways, refining TAZ centroid connections, and adding detail to the roadway network in areas of increased land use density. Study area roadway link speeds were also reviewed and adjusted to reflect local operating conditions, particularly on the narrower roadways located within the Daybreak area.

Base year (2023) household and employment estimates were developed by Wasatch Front Regional Council (WFRC) for the Wasatch Front 2023 Regional Transportation Plan, and is shown below in figure 7. These Wasatch Front land-use estimates were combined with previously developed land-use data developed for refined zones in the Daybreak community. Additional study-area refinements were made based on input from South Jordan planning staff and a review of aerial imagery to account for recent construction. Zonal land-use estimates were then adjusted to reflect 2023 South Jordan City household and employment control totals.

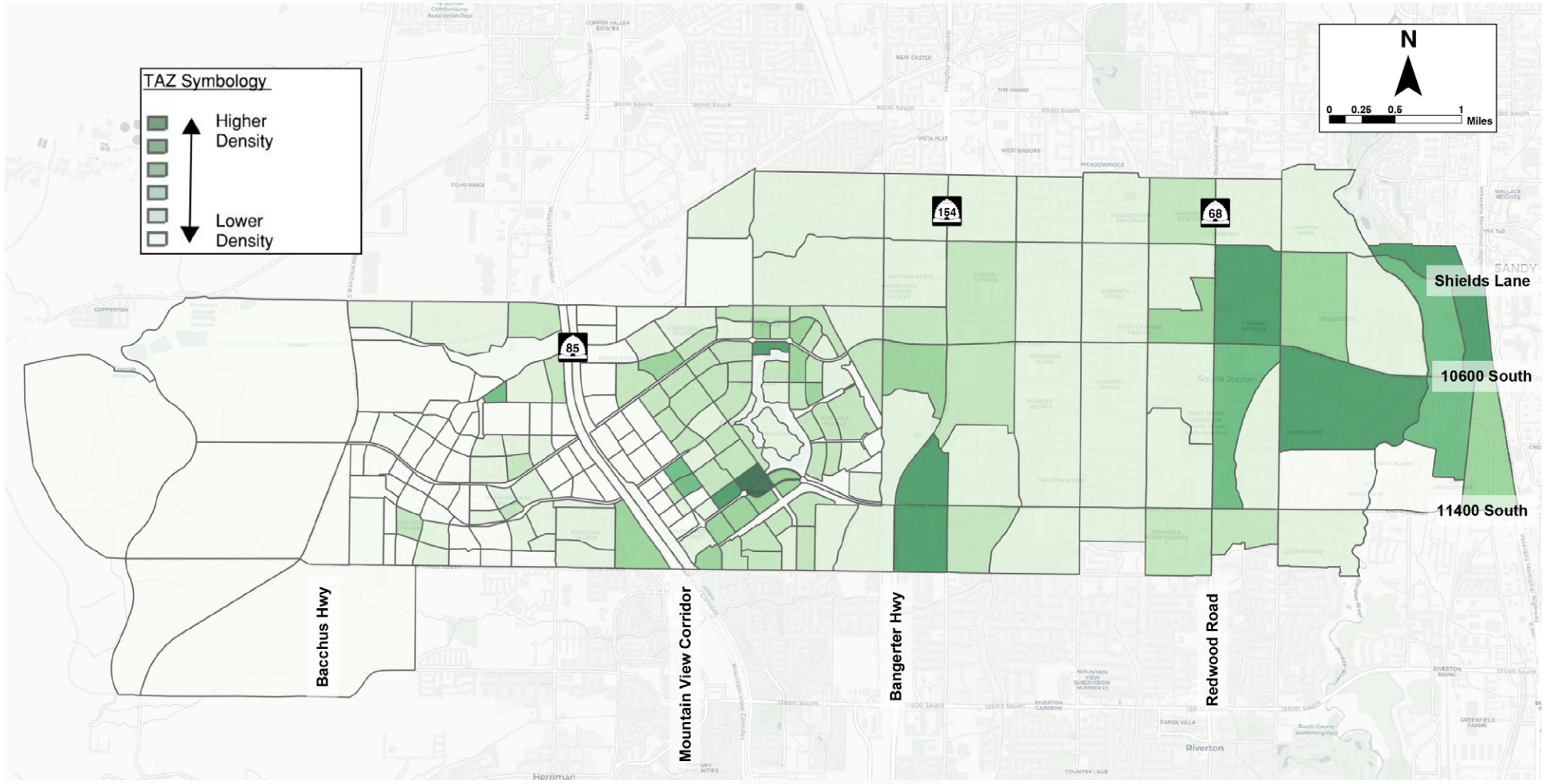
Base year ADT estimates from the refined travel model were compared with the recent count data. Where the travel demand model over or under-predicted current traffic volumes, adjustment factors were identified and applied to both base-year and future traffic projections to account for inherent imperfections in the travel demand model and to provide the best possible future traffic volume projections.

Details regarding modeling specifics such as roadway network, demographics, and scenario testing are described in the sections below.

A map of the 2023 WFRC regional transportation projects listed above can be seen [here](#). The WFRC roadway projects were incorporated into the creation of the project lists and travel demand modeling in this TMP.



Figure 7: 2023 Combined Household and Employment Density



F. Future (2033) Conditions

This section discusses the future (2033) roadway conditions in South Jordan City. Future roadway projects and network updates to the travel demand model are discussed. A no-build scenario LOS is completed. The LOS of each major road is analyzed, improvements are recommended, and a build scenario LOS analysis is completed.

a. 2033 Roadway Network

The local roadway network was updated for the 2033 analysis to include new roadways and grid connections that have been planned to occur within South Jordan during the 10-year planning window. WFRC lists the following projects in the Regional Transportation Plan (RTP) 2023-2050. It was assumed these projects were completed when running the 2033 travel demand model:

- **Riverfront Parkway Widening** from 11050 South to 11400 South : A three-lane to five-lane roadway widening project expected to take place between 2023 and 2032
- **10600 South / 10400 South Widening** from Bangerter Highway to Redwood Road : A five-lane to seven-lane roadway widening project expected to take place between 2023 and 2032
- **4000 West Operations** from 9000 South to 11400 South: An operational improvement project expected to occur between 2023 and 2032
- **Mountain View Corridor Widening** from Old Bingham Highway to Porter Rockwell Boulevard: A roadway widening project from four-lanes to eight-lanes expected to take place between 2023 and 2032
- **Prosperity Road New Construction** from Crimson View Drive (10400 South) to 11000 South: A new three-lane roadway planned between 2023 and 2032
- **7300 West New Construction** from South Jordan Parkway to 13300 South / Herriman Highway: A new five-lane roadway planned between 2023 and 2032
- **SR-111 / Bacchus Highway Widening** from 5400 South to South Jordan Parkway (11000 South): A two-lane to five-lane roadway widening project expected to take place between 2023 and 2032
- **10200 South Widening** from Bacchus Highway to Mountain View Corridor: A two-lane to five-lane roadway widening project expected to take place between 2023 and 2032
- **Herriman Parkway** (12600 South) New Construction from Oquirrh View Boulevard to 6800 West: A new three-lane roadway project expected to take place between 2023 and 2032

The 2033 analysis also includes major UDOT roadway improvements outside of South Jordan jurisdiction, including the planned access-controlled Mountain View Corridor and continued grade-separation of Bangerter Highway.

Both the no-build and build analyses include new UDOT roadways that are planned to occur within the 10-year planning window and new local roadways in the daybreak area that are designed and planned for near-term construction along known alignments.

b. Anticipated Project Development

The project team coordinated with City planning staff and representatives from the Daybreak and Shoreline developments, located within the existing South Jordan City Limits, and representatives from Rio Tinto who own unincorporated land west and southwest of the existing city limits in areas planned for annexation within South Jordan.

The Daybreak development is located approximately between Bacchus Highway and 4000 W. From 2023 to 2033, Daybreak residential growth is expected to extend westward from the current limits of development and infill development is expected proximate to Mountain View Corridor.

The Shoreline development is located north of 11800 South east of Bacchus Highway, on either side of the future SR-111 alignment. Initial development within Shoreline is anticipated to be concentrated near the SR-111 & 11800 South intersection, with additional development to occur within this area over time.

Rio Tinto owned lands in the South Jordan annex areas west and southwest of the current city boundary are expected to develop over time, with development beginning toward the eastern extent of this area (south of 11800 S) and progressing westward in the future.



c. 2033 Socioeconomic Data

The population in South Jordan is projected to be approximately 113,000 by 2033; approximately 10,000 new households are expected to accommodate this population growth.

Future land-use growth in the 2033 travel model scenario was informed by the 2033 WFRC version nine land-use forecasts and was refined to reflect permitted and planned projects and local planning expertise. Large, planned developments discussed above were incorporated into future land-use estimates. Growth projections were reviewed with City staff and adjusted to reflect their best understanding of future growth patterns.

After distribution of forecast growth to study TAZs, households were adjusted to match the city-wide 2033 South Jordan projection of approximately 37,500, and similar proportional adjustments to employment were applied.

Figure 8 and Figure 9 present the change in combined household and employment densities from 2023 to 2033 and the final 2033 combined household and employment densities, respectively. As can be seen below, 10-year projected growth is concentrated along Mountain View Corridor, South Jordan Parkway, and Lake Avenue and 11800 South.

Figure 8: 2023 to 2033 Combined Household and Employment Density Growth

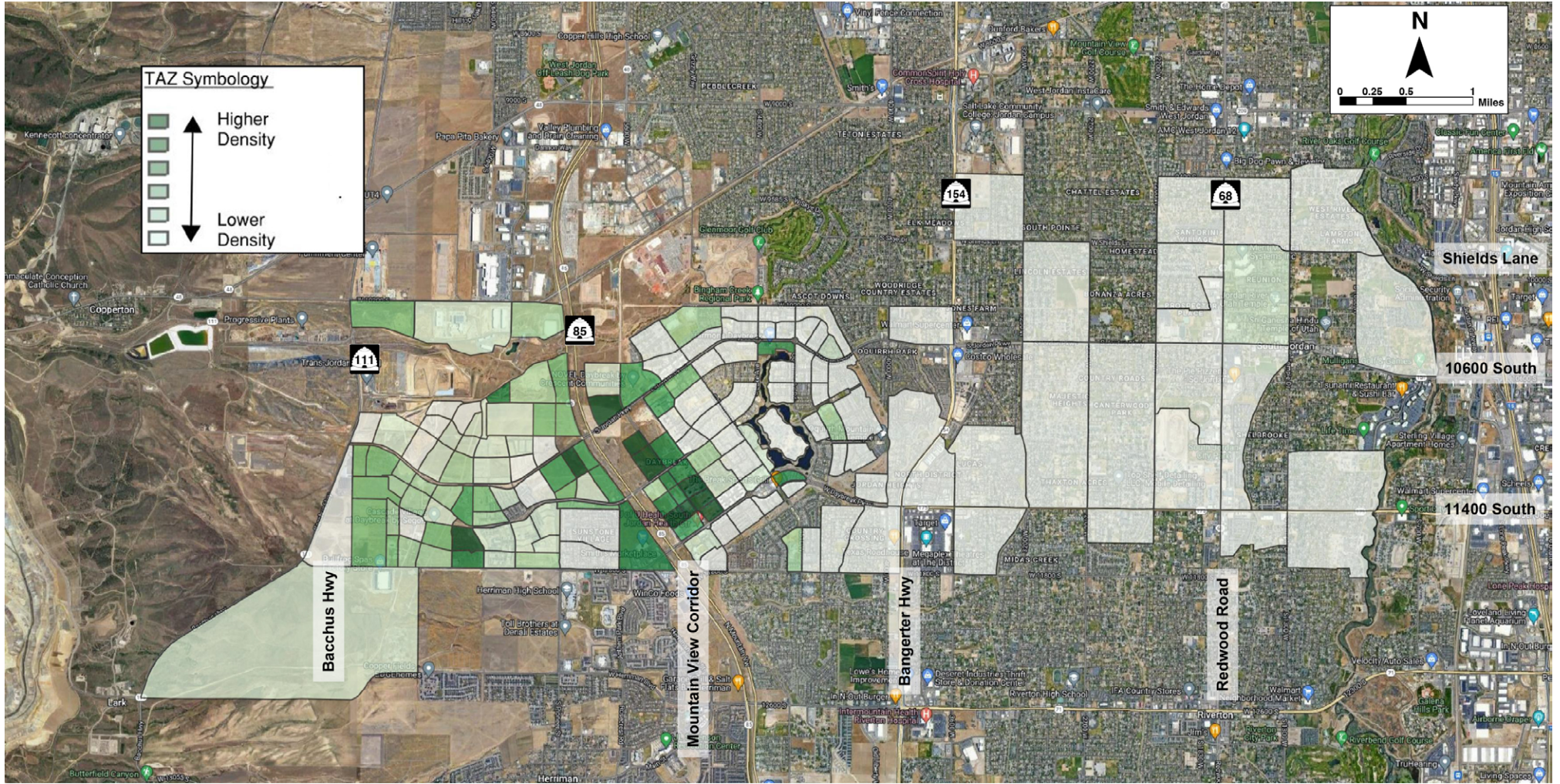
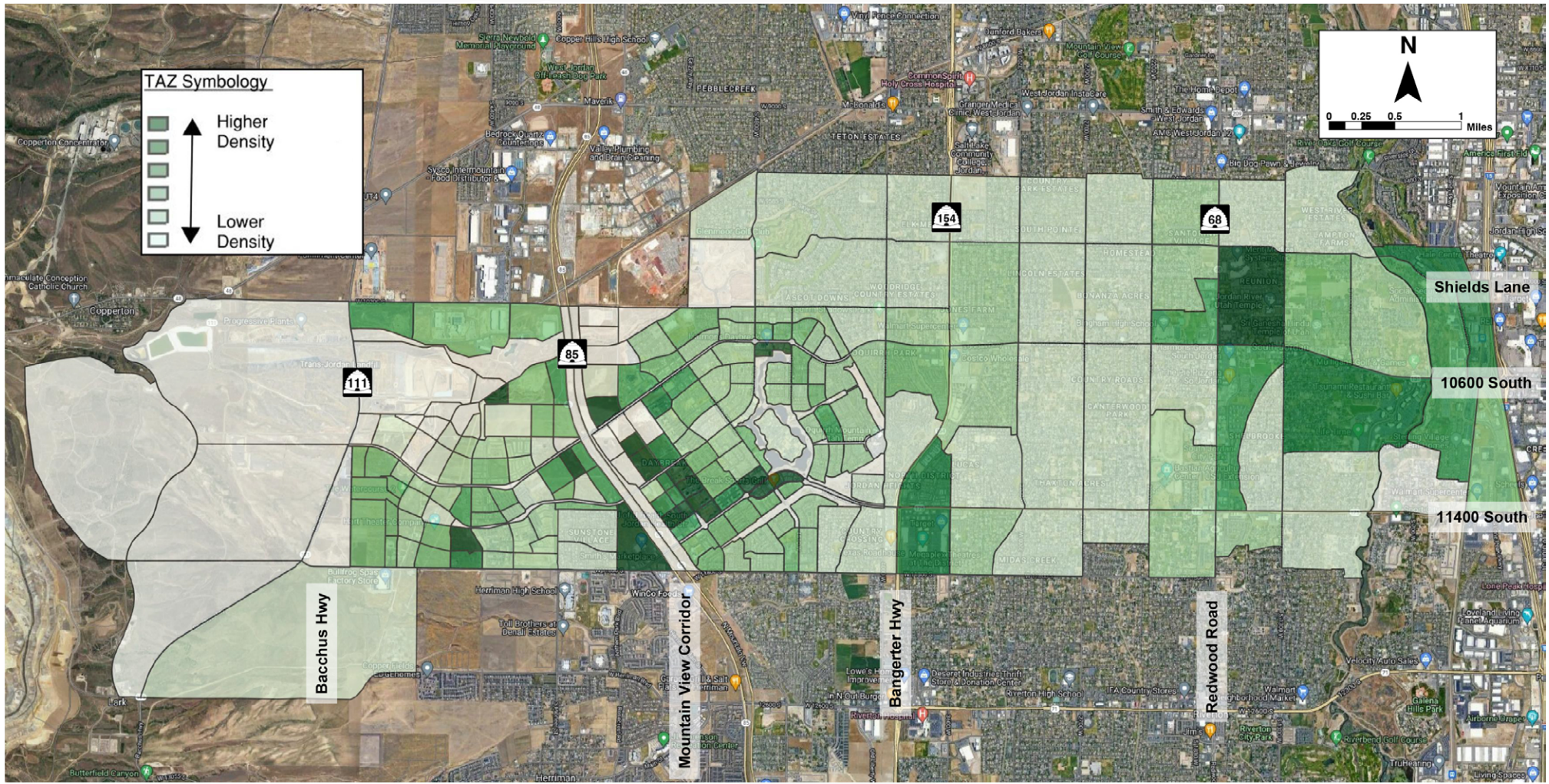


Figure 9: 2033 Combined Household and Employment Density



d. 2033 No-Build Scenario

The no-build scenario provides an analysis of traffic conditions without project roadway improvements. Figure 10 presents the 2033 no-build LOS results obtained by applying LOS thresholds from Table 4 to the projected 2033 no-build traffic volumes from the travel demand modeling.

As shown, the following roadway segments are expected to operate at unacceptable levels of service (LOS E or worse):

- 10200 South; 6200 West to Mountain View Corridor
- SR-111; 10200 South to South Jordan Parkway
- SR-111; South of 11800 South
- South Jordan Parkway; Sage Creek Road to Redwood Road
- Daybreak Parkway; 4000 West to River Heights Drive
- 11400 South; Redwood Road to South Jordan Gateway
- 11800 South; SR-111 to Prosperity Road
- Daybreak Parkway; Trail Crossing Drive to Mountain View Corridor
- 11800 South; Mountain View Corridor to 4000 West

e. 2033 Build Scenario

The 2033 build scenario provides an analysis of traffic conditions after implementation of roadway projects identified to improve areas of unacceptable LOS from the 2033 no-build scenario. Projects shown below in Table 5 and in [Figure 30](#) are recommended to increase roadway capacity and accommodate projected 2033 traffic volumes. Project numbers listed in the table are for identification only and are no indication of project prioritization. Cost estimates are in 2024 dollars and do not take inflation into account. Right-of-way is included in the project cost estimates on developer owned property. The values represent the cost to build the cross sections to the widths described in the South Jordan roadway cross section standards.

Projects are categorized as either being “new roadway” or “widening” projects and indicate the proposed number of lanes, which correspond with typical cross sections referenced above and depicted in the most recent South Jordan Standard Drawings.

An atypical cross section is recommended for 11400 S in project 1-9, with three through lanes in the westbound direction, a center turn lane, and two through lanes in the eastbound direction between 3600 W and South Jordan Gateway. West of here, a typical seven-lane cross section is recommended (project 1-8) on 11400 S between Bangerter Highway and 3600 W and further west an innovative intersection improvement is called for (intersection project 2-F) at 4000 W. Projects identified along this corridor are similar to those identified in an ongoing UDOT [corridor study](#). However, as presented below, project 1-9 calls for widening east through to South Jordan Gateway rather than stopping at 1300 W, as presently in the UDOT study, to ensure continuous capacity from Bangerter Highway through to I-15.

Additionally, while project 1-11 recommends a seven-lane cross section for Daybreak Parkway between Trail Crossing Drive and Mountain View Corridor, this section is envisioned to add right-turn auxiliary lanes between these roadways rather than additional through lanes, as depicted in [Figure 17](#).

The 2033 build scenario LOS is shown below in Figure 11. As shown in the 2033 build scenario, all roadways are expected to operate at an acceptable LOS D or higher with the exception of SR-111 from 11800 South to 12600 South which operate at LOS E or F. UDOT initially planned for a 5-lane cross section to be built on this section of SR-111 but has recently scaled this back to 2-lanes for initial construction due to budget limitations. Analysis suggests a 5-lane cross section would resolve congestion in this area, as seen in the 2050 Build scenario, which includes a project to widen this roadway.

TABLE 5: FUTURE ROADWAY PROJECTS (PHASE #1)

Project Number	Description	Responsibility	Improvement Scope	# of Lanes		Estimated Cost
				2023	Proposed	
PHASE #1 (2023-2032)						
1-1	SR-111: 10200 South to South Jordan Parkway	UDOT	Widening	2	5	\$17,100,000
1-2	SR-111: South Jordan Parkway to Herriman Parkway	UDOT	New Roadway	-	2	\$75,747,808
1-3	10200 South: Bacchus Highway to MVC*	SJC / WJC / WFRC	Widening	2	5	\$17,560,000
1-4	4000 West: 9000 South to 11400 South*	SJC / WFRC	Restriping	3	5	\$178,620
1-5	South Jordan Parkway: Bangerter Highway to Redwood Road	UDOT	Widening	5	7	\$53,000,000
1-6	Riverfront Parkway: 11050 South to 11400 South*	SJC / WFRC	Widening	2	5	\$5,500,000
1-7	Bingham Rim Road: MVC to Stavenger Drive*	UDOT	New Roadway	-	2	\$3,200,000
1-8	11400 South: Bangerter Highway to 3600 West	UDOT	Widening	5	7	\$3,800,000
1-9	11400 South: 3600 West to South Jordan Gateway	UDOT	Widening	5	6 / 7	\$82,606,008
1-10	11800 South: Bacchus Highway to Prosperity Road*	SJC / Herriman / WFRC	Widening	2	5	\$32,225,797
1-11	Daybreak Parkway: Trail Crossing Drive to MVC*	SJC	Widening	5	7	\$5,988,759
1-12	11800 South: MVC to 4000 West*	SJC / Herriman / Riverton	Widening	3	5	\$13,891,543
1-13	Lake Avenue: SR-111 to Lake Avenue*	SJC	New Roadway	-	2	\$2,214,051
1-14	Grandville Avenue: 10200 South to Bingham Rim Road*	UDOT	New Roadway	-	2	\$3,349,045
1-15	Bingham Rim Road: Prosperity Road to MVC*	SJC	New Roadway	-	3	\$4,236,618
1-16	7800 West: Bacchus Highway to Herriman Parkway*	SJC / WFRC	New Roadway	-	3	\$10,285,000
1-17	12150 South: 7800 West to South Jordan Border*	Developer / SJC / WFRC	New Roadway	-	3	\$71,895,000
1-18	Bingham Rim Road: SR-111 to 11800 S*	SJC / Herriman	New Roadway	-	2	\$5,503,679
1-19	Herriman Parkway (12600 S): 7800 W to SR-111*	SJC / WFRC	New Roadway	-	3	\$16,260,000
1-20	Meadowgrass Drive: Bacchus Highway to Bingham Rim Road*	SJC	New Roadway	-	2	\$4,168,269
1-21	Mountain View Corridor	UDOT	New Roadway	-	4	\$125,920,000
1-22	Bingham Rim Road: 7800 W to SR-111*	SJC / Developer	New Roadway	-	3	\$4,099,953
1-23	Prosperity Road: Crimson View Drive to 11000 South	SJC / WFRC	New Roadway	-	3	\$14,780,000
1-24	Bingham Rim Road: South Jordan Parkway to Prosperity Road	SJC	New Roadway	-	2 / 3	\$12,022,093
1-25	Prosperity Road: Bingham Rim Road to Copper Hawk Drive	Daybreak	New Roadway	-	2	\$3,500,000

* Impact Fee Eligible Project

Figure 10: 2033 Roadway LOS and ADT - No Build

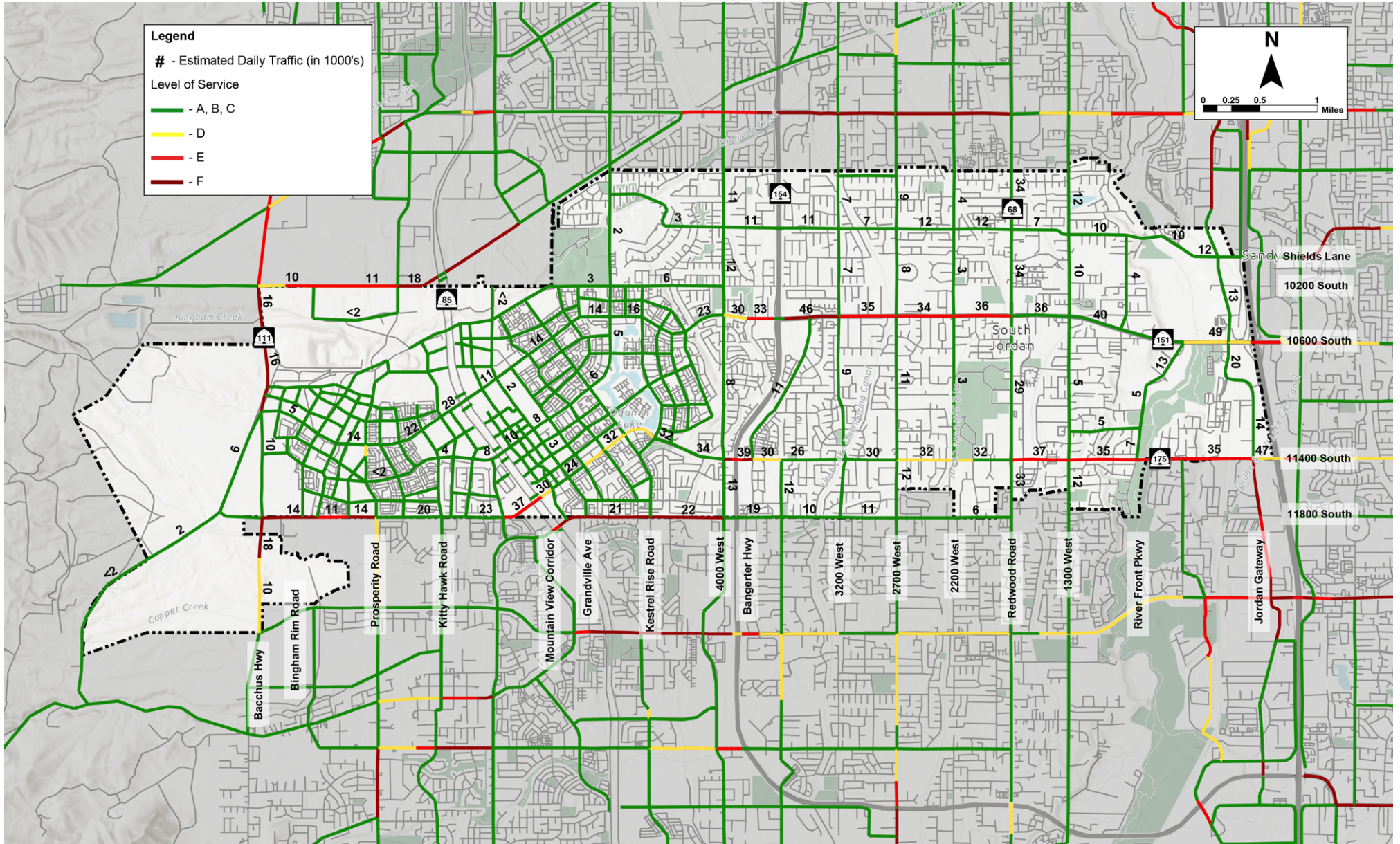
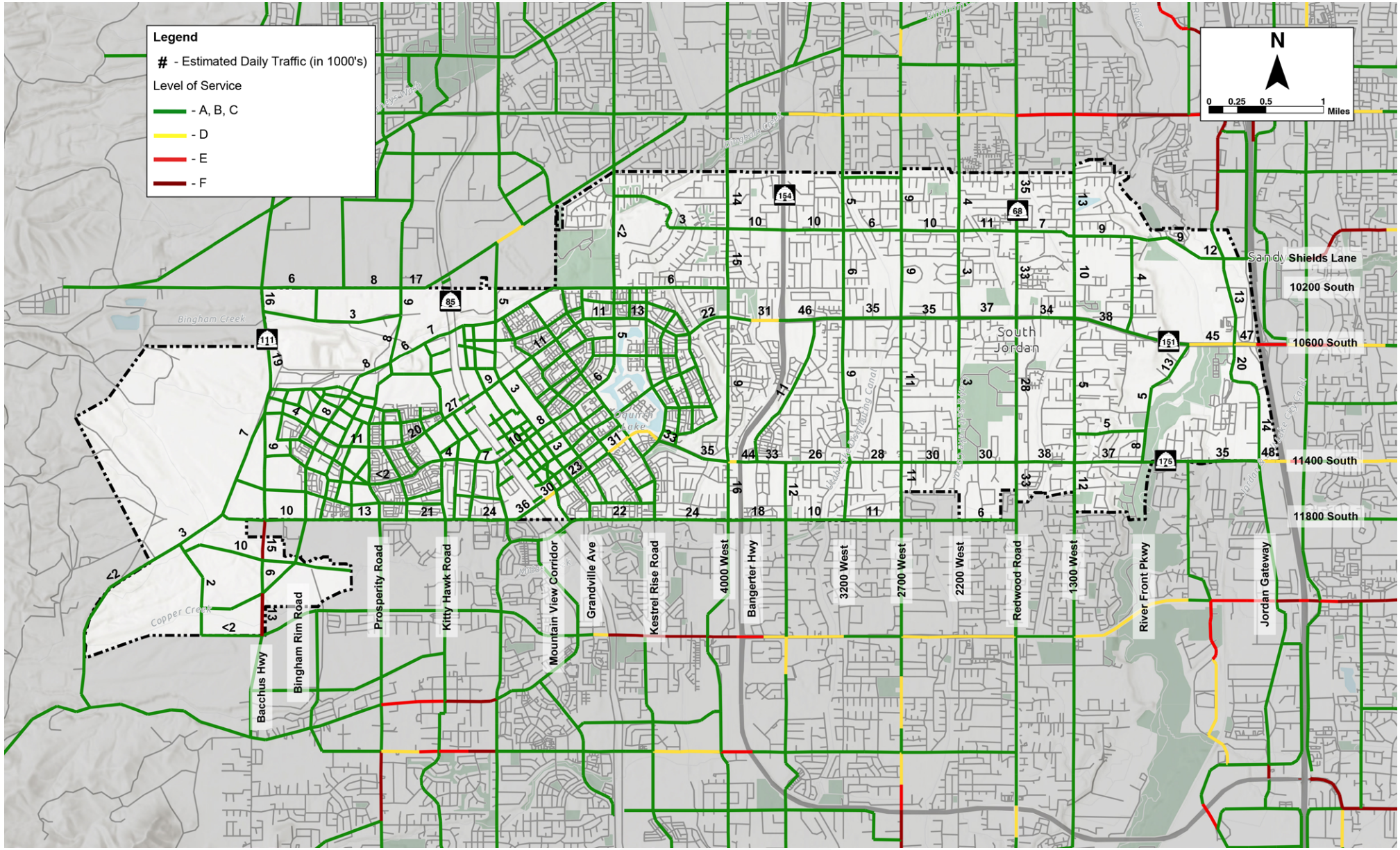


Figure 11: 2033 Roadway LOS and ADT - Build



H. Future (2050) Conditions

This section discusses the future (2050) roadway conditions in South Jordan City. Future roadway projects and network updates to the travel demand model are discussed. A no-build scenario LOS is completed. The LOS of each major road is analyzed, improvements are recommended, and a build scenario LOS analysis is completed.

a. 2050 Roadway Network

The local roadway network was updated for the 2050 analysis to include new roadways and grid connections that have been planned to occur within South Jordan during the planning window. WFRC lists the following projects in the RTP 2023-2050. It was assumed these projects were completed when running the 2050 travel demand model:

- **10600 South / 10400 South Widening** from Silver Mine Road to Bangerter Highway: A five-lane to seven-lane roadway widening project expected to take place between 2033 and 2042
- **7900 West New Construction** from Bacchus Highway to Herriman Highway: A new three-lane roadway project expected to occur between 2033 and 2042
- **11400 South Widening** from 4000 W to Redwood Road: A five-lane to seven-lane roadway widening project expected to take place between 2043 and 2050
- **11400 South Operations** from Oquirrh Lake Road to 4000 W: An operational improvement project expected to take place between 2043 and 2050
- **Bangerter Highway Operations** from SR-201 to 2700 West: An operational improvement project expected to take place between 2043 and 2050
- **10200 South New Construction** from 5600 West to Bingham Rim Road: A new two-lane roadway project expected to occur between 2043 and 2050

The 2050 analysis also includes major UDOT roadway improvements outside of South Jordan jurisdiction, including the planned access-controlled Mountain View Corridor and continued grade-separation of Bangerter Highway.

Both the no-build and build analyses include new UDOT roadways that are planned to occur within the planning window and new local roadways in the daybreak area that are designed and planned for near-term construction along known alignments.

b. 2050 Socioeconomic Data

The population in South Jordan is projected to be approximately 156,000 by 2050; approximately 26,000 new households are expected to accommodate this population growth.

Future land-use growth in the 2050 travel model scenario was informed by the 2050 WFRC version nine land-use forecasts and was refined to reflect permitted and planned projects and local planning expertise. As with the 2033 analysis, large, planned developments from Rio Tinto, Larry H. Miller (Daybreak), and Doug Young (Shoreline) were incorporated into future land-use estimates. Growth projections were reviewed with City staff and adjusted to reflect their best understanding of future growth patterns.

After distribution of forecast growth to study TAZs, households were adjusted to match the city-wide 2050 South Jordan projection of approximately 54,000, and similar proportional adjustments to employment were applied.

Figure 12 and Figure 13 present the change in combined household and employment densities from 2023 to 2050 and the final 2050 scenario densities, respectively. As can be seen below, in addition to concentrated growth along Mountain View Corridor, by 2050 additional growth is projected to extend farther west in the Daybreak community, the southwest annex areas, and south of 10200 S.

Figure 12: 2023 to 2050 Combined Household and Employment Density Growth

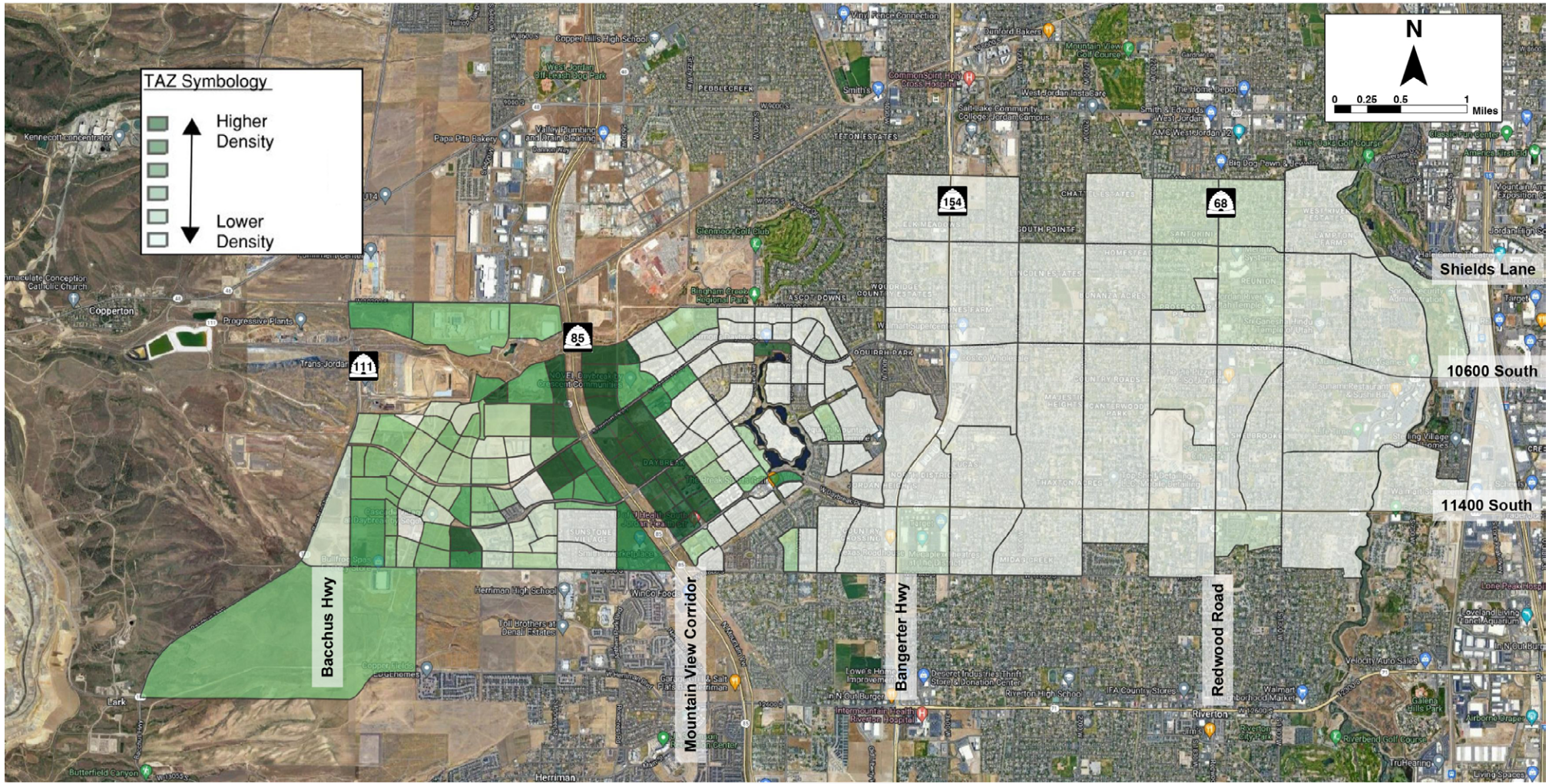
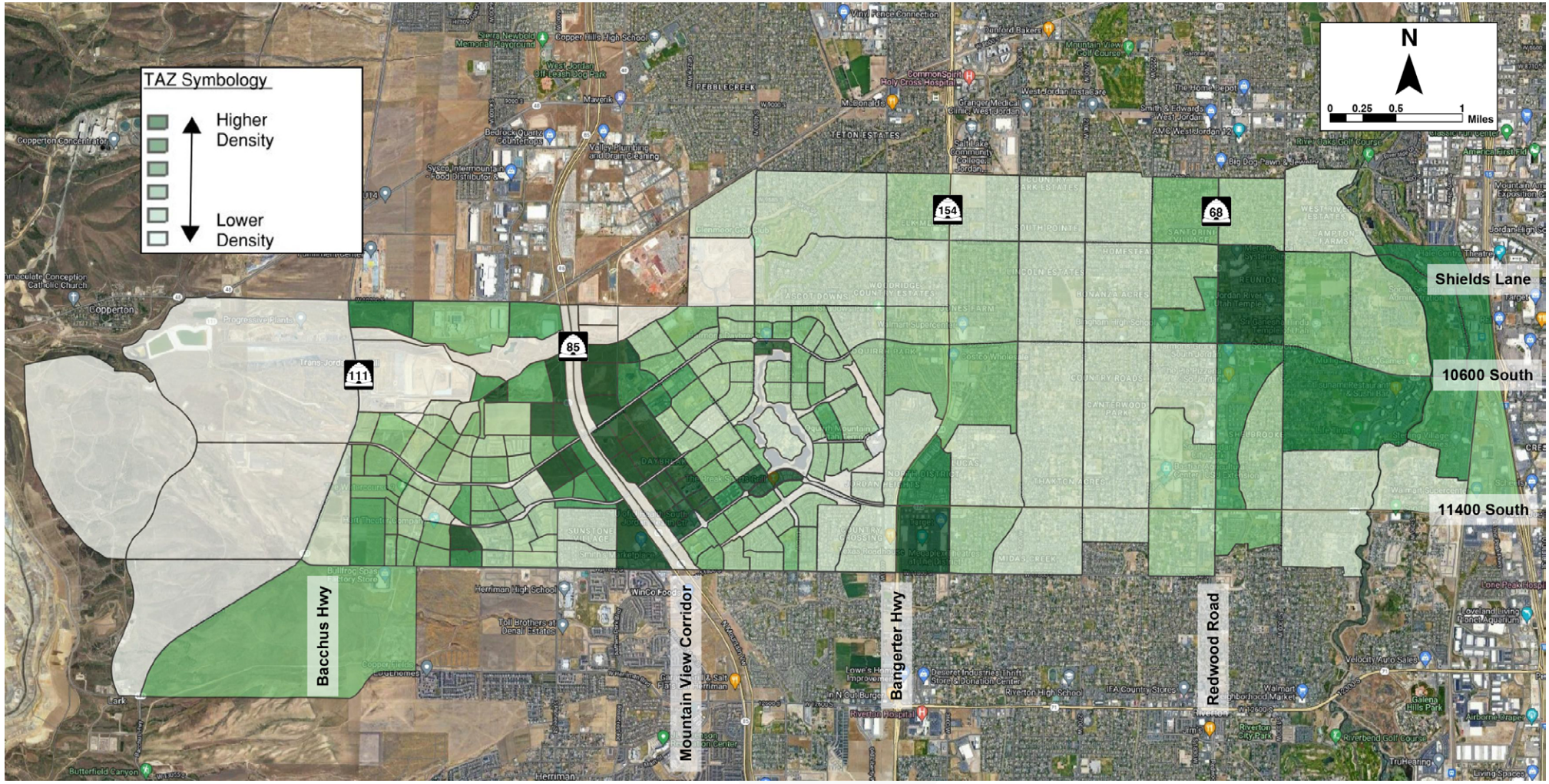


Figure 13: 2050 Combined Household and Employment Density



c. 2050 No-Build Scenario

The no-build scenario provides an analysis of traffic conditions without project roadway improvements. Figure 14 presents the 2050 no-build LOS results obtained by applying LOS thresholds from Table 4 to the projected 2050 no-build traffic volumes from the travel demand modeling.

As shown below, the following roadway segments are expected to operate at unacceptable levels of service (LOS E or worse):

- 10200 South; SR-111 to Mountain View Corridor
- SR-111; 10200 South to South Jordan Parkway
- SR-111; 11800 South to Herriman Boulevard
- South Jordan Parkway; Trocadero Avenue to Mountain View Corridor
- South Jordan Parkway; 4000 West to Redwood Road
- South Jordan Parkway; River Front Parkway to I-15
- 11400 South; Lake Run Road to 3600 West
- 11400 South; 2700 West to I-15
- 11800 South; SR-111 to Prosperity Road
- Daybreak Parkway; Trail Crossing Drive to Grandville Avenue
- 11800 South; Mountain View Corridor to 4000 West
- Bingham Rim Road; East of Mountain View Corridor

d. 2050 Build Scenario

The build scenario provides an analysis of traffic conditions after implementation of the roadway improvements listed in the table below. Due to the unacceptable LOS expected to occur in the 2050 no-build scenario on select roadways, the following projects in Table 6 are recommended between 2033 and 2050 to increase roadway capacity and accommodate future development. The 2050 build scenario LOS is shown below in Figure 15. The project numbers listed in the table are for identification only and are no indication of project prioritization. Cost estimates are in 2024 dollars and do not take inflation into account. Right-of-way is included in the project cost estimates on developer owned property. The values represent the cost to build the cross sections to the widths described in the South Jordan roadway cross section standards.

Similar to project 1-11 in Phase 1, project 3-1 recommends a seven-lane cross section on Daybreak Parkway east of Mountain View Corridor with right-turn auxiliary lanes rather than additional through lanes, as depicted in [Figure 17](#).

As shown in the 2033 build scenario, all roadways are expected to operate at an acceptable LOS D or higher with the exception of the following roadways which are expected to operate at LOS E or F:

- Northern east/west annexation roadway - Assumed to be a 3-lane cross section, analysis indicates additional capacity (5-lanes) or increased grid connectivity in the annexation area will be required.
- Daybreak Parkway from Lane Run Road to Oquirrh Lake Road - Given the downtown nature of this area, which prioritizes maintaining a high quality pedestrian environment, bike infrastructure, and on-street parking, LOS E conditions are assumed to be acceptable in this area in 2050.
- 11400 South from 4000 West to Bangerter Highway, 10600 South from River Front Parkway to South Jordan/Sandy border, 11400 South from Jordan Gateway to South Jordan/Sandy border - Some level of congestion is expected to persist due to the close proximity of signalized arterial intersections to adjacent freeway interchanges.

TABLE 6: FUTURE ROADWAY PROJECTS (PHASES #2 AND #3)

Project Number	Description	Responsibility	Improvement Scope	# of Lanes		Estimated Cost
				2023	Proposed	
PHASE #2 (2033-2042)						
2-1	Prosperity Road: Crimson View Drive to 11000 South	SJC / WFRC	New Roadway	-	3	\$14,780,000
2-2	Bingham Rim Road: South Jordan Parkway to Prosperity Road	SJC	New Roadway	-	2 / 3	\$12,022,093
2-3	N/S Annex Road: Herriman Parkway to Bacchus Highway	SJC	New Roadway	-	2	\$7,932,103
2-4	6900 West: 11800 South to Herriman Parkway	SJC / WFRC	New Roadway	-	2	\$10,410,885
2-5	Dockside Drive: Bacchus Highway to Fordman Way	SJC	New Roadway	-	2	\$3,346,356
2-6	Bingham Rim Road: Bacchus Highway to 7800 West	SJC	New Roadway	-	2	\$13,087,970
2-7	SR-111: South Jordan Parkway to Herriman Parkway	UDOT	Widening (2 to 5)	-	5	\$121,291,839
2-8	Herriman Parkway (12600 South): Bacchus Highway to 7800 West	SJC / WFRC	New Roadway	-	3	\$31,350,000
PHASE #3 (2043-2050)						
3-1	Daybreak Parkway : MVC to Vadiana Drive	SJC	Widening	5	7	\$2,700,663
3-2	10200 South: 5600 West to Bingham Rim Road	SJC / WFRC	New Roadway	-	2	\$42,160,000
3-3	Mountain View Corridor Expansion	UDOT	Widening	4	8	\$40,180,000
3-4	Bingham Rim Road Extension	SJC	New Roadway	-	2	\$10,039,068

* Impact Fee Eligible Project

I. Roadway Projects Summary

Figure 16 below summarizes the planned roadway projects discussed previously in the 2033 and 2050 travel demand modeling analysis. Figure 17 presents conceptual sketches for project 1-11 and project 3-1 lane configurations on Daybreak Parkway.



Figure 14: Future (2050) LOS and ADT - No Build

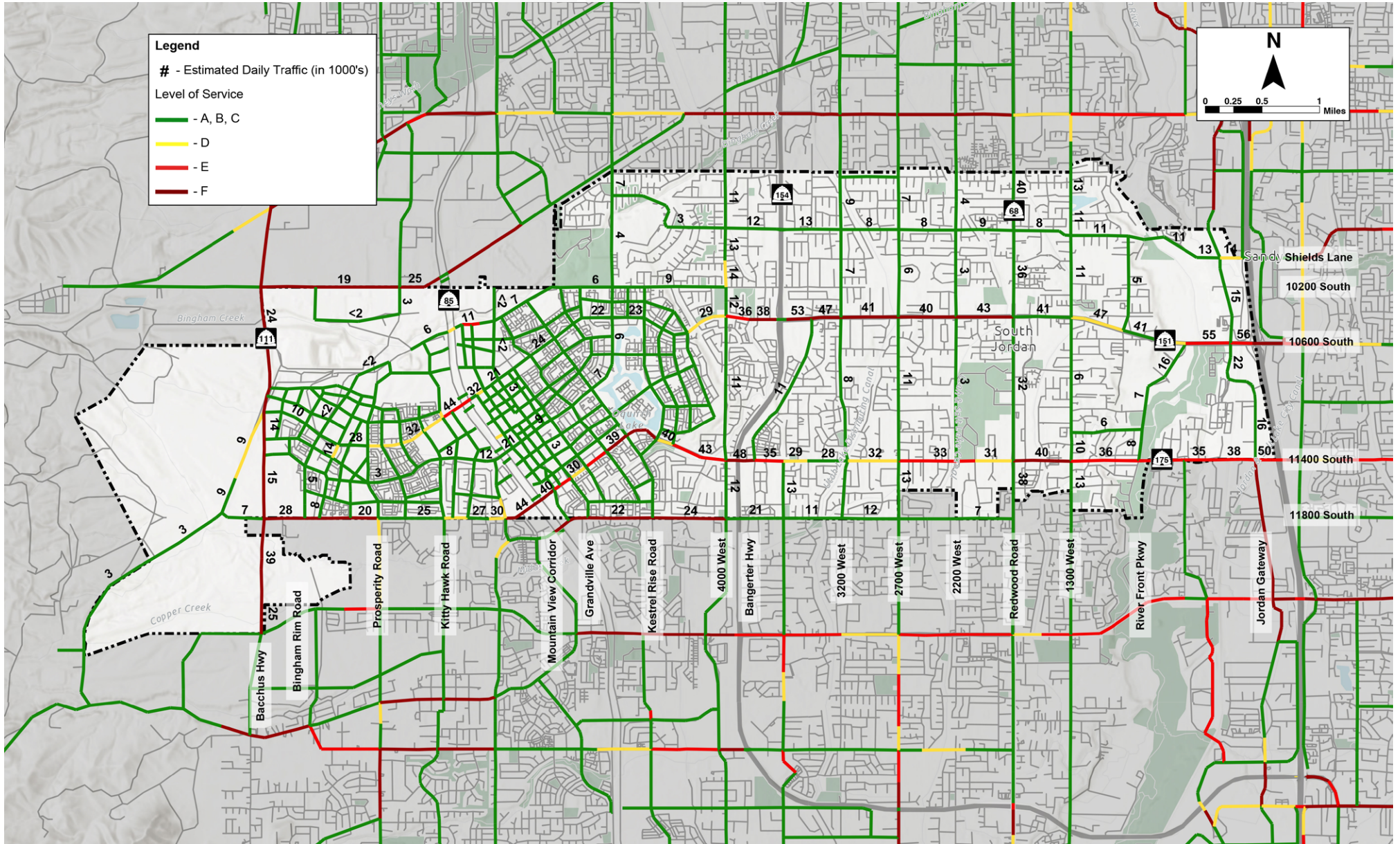


Figure 15: Future (2050) LOS and ADT - Build

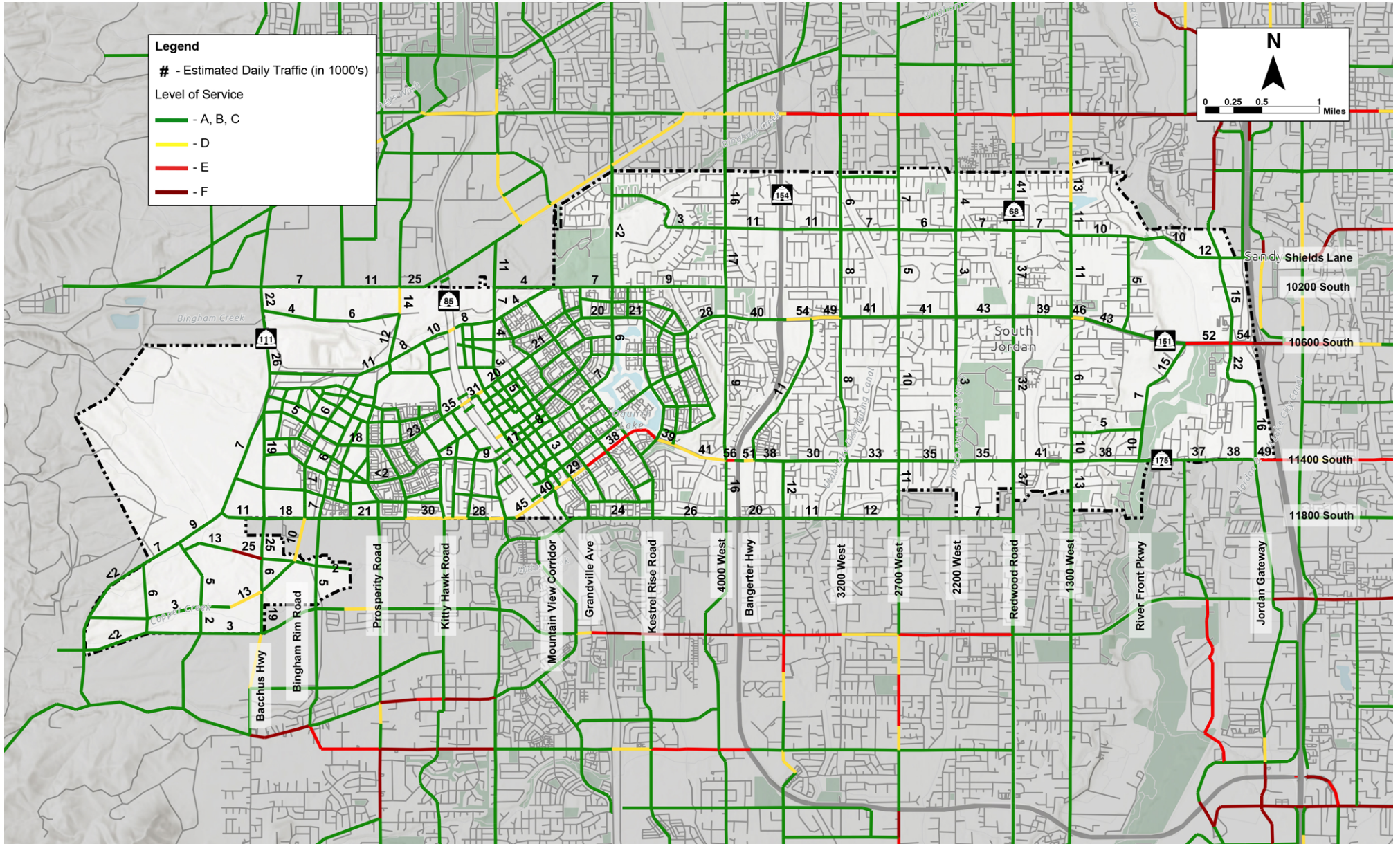


Figure 16: Roadway Projects

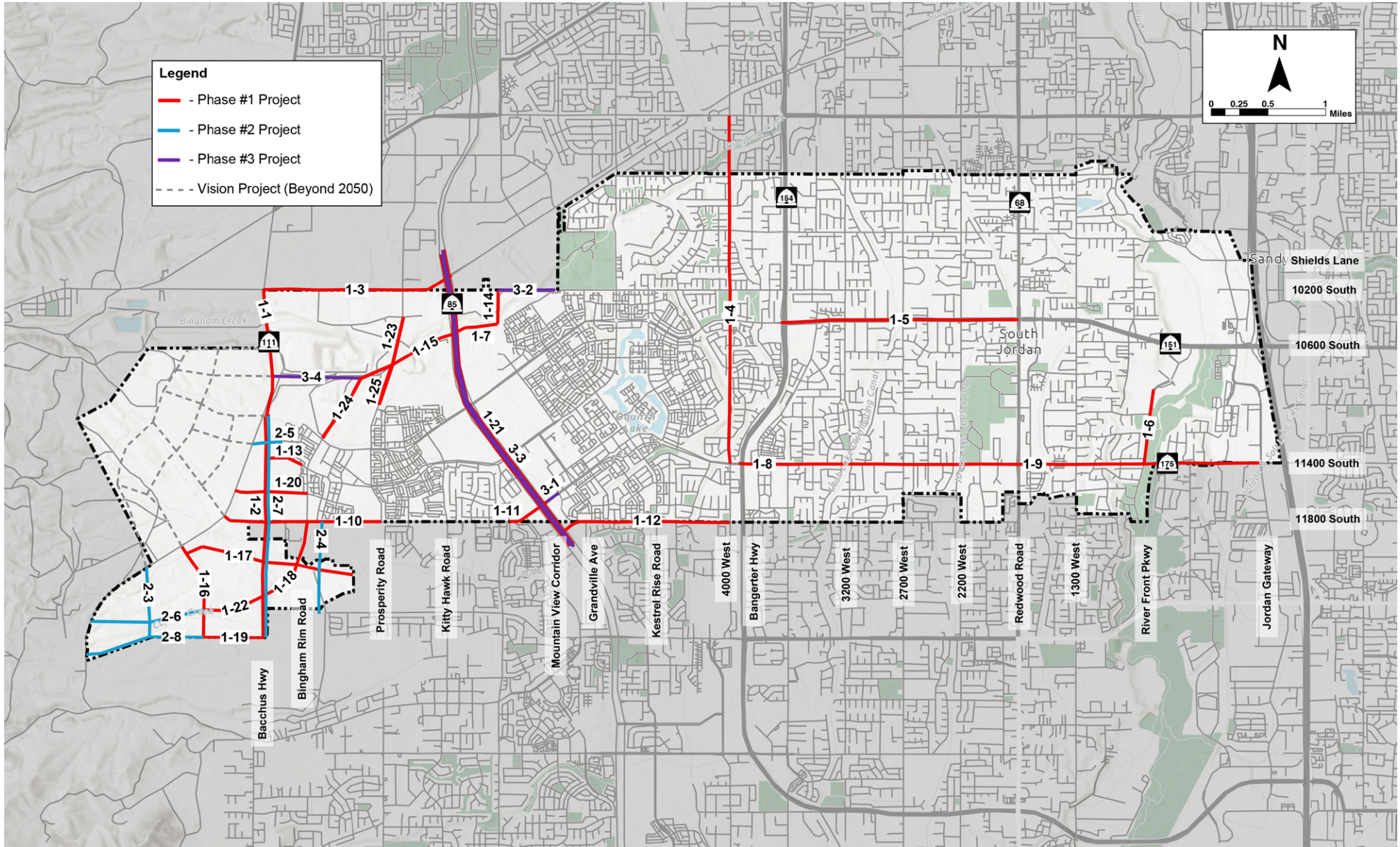
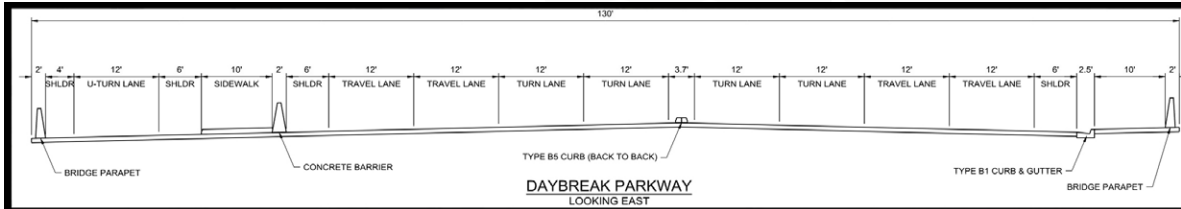


Figure 17: Conceptual Sketch for projects 1-11 and 3-1



Aside from adding U-Turn lanes, the proposed cross section for the Mountain View Corridor & Daybreak Parkway interchange bridge would maintain the same vehicle lane configuration as recently striped.



Phase 1 (Project 1-11):

Westbound lane added from MVC SBR add-lane to WBR turn lane into Trail Crossing Drive.

Eastbound lane added from Freedom Park Drive NBR add-lane to EBR turn lane onto MVC Southbound.

Bike lanes relocated to multi-use path and pavement repurposed for added vehicle lanes.

Phase 3 (Project 3-1):

Westbound lane added from SBR from Vadania Drive add-lane to WBR turn lane onto MVC Northbound.

Eastbound lane added from MVC NBR add-lane to EBR turn lane onto Vadania Drive.

Alternatively, Phase 2 widening east of MVC could extend to Grandville Avenue with minimal earth work given existing pavement widths between Vadania Drive and Grandville Avenue.

J. Intersection Projects

It is recommended the City begin planning for the proposed intersection improvements shown below in Table 7. Project numbers listed in the table are for identification only and are no indication of project prioritization. Cost estimates are in 2024 dollars and do not take inflation into account. Right-of-way is included in the project cost estimates on developer owned property. The values represent the cost to build the cross sections to the widths described in the South Jordan roadway cross section standards. Figure 18 depicts the locations of the proposed intersection improvements. Figure 19 below shows the future (2050) intersection control map of South Jordan. Signal warrant analyses are to be performed prior to the installation of a traffic signal.

The [South Jordan Intersection Configuration Analysis](#) (November 2, 2020) study was reviewed when developing intersection projects. However, many widening projects are scaled down due to lower future growth projects in this TMP compared to the 2019 TMP. The intersection improvement projects provided in the TMP are high-level in nature, and thus additional analysis should be performed before initiating any widening projects.

Intersection improvement scopes for the following projects are described as:

- **1-B:** The addition of a WB right-turn lane
- **1-V:** The addition of EB/WB right turn lanes
- **1-U:** Adding second NB/SB thru lanes (while keeping left/right turn lanes. 4000 W is going to be a 5-lane cross section with just restriping, but thru this intersection there will need to be some widening)
- **1-Z:** Realigning the northeastern extent of Bacchus Highway to reconnect with the new SR-111 & South Jordan Parkway intersection.²



² While anticipated to occur beyond the 2050 planning year, when Rio Tinto lands west of Bacchus Highway ultimately develop, the City plans to continue South Jordan Parkway to the west. At this point tying Bacchus Highway into another location or stubbing it should be considered to avoid creating a 5-leg intersection.

TABLE 7: FUTURE INTERSECTION PROJECTS

Project Number	Description	Responsibility	Improvement Scope	Estimated Cost
PHASE #1 (2023-2032)				
1-A	Shields Lane & 1300 W*	SJC	Intersection Improvement	\$666,925
1-B	SR-111 & South Jordan Parkway	UDOT	Install Signal	\$450,000
1-C	SR-111 & Lake Avenue	UDOT	Install Signal	\$450,000
1-D	SR-111 & Meadowgrass Drive	UDOT	Install Signal	\$450,000
1-E	SR-111 & 11800 S	UDOT	Install Signal	\$450,000
1-F	SR-111 & 12150 S	UDOT	Install Signal	\$450,000
1-G	SR-111 & Annex Area E/W	UDOT	Install Signal	\$450,000
1-H	SR-111 & Herriman Parkway	UDOT	Install Signal	\$450,000
1-I	11800 S & Bingham Rim Road*	SJC	Install Signal	\$400,000
1-J	11800 S & Silver Pond Road*	SJC	Install Signal	\$400,000
1-K	11800 S & Prosperity Road*	SJC	Install Signal	\$400,000
1-L	11800 S & Willow Walk Drive*	SJC	Install Signal	\$400,000
1-M	10200 S & 6200 W*	SJC	Install Signal	\$400,000
1-N	10200 S & Grandville Avenue*	SJC	Install Signal	\$250,000
1-O	11400 S & Andover Road	UDOT	Install Signal	\$350,000
1-P	Bingham Rim Road & MVC SB	UDOT	Install Signal	\$325,000
1-Q	Bingham Rim Road & MVC NB	UDOT	Install Signal	\$325,000
1-R	Bingham Rim Road & Grandville Avenue*	SJC	Install Signal	\$325,000
1-S	Grandville Avenue & Burntside Avenue*	SJC	Install Signal	\$325,000
1-T	10400 S & 4000 W*	WFRC / SJC	Intersection Improvement	\$5,152,400
1-U	4000 W & S Skye Drive/10200 South*	SJC	Intersection Improvement	\$2,592,000
1-V	South Jordan Parkway & Vadiana Drive*	SJC	Install Signal	\$400,000
1-W	11800 S & Flying Fish Drive	Herriman / SJC	Install Signal	\$400,000
1-X	South Jordan Parkway & Cardinal Park Rd*	SJC	Install Signal	\$425,000
1-Y	SR-111 & South Jordan Parkway*	SJC	Roadway Realignment	\$1,600,000
1-Z	Riverfront Parkway & 11400 S*	SJC	Intersection Improvement	\$150,000
PHASE #2 (2033-2042)				
2-A	Shields Lane & Jordan Gateway	SJC	Intersection Improvement	\$3,000,000.00
2-B	Redwood Road & South Jordan Parkway	UDOT	Innovative Intersection	\$10,000,000.00
2-C	Redwood Road & and Daybreak Parkway	UDOT	Innovative Intersection	\$10,000,000.00
2-D	10200 S & 4800 W	SJC	Install Signal	\$375,000.00
2-E	4800 W & 9585 S	SJC	Install Signal	\$350,000.00
2-F	11400 S & 4000 W	SJC	Thru-Turn or Roundabout	\$4,019,800
PHASE #3 (2043-2050)				
3-A	11800 S & 3200 W	SJC	Install Signal	\$475,000.00
3-B	SR-111 & EW Annex Road 2	UDOT / SJC	Install Signal	\$475,000.00

* Impact Fee Eligible Project

Figure 18: Intersection Projects

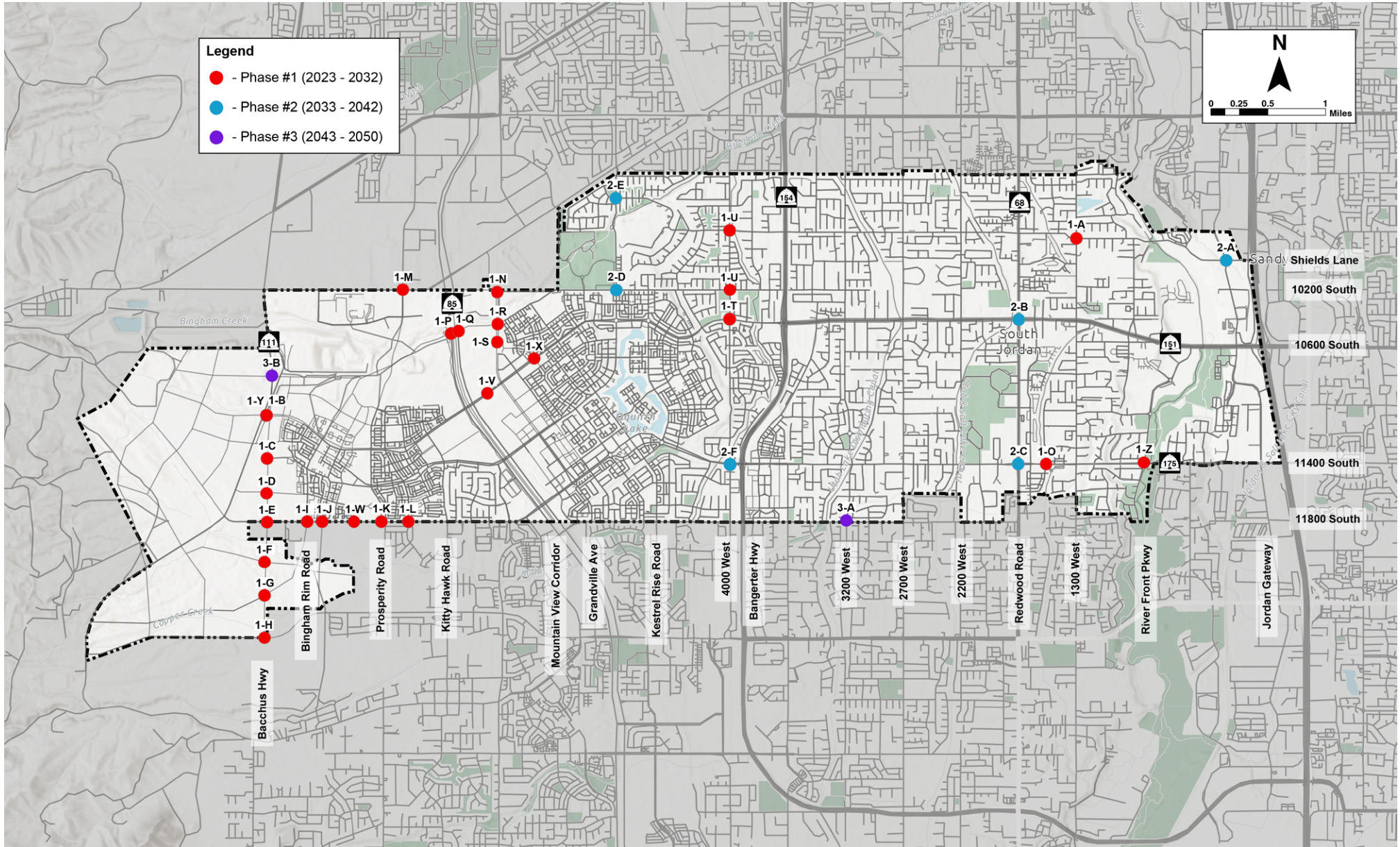
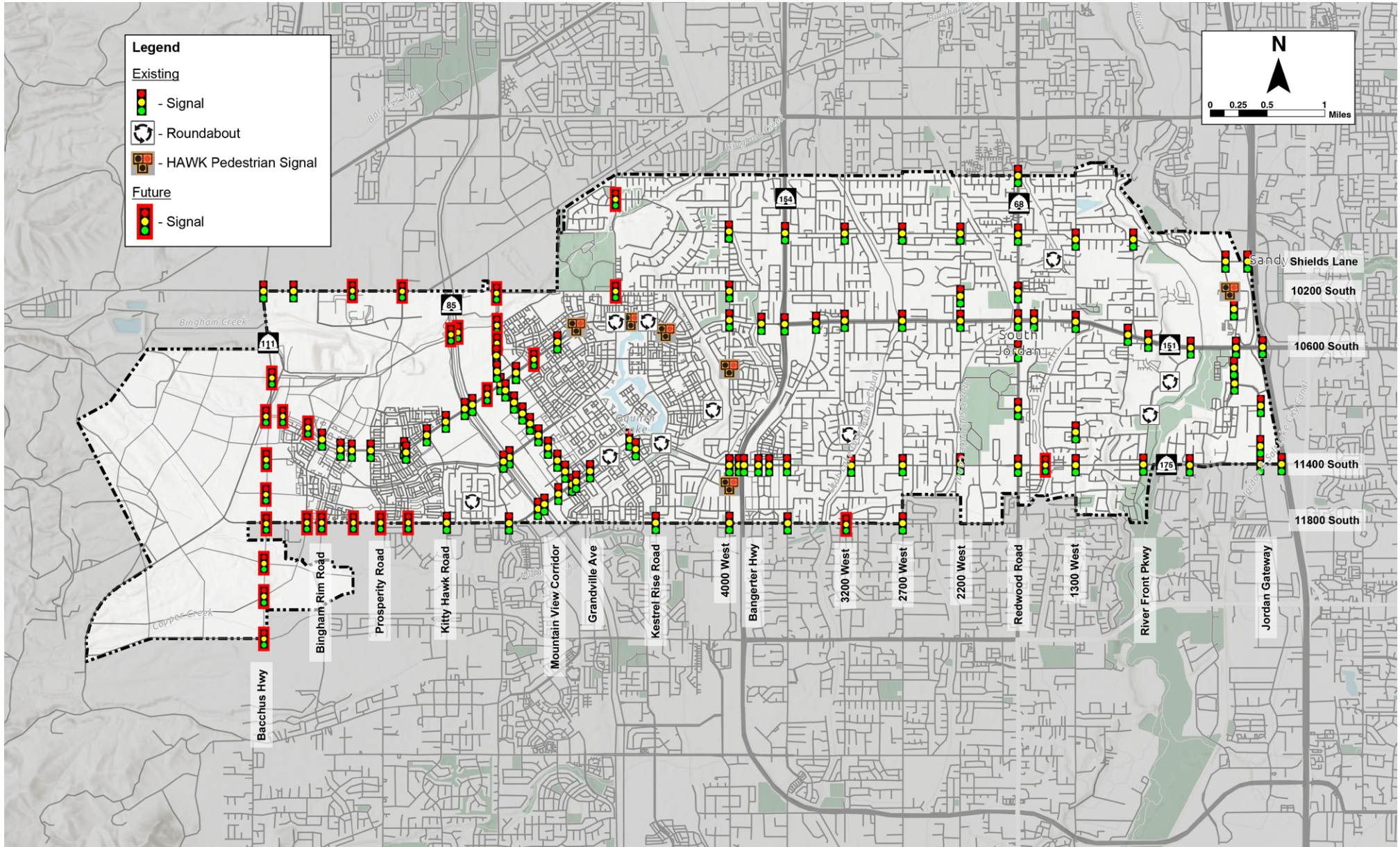


Figure 19: Future (2050) Intersection Control



III. ALTERNATIVE TRANSPORTATION

A. Purpose

Alternative transportation modes, such as transit and active transportation, are an important part of the overall transportation system. Public transit typically includes buses, light rail, and shuttle routes. Active transportation includes any form of non-motorized transportation such as walking or biking. Both transit and active transportation are essential parts of an active and vibrant community.

B. Public Transit

Existing Transit Service

Public transportation in South Jordan City is served by the Utah Transit Authority (UTA). Public transit typically includes buses, light rail, and shuttle routes. According to the American Community Survey (2022), 2.1% of South Jordan residents reported using public transit as their transportation mode to commute to work. This is compared to 1.8% of Utahns and 3.8% of people in the United States who use public transit as their transportation mode to commute to work.

Currently, UTA operates the TRAX Red Line on the west side of South Jordan, and the FrontRunner on the east side. Beyond these two rail services, UTA operates bus Route 218, which runs west from the South Jordan FrontRunner station. Three additional bus services connect to the South Jordan FrontRunner station, but run east from the station and thus offer minimal service to South Jordan City. UTA's Salt Lake County transit map can be viewed [here](#). Figure 20 shows the existing South Jordan transit system.

UTA On Demand currently operates in parts of South Jordan, and has plans to expand its coverage for the entire city within the next five years. UTA On Demand is an innovative form of transportation that connects riders with other transit services like TRAX, FrontRunner, or Bus as well as to other destinations in the community. The app-based technology matches multiple riders headed in a similar direction into a single vehicle, allowing for quick and efficient shared trips. UTA On Demand currently operates in a majority of South Jordan City, a map of the current service area can be found at the following [link](#).



Future Transit Service

South Jordan City should be actively involved in working with UTA, UDOT, and WFRC to support transit as a viable and efficient transportation mode in the city. Planning efforts will help procure funds to support the development and maintenance of a sustainable transit system. With the construction of new major transportation corridors such as the Mountain View Corridor and SR-111, and the build out of the Daybreak urban core, there may be opportunities for additional new transit services.

The [WFRC regional transportation plan](#) lists the following transit improvements in their 2023-2050 long-range transit plans:

PHASE 1

- Mid-Jordan Extension Corridor Preservation from Daybreak Parkway TRAX Station to 12600 South and Bangerter Highway
- FrontRunner Forward Investment Package I (Salt Lake County)
- Daybreak TRAX Station

PHASE 2

- South Jordan / Sandy Connector Core Route (15 min service) from Sandy Expo TRAX Station to South Jordan FrontRunner Station
- FrontRunner Forward Investment Package II (Salt Lake County)
- Daybreak Transit Hub

PHASE 3

- FrontRunner Fleet Upgrades I (Salt Lake County)

The [UTA regional transportation plan](#) lists the following transit projects in their 2024-2050 long-range transit plans:

PHASE 1

- Existing TRAX Red Line improvement, every 15 minutes
- New local bus route on Lake Avenue up to every 30 minute frequency
- New local bus route on Daybreak Pkwy up to every 30 minutes frequency
- FrontRunner Forward Investment Package I every 15 minutes peak, 30 minutes off-peak

PHASE 2

- South Jordan / Sandy Connector Core Route 15 minute service from Sandy Expo TRAX Station to South Jordan FrontRunner Station

PHASE 3

- 11400 South new local bus route 30 minute frequency
- New frequent service route connecting Salt Lake and Utah Counties. Existing Route 218 serves part of this corridor. 15 minute frequency

The South Jordan TMP team reviewed the previous transit plans and worked closely with the City to develop a preferred transit plan, shown in Figure 21 below. Changes to the previous transit plans include:

- **Project 2-1:** Re-routing the Lake Ave line to 11800 South and extending the route into Rio Tinto/Olympia, changing the phasing from phase one to phase two.
- **Project 1-2:** Extending the South Jordan Parkway/10600 South line to continue along South Jordan Parkway until U-111 before looping back on itself via Prosperity, changing the phasing from phase two to phase one.
- **Vision Project:** Extending the TRAX Red Line

Figure 20: Existing Transit System

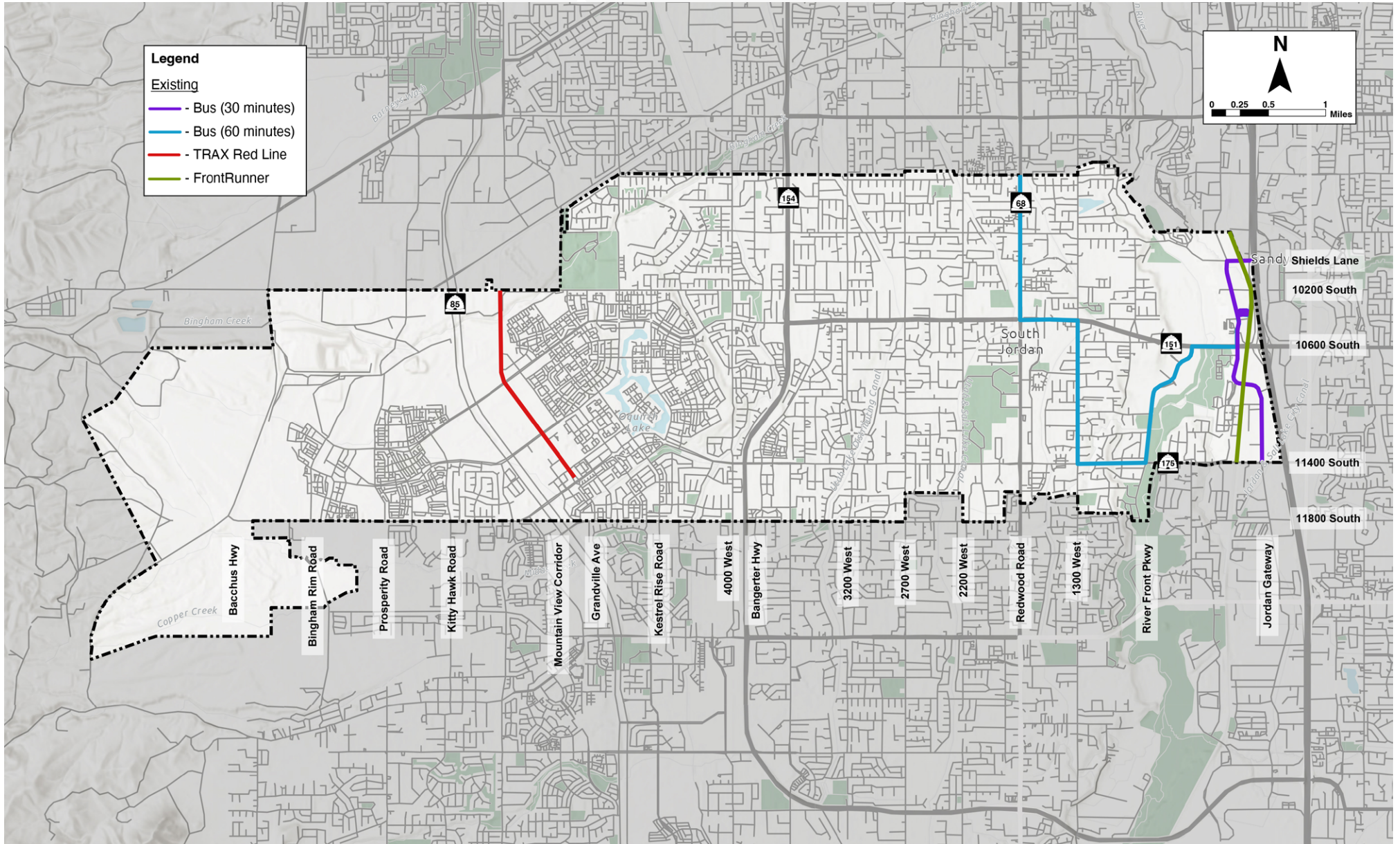
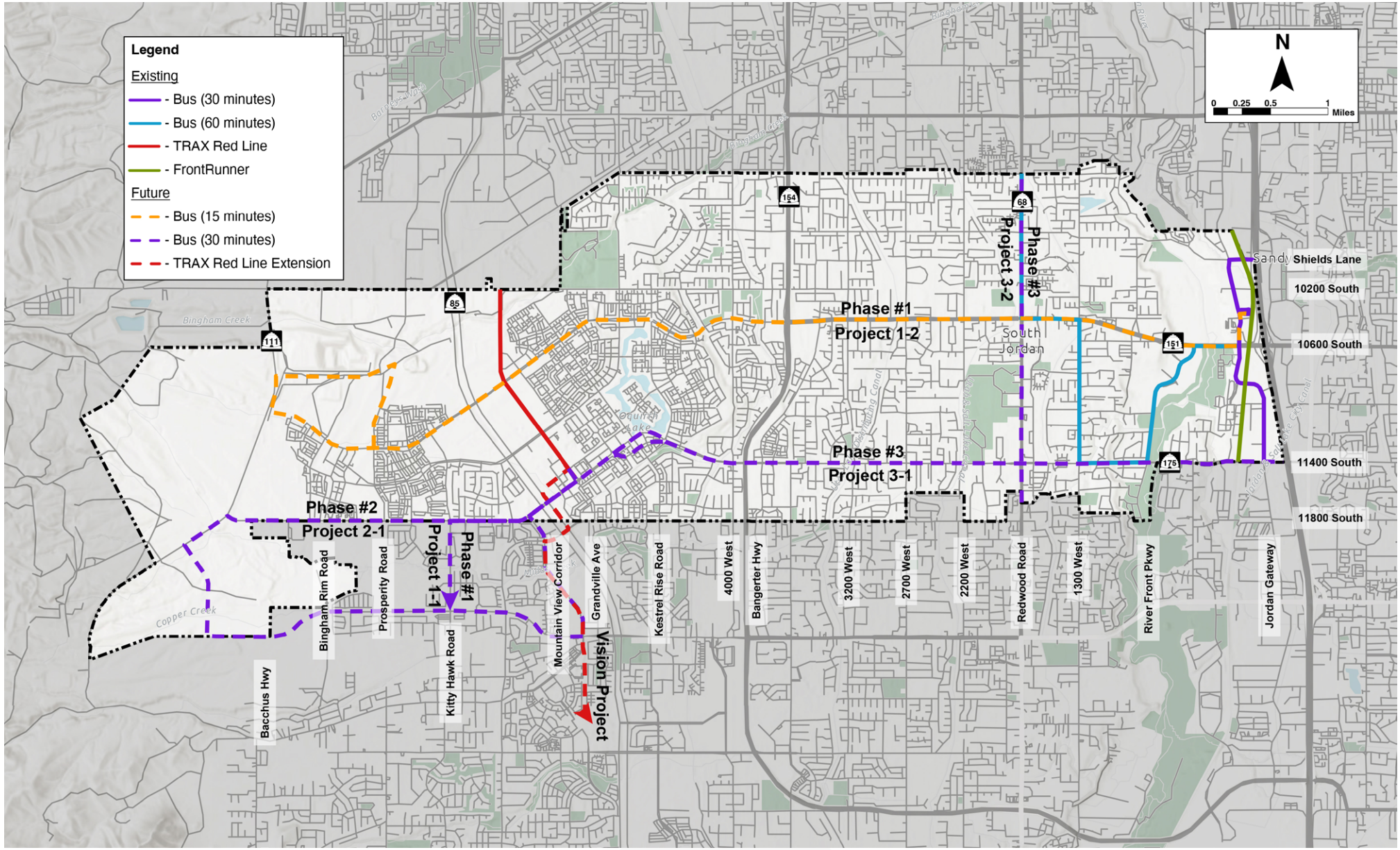


Figure 21: Future Transit Vision



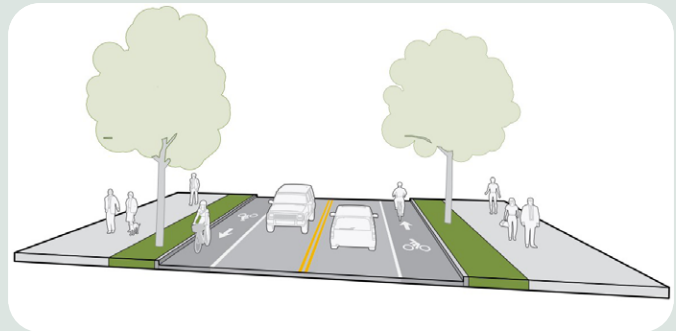
C. Active Transportation

Existing Active Transportation

The existing transportation facility map combined the active transportation plans from the [previous TMP \(2019\)](#) and the [South Jordan Active Transportation Plan \(2020\)](#), and was refined in various meetings with the project team. The existing active transportation map is found below in Figure 22. The active transportation network in South Jordan can be divided into facility types such as conventional bike lanes, buffered bike lanes, multi-use pathway, neighborhood byways, and cycle track. Compilation and organization of existing data into a single dataset. The following definitions for active transportation facilities are from the previous ATP which refer to the [Salt Lake County Bikeway Design guidance manual](#).

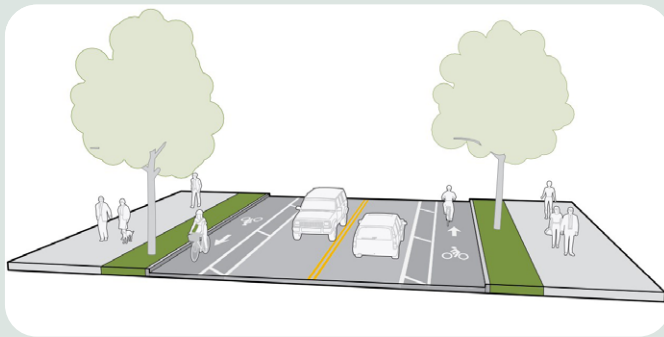
Conventional Bike Lanes

This bikeway type uses signage and striping to allocate dedicated roadway space to bicyclists. Bike lanes encourage predictable movements by bicyclists and motorists. Care must be taken to properly design bike lanes to meet or exceed minimum standards, particularly for operating space, and to properly restrict cars from parking in them. Substandard bike lanes are often worse than no bikeway at all, as such facilities will attract few cyclists, may be perceived as a waste of public funds, and could be hazardous. It is also important that bike lane treatments be carried up to and through intersections (see intersection treatments on page 16) to provide continuity and guidance for bicyclists where the potential for conflicts is highest. Where bike lanes must end due to space constrictions or must transition to another facility type, advance warning and/or wayfinding signage for an alternative route should be provided to instruct bicyclists how to proceed. Bike lanes generally need to be swept periodically to keep debris from accumulating in them, especially if they are located adjacent to a curb.



Where bike lanes must end due to space constrictions or must transition to another facility type, advance warning and/or wayfinding signage for an alternative route should be provided to instruct bicyclists how to proceed. Bike lanes generally need to be swept periodically to keep debris from accumulating in them, especially if they are located adjacent to a curb.

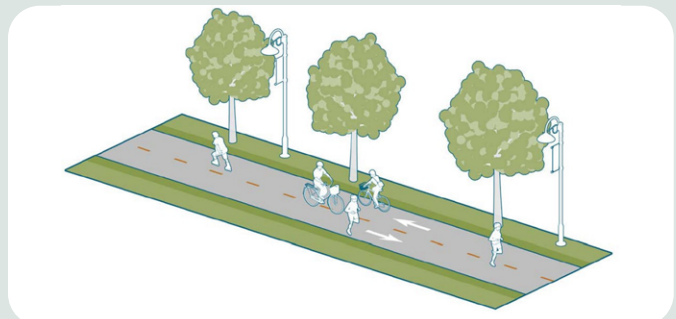
Buffered Bike Lanes



Buffered Bike Lanes provide a greater sense of comfort for bicyclists than conventional bike lanes by way of a lateral painted buffer between the bike lane and either the travel lane or parked cars (or both). The buffer is demarcated with two longitudinal strips and diagonal pavement (i.e., gore) striping. A raised profile stripe or rumble strip may also deter motor vehicles from encroaching into the bike lane while being more compatible with snow plows, but would make access to and from the buffered lanes more difficult for bicyclists. Maintenance considerations are similar to regular bike lanes except that buffered lanes have more striping that needs to be refreshed.

Multi-use paths are typically located in rights-of-way separate from roadways, or adjacent to high-speed roads with very few roadway crossings of the path. They are preferred by less experienced cyclists because of their separation from traffic. More experienced cyclists may avoid them if pedestrians and slower cyclists are present. Snow removal and sweeping of these paths may require specialized equipment. Additionally, tree roots growing under the pavement may require periodic maintenance to preserve a comfortably smooth pathway surface.

Multi-Use Pathway



Neighborhood Byways



Neighborhood byways (also referred to as bicycle boulevards or neighborhood greenways) are low-speed, low-volume shared roadways that create a high comfort bicycling environment. Traffic calming or diversion treatments are sometimes used to promote speed and volume reductions but they are not required. Shared lane markings and wayfinding signs are often used to help the user navigate the route and raise awareness that bicyclists are present. Neighborhood byways also feature enhanced treatments at arterial/collector street intersections to provide safe and convenient crossings. Maintenance requirements are generally low because cars share the same space and assist with sweeping of debris from the travel path, although traffic calming elements would add some upkeep needs if they are installed.

This bikeway type combines the user experience of a separated path with the on-street infrastructure of bike lanes. They may be one-way or two-way, level with the travel lane or raised above the level of the adjacent travel lane. Separation from traffic can be achieved with vertical separation or physical elements such as a lane of parallel parking, planters, curbing, or flexposts. Protected bike lanes have added design considerations at driveways, transit stops, and intersections (especially for two-way protected bike lanes) to manage conflicts with turning vehicles and crossing pedestrians. Protected bike lanes may require bicycle-specific signals or phasing. Colored pavement or other visual treatments may be used to enhance visibility and raise awareness of the bike lane.

Cycle Track



Future Active Transportation

This plan updates the active transportation plans from the previous TMP (2019) and the South Jordan AT (2020). The following process was followed to update the active transportation plan:

- Compilation and organization of existing data into a single dataset
- Completion of various city-wide trail maps iterations with revisions and changes as directed by the project team
- The project team identified active transportation-related safety concerns and mitigation measures
- Recommendations for project phasing and the updating of the comprehensive active transportation plan

The future active transportation projects map is found below in Figure 23. Active transportation phasing recommendations were developed by the TMP project team together with South Jordan City and are found in the table below.



TABLE 8: ACTIVE TRANSPORTATION PHASING RECOMMENDATIONS

Project Number	Project Name	Improvement Type
PHASE #1		
1	11400 South; 4000 West to Jordan River Multi-Use Pathway	Multi Use Pathway
2	Skye Drive / Shields Lane Active Transportation Improvement from 4000 West to 300 West	Active Transportation Improvement
3	2700 West Buffered Bike Lane	Buffered Bike Lane
4	1300 West Buffered Bike Lane from South Jordan Parkway to City Limits	Buffered Bike Lane
5	Beckstead Canal; SJP Connection	Multi Use Pathway
6	Herriman Boulevard Buffered Bike Lane from Bacchus Highway	Buffered Bike Lane
7	10200 South Buffered Bike Lane from Jordan Gateway to TRAX FrontRunner Connector	Buffered Bike Lane
8	Bingham Creek Trail Shared Use Path from Bonneville Shoreline Trail West to Bingham Creek Park	Multi Use Pathway
9	7300 West Shared Use Path from Old Bingham Hwy to 11800 South	Multi Use Pathway
10	Welby Canal Shared Use Path from Yorkshire Drive to 9800 South	Multi Use Pathway
11	Utah Distribution Canal Trail Shared Use Path	Multi Use Pathway
12	Utah and Salt Lake Canal Shared Use Path	Multi Use Pathway
13	South Jordan Canal Trail Shared Use Path	Multi Use Pathway
14	Ultradent Drive Shared Use Path from Jordan River Parkway to FrontRunner	Multi Use Pathway
15	Sandy to South Jordan FrontRunner Station I-15 and Tracks Crossing	Multi Use Pathway
16	Prosperity Road Byway	Byway
17	Bingham Rim Road Byway	Byway
18	Otter Trail Drive; Vermillion Dr. to 10200 South Byway	Byway
19	Lake Ave; Prosperity Rd to Bacchus Hwy Shared Use Path	Multi Use Pathway
20	Copper Creek/Midas Creek Shared Use Path	Multi Use Pathway
21	Rio Tinto Bike Lanes	Bike Lane
22	Jordan River Drive; 1300 West to River Front Pkwy Byway	Byway
23	South Jordan Parkway Bike Lane from Bacchus Highwa	Bike Lane
24	11800 South Shared Use Path from Bacchus Highway to Bingham Rim Road	Multi Use Pathway
25	3200 West; Daybreak Parkway to West Jordan/South Jordan Border Bike Lane	Bike Lane
26	1055 West Shared Use Path	Multi Use Pathway
27	11800 South Shared Use Path from Flying Fish Drive to Prosperity Road	Multi Use Pathway
PHASE #2		
28	4800 West Buffered Bike Lane from SJP to Old Bingham Hwy	Buffered Bike Lane
29	3600 West Bike Lane from 11400 South to City Limits	Bike Lane
30	Redwood Road Shared Use Path	Multi Use Pathway
31	Dry Creek Trail Shared Use Path	Multi Use Pathway
32	10755 South; 3100 West to 2700 West Byway	Byway
33	2700 West to Beckstead Lane Byway	Byway
34	Beckstead Ln; 11010 South to 10610 South Byway	Byway
35	10610 South/Meridies Drive; 2200 West to Beckstead Lane	Byway
36	Rustic Roads Dr; 2200 West to 2700 West Byway	Byway
37	10775 South; Beckstead Ln to 1300 West Byway	Byway
38	10550 South; 1300 West to South Jordan Pkwy	Byway
39	Canal Shared Use Path from River Heights Dr to 3210 West	Multi Use Pathway
40	10950 South; Canal to 3200 West Byway	Byway
41	9400 South; 2200 West to Redwood Road Bike Lane	Bike Lane
42	2200 West; 9800 South to 10400 South Bike Lane	Bike Lane
43	11800 South; MVC to Redwood Road Buffered Bike Lane	Buffered Bike Lane
PHASE #3		
44	Bonneville Shoreline Trail (West)	Trail Dirt
45	Bonneville Shoreline to Rio Tinto Property Shared Use Path	Multi Use Pathway
46	Future Rio Tinto Bike Lanes (West of Bacchus)	Bike Lane
47	Future Rio Tinto Bike Lanes (West of Bacchus)	Bike Lane
48	Bingham Creek from Bingham Creek Park to Bonneville Shoreline Trail	Dirt Trail

Figure 22: Existing Active Transportation Network

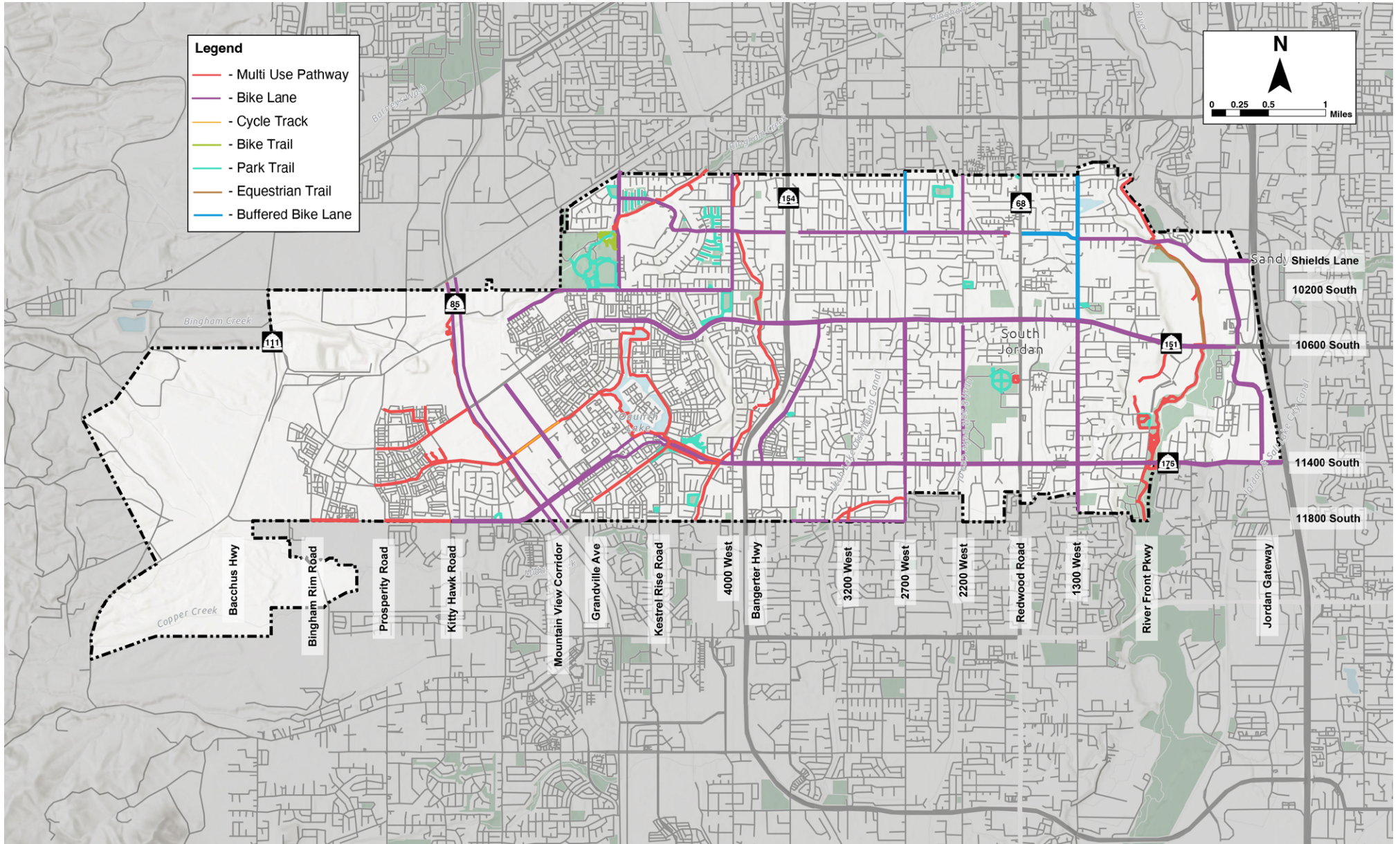
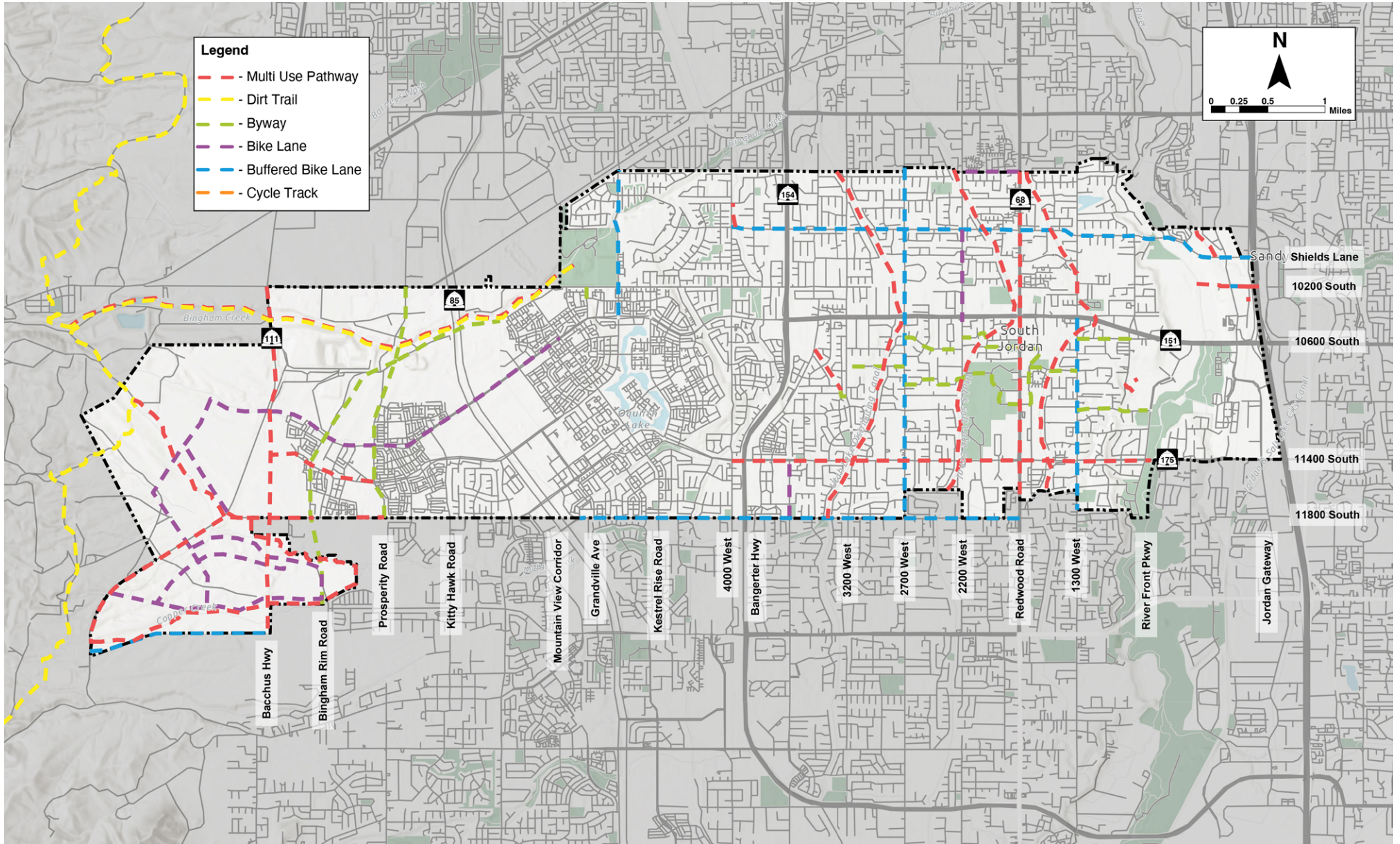


Figure 23: Future Active Transportation Projects



IV. CITY TRANSPORTATION MANAGEMENT

A. Purpose

The City Transportation Management section discusses best practices to ensure the City develops and maintains a safe and efficient transportation network. This section includes the following:

- Transportation safety analysis
- Traffic calming
- Access management standards
- Connectivity
- Truck routes
- Traffic impact study standards
- Livable streets

B. Transportation Safety Analysis

A safety analysis was performed for all roadways within South Jordan City. The most recent five full years of available crash data (January 1, 2018 to December 31, 2022) from UDOT Traffic & Safety were used to perform a safety analysis. Historic crash patterns were analyzed within South Jordan City to develop project and policy recommendations.

In total, there were 5,222 crashes reported within South Jordan City between January 1, 2018 and December 31, 2022. Preliminary 2023 crash data was also analyzed. All of the 2023 severe crashes are validated, while non-severe crashes are not fully validated. Therefore, 2023 non-severe crashes are not included in the chart below. Of these 5,222 crashes reported, 98 involved suspected serious injuries, and 8 were fatal. Crashes have been steadily decreasing in South Jordan City since 2018. Fatal and serious injury crashes have been steadily increasing. However, there was a 33 percent reduction of severe crashes between 2022 and 2023.

Figure 24: 2018 to 2023 Crash Trends

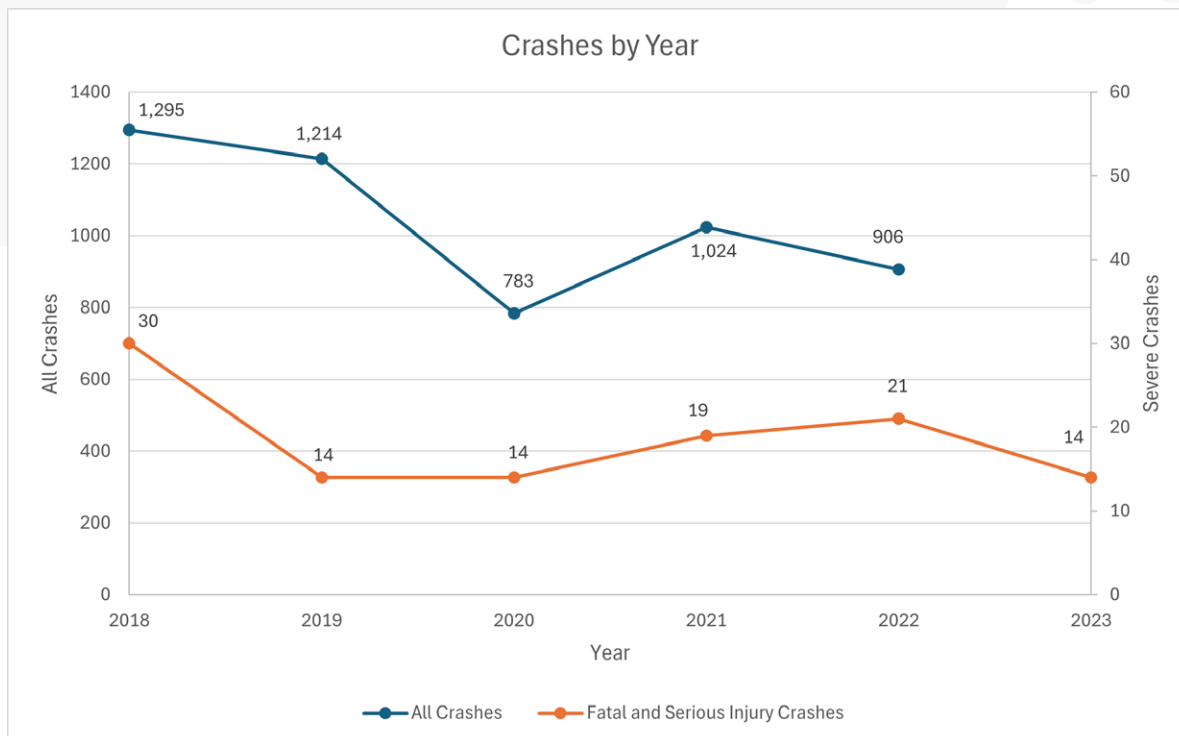
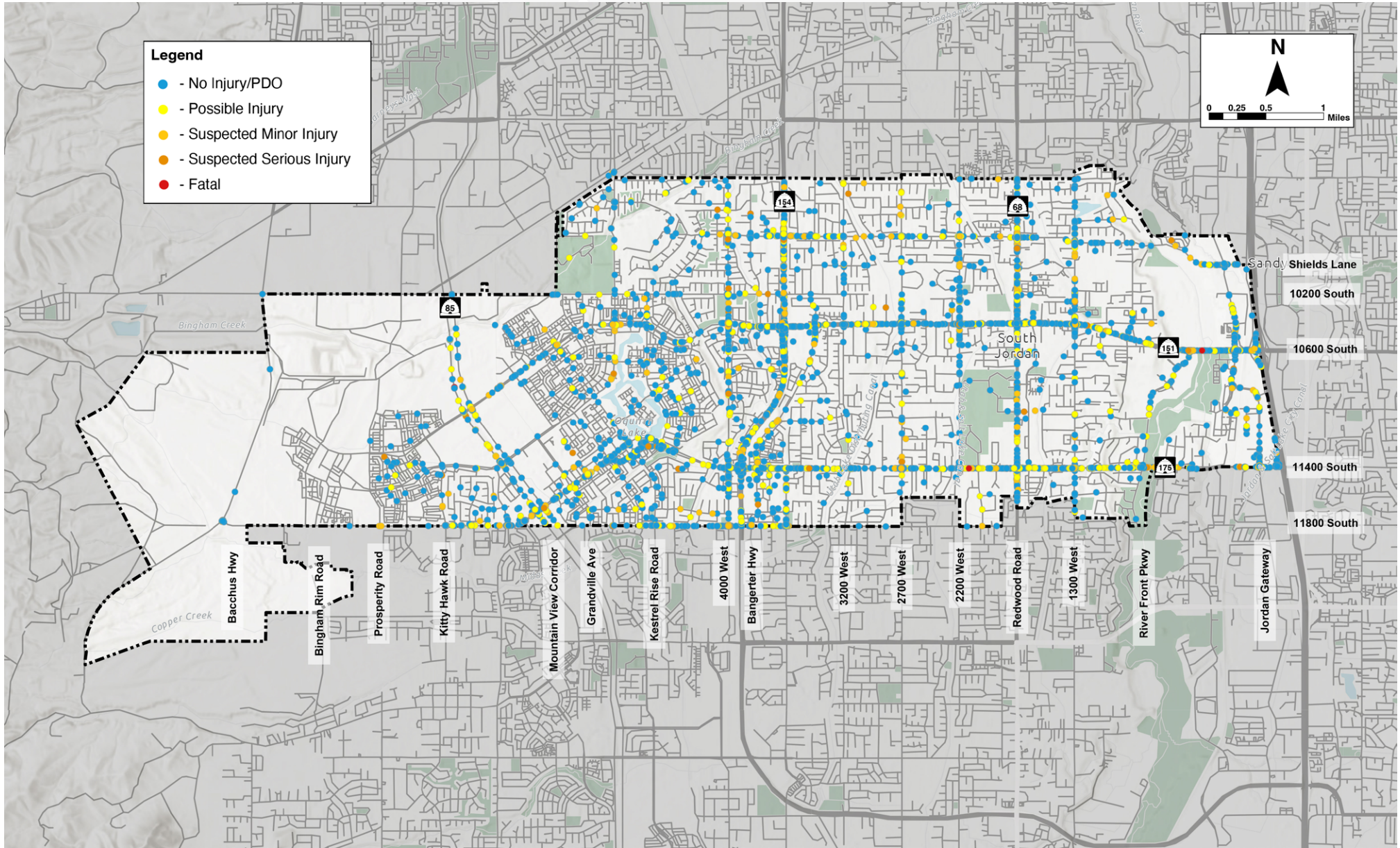


Figure 25: 2018 to 2022 Crash Frequency Summary



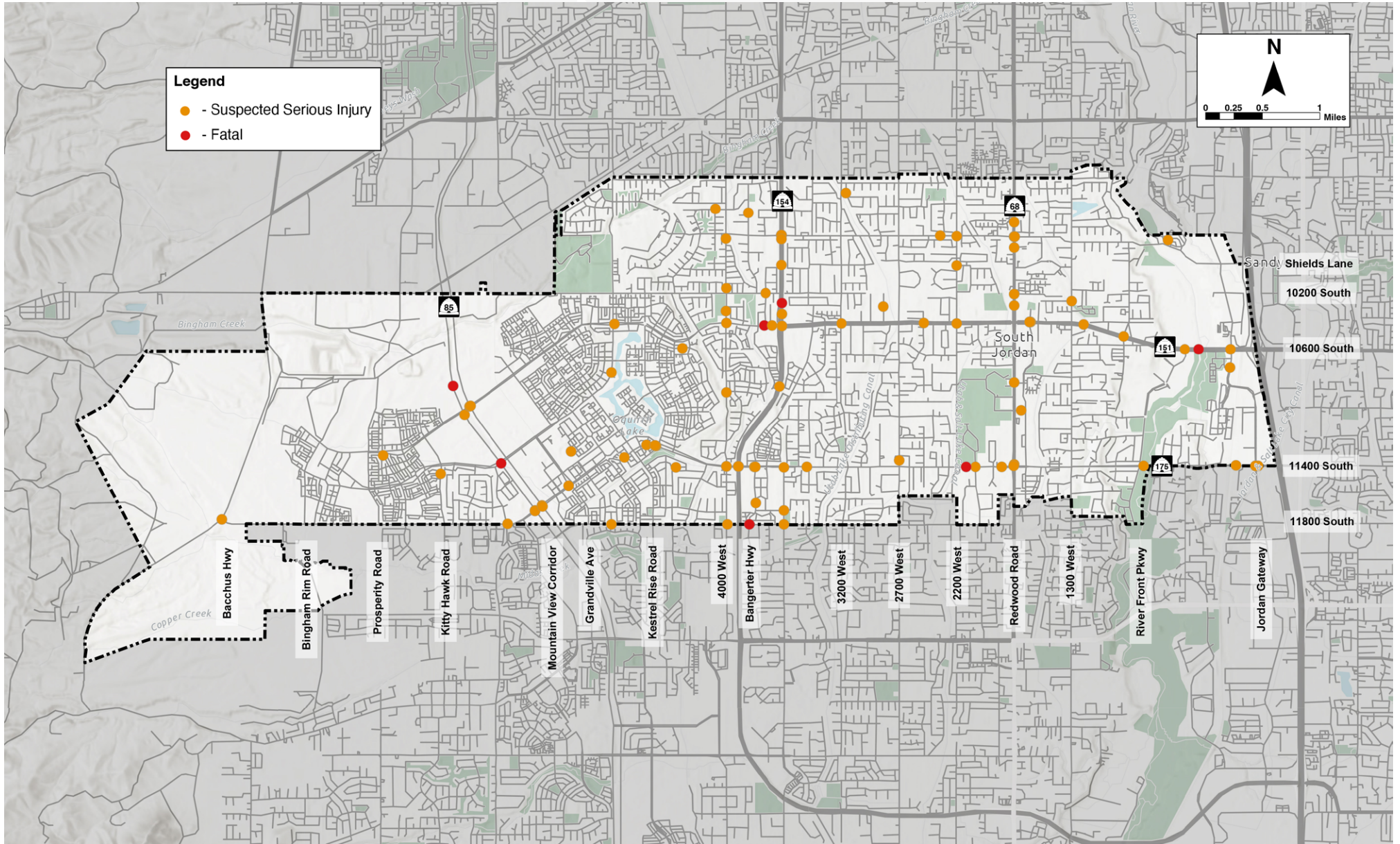
Crash severity is reported according to a five-category scale ranging from no injury to fatality. UDOT, like many other places, has taken on the goal of Zero Fatalities . This [zero fatalities](#) approach is guided by the Safe System framework. The [Safe System approach](#) consists of the following five elements.

Given these goals, and the desire to reduce or eliminate severe crashes (both fatal and serious injury), these crash types are the focus of the analysis.

				
<h3>Safe Road Users</h3>	<h3>Safe Vehicles</h3>	<h3>Safe Speeds</h3>	<h3>Safe Roads</h3>	<h3>Post-Crash Care</h3>
<p>The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.</p>	<p>Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.</p>	<p>Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.</p>	<p>Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.</p>	<p>When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.</p>

The figure below illustrates the fatal and serious injury crashes in South Jordan City from 2018 to 2022. The number of fatal and serious injury crashes in South Jordan City as a percentage of total crashes is 1.87 percent, which is just below the Salt Lake County average of 1.93 percent during the same time frame. Of these 98 severe crashes, 48 were on UDOT roadways, and 50 were on City roadways.

Figure 26: 2018 to 2022 Severe Crashes



A comparison of severe crash rates between South Jordan City and the other cities in Salt Lake County during the same time frame is below.

City	Severe Crash Rate
South Jordan	1.87%
Midvale	1.29%
Draper	1.34%
Murray	1.40%
Sandy	1.76%
Bluffdale	1.91%
Taylorsville	1.93%
Herriman	2.29%
West Jordan City	3.01%

Of the severe crashes, 16 of them involved a pedestrian or bicycle (26% of all city roadway severe crashes). Based on this review, the following recommendations are made:

- **11800 South & Trail Crossing Drive:** Two severe pedestrian crashes have occurred at this intersection since 2018. As a result, 'Yield to pedestrian' signage is recommended, as well as protected only left turn phasing.



- **Daybreak Parkway & Oquirrh Lake Road:** Two severe bike crashes have occurred at or near this roundabout since 2018. It is recommended South Jordan City continue to monitor this intersection.
- **3200 West: Field Haven Way to Blaze Meadows Road:** Remove the passing lane striping and replace with double yellow line striping.

No trends or patterns were observed within fatal and serious injury vehicle crashes. Many of the crashes were related to Bangerter Highway and Mountain View Corridor, which will be or are already grade separated. It is recommended South Jordan City continue to monitor crashes to find any discernible patterns.

C. Access Management

TRB defines access management as “the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway” (TRB Access Management Manual, 2nd Edition, 2014).

Because the primary function of arterials is providing mobility and not access, access management techniques generally focus on reducing the number of conflict points on arterial roads in order to maintain a high level of capacity without adding additional through lanes. Reducing conflict points can be accomplished by limiting access points, restricting left-turn movements at access points, providing turn lanes, and locating appropriately-spaced traffic signals.

Access management can also be used on collector roads, although these measures are less restrictive because a collector’s purpose is to provide mobility and access. Collector roads generally have lower volumes and speeds thereby reducing the need for stringent access management as is the case with arterials.

Access management techniques are generally not employed on local roads because their purpose is to provide full access to all adjacent parcels of land. Local roads have low volume and speed and are therefore not negatively affected by the increased quantity of conflict points.

Access management has been documented to include the following safety and operational benefits:

- Lower crash rates
- Less severe crash severity
- Increased traffic signal efficiency
- Decreased delay
- Increased capacity

Positive economic benefits can also result from proper access management, which may improve travel times and congestion. This makes locations more desirable to patrons (Federal Highway Administration, [Safe Access is Good for Business](#), 2006).

Especially applicable to transportation master planning is the fact that improving access management along an arterial corridor can increase the capacity of the roadway. This can result in less need for additional through lanes and thereby significantly reducing the cost of roadway infrastructure.

In South Jordan, most of the arterial roadways are owned by UDOT and therefore access to them is controlled by UDOT’s access management requirements. UDOT has established state highway access management requirements as part of Administrative Rule R930-6. All Utah state roadways are assigned an access category between 1 and 10. Each access category has varying spacing requirements, with lower access category numbers having stricter spacing.

Most collector roadways and some arterials are controlled by South Jordan. Therefore, it is up to City staff to ensure that access is managed along these roadways. This may include making changes to the current roadways to address existing problems as well as requiring good access management as new roads and/or developments are planned.

Establishing corridor agreements and access management standards ahead of new development can help ensure well-planned corridors that will be safer and have higher capacity than roadways without access management. Corridor agreements can also assist developers in knowing ahead of time where and what type of access will be permitted.

Some recommended access management techniques are as follows:

- Provide raised medians to restrict left-turn movements
- Provide Two-Way Left-Turn Lanes on arterial and collector roads
- Provide right-of-way for left-turn pockets at intersections with minor collectors
- Limit signalized intersection, unsignalized intersection, access, and driveway spacing based on roadway type
- Encourage shared access driveways for parcels adjacent to arterials

As applications for access are submitted to South Jordan City, the City Engineer will review the applications based on best practices discussed here and City Code.

D. Connectivity

A roadway system with excellent connectivity allows people multiple options when traveling between points within a city. Strong collector and arterial road connectivity distributes traffic between corridors, and a well-connected local street network allows short-trips to be completed on local roadways rather than relying on regional collectors and arterials. A connected road network improves access and reduces travel times for all users and can reduce the need for future roadway widening. Good network connectivity also improves emergency access and response times, and allows multiple exit routes in the event of emergencies.

South Jordan City has very good connectivity in the north-south direction with frequent collector or arterial north-south roadways. However, there is a lack of east-west connections, especially between South Jordan Parkway and 11400 South. This may be due to the many canals that run north-south in the City.

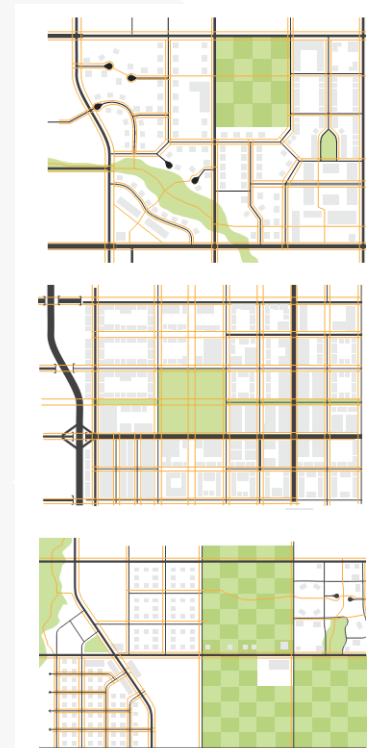
It is recommended that east-west connectivity be improved in the City as development continues. Along with this, it is recommended that the use of cul-de-sacs be minimized where possible and that infill projects connect to all possible stub roads. Disconnected streets, which oftentimes include cul-de-sacs and dead ends, are a major factor in increasing auto dependency and traffic on collectors and arterials. Figure 27 below shows a map of all cul-de-sacs and dead ends in South Jordan City.

South Jordan City does not allow accesses and connections to be gated. This is done to promote connectivity and to reduce vehicle traffic volumes on collector and arterial roadways. Figure 28 shows possible roadway connectivity improvements that can be used to guide the City on what connections may be most beneficial to make in the future. Additionally, not all connections are for vehicles, and in many locations providing active transportation connections only may be sufficient.

It is recommended that the City develop and adopt a connectivity standard to guide future connections and developments. Lehi City recently adopted a [connectivity standard](#) that has been a case study in implementing elements from the [Utah Street Connectivity Guide](#), sponsored by the Wasatch Front Regional Council, and is a good example of what a connectivity standard may contain. It is recommended the City review Lehi's connectivity standard and the Utah Street Connectivity Guide and discuss what may be appropriate for South Jordan City.

A good connectivity standard may require the following:

- A circulation plan to be provided as part of a preliminary subdivision plat application
- A connectivity index calculation that benefits developments that provide trail connections or access to green space such as open space, parks, or natural areas
- A residential connectivity standard that requires a connectivity index, block length, and cul-de-sac length based on development density
- Pedestrian connectivity standards for residential and non-residential developments that focus on providing access to existing and planned trails
- Nonresidential connectivity standards that require nonresidential subdivisions containing the dedication of public roads to meet a connectivity index and block length standard



Utah Street Connectivity Guide

E. Truck Routes

In order to minimize the impact of trucks on most city streets, truck routes have been designated for existing and future roadways. These truck routes are primarily located on arterial roadways, including all state-maintained arterials located in South Jordan City. The South Jordan City Code outlines several public streets that are designated as truck routes. This can be found in Section 10.24.020 of the City Code. Figure 29 shows designated truck routes within South Jordan City.

Figure 27: Immediate Dead End Streets

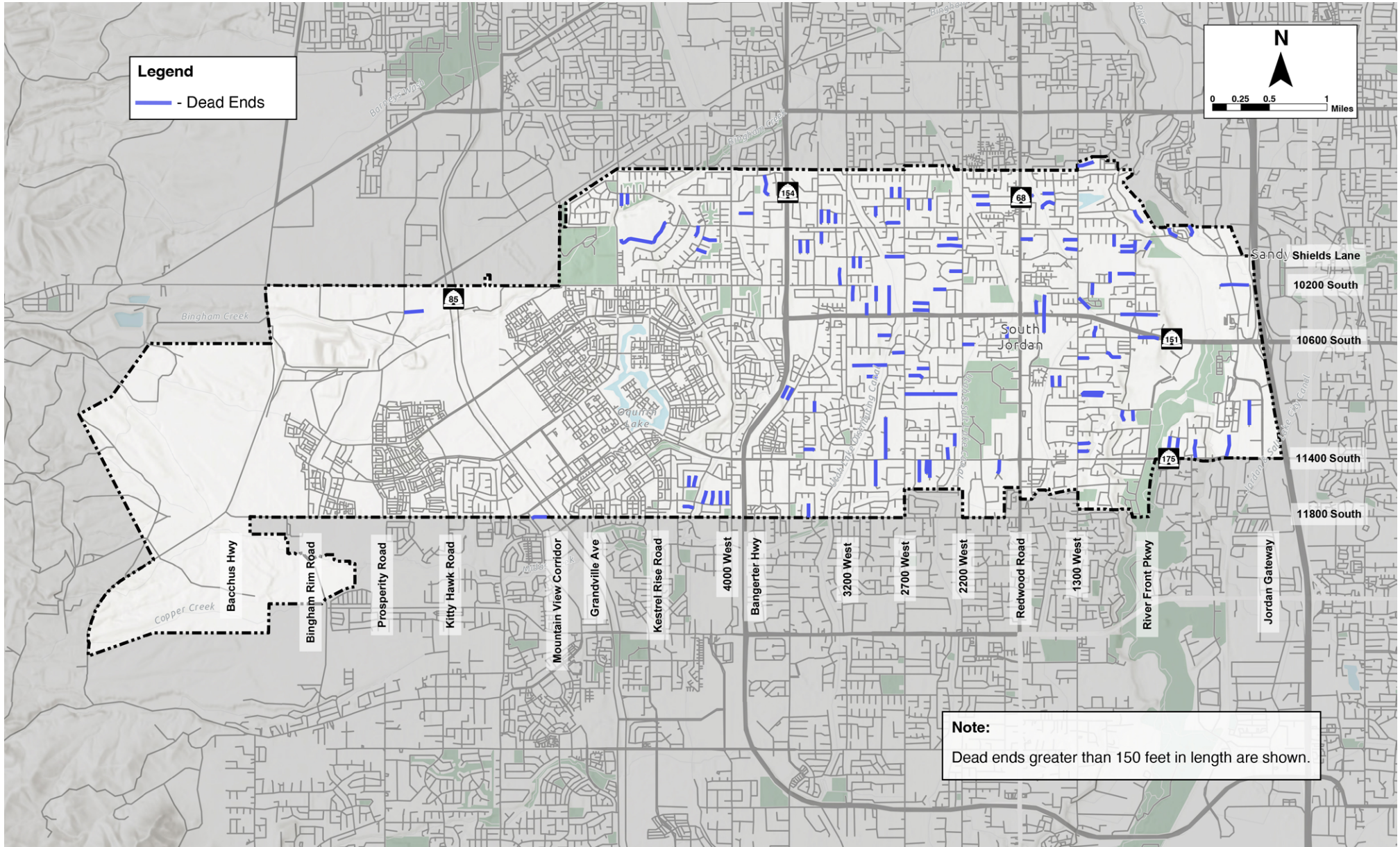


Figure 28: Connectivity Improvement Opportunities

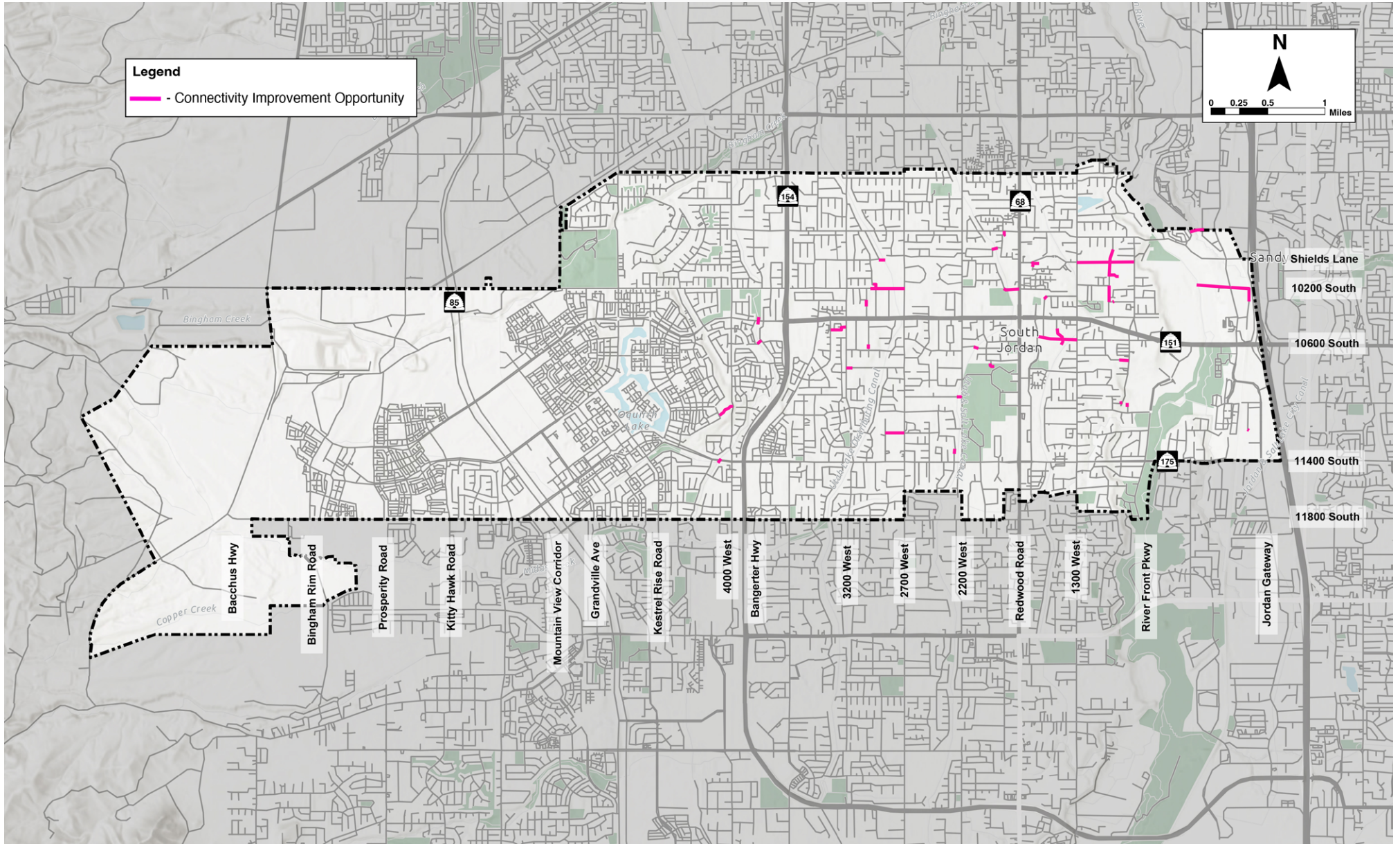
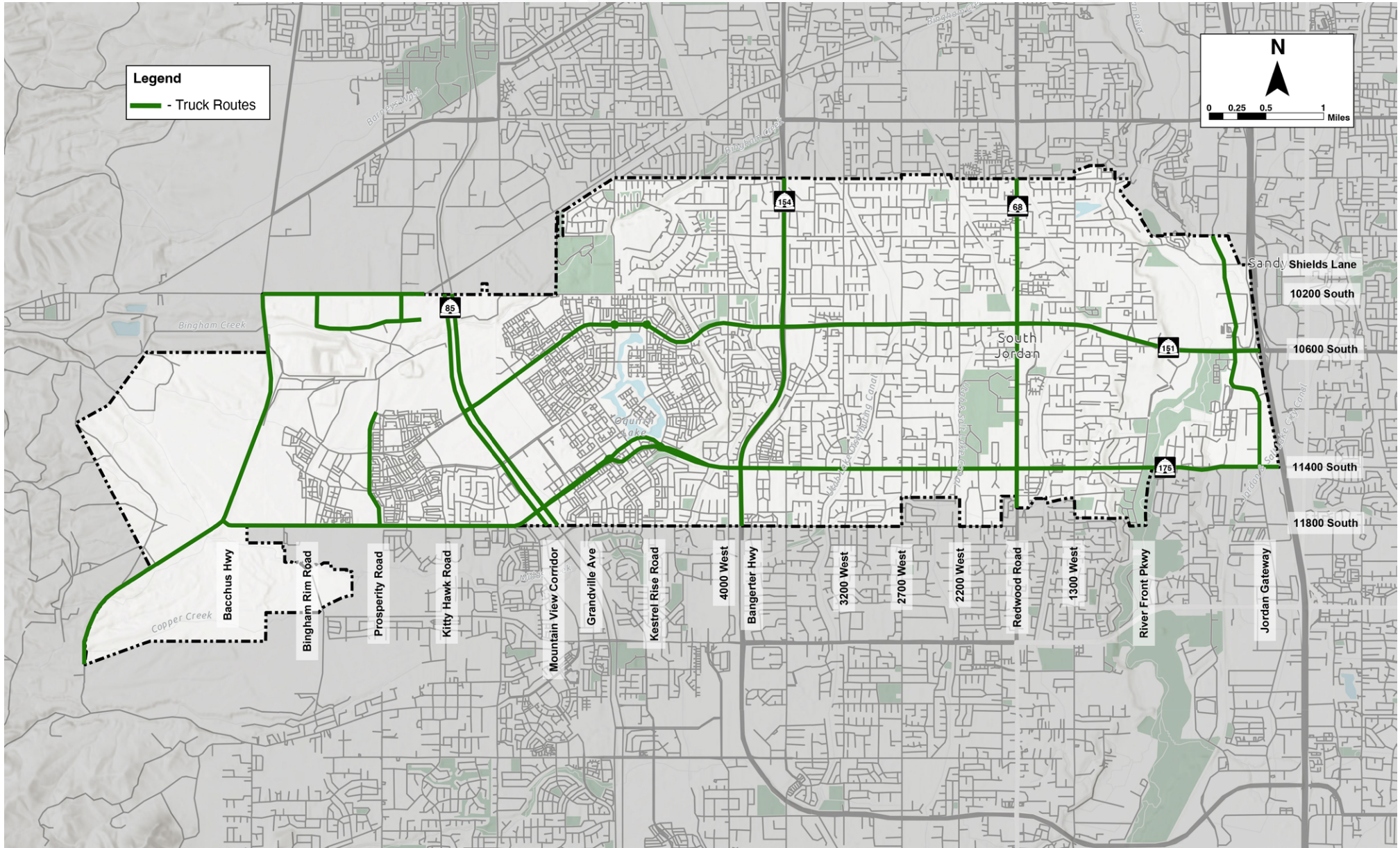


Figure 29: Truck Routes



F. Traffic Impact Studies

As the City continues to grow and develop, traffic-related impacts will need to be addressed. This can be accomplished by requiring future developments to complete a Traffic Impact Study (TIS). The TIS is an important document that can tell City staff how a development will impact the traffic in the project area. The scope of a TIS is dependent on the size and land use of the development, which determines the number of trips that will be generated by the project. The size and scope of a TIS should be determined by the City Engineer on a case by case basis.

The TIS should address items such as poor levels of service, access spacing, internal circulation, adjacent roadway impacts, and mitigation measures. A TIS should identify the improvements that could be made by the City for existing traffic issues and by the developers due to poor levels of service with project traffic added. Developments that access UDOT roadways need to follow the UDOT TIS Guidelines. It is recommended that the City adopt TIS guidelines for all future developments.

G. Livable Streets

South Jordan City has developed guidelines for residential street level-of-service thresholds aimed at preserving quality of life for local residents. The South Jordan [Construction Standards and Specifications](#) document presents these thresholds and notes: “Although each lane of a residential street could carry from 1,000 to 1,600 vehicles per hour, the quality of life along residential streets is impacted at far lower traffic levels”(February 2022).

Table 10 presents the residential street LOS thresholds and descriptions included in the Construction Standards and Specifications document.

LOS	Daily Traffic	Description
A	< 300	It is very easy to walk across the street, ride bicycles and enter or exit residential driveways. Typical motor vehicle speeds are 25 MPH or less.
B	300 to 600	It is easy to walk across the street, ride bicycles and enter or exit residential driveways. Often residents are concerned about vehicle speeds that have increased to 25-30 MPH.
C	600 to 1,200	It is relatively easy to walk across the street, ride bicycles and enter or exit residential driveways. Residents are concerned about vehicle speeds that have increased to over 30 MPH. Residents are also uncomfortable with vehicle volumes that have risen to 1,200 vehicles per day with 120 vehicles during the peak travel hour.
D	1,200 to 1,800	Increased caution is necessary when walking across the street, riding bicycles and entering or exiting residential driveways. Residents are very concerned about vehicle speeds that have increased to up to 35 MPH. Residents perceive that commuters are shortcutting on their street due to vehicle volumes up to 1,800 vehicles per day with 180 vehicles during the peak travel hour.
E	1,800 to 2,400	Due to elevated vehicle speeds and volumes, a high level of caution is necessary when walking across the street, riding bicycles and entering or exiting residential driveways. Vehicle speeds have increased to 35 MPH or more. There is significant commuter shortcutting with up to 2,400 vehicles per day and 240 vehicles during the peak travel hour. It is increasingly difficult to exit driveways during the peak traffic hour with one car passing down the street every 15 seconds.
F	> 2,400	Due to elevated vehicle speeds and volumes, a high level of caution is necessary when walking across the street, riding bicycles and entering or exiting residential driveways. Vehicle speeds have increased to 35 MPH or more. There is significant commuter shortcutting with over 2,400 vehicles per day and 240 vehicles during the peak travel hour. Exiting and entering driveways is difficult and requires approaching vehicles to stop for driveway traffic.

As with residential streets, it is also important to maintain lower traffic volumes on Lanes (or dead-end alleyways) which provide access and accommodate service vehicles including garbage pickup and deliveries. Following discussion with City staff review of peer agency standards, a target threshold of 500 vehicles per day or less is recommended for Lane roadways in South Jordan City.

H. Traffic Calming

Building on the ideas presented in the Livable Streets standards, traffic calming may be essential to maintain an appropriate level of service. Traffic calming is the means by which the physical and social impacts of motor vehicles on urban life are reduced. This can include the reduction of vehicle traffic and/or vehicle speed. This may be especially important in areas of the City where a high pedestrian presence is desired, such as in residential neighborhoods, in the vicinity of schools, and in village centers. While the goal of arterial-type streets is increasing capacity, it is normally desired that residential and village center streets maintain a “livable” environment. The term “livable” will likely have a different meaning for everyone, but it can generally be interpreted as being a safer road for pedestrians and bikers where vehicle volumes and speeds are lower.

One common form of traffic calming is neighborhood traffic management (NTM). NTM includes physical devices, streetscape treatments, and other non-physical treatments that will influence vehicle operation including the reduction of speed which often translates into a reduction of cut-through traffic. NTM implies changes being made at the neighborhood level, and not necessarily at a broader (corridor or City) level. The TSM and TDM measures discussed in previous sections are examples of traffic calming at these broader levels.

NTM measures can be separated into physical and non-physical (or psychological) treatments. Physical treatments include vertical and horizontal devices that require a driver to slow their travel in order to maintain a comfortable drive. The following are examples of these physical NTM measures:

- Raised pedestrian crossings
- Chicanes
- Mid-block islands
- Roundabouts and traffic circles
- Intersection bulb-outs or chokers
- Lateral lane shifts
- On-street parking

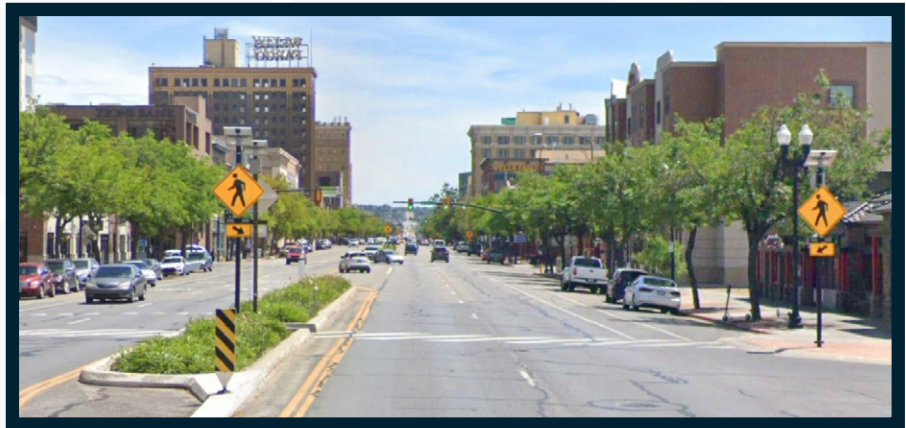
There are other physical treatments that are not allowed in South Jordan City, such as speed humps. Speed humps are not allowed because they damage snow plow equipment, increase delay for emergency responders, and increase noise and pollution. Also, there has been a history of damaged vehicle claims in the City due to speed humps.

Non-physical treatments include measures that encourage a driver to slow down that do not involve physical changes to the roadway. These types of measures do not physically require a vehicle to slow down, but many drivers do slow down because of the psychological effect of these measures. The following are examples of non-physical NTM measures:

- Increased speed enforcement
- Driver feedback signs
- Narrow lane striping
- Signs dictating speed limit or various restrictions
- Speed legends on pavement



As South Jordan City continues to increase the connectivity of streets in order to reduce the use of higher-order streets (such as arterials) for shorter trips, the need for NTM will be important to ensure that the livability of residential streets is not adversely affected. As such, city staff should continue to work with residents and implement NTM as needed when the perceived livability of residential streets is adversely impacted by new growth, street connections, and travel patterns.



V. UTAH STATE CODE REQUIREMENTS

The [10-9a-403](#) section of the Utah State Code outlines the requirements of the general plan for the transportation and traffic circulation element.

10-9a-403(2)(a):

(ii) a transportation and traffic circulation element that:

(A) provides the general location and extent of existing and proposed freeways, arterial and collector streets, public transit, active transportation facilities, and other modes of transportation that the planning commission considers appropriate;

(B) for a municipality that has access to a major transit investment corridor, addresses the municipality's plan for residential and commercial development around major transit investment corridors to maintain and improve the connections between housing, employment, education, recreation, and commerce;

(C) for a municipality that does not have access to a major transit investment corridor, addresses the municipality's plan for residential and commercial development in areas that will maintain and improve the connections between housing, transportation, employment, education, recreation, and commerce; and

(D) correlates with the population projections, the employment projections, and the proposed land use element of the general plan;

10-9a-403(2):

(e) In drafting the transportation and traffic circulation element, the planning commission shall:

(i)

(A) consider and coordinate with the regional transportation plan developed by the municipality's region's metropolitan planning organization, if the municipality is within the boundaries of a metropolitan planning organization; or

(B) consider and coordinate with the long-range transportation plan developed by the Department of Transportation, if the municipality is not within the boundaries of a metropolitan planning organization; and

(ii) consider and coordinate with any station area plans adopted by the municipality if required under Section 10-9a-403.1.

This TMP meets all requirements listed above. The City is working with WFRC to get consultants onboard to complete station area planning for the west side TRAX stations and for the eastside FrontRunner station. The TRAX station SAP will be completed by the end of 2024 and the FrontRunner station completed in 2025 at the latest.

The 4800 West Old Bingham Highway Red Line Trax Station has met the SAP requirements by adopting a resolution that summarized prior actions and the impracticability for developing a new station area plan for the station (This resolution is provided in Appendix A.)

VI. CAPITAL FACILITIES PLAN

As shown in Section II - Transportation Network Analysis, future growth due to new development requires South Jordan to make improvements to their transportation network to provide residents with a safe and efficient transportation network and maintain an acceptable Level of Service. Specific intersection and roadway improvements are listed below in Table 11 and 12 and are shown below in Figure 30. The project number listed in the table is for identification only and is no indication of project prioritization. Each project cost estimate represents 2024 cost and is not adjusted for inflation; therefore, estimates will need to be regularly updated by the City as project scopes may change as development occurs. Right-of-way is included in the project cost estimates on developer owned property. The values represent the cost to build the cross sections to the widths described in the South Jordan roadway cross section standards. Only roadway improvements to arterials and collectors are identified, as local roads are typically built by future development. Details for each project cost estimate can be found in the Appendix B.

TABLE 11: CFP INTERSECTION PROJECTS

Project Number	Description	Responsibility	Improvement Scope	Estimated Cost
PHASE #1 (2023-2032)				
1-A	Shields Lane & 1300 W*	SJC	Intersection Improvement	\$666,925
1-B	SR-111 & South Jordan Parkway	UDOT	Install Signal	\$450,000
1-C	SR-111 & Lake Avenue	UDOT	Install Signal	\$450,000
1-D	SR-111 & Meadowgrass Drive	UDOT	Install Signal	\$450,000
1-E	SR-111 & 11800 S	UDOT	Install Signal	\$450,000
1-F	SR-111 & 12150 S	UDOT	Install Signal	\$450,000
1-G	SR-111 & Annex Area E/W	UDOT	Install Signal	\$450,000
1-H	SR-111 & Herriman Parkway	UDOT	Install Signal	\$450,000
1-I	11800 S & Bingham Rim Road*	SJC	Install Signal	\$400,000
1-J	11800 S & Silver Pond Road*	SJC	Install Signal	\$400,000
1-K	11800 S & Prosperity Road*	SJC	Install Signal	\$400,000
1-L	11800 S & Willow Walk Drive*	SJC	Install Signal	\$400,000
1-M	10200 S & 6200 W*	SJC	Install Signal	\$400,000
1-N	10200 S & Grandville Avenue*	SJC	Install Signal	\$250,000
1-O	11400 S & Andover Road	UDOT	Install Signal	\$350,000
1-P	Bingham Rim Road & MVC SB	UDOT	Install Signal	\$325,000
1-Q	Bingham Rim Road & MVC NB	UDOT	Install Signal	\$325,000
1-R	Bingham Rim Road & Grandville Avenue*	SJC	Install Signal	\$325,000
1-S	Grandville Avenue & Burntside Avenue*	SJC	Install Signal	\$325,000
1-T	10400 S & 4000 W*	WFRC / SJC	Intersection Improvement	\$5,152,400
1-U	4000 W & S Skye Drive/10200 South*	SJC	Intersection Improvement	\$2,592,000
1-V	South Jordan Parkway & Vadania Drive*	SJC	Install Signal	\$400,000
1-W	11800 S & Flying Fish Drive	Herriman / SJC	Install Signal	\$400,000
1-X	South Jordan Parkway & Cardinal Park Rd*	SJC	Install Signal	\$425,000
1-Y	SR-111 & South Jordan Parkway*	SJC	Roadway Realignment	\$1,600,000
1-Z	Riverfront Parkway & 11400 S*	SJC	Intersection Improvement	\$150,000

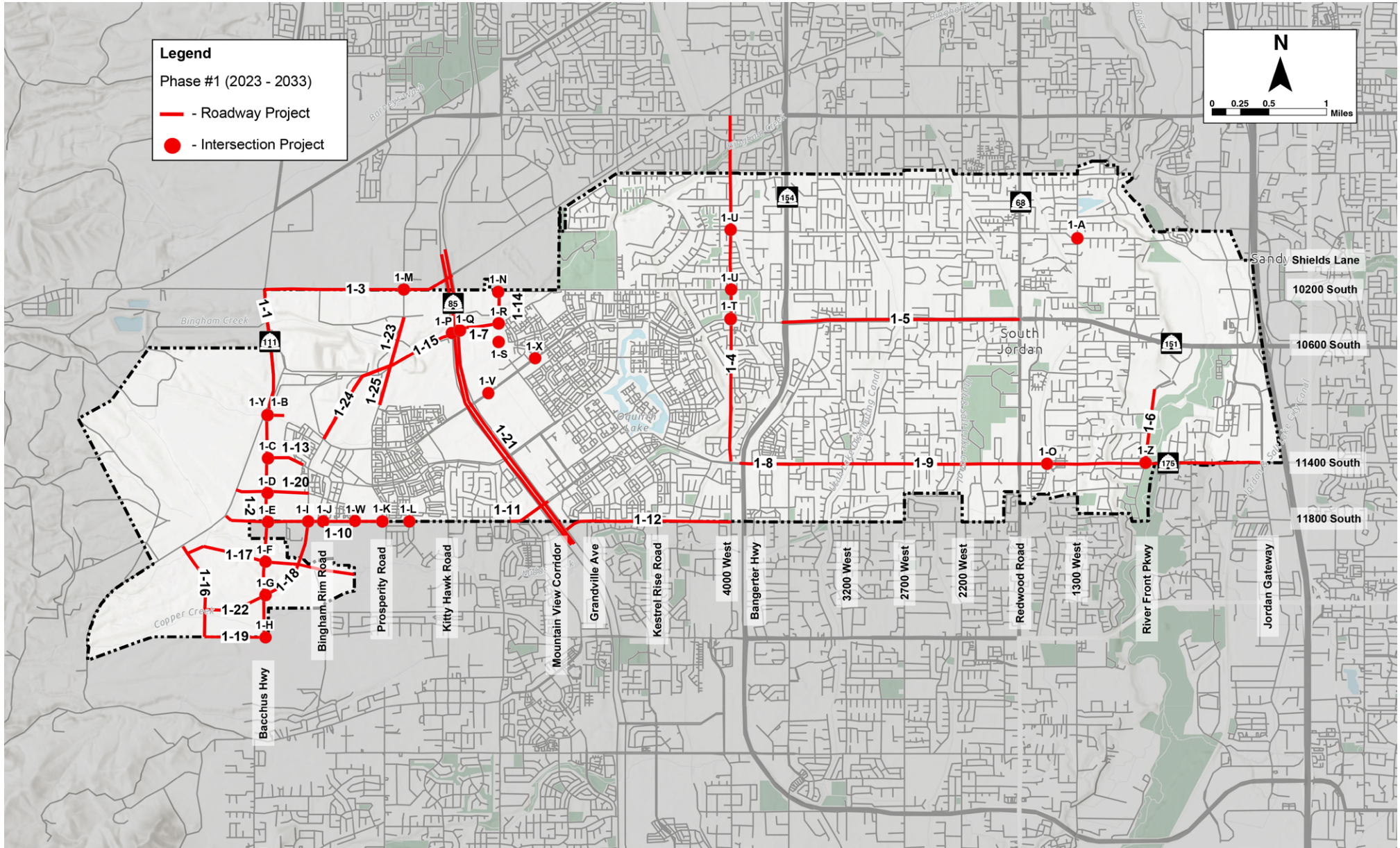
* Impact Fee Eligible Project

TABLE 12: CFP ROADWAY PROJECTS

Project Number	Description	Responsibility	Improvement Scope	# of Lanes		Estimated Cost
				2023	Proposed	
PHASE #1 (2023-2032)						
1-1	SR-111: 10200 South to South Jordan Parkway	UDOT	Widening	2	5	\$17,100,000
1-2	SR-111: South Jordan Parkway to Herriman Parkway	UDOT	New Roadway	-	2	\$75,747,808
1-3	10200 South: Bacchus Highway to MVC*	SJC / WJC / WFRC	Widening	2	5	\$17,560,000
1-4	4000 West: 9000 South to 11400 South*	SJC / WFRC	Restriping	3	5	\$178,620
1-5	South Jordan Parkway: Bangerter Highway to Redwood Road	UDOT	Widening	5	7	\$53,000,000
1-6	Riverfront Parkway: 11050 South to 11400 South*	SJC / WFRC	Widening	2	5	\$5,500,000
1-7	Bingham Rim Road: MVC to Stavenger Drive*	UDOT	New Roadway	-	2	\$3,200,000
1-8	11400 South: Bangerter Highway to 3600 West	UDOT	Widening	5	7	\$3,800,000
1-9	11400 South: 3600 West to South Jordan Gateway	UDOT	Widening	5	6 / 7	\$82,606,008
1-10	11800 South: Bacchus Highway to Prosperity Road*	SJC / Herriman / WFRC	Widening	2	5	\$32,225,797
1-11	Daybreak Parkway: Trail Crossing Drive to MVC*	SJC	Widening	5	7	\$5,988,759
1-12	11800 South: MVC to 4000 West*	SJC / Herriman / Riverton	Widening	3	5	\$13,891,543
1-13	Lake Avenue: SR-111 to Lake Avenue*	SJC	New Roadway	-	2	\$2,214,051
1-14	Grandville Avenue: 10200 South to Bingham Rim Road*	UDOT	New Roadway	-	2	\$3,349,045
1-15	Bingham Rim Road: Prosperity Road to MVC*	SJC	New Roadway	-	3	\$4,236,618
1-16	7800 West: Bacchus Highway to Herriman Parkway*	SJC / WFRC	New Roadway	-	3	\$10,285,000
1-17	12150 South: 7800 West to South Jordan Border*	Developer / SJC / WFRC	New Roadway	-	3	\$71,895,000
1-18	Bingham Rim Road: SR-111 to 11800 S*	SJC / Herriman	New Roadway	-	2	\$5,503,679
1-19	Herriman Parkway (12600 S): 7800 W to SR-111*	SJC / WFRC	New Roadway	-	3	\$16,260,000
1-20	Meadowgrass Drive: Bacchus Highway to Bingham Rim Road*	SJC	New Roadway	-	2	\$4,168,269
1-21	Mountain View Corridor	UDOT	New Roadway	-	4	\$125,920,000
1-22	Bingham Rim Road: 7800 W to SR-111*	SJC / Developer	New Roadway	-	3	\$4,099,953
1-23	Prosperity Road: Crimson View Drive to 11000 South	SJC / WFRC	New Roadway	-	3	\$14,780,000
1-24	Bingham Rim Road: South Jordan Parkway to Prosperity Road	SJC	New Roadway	-	2 / 3	\$12,022,093
1-25	Prosperity Road: Bingham Rim Road to Copper Hawk Drive	Daybreak	New Roadway	-	2	\$3,500,000

* Impact Fee Eligible Project

Figure 30: Future Projects – Capital Facilities Plan



VII. CONCLUSION

Overview

The purpose of the South Jordan TMP is to plan the future transportation needs of South Jordan City. The following tasks were completed as part of this TMP:

- Traffic data was analyzed to help establish existing conditions in the City.
- Future traffic volumes were developed for future planning years 2033 and 2050.
- A travel demand analysis based on existing and future land use was performed.
- A list of needed future roadway and intersection projects was created.
- City street functional classifications were updated based on the future roadway projects.
- The comprehensive active transportation plan was updated with recommendations for project phasing.
- The previous transit plans were reviewed, and we worked closely with the City to develop a preferred transit plan.
- A safety analysis was performed.
- Connectivity improvement opportunities were identified.
- Traffic calming, access management, TIS, and Livable Streets standards are described.
- Truck routes were identified and mapped.
- Utah State Code Requirements for the transportation and traffic circulation element were met.
- The Impact Fee was calculated.
- The City Council implemented the new TMP and Impact Fee.
- An ArcGIS Online Story Map was created that summarized the analysis performed in this TMP.

Next Steps

As a result of this TMP, there are several opportunities for South Jordan City staff to apply the recommendations of this TMP in the coming months and years. It is recommended that South Jordan City complete the following when possible:

- Continue to monitor and collect traffic data to inform transportation planning decisions
- Work to get funding for projects that are not currently funded.
- Work with UTA to implement the preferred transit plan.
- Acquire funding for the phase #1 active transportation projects.
- Monitor crash trends to find discernible patterns.
- Implement the following safety improvements:
 - **11800 South & Trail Crossing Drive:** Two severe pedestrian crashes have occurred at this intersection since 2018. As a result, 'Yield to pedestrian' signage is recommended, as well as protected only left turn phasing.
 - **Daybreak Parkway & Oquirrh Lake Road:** Two severe bike crashes have occurred at or near this roundabout since 2018. It is recommended South Jordan City continue to monitor this intersection.
 - **3200 West: Field Haven Way to Blaze Meadows Road:** Remove the passing lane striping and replace with double yellow line striping
- Develop and adopt a connectivity standard to guide future connections and developments using the resources provided in the 'Connectivity' section of this TMP.
- Improve east-west connectivity as development continues by making key connections as shown in Figure 28 when appropriate.
- Follow the best practices as outlined in section III. City Transportation Management



VIII. APPENDIX

Appendix A – 4800 W. Old Bingham Hwy Trax Red
Line Station SAP

Appendix B – Cost Estimates



VII. APPENDIX

Appendix A – 4800 W. Old Bingham Hwy Trax Red Line Station SAP

RESOLUTION R2023-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH, REGARDING THE STATION AREA PLAN REQUIREMENTS FOR THE UTA TRAX 4800 W OLD BINGHAM HWY STATION.

WHEREAS, Utah Code Section 10-9a-403.1, requires the South Jordan City Council (the “City Council”) to review and approve a Station Area Plan (“SAP”) as an element of the City of South Jordan’s (the “City”) General Plan for any area of the City that is located within one-half mile of an existing or future fixed-guideway public transit station; and

WHEREAS, the SAP requirement of Utah Code Section 10-9a-403.1 is considered satisfied if the City Council adopts a resolution describing any existing conditions that make satisfying a portion or all of the SAP objectives impracticable, prior actions the City took that substantially promote the SAP objectives if those actions remain relevant and meaningful for achieving the SAP objectives, or a combination of impracticable conditions and the City’s prior actions; and

WHEREAS, City Staff identified the station area in the City for the Utah Transit Authority TRAX 4800 W Old Bingham Hwy Station as satisfying the SAP requirements because of impracticable conditions and the City’s prior actions in the station area, as fully described in the attached Exhibit 1.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH:

SECTION 1. Adoption. The City Council hereby approves this Resolution describing in Exhibit 1, for the TRAX 4800 West Old Bingham Highway Station, the conditions that exist to make satisfying a portion or all the SAP requirements impracticable, and prior actions the City took that substantially promote certain SAP objectives and remain relevant and meaningful for achieving the SAP objectives, and forwards it to the Wasatch Front Regional Council for its review and certification.

SECTION 2. Severability. If any section, clause or portion of this Resolution is declared invalid by a court of competent jurisdiction, the remainder shall not be affected thereby and shall remain in full force and effect.

SECTION 3. Effective Date. This Resolution shall become effective immediately upon passage.

[SIGNATURE PAGE FOLLOWS]

APPROVED BY THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH,
 ON THIS 2 DAY OF May, 2023 BY THE FOLLOWING VOTE:

	YES	NO	ABSTAIN	ABSENT
Patrick Harris	<u>X</u>	___	___	___
Bradley Marlor	<u>X</u>	___	___	___
Donald Shelton	<u>X</u>	___	___	___
Tamara Zander	<u>X</u>	___	___	___
Jason McGuire	<u>X</u>	___	___	___

Mayor: *Dawn R. Ramsey*
 Dawn R. Ramsey

Attest: *Anna Crookston*
 City Recorder

Approved as to form:

Ryan W. Loose
 Ryan W. Loose (Apr 28, 2023 07:03 MDT)
 Office of the City Attorney



EXHIBIT 1

(Station Area Plan Impracticability and Prior Actions Review
UTA TRAX 4800 W Old Bingham Hwy)

Station Area Plan Impracticability and Prior Action Review
UTA TRAX 4800 W OLD BINGHAM HWY STATION
April 2023

The purpose of this review is to demonstrate that the Station Area Plan (“SAP”) requirement is satisfied based on impracticability and prior action for the area of the City of South Jordan (“City”) that is located within one-half mile of the Utah Transit Authority TRAX 4800 W Old Bingham Hwy Station (“Station” and “Station Area”), which is located in the City of West Jordan (“West Jordan”).

Station Area Plan Requirement Summary

SAPs are comprehensive documents drafted to promote the following objectives within a one-half mile radius of public transit stations (rail or bus rapid transit): “(i) increasing the availability and affordability of housing, including moderate income housing; (ii) promoting sustainable environmental conditions; (iii) enhancing access to opportunities; and (iv) increasing transportation choices and connections.”¹ With the passage of Utah House Bill 462 (Housing Affordability Amendments) in 2022, cities that have land within a ½ mile radius of a fixed-guideway public transit station are now required to develop and update SAPs in accordance with their general plan and zoning.

The SAP requirements are satisfied if a city determines that conditions exist that make satisfying a portion or all of the SAP requirements impracticable. These conditions include “existing development, entitlements, land ownership, land uses that make opportunities for new development and long-term redevelopment infeasible, environmental limitations, market readiness, development impediment conditions, or other similar conditions. . . .”²

The SAP requirements are also satisfied if a city has taken actions prior to June 1, 2022, that substantially promote the SAP objectives and the city “can demonstrate that [those actions] are still relevant to making meaningful progress towards achieving those objectives. . . .”³

Station Area Existing Conditions

The Station is located in the City of West Jordan (“West Jordan”) east of 4800 West parallel to Old Bingham Highway, and has vehicle access from Old Bingham Highway. The Station Area includes property primarily located within West Jordan, with less than 40% of the overall station area located in the City. City staff has been in contact with West Jordan and is available to assist West Jordan with its SAP planning efforts related to the station area that is in West Jordan.

The Station Area is built out with single-family neighborhoods, part of a residential condominium community, a small portion of Glenmoor Golf Club, Bingham Creek Trail and

¹ Utah State Code § 10-9a-403.1(7)(a).

² Utah State Code § 10-9a-403.1(2)(b)(ii)(A).

³ Utah State Code § 10-9a-403.1(2)(b)(i)(A).

a 4.5-acre City park. The City, in partnership with Salt Lake County, is also overseeing the construction of the new 160-acre Bingham Creek Regional Park that is located just south of the Station Area. The South Jordan City Council (“City Council”) rezoned this park property in 2021 to facilitate the development of the park. When completed, the Bingham Creek Regional Park will connect to the Bingham Creek Trail, which runs diagonally across the southern portion of the Station Area and provides active transportation access in the area.



4800 West is a minor collector and is the main road through the Station Area. The City built the existing 4800 West several years after the Station opened in 2011, by connecting

and improving two dead-end sections of 4800 West. This major road project connected Old Bingham Highway and the Station to 10200 South and the quickly developing area beyond. It also included an underpass in anticipation that the Bingham Creek Trail would continue west of 4800 West. Today it is a fully improved road with existing sidewalks and bike lanes⁴ on both sides of the road. Multiple roads connect the neighborhoods in the Station Area to 4800 West, which intersects in West Jordan with Old Bingham Highway and the Station, and then continues north through West Jordan.

Impracticability and Prior Action Analysis

The SAP requirements for the Station Area are satisfied through a combination of prior actions and existing conditions that make satisfying certain requirements impracticable. These conditions and related information are listed below according to each SAP objective outlined in Utah State Code.

Increasing the availability and affordability of housing, including moderate income housing (Utah State Code § 10-9a-403.1(7)(a)(i)):

- **IMPRACTICABILITY:** Before the Station opened in 2011, the Station Area was built out with single-family subdivisions and a portion of a residential condominium community. These neighborhoods existed a decade or more before the Station opened. In general, unless there is widespread blight, single-family neighborhoods are highly unlikely to redevelop on a broad scale. The City expects these residential neighborhoods to remain for many decades and that individual homeowners will continue to maintain their homes and invest in improvements to the existing homes. It is therefore unlikely there will be opportunities for new development and long-term redevelopment is infeasible.
- **PRIOR ACTION:** In 2012, the City Council passed an ordinance permitting internal accessory dwelling units (“ADUs”) throughout most of the City’s single-family zones.⁵ The City Council has updated this ordinance several times, including in 2020⁶ and 2021⁷ in direct response to new state legislative mandates regarding ADUs. Homes in the single-family neighborhoods in the Station Area are located in a zone that has allowed internal ADUs since 2012. The City expects that homeowners will continue to maintain existing ADUs and build new ADUs throughout the Station Area. As outlined in the City’s Moderate Income Housing Plan (“MIH Plan”), the City is continuing to assess and improve its existing ADU regulations. Any changes to the City’s ADU regulations will have a continuing effect on the housing conditions in the Station Area.

⁴ The bike lanes end at the City’s border with West Jordan.

⁵ See Ord. 2010-09.

⁶ See Ord. 2020-10.

⁷ See Ord. 2021.16.

- **PRIOR ACTION:** The City has a down payment assistance program, and it has provided funding to community partners that support home repairs and rental assistance for low- and moderate-income households. These programs are part of the MIH Plan and are available for residents to use on homes, both single-family and condominium, in the Station Area.

Promoting sustainable environmental conditions (Utah State Code § 10-9a-403.1(7)(a)(ii)):

- **PRIOR ACTION:** The City has worked hard to create and preserve the existing open space in the Station Area because the variety of existing open spaces provide necessary opportunities for active transportation, recreation, and connection to nature and other area amenities.
- **IMPRACTICABILITY:** Development of the Bingham Creek corridor in the Station Area as something other than a trail and open space is impracticable, undesirable and not wise because the natural creek corridor serves as a regional storm drain facility. Not only is the creek a crucial facility for storm water management in the area, removing the creek would have broader negative environmental impacts in the Station Area.
- **PRIOR ACTION:** In 2021, the City Council updated its existing water efficiency standards to better promote conserving water resources by encouraging and requiring more water efficiency inside and outside homes, businesses and other buildings.⁸ The City also encourages efficient water use by providing water conserving rebate programs and by posting related information on the City's website.⁹ The water-saving rebates are available to households in the Station Area, and the Station Area is subject to the water efficiency standards.

Enhancing access to opportunities (Utah State Code § 10-9a-403.1(7)(a)(iii)):

- **PRIOR ACTION:** Because large-scale redevelopment is both impracticable and unlikely in the Station Area, the City makes efforts to inform residents of programs available to them that enhance their access to opportunities. For example, each year the City sends a postcard that outlines housing related services and programs to each household in roughly the eastern half of the Station Area, which qualifies as a low- and moderate-income area according to the U.S. Department of Housing and Urban Development's definitions.
- **PRIOR ACTION:** Although not in the Station Area, the City's investment in the Bingham Creek Regional Park, and its connection to 4800 West and the Bingham Creek Trail, which are in the Station Area, improves access to a variety of recreation opportunities in and out of the Station Area. These connections also provide

⁸ See Ord. 2021-09.

⁹ See sjc.utah.gov/531/Water-Smart-SoJo.

convenient and safe access to the existing and future employment opportunities, educational opportunities, and mixed-use developments located south and southwest of the Bingham Creek Regional Park in the Daybreak Community.

- **PRIOR ACTION:** On October 5, 2021, the City Council approved a license agreement with Google Fiber allowing it to use City rights-of-way to install fiber broadband throughout the City.¹⁰ Construction of Google Fiber is underway and is already expanding access to broadband in the Station Area.¹¹

Increasing transportation choices and connections (Utah State Code § 10-9a-403.1(7)(a)(ii)):

- **PRIOR ACTION:** 4800 West is a fully improved road with sidewalks and bike lanes that provides convenient bike, pedestrian and vehicle access to the Station. Five residential streets intersect with 4800 West in the Station Area and connect the nearby neighborhoods to the Station. Because of the design of these built-out neighborhoods, there are no practical opportunities for providing new road connections to 4800 West and the Station.
- **PRIOR ACTION:** The City Council adopted the City's Transportation Master Plan in 2019.¹² The Transportation Master Plan provides guidance for future investment in the City's transportation infrastructure, including in the Station Area, and aligns with the Wasatch Front Regional Council's Regional Transportation Plan. The Transportation Master Plan also includes a section on active transportation and efforts the City can take to improve active transportation in the Station Area.
- **PRIOR ACTION:** To compliment the City's Transportation Master Plan, the City has a more detailed Active Transportation Plan¹³ based on a study that the City conducted jointly with West Jordan. This plan took a detailed look at the City's bicycle and pedestrian facilities, and provides a groundwork for enhancing active transportation facilities and opportunities throughout the City, including in the Station Area. The Active Transportation Plan identified critical projects throughout the City that would improve active transportation opportunities. One project currently underway that the plan identified that will affect the Station Area, and connects to work already completed in the Station Area, is a paved multi-use trail that will extend Bingham

¹⁰ See R2021-29.

¹¹ See sjc.utah.gov/537/Google-Fiber for a map of construction Google Fiber's progress in the Station Area.

¹² Found at sjc.utah.gov/DocumentCenter/View/806/Appendix-B---South-Jordan-Transportation-Master-Plan-September-2019-PDF.

¹³ Found at [www.sjc.utah.gov/DocumentCenter/View/2969/Active-Transportation-Plan#:~:text=The%20Active%20Transportation%20\(AT\)%20Plan,trail%20and%20bike%20lane%20projects](http://www.sjc.utah.gov/DocumentCenter/View/2969/Active-Transportation-Plan#:~:text=The%20Active%20Transportation%20(AT)%20Plan,trail%20and%20bike%20lane%20projects).

Creek Trail from the west side of 4800 West, through the Bingham Creek Regional Park and to the City's western boundary.¹⁴

- The City's Master Transportation Plan and Active Transportation Plan are both important documents that help the City holistically manage and ensure reliable traffic conditions in the Station Area, and in the surrounding areas that have direct impact on the Station Area. Because the City is rapidly growing, the City regularly updates these plans to ensure alignment with regional plans.
- **PRIOR ACTION:** For years, the City has been systematically retrofitting existing sidewalks with ADA compliant ramps throughout the City, including in the Station Area. This continued investment provides improved transportation choices and connections throughout the Station Area. The City has already improved many intersections in the Station Area and has identified additional intersections that the City will improve with ADA compliant ramps as this effort continues.

¹⁴ This project is a collaboration between the City and the developers of Daybreak, and the County will fund its construction. Preliminary design work by Daybreak is ongoing and is currently in draft form.



VII. APPENDIX

Appendix B – Cost Estimates

ENGINEER'S ESTIMATE (2024 COSTS)
Shields Lane & 1300 W

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$32,000.00
Public Information Services	1	lump	1.00%	\$3,400.00
Traffic Control	1	lump	2.00%	\$6,800.00
Survey	1	lump	2.00%	\$6,800.00
				\$49,000.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	250	ft	\$ 12.00	\$3,000.00
Remove Concrete Sidewalk	267	sq yd	\$ 28.00	\$7,466.67
Roadway Excavation (Plan Quantity)	178	cu yd	\$ 24.00	\$4,266.67
Granular Borrow (Plan Quantity)	89	cu yd	\$ 35.00	\$3,111.11
Untreated Base Course	87	Ton	\$ 40.00	\$3,480.00
Remove Concrete Driveway	50	sq yd	\$ 28.00	\$1,400.00
HMA - 1/2 inch	87	Ton	\$ 130.00	\$11,310.00
Pavement Marking Paint	20	gal	\$ 80.00	\$1,600.00
Pavement Message (Preformed Thermoplastic)	4	Each	\$ 250.00	\$1,000.00
Concrete Curb and Gutter Type B1	250	ft	\$ 35.00	\$8,750.00
Perpendicular/Parallel Pedestrian Access Ramp	4	Each	\$ 4,000.00	\$16,000.00
Concrete Sidewalk	1,200	sq ft	\$ 9.00	\$10,800.00
Chip Seal Coat, Type II		sq yd	\$ 3.00	\$0.00
				\$72,184.44

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	200	ft	\$ 125.00	\$25,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
				\$39,000.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
New Signal System	1	Lump	\$175,000.00	\$175,000.00
				\$175,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility contingency	1	lump	\$40,000.00	\$40,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
Ovehead power line relocate		Each	\$20,000.00	\$0.00
				\$40,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$10,000.00	\$10,000.00
				\$10,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
				\$0.00
			BID ITEMS \$	\$385,184.44
			Contingency (30%) \$	\$115,555.33
			BID ITEMS TOTAL \$	\$500,739.78
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	2,400	sq ft	\$15.00	\$36,000.00
Assuming 5' wide construction easement required for length of project	1,000	sq ft	\$5.00	\$5,000.00
				\$41,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (15% of Bid Items)	1	lump	\$75,110.97	\$75,110.97
				\$75,110.97
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$50,073.98	\$50,073.98
				\$50,073.98
			BID ITEMS TOTAL	\$500,739.78
			NON-BID ITEMS TOTAL	\$166,184.94
			GRAND TOTAL	\$666,924.72

ENGINEER'S ESTIMATE (2024 COSTS)
10400 S & 4000 W

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$96,200.00
Public Information Services	1	lump	1.00%	\$10,200.00
Traffic Control	1	lump	2.00%	\$20,300.00
Survey	1	lump	2.00%	\$20,300.00
				\$147,000.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	1,000	ft	\$ 12.00	\$12,000.00
Remove Concrete Sidewalk	1,333	sq yd	\$ 28.00	\$37,333.33
Roadway Excavation (Plan Quantity)	889	cu yd	\$ 24.00	\$21,333.33
Granular Borrow (Plan Quantity)	444	cu yd	\$ 35.00	\$15,555.56
Untreated Base Course	435	Ton	\$ 40.00	\$17,400.00
Remove Concrete Driveway	100	sq yd	\$ 28.00	\$2,800.00
HMA - 1/2 inch	435	Ton	\$ 130.00	\$56,550.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
Pavement Message (Preformed Thermoplastic)	4	Each	\$ 250.00	\$1,000.00
Concrete Curb and Gutter Type B1	1,000	ft	\$ 35.00	\$35,000.00
Perpendicular/Parallel Pedestrian Access Ramp	4	Each	\$ 4,000.00	\$16,000.00
Concrete Sidewalk	6,000	sq ft	\$ 9.00	\$54,000.00
Chip Seal Coat, Type II	6,000.00	sq yd	\$ 3.00	\$18,000.00
				\$290,972.22

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1000	ft	\$ 250.00	\$250,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	4	Each	\$ 7,000.00	\$28,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	4	Each	\$ 2,000.00	\$8,000.00
				\$286,000.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
New Signal System	1	Lump	\$300,000.00	\$300,000.00
				\$300,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility contingency	1	lump	\$100,000.00	\$100,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
Ovehead power line relocate		Each	\$20,000.00	\$0.00
				\$100,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$35,000.00	\$35,000.00
				\$35,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
				\$0.00
			BID ITEMS \$	\$1,158,972.22
			Contingency (30%) \$	\$347,691.67
			BID ITEMS TOTAL \$	\$1,506,663.89
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	12,000	sq ft	\$15.00	\$180,000.00
Assuming 5' wide construction easement required for length of project	5,000	sq ft	\$5.00	\$25,000.00
				\$205,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (15% of Bid Items)	1	lump	\$225,999.58	\$225,999.58
				\$225,999.58
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$150,666.39	\$150,666.39
				\$150,666.39
			BID ITEMS TOTAL	\$1,506,663.89
			NON-BID ITEMS TOTAL	\$581,665.97
			GRAND TOTAL	\$2,088,329.86

ENGINEER'S ESTIMATE (2024 COSTS)
4000 W & S Skye Drive

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$61,600.00
Public Information Services	1	lump	1.00%	\$6,500.00
Traffic Control	1	lump	2.00%	\$13,000.00
Survey	1	lump	2.00%	\$13,000.00
				\$94,100.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	500	ft	\$ 12.00	\$6,000.00
Remove Concrete Sidewalk	533	sq yd	\$ 28.00	\$14,933.33
Roadway Excavation (Plan Quantity)	356	cu yd	\$ 24.00	\$8,533.33
Granular Borrow (Plan Quantity)	178	cu yd	\$ 35.00	\$6,222.22
Untreated Base Course	174	Ton	\$ 40.00	\$6,960.00
Remove Concrete Driveway	50	sq yd	\$ 28.00	\$1,400.00
HMA - 1/2 inch	174	Ton	\$ 130.00	\$22,620.00
Pavement Marking Paint	20	gal	\$ 80.00	\$1,600.00
Pavement Message (Preformed Thermoplastic)	4	Each	\$ 250.00	\$1,000.00
Concrete Curb and Gutter Type B1	500	ft	\$ 35.00	\$17,500.00
Perpendicular/Parallel Pedestrian Access Ramp	4	Each	\$ 4,000.00	\$16,000.00
Concrete Sidewalk	2,400	sq ft	\$ 9.00	\$21,600.00
Chip Seal Coat, Type II		sq yd	\$ 3.00	\$0.00
				\$124,368.89

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	400	ft	\$ 250.00	\$100,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 7,000.00	\$14,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
				\$118,000.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
New Signal System	1	Lump	\$300,000.00	\$300,000.00
				\$300,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility contingency	1	lump	\$75,000.00	\$75,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
Ovehead power line relocate		Each	\$20,000.00	\$0.00
				\$75,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$30,000.00	\$30,000.00
				\$30,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
				\$0.00
			BID ITEMS \$	\$741,468.89
			Contingency (30%) \$	\$222,440.67
			BID ITEMS TOTAL \$	\$963,909.56
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	4,800	sq ft	\$15.00	\$72,000.00
Assuming 5' wide construction easement required for length of project	2,000	sq ft	\$5.00	\$10,000.00
				\$82,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (15% of Bid Items)	1	lump	\$144,586.43	\$144,586.43
				\$144,586.43
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$96,390.96	\$96,390.96
				\$96,390.96
			BID ITEMS TOTAL	\$963,909.56
			NON-BID ITEMS TOTAL	\$322,977.39
			GRAND TOTAL	\$1,286,886.94

ENGINEER'S ESTIMATE (2024 COSTS)
4000 West: 9000 South to 11400 South

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$9,500.00
Public Information Services	1	lump	1.00%	\$1,000.00
Traffic Control	1	lump	2.00%	\$2,000.00
Survey	1	lump	2.00%	\$2,000.00
				\$14,500.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	0	cu yd	\$ 24.00	\$0.00
Granular Borrow (Plan Quantity)	0	cu yd	\$ 35.00	\$0.00
Untreated Base Course	0	Ton	\$ 40.00	\$0.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	0	Ton	\$ 130.00	\$0.00
Pavement Marking Paint	1,000	gal	\$ 80.00	\$80,000.00
Pavement Message (Preformed Thermoplastic)	80	Each	\$ 250.00	\$20,000.00
Concrete Curb and Gutter Type B1	0	ft	\$ 35.00	\$0.00
Perpendicular/Parallel Pedestrian Access Ramp		Each	\$ 4,000.00	\$0.00
Concrete Sidewalk	0	sq ft	\$ 9.00	\$0.00
				\$100,000.00

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	0	ft	\$ 125.00	\$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	0	Each	\$ 5,000.00	\$0.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	0	Each	\$ 2,000.00	\$0.00
				\$0.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)		lump		
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
				\$0.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump		\$0.00
				\$0.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
		Lump		\$0.00
				\$0.00
			BID ITEMS \$	\$114,500.00
			Contingency (30%) \$	\$34,350.00
			BID ITEMS TOTAL \$	\$148,850.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	0	sq ft	\$15.00	\$0.00
Assuming 5' wide construction easement required for length of project	0	sq ft	\$3.00	\$0.00
				\$0.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$14,885.00	\$14,885.00
				\$14,885.00
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$14,885.00	\$14,885.00
				\$14,885.00
			BID ITEMS TOTAL \$	\$148,850.00
			NON-BID ITEMS TOTAL \$	\$29,770.00
			GRAND TOTAL \$	\$178,620.00

ENGINEER'S ESTIMATE (2023 COSTS)
11400 South: 3600 West to South Jordan Gateway

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$2,493,000.00
Public Information Services	1	lump	1.00%	\$262,500.00
Traffic Control	1	lump	2.00%	\$524,900.00
Survey	1	lump	2.00%	\$524,900.00
				\$3,805,300.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	30,900	ft	\$ 12.00	\$370,800.00
Remove Concrete Sidewalk	11,444	sq yd	\$ 28.00	\$320,444.44
Roadway Excavation (Plan Quantity)	10,681	cu yd	\$ 24.00	\$256,355.56
Granular Borrow (Plan Quantity)	17,922	cu yd	\$ 50.00	\$896,100.00
Untreated Base Course	17,922	Ton	\$ 40.00	\$716,880.00
Remove Concrete Driveway	5,000	sq yd	\$ 28.00	\$140,000.00
HMA - 1/2 inch	15,759	Ton	\$ 130.00	\$2,048,670.00
Pavement Marking Paint	1,500	gal	\$ 80.00	\$120,000.00
Pavement Message (Preformed Thermoplastic)	250	Each	\$ 250.00	\$62,500.00
Concrete Curb and Gutter Type B1	30,900	ft	\$ 35.00	\$1,081,500.00
Perpendicular/Parallel Pedestrian Access Ramp	100	Each	\$ 4,000.00	\$400,000.00
Concrete Sidewalk	206,000	sq ft	\$ 16.00	\$3,296,000.00
				\$9,709,250.00

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	21802	ft	\$ 125.00	\$2,725,250.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	69	Each	\$ 5,000.00	\$345,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	69	Each	\$ 2,000.00	\$138,000.00
				\$3,208,250.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
Reconstruct signals	8	lump	\$300,000.00	\$2,400,000.00
				\$2,400,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$2,000,000.00	\$2,000,000.00
Street Lighting (spaced every 200')	103	Each	\$8,000.00	\$824,000.00
				\$2,824,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$100,000.00	\$100,000.00
				\$100,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Widen railroad bridge near 400 West	1	Lump	\$5,000,000.00	\$5,000,000.00
Widen canal at Andover Way	1		\$3,000,000.00	\$3,000,000.00
				\$8,000,000.00
			BID ITEMS \$	\$30,046,800.00
			Contingency (30%) \$	\$9,014,040.00
			BID ITEMS TOTAL \$	\$39,060,840.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	1,380,200	sq ft	\$15.00	\$20,703,000.00
Assuming 5' wide construction easement required for length of project	206,000	sq ft	\$5.00	\$1,030,000.00
Potential full parcel takes	20	sq ft	\$700,000.00	\$14,000,000.00
				\$35,733,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$3,906,084.00	\$3,906,084.00
				\$3,906,084.00
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$3,906,084.00	\$3,906,084.00
				\$3,906,084.00
			BID ITEMS TOTAL	\$39,060,840.00
			NON-BID ITEMS TOTAL	\$43,545,168.00
			GRAND TOTAL	\$82,606,008.00

ENGINEER'S ESTIMATE (2023 COSTS)
Daybreak Parkway: Trail Crossing Drive to MVC

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$165,200.00
Public Information Services	1	lump	1.00%	\$17,400.00
Traffic Control	1	lump	2.00%	\$34,800.00
Survey	1	lump	2.00%	\$34,800.00
				\$252,200.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	2,800	ft	\$ 12.00	\$33,600.00
Remove Concrete Sidewalk	778	sq yd	\$ 28.00	\$21,777.78
Roadway Excavation (Plan Quantity)	726	cu yd	\$ 24.00	\$17,422.22
Granular Borrow (Plan Quantity)	1,218	cu yd	\$ 35.00	\$42,630.00
Untreated Base Course	1,218	Ton	\$ 40.00	\$48,720.00
Remove Concrete Driveway	50	sq yd	\$ 28.00	\$1,400.00
HMA - 1/2 inch	1,071	Ton	\$ 130.00	\$139,230.00
Pavement Marking Paint	200	gal	\$ 80.00	\$16,000.00
Pavement Message (Preformed Thermoplastic)	20	Each	\$ 250.00	\$5,000.00
Concrete Curb and Gutter Type B1	2,800	ft	\$ 35.00	\$98,000.00
Perpendicular/Parallel Pedestrian Access Ramp	16	Each	\$ 4,000.00	\$64,000.00
Concrete Sidewalk	14,000	sq ft	\$ 16.00	\$224,000.00
				\$711,780.00

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1482	ft	\$ 125.00	\$185,250.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	5	Each	\$ 5,000.00	\$25,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	5	Each	\$ 2,000.00	\$10,000.00
				\$220,250.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
Reconstruct signals	2	lump	\$300,000.00	\$600,000.00
				\$600,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$100,000.00	\$100,000.00
Street Lighting (spaced every 200')	7	Each	\$8,000.00	\$56,000.00
				\$156,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
	1	Lump		\$0.00
	1			\$0.00
				\$0.00
			BID ITEMS \$	\$1,990,230.00
			Contingency (30%) \$	\$597,069.00
			BID ITEMS TOTAL \$	\$2,587,299.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	93,800	sq ft	\$30.00	\$2,814,000.00
Assuming 5' wide construction easement required for length of project	14,000	sq ft	\$5.00	\$70,000.00
Potential full parcel takes		sq ft	\$700,000.00	\$0.00
				\$2,884,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$258,729.90	\$258,729.90
				\$258,729.90
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$258,729.90	\$258,729.90
				\$258,729.90
			BID ITEMS TOTAL	\$2,587,299.00
			NON-BID ITEMS TOTAL	\$3,401,459.80
			GRAND TOTAL	\$5,988,758.80

ENGINEER'S ESTIMATE (2023 COSTS)
11800 South: MVC to 4000 West

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$737,800.00
Public Information Services	1	lump	1.00%	\$77,700.00
Traffic Control	1	lump	2.00%	\$155,400.00
Survey	1	lump	2.00%	\$155,400.00
				\$1,126,300.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	21,400	ft	\$ 12.00	\$256,800.00
Remove Concrete Sidewalk	5,944	sq yd	\$ 28.00	\$166,444.44
Roadway Excavation (Plan Quantity)	5,548	cu yd	\$ 24.00	\$133,155.56
Granular Borrow (Plan Quantity)	9,309	cu yd	\$ 35.00	\$325,815.00
Untreated Base Course	9,309	Ton	\$ 40.00	\$372,360.00
Remove Concrete Driveway	50	sq yd	\$ 28.00	\$1,400.00
HMA - 1/2 inch	8,186	Ton	\$ 130.00	\$1,064,115.00
Pavement Marking Paint	200	gal	\$ 80.00	\$16,000.00
Pavement Message (Preformed Thermoplastic)	20	Each	\$ 250.00	\$5,000.00
Concrete Curb and Gutter Type B1	21,400	ft	\$ 35.00	\$749,000.00
Perpendicular/Parallel Pedestrian Access Ramp	16	Each	\$ 4,000.00	\$64,000.00
Concrete Sidewalk	107,000	sq ft	\$ 16.00	\$1,712,000.00
				\$4,866,090.00

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	11325	ft	\$ 125.00	\$1,415,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	36	Each	\$ 5,000.00	\$180,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	36	Each	\$ 2,000.00	\$72,000.00
				\$1,667,625.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
Reconstruct signals	2	lump	\$300,000.00	\$600,000.00
				\$600,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$100,000.00	\$100,000.00
Street Lighting (spaced every 200')	54	Each	\$8,000.00	\$432,000.00
				\$532,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$100,000.00	\$100,000.00
				\$100,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
	1	Lump		\$0.00
	1			\$0.00
				\$0.00
			BID ITEMS \$	\$8,892,015.00
			Contingency (30%) \$	\$2,667,604.50
			BID ITEMS TOTAL \$	\$11,559,619.50
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	1,000	sq ft	\$15.00	\$15,000.00
Assuming 5' wide construction easement required for length of project	1,000	sq ft	\$5.00	\$5,000.00
Potential full parcel takes		sq ft	\$700,000.00	\$0.00
				\$20,000.00
Design Engineering (10% of Bid Items)				
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$1,155,961.95	\$1,155,961.95
				\$1,155,961.95
Construction Management (10% of Bid Items)				
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$1,155,961.95	\$1,155,961.95
				\$1,155,961.95
			BID ITEMS TOTAL	\$11,559,619.50
			NON-BID ITEMS TOTAL	\$2,331,923.90
			GRAND TOTAL	\$13,891,543.40

ENGINEER'S ESTIMATE (2024 COSTS)
Bingham Rim Road: Prosperity Road to MVC

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$87,500.00
Public Information Services	1	lump	1.00%	\$9,300.00
Traffic Control	1	lump	2.00%	\$18,500.00
Survey	1	lump	2.00%	\$18,500.00
				\$133,800.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	1,534	cu yd	\$ 24.00	\$36,814.81
Granular Borrow (Plan Quantity)	1,595	cu yd	\$ 35.00	\$55,825.00
Untreated Base Course	1,595	Ton	\$ 40.00	\$63,800.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	1,403	Ton	\$ 130.00	\$182,325.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
Pavement Message (Preformed Thermoplastic)	6	Each	\$ 250.00	\$1,500.00
Concrete Curb and Gutter Type B1	4,000	ft	\$ 35.00	\$140,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	16,000	sq ft	\$ 9.00	\$144,000.00
				\$660,264.81

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1059	ft	\$ 125.00	\$132,375.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	4	Each	\$ 5,000.00	\$20,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	4	Each	\$ 2,000.00	\$8,000.00
				\$160,375.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$20,000.00	\$10,000.00
Street Lighting (spaced every 200')	10	Each	\$8,000.00	\$80,000.00
				\$90,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$10,000.00	\$10,000.00
				\$10,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
		Lump	\$200,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$1,054,439.81
			Contingency (30%) \$	\$316,331.94
			BID ITEMS TOTAL \$	\$1,370,771.76
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	71,000	sq ft	\$15.00	\$1,065,000.00
Assuming 5' wide construction easement required for length of project	10,000	sq ft	\$3.00	\$30,000.00
				\$1,095,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$137,077.18	\$137,077.18
				\$137,077.18
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$137,077.18	\$137,077.18
				\$137,077.18
			Per mile with Right of Way	\$14,466,809.87
			Per mile without Right of Way	\$8,224,630.56

ENGINEER'S ESTIMATE (2024 COSTS)
2 Lane New Roadway

BID ITEMS

GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$73,600.00
Public Information Services	1	lump	1.00%	\$7,800.00
Traffic Control	1	lump	2.00%	\$15,500.00
Survey	1	lump	2.00%	\$15,500.00
				\$112,400.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	1,534	cu yd	\$ 24.00	\$36,814.81
Granular Borrow (Plan Quantity)	1,595	cu yd	\$ 35.00	\$55,825.00
Untreated Base Course	1,595	Ton	\$ 40.00	\$63,800.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	1,403	Ton	\$ 130.00	\$182,325.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
Pavement Message (Preformed Thermoplastic)	6	Each	\$ 250.00	\$1,500.00
Concrete Curb and Gutter Type B1	2,000	ft	\$ 35.00	\$70,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	12,000	sq ft	\$ 9.00	\$108,000.00
				\$554,264.81

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1059	ft	\$ 125.00	\$132,375.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	4	Each	\$ 5,000.00	\$20,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	4	Each	\$ 2,000.00	\$8,000.00
				\$160,375.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$20,000.00	\$10,000.00
Street Lighting (spaced every 200')	5	Each	\$8,000.00	\$40,000.00
				\$50,000.00

LANDSCAPING

Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$10,000.00	\$10,000.00
				\$10,000.00

Structures				
Description	Quantity	Unit	Unit Price	Amount
		Lump	\$200,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$887,039.81
			Contingency (30%) \$	\$266,111.94
			BID ITEMS TOTAL \$	\$1,153,151.76

NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	71,000	sq ft	\$15.00	\$1,065,000.00
Assuming 5' wide construction easement required for length of project	10,000	sq ft	\$3.00	\$30,000.00
				\$1,095,000.00

Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$115,315.18	\$115,315.18
				\$115,315.18

Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$115,315.18	\$115,315.18
				\$115,315.18

			Per mile with Right of Way	\$13,087,969.55
			Per mile without Right of Way	\$6,918,910.56

ENGINEER'S ESTIMATE (2024 COSTS)
2 Lane New Roadway (Daybreak)

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$69,300.00
Public Information Services	1	lump	1.00%	\$7,300.00
Traffic Control	1	lump	2.00%	\$14,600.00
Survey	1	lump	2.00%	\$14,600.00
				\$105,800.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	1,534	cu yd	\$ 24.00	\$36,814.81
Granular Borrow (Plan Quantity)	1,450	cu yd	\$ 35.00	\$50,750.00
Untreated Base Course	1,450	Ton	\$ 40.00	\$58,000.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	1,275	Ton	\$ 130.00	\$165,750.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
Pavement Message (Preformed Thermoplastic)	6	Each	\$ 250.00	\$1,500.00
Concrete Curb and Gutter Type B1	2,000	ft	\$ 35.00	\$70,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	10,000	sq ft	\$ 9.00	\$90,000.00
				\$508,814.81

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1059	ft	\$ 125.00	\$132,375.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	4	Each	\$ 5,000.00	\$20,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	4	Each	\$ 2,000.00	\$8,000.00
				\$160,375.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$20,000.00	\$10,000.00
Street Lighting (spaced every 200')	5	Each	\$8,000.00	\$40,000.00
				\$50,000.00

LANDSCAPING

Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$10,000.00	\$10,000.00
				\$10,000.00

Structures				
Description	Quantity	Unit	Unit Price	Amount
		Lump	\$200,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$834,989.81
			Contingency (30%) \$	\$250,496.94
			BID ITEMS TOTAL \$	\$1,085,486.76

NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	71,000	sq ft	\$15.00	\$1,065,000.00
Assuming 5' wide construction easement required for length of project	10,000	sq ft	\$3.00	\$30,000.00
				\$1,095,000.00

Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$108,548.68	\$108,548.68
				\$108,548.68

Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$108,548.68	\$108,548.68
				\$108,548.68

			Per mile with Right of Way	\$12,659,244.11
			Per mile without Right of Way	\$6,512,920.56

ENGINEER'S ESTIMATE (2024 COSTS)

3 Lane New Roadway

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$76,800.00
Public Information Services	1	lump	1.00%	\$8,100.00
Traffic Control	1	lump	2.00%	\$16,200.00
Survey	1	lump	2.00%	\$16,200.00
				\$117,300.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	1,858	cu yd	\$ 24.00	\$44,592.59
Granular Borrow (Plan Quantity)	1,885	cu yd	\$ 35.00	\$65,975.00
Untreated Base Course	1,885	Ton	\$ 40.00	\$75,400.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	1,658	Ton	\$ 130.00	\$215,475.00
Pavement Marking Paint	75	gal	\$ 80.00	\$6,000.00
Pavement Message (Preformed Thermoplastic)	8	Each	\$ 250.00	\$2,000.00
Concrete Curb and Gutter Type B1	2,000	ft	\$ 35.00	\$70,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	10,000	sq ft	\$ 9.00	\$90,000.00
Asphalt Path		Ton	\$ 130.00	\$0.00
Asphalt Path (UTBC)		Ton	\$ 40.00	\$0.00
				\$601,442.59

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1059	ft	\$ 125.00	\$132,375.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
				\$146,375.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$20,000.00	\$10,000.00
Street Lighting (spaced every 200')	5	Each	\$8,000.00	\$40,000.00
				\$50,000.00

LANDSCAPING

Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$10,000.00	\$10,000.00
				\$10,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
		Lump	\$200,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$925,117.59
			Contingency (30%) \$	\$277,535.28
			BID ITEMS TOTAL \$	\$1,202,652.87
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way (assuming full roadway area to 1' behind walk)	66,000	sq ft	\$15.00	\$990,000.00
Assuming 5' wide construction easement required for length of project	10,000	sq ft	\$3.00	\$30,000.00
				\$1,020,000.00
Design Engineering (10% of Bid Items)				
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$120,265.29	\$120,265.29
				\$120,265.29
Construction Management (10% of Bid Items)				
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$120,265.29	\$120,265.29
				\$120,265.29
			Per mile with Right of Way	\$13,005,608.59
			Per mile without Right of Way	\$7,215,917.22

ENGINEER'S ESTIMATE (2023 COSTS)
Daybreak Parkway : MVC to Vadania Drive

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$130,800.00
Public Information Services	1	lump	1.00%	\$13,800.00
Traffic Control	1	lump	2.00%	\$27,600.00
Survey	1	lump	2.00%	\$27,600.00
				\$199,800.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	700	ft	\$ 12.00	\$8,400.00
Remove Concrete Sidewalk	97	sq yd	\$ 28.00	\$2,722.22
Roadway Excavation (Plan Quantity)	363	cu yd	\$ 30.00	\$10,888.89
Granular Borrow (Plan Quantity)	1,218	cu yd	\$ 40.00	\$48,720.00
Untreated Base Course	508	Ton	\$ 45.00	\$22,837.50
Remove Concrete Driveway	1,000	sq yd	\$ 28.00	\$28,000.00
HMA - 1/2 inch	187	Ton	\$ 140.00	\$26,239.50
Pavement Marking Paint	100	gal	\$ 80.00	\$8,000.00
Pavement Message (Preformed Thermoplastic)	24	Each	\$ 250.00	\$6,000.00
Concrete Curb and Gutter Type B1	1,540	ft	\$ 35.00	\$53,900.00
Perpendicular/Parallel Pedestrian Access Ramp	12	Each	\$ 4,000.00	\$48,000.00
Concrete Sidewalk	3,850	sq ft	\$ 9.00	\$34,650.00
Chip Seal Coat, Type II		sq yd	\$ 3.00	\$0.00
				\$298,358.11

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	50	ft	\$ 125.00	\$6,250.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
				\$20,250.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
Signal modifications at New Bingham Hwy and Vadania Drive	1	Lump	\$600,000.00	\$600,000.00
				\$600,000.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility contingency	1	lump	\$400,000.00	\$400,000.00
Street Lighting (spaced every 200')	1	Each	\$8,000.00	\$8,000.00
				\$408,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
				\$0.00
			BID ITEMS \$	\$1,576,408.11
			Contingency (30%) \$	\$472,922.43
			BID ITEMS TOTAL \$	\$2,049,330.54
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
It appears the City Owns most right of way (Contingency only	25,000	sq ft	\$5.00	\$125,000.00
Assuming 5' wide construction easement required for length of project	7,000	sq ft	\$2.00	\$14,000.00
				\$139,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (15% of Bid Items)	1	lump	\$307,399.58	\$307,399.58
				\$307,399.58
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$204,933.05	\$204,933.05
				\$204,933.05
			BID ITEMS TOTAL \$	\$2,049,330.54
			NON-BID ITEMS TOTAL \$	\$651,332.64
			GRAND TOTAL \$	\$2,700,663.18

ENGINEER'S ESTIMATE (2024 COSTS)

5 Lane New Roadway

BID ITEMS

GENERAL

Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$109,200.00
Public Information Services	1	lump	1.00%	\$11,500.00
Traffic Control	1	lump	2.00%	\$23,000.00
Survey	1	lump	2.00%	\$23,000.00
				\$166,700.00

ROADWAY

Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	0	ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk	0	sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)	2,160	cu yd	\$ 24.00	\$51,851.85
Granular Borrow (Plan Quantity)	2,755	cu yd	\$ 35.00	\$96,425.00
Untreated Base Course	2,755	Ton	\$ 40.00	\$110,200.00
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	2,423	Ton	\$ 130.00	\$314,925.00
Pavement Marking Paint	20	gal	\$ 80.00	\$1,600.00
Pavement Message (Preformed Thermoplastic)	8	Each	\$ 250.00	\$2,000.00
Concrete Curb and Gutter Type B1	4,000	ft	\$ 35.00	\$140,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	16,000	sq ft	\$ 9.00	\$144,000.00
Asphalt Path		Ton	\$ 130.00	\$0.00
Asphalt Path (UTBC)		Ton	\$ 40.00	\$0.00
				\$893,001.85

DRAINAGE & IRRIGATION

Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	1059	ft	\$ 125.00	\$132,375.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
				\$146,375.00

SIGNAL SYSTEM

Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00

UTILITIES

Description	Quantity	Unit	Unit Price	Amount
Utility Contingency (assume minimal utilities since it is a green field road)	1	lump	\$20,000.00	\$10,000.00
Street Lighting (spaced every 200')	10	Each	\$8,000.00	\$80,000.00
				\$90,000.00

LANDSCAPING