2023-2050

Regional Transportation Plan

Dixie Metropolitan Planning Organization Adopted May 16, 2023



2023-2050 Regional Transportation Plan

(Adopted May 16, 2023)

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Chapter 1 – Executive Summary

This Regional Transportation Plan (RTP) is the culmination of planning efforts undertaken by Dixie Metropolitan Planning Organization (MPO) for the Census Bureaus' designated urban areas in Washington County, Utah – including the St. George Urbanized Area and the Hurricane Urban Cluster. The RTP objective is to foster coordination of community leaders, the public, and stakeholders to plan for the transportation of people, goods, and



services through goals centered on safety, air quality, transportation facilities, congestion management, corridor preservation, public transit, pedestrian movement, and respect for environmental constraints.

The plan is updated every four years in coordination with the Utah Department of Transportation, three other MPOs in Utah, Washington County, and the cities within the urban areas noted above. Transportation planning in Washington County follows local visioning goals in collaboration with other planning efforts such as Utah's Unified Transportation Plan, Vision Dixie, the Utah Strategic Highway Safety Plan, Homeland Security plans, etc.

The cities of Ivins, Hurricane, LaVerkin, Leeds, St. George, Santa Clara, Toquerville, and Washington, are included in the planning boundary Map #2 in Appendix B.

This plan relies on principals defined in Vision Dixie, a visioning effort undertaken in 2006-08 to document the vision of Dixie's desired future development as defined by the public, elected officials, public service agencies, business interests, and other socioeconomic forces. From a transportation perspective, Vision Dixie calls for a variety of roads, transit, and pedestrian facilities, community connectivity and access to a greater variety of human services, businesses, and residential units.

11.0 3.4 Total VMT 3.2 10.5 VMT per capita 3.0 /MT (trillions) 2.8 2.6 2.4 8.5 2.2 2.0 8.0 2000 1990 1995 2005 2010 2015 State Smart Transportation Initiative

Projected transportation demand in the St. George area was modeled using stateapproved computer programs and verifies

the Vision Dixie call for a variety of future transportation facilities including roads, transit routes, and active transportation routes.

Washington County's estimated population growth over the next 25 years combined with limited amounts of federal, state, and local funds available to accommodate their needs indicate that revenue streams will need to be incrementally increased and changed over time to generate sufficient resources

to accommodate anticipated needs. The funding sources and future funding assumptions are explained in Chapter 5.

A summary of proposed transportation facilities, including a comprehensive list of road improvements over the next 25 years is noted in Chapter 6 and depicted on Map 1 in Appendix A. Exceptional evidence also points to the need for expanded bicycle facilities, pedestrian facilities, and regional transit systems throughout the Urbanized Area as outlined in Chapters 12 and 13.

Special attention must also be given to safety, congestion, and corridor preservation over the next 25 years. And of utmost importance is affording appropriate environmental protections of and respect for the varied "threatened and endangered species" (plant and animal) present in southwestern Utah as discussed in Chapter 11.

Taken together the chapters within the Regional Transportation Plan identify needs, issues, and potential solutions to facilitate transportation planning excellence.

Chapter 2 -- Need and Purpose

According to the U.S. Census, the 2020 estimated population of Washington County, Utah is 182,111 people. That population is expected to grow to 265,864 by 2030; to 337,326 by 2040; and to 401,757 by 2050 according to the Kem C. Gardner Policy Institute and the Utah State Governors' Office of Management and Budget.

As the population continues to grow, so too will the demand for transportation facilities and services.



This 2023-2050 Regional Transportation Plan outlines how various jurisdictions within the Dixie MPO intend to meet the area's transportation demands and needs over the next 30 years. The area has many geographical features (hills, bluffs, and rivers) that challenge the circulation of people and freight and the creation of various transportation systems. The area is also habitat to threatened and endangered plant and wildlife species and is governed by county, state, and federal regulations.

The expected population growth, coupled with the community's desire to retain mobility for people, goods, and services defines the need for this plan. This plan's purpose is to outline how these needs could be addressed over the next 30 years with consideration of geography, environment, socioeconomic trends, and anticipated transportation demand (needs).

The Dixie MPO was designated by the Governor of Utah on September 20, 2002. In compliance with federal guidelines the Dixie MPO develops and approves processes and procedures for conducting long range planning. This responsibility involves identifying proposed transportation projects for consideration in the Transportation Improvement Program (TIP), considering the economic and environmental implications of transportation system improvements, and addressing the traffic growth anticipated in the future.

The Infrastructure Investment and Jobs Act (IIJA), most commonly known as the Bipartisan Infrastructure Bill, is a United States federal statute enacted by the 117th United States Congress and signed into law by President Joe Biden on November 15, 2021.

The Bill funds surface transportation programs—including, but not limited to, Federal-aid highways, other transportation facilities, and transit programs. It provides long-term funding certainty for surface transportation programs.

Performance Measures

Federal performance measures enable a federal summary and comparison between states. The Utah performance measures are derived from local goals (MPOs, Transit, DOT) and used for decision-making within Utah. A Performance-Based Planning & Programming Memorandum of Agreement is provided in Appendix A of this plan.

Dixie MPO has chosen to adopt the state targets for the St. George Urbanized Area and the Hurricane Urban Cluster and will coordinate directly with the Utah Department of Transportation to support the statewide targets. Current performance measures address the reduction of fatal and serious-injury crashes (Highway Safety), infrastructure condition, congestion reduction, system reliability, freight movement, economic vitality, and environmental sustainability on road source emissions. For a more detailed explanation of these performance measures see https://udot.utah.gov/connect/about-us/technology-innovation/transportation-performance-management-division/performance-management/ for a more detailed explanation of these performances.

Chapter 3 – Vision and Mission

"Vision" is the guidepost for all efforts of the Dixie Metropolitan Planning Organization. Simply stated the "Vision" is rooted in sound planning practice: to Achieve Transportation Planning Excellence.

Through "Vision Dixie", over three thousand residents created a framework in which future development and transportation can work together to create communities, and a region that preserves Southern Utah's quality of life. The "Vision" looks forward to an affordable, sustainable, and livable future.

The public preferences are summarized in a series of Vision Dixie Principles that illustrate how growth might occur as cooperative efforts are made to implement the principles identified through the process.

The Vision Dixie Principles provide a framework for voluntary local implementation. Local officials have committed to work with residents to determine how these principles fit with local plans for the future.

The process was kicked off on October 18, 2006 when nearly 400 residents joined the Washington County Commission in a county wide process of workshops, technical research and analysis.

Over 1,200 residents attended workshops in the fall of 2006 to voice their preferences for how the county should grow. This input coupled with technical guidance from local planners, led to the creation of four scenarios that were unveiled at nine "Dixie Dialogue" meetings in May and June 2007. More than 500 residents attended these meetings to identify which ideas, contained in the scenarios, they favor. An additional 800 residents evaluated these scenarios on-



line. Also, in June 2007, an independent polling firm contacted 400 representative county residents to ask their opinions on growth issues and strategies.

Based on these citizen input initiatives, a steering committee made up of mayors from throughout the urbanizing area, established ten Vision Dixie Principles.

The Vision Dixie Principles:

Principle 1: Plan Regionally, Implement Locally
Principle 2: Maintain Air and Water Quality and Conserve Water
Principle 3: Guard our 'Signature' Scenic Landscapes
Principle 4: Provide Rich, Connected Natural Recreation and Open Space
Principle 5: Build balanced Transportation that includes a System of Public Transportation, Connected Roads, and Meaningful Opportunities to Bike and Walk. Principle 6: Get 'Centered' by Focusing Growth on Walkable, Mixed-Use Centers.

Principle 7: Direct Growth Inward.

- Principle 8: Provide a Broad Range of Housing Types to Meet the Needs of All Income Levels, Family Types, and Stages of Life.
- Principle 9: Reserve Key Areas for Industry to Grow the "Economic Pie".
- **Principle 10**: Focused Public Land Conversion Should Sustain Community Goals and Preserve Critical Lands.

Land Use / Transportation Relationship

Because of Dixie's (unique) geography, transportation corridors in Dixie must accommodate more traffic than in a typical transportation grid-system. Thus, each transportation corridor in Dixie may be more susceptible to potential congestion. While auto use will continue to be dominant, roads will not be able to meet all our mobility needs decades into the future. Public transportation is especially important to keep us from being overwhelmed by gridlock. Putting in place a transit backbone will help our

downtowns, major centers, and Utah Tech University (formerly Dixie State University) flourish. A viable public transit system could also help air quality and relieve household expenses associated with day-to-day travel. (Vision Dixie 2035: Land-Use & Transportation Vision, p. 26)

A vibrant "center" includes multiple ingredients: a mix of uses, pedestrian-oriented buildings, focused density, connected streets, and context sensitive streets. (Vision Dixie 2035: Land-Use & Transportation Vision, p. 31)

Vision Dixie calls for corridor preservation for



roads and transit, street connectivity, and the creation of community-friendly collector and arterial roads to reduce congestion and accommodate a growing population with the following long-term recommendations:

- Work together to identify and preserve transit corridors and potential station locations.
- Explore the creation of a transit district and a local option sales tax for transit.
- Adopt the road corridors of Utah Department of Transportation, Dixie MPO, and Five County Association of Governments into local general plan updates. Corridor preservation should address road needs, transit needs, utilities, bicycle facilities and trails. Formalize local government ordinances and negotiation procedures to preserve corridors as development happens.
- Revise street connectivity standards in updated subdivision ordinances.
- Coordinate local street plans in sub-area plans to assure optimum connectivity.
- Coordinate local street plans between jurisdictions.

• Amend local policies and construction standards to comply with "complete streets" criteria (that include provision for pedestrians, bicycles and parking) consistent with street segments mapped in the general plan.

Vision Dixie principles 6-8 encourage "Walk-able, Mixed-Use Centers", "Directing Growth Inward," and "Enabling the Housing Market to Meet Housing Wants and Needs," with the following long-term recommendations:

- 1. Approximate areas for future mixed-use centers, remove zoning and subdivision barriers to mixed-use centers, and update community general plans to include these centers.
- 2. Include mapped priority land re-use areas in general plans to signify to developers and nearby land owners that development in those areas helps fulfill city-wide goals (of inward growth first).
- Modify edge-of-town standards and annexation policies to encourage contiguous development and discourage leap-frog development through market-based mechanisms that charge leap-frog development consistent with its higher level of impacts (e.g., longer streets per home).
- 4. Amend the zoning map and ordinances to allow a greater range of (housing) densities.

These recommendations are supported by the 2019-2050 Regional Transportation Plan.

This **Vision** can be realized through a strong day-by-day effort to attain goals and objectives, as stated in the Regional Transportation Plan with the **Mission** to: "Foster coordination of community leaders, the public, and stakeholders to reach transportation goals centered around safety, air quality, congestion management, freight movement, corridor preservation, public transit, pedestrian movement, and respect for environmental constraints."

Chapter 4 – Projected Transportation Demand

The Dixie MPO Travel Demand Model was created in 2010 using the CITILABS CUBE Model platform to forecast future traffic demands throughout Washington County. The computer-based planning platform allows the MPO to better predict traffic movements based on our unique terrain, environment, and land-uses. A rigorous effort to calibrate and validate the model and update socio-economic data has followed since 2010 to assure the model includes the best information available. The CUBE model is the platform also used by the Utah Department of Transportation and other MPO's within Utah.

In 2013 and again in 2018-2019, and most recently in 2022 – the Dixie MPO commissioned an extensive update of the Dixie MPO Travel Demand Model. This recent update is a major effort in bringing the model to the most currently used platforms as used throughout the state. This work includes updating the model structure, updating the model supply-side data and model calibration/validation of each model step. The update incorporates revised Traffic Analysis Zones, recent Population and Household data, updated Employment data, University and School data and many other supply-side data requirements. The 2020 Census, and other population estimates were used in the update. Calibration /Validation will be done to meet UDOT and industry standards. This version of the Dixie MPO Travel Demand Model is scheduled to be fully complete in 2023.

Model Structure

Travel demand models are computer-based mathematical models that use socioeconomic and roadway network, local geometry, and land use data to forecast traffic under various scenarios. To forecast traffic the Dixie Travel Demand Model uses the traditional 4-step process. The four basic phases are:

- Trip Generation Trip generation determines how many trips are made in a region. To simplify
 the process, large geographical areas are broken up into smaller areas called traffic analysis
 zones (TAZ). Using information from sources like the Census Bureau and city land use plans,
 each TAZ is given certain attributes such as the number of households, employees, and average
 income levels. These attributes are then used to calculate the number of trip productions and
 attractions for each TAZ.
- Trip Distribution –Trip distribution determines where the trips are going. Trip productions and attractions from different TAZ's are linked together using a gravity model to form origindestination patterns. The gravity model states that the trip attraction between two zones is proportional to the size of the zones (number of households/employees) and the distance between them.
- 3. Mode Choice What modal method of reaching a trip's destination is determined in step 3. Looking at factors such as cost, convenience, and travel time it is determined if the trip will be made by walking, transit or vehicle.
- 4. Trip Assignment The route the trip will take to reach its destination is then determined. Link attributes contained in the highway network such as capacity and travel speed are used to determine the shortest travel path to a destination. The trips are then assigned to the roadway network.

Each step of the process is calibrated to observed travel behavior. Base model forecasts are checked against observed traffic counts to ensure reasonable accuracy. Once the model is developed so that it replicates existing travel behavior, it is then used to evaluate future scenarios and alternatives.

Socio-Economic Characteristics

In addition to population growth, the characteristics of population distribution within the MPO are vital considerations in the development of a viable transportation network. More than 88% of the Washington County population resides within the Dixie MPO census defined "Urban" boundaries. Other, more rural, cities and towns within the County include Apple Valley Town, Enterprise City, Hildale City, New Harmony Town, Rockville Town, Springdale Town, and Virgin Town as well as unincorporated County.

The distribution of the current population and projected growth are illustrated on Map 3 "Population Change Map" in Appendix B at the back of this plan. The mapping includes a 2018 population distribution and the future population of projected growth areas through 2050.

Employment and Commuting

Over 7,500 employment establishments were operating in Washington County in 2021 (see Appendix A for table of major employers). More than 98 of these establishments had over 100 employees, according to the Utah Division of Workforce Services. The highest demand for transportation facilities and services comes during the morning and evening commutes as people travel from home to work and back. Companies come and go, and seasonal peaks in tourism and retail activity affect the number of commuters.

As of 2022 Washington County growth dynamics remain strong including employment expansion. September 2022 Year-to-Year change in Nonfarm Jobs increased over 3,200 jobs with all sectors increasing except for Financial Activities, it is anticipated that additions to the county's employment base will continue to strengthen Washington County's economic and growth numbers in the months ahead. As growth continues, so too will the need for adequate transportation facilities.

Objectives and Goals

To plan for future transportation demands, the Dixie MPO will strive to meet necessary goals and objectives to recognize the impacts of the area growth on transportation.

Objective

To recognize population growth and land uses as the key drivers of future transportation demand.

Goals

- 1. Stay abreast of changes in population growth and projections in the area.
- 2. Be aware of changes in land development patterns and how those changes affect population growth and transportation demand.
- 3. Stay current on socio-economic factors and changes that may affect the demand for transportation.
- 4. Provide for regular updates of the Transportation Demand Model and look for opportunities to update the model within localized studies.
- 5. Keep up with Model platform updates and changes in technology that can improve the accuracy of the Transportation Demand Model.
- 6. Become more educated and efficient in the execution and use of the Transportation Demand Model in keeping the model current and useful to the Dixie MPO and its partners.

Chapter 5 – Financial Plan

Current Funding Sources, Gas Taxes, Fees

Funding sources for transportation facilities and services in the Washington County area include federal, state, and local government funds as well as private developer contributions for transportation improvements. The projects noted in Chapter 6 of this plan are required to be fiscally restrained (meaning planned projects cannot exceed planned revenue).

Federal Funds:

The current federal highway and transit bill (Bipartisan Infrastructure Law or BIL) continues to fund federal transportation programs. As the BIL matures in 2026, future infrastructure and transportation bills are expected to continue federal funding for these programs.

Congressionally Directed Spending packages are also available through direct application by sponsoring agencies to individual state and federal Congressional Representative.

State Funds:

The Utah Department of Transportation receives state highway user revenues as well as state general funds for highway construction and maintenance projects. The highway user revenues sources include motor fuel taxes, special fuel taxes, vehicle registration fees, driver license fees, and other fees. General fund revenues are also used for transportation and the state has the authority to issue bonds for specific highway projects.

A portion of the state highway user funds are made available to local governments for highway construction. Seventy (70) percent of these funds are kept by the UDOT for their construction and maintenance programs. The remaining 30 percent of funds are made available to the cities and counties in the state through the Class B and C Program for road maintenance or construction.



State Legislature Directed Spending packages are also available through direct application by sponsoring agencies to individual State Legislative Representatives.

Local Funds:

In addition to B&C funds, local governments may use a variety of other funding sources to build transportation projects. These sources include (but are not limited to) local sales tax options, local impact fees paid by developers, general fund contributions (sales and property taxes), bonding arrangements, the Local Corridor Preservation Fund (vehicle registration fees), and special service district fees.

Private Sources

Private interests may also provide transportation improvements. As developers construct the local streets within their own subdivisions, they may also be required to dedicate rights-of-way for the construction of collector and arterial streets adjacent to their developments. Developers are also considered as possible sources of funding for projects needed because of the impacts of the development, such as the need for traffic signals or arterial street widening.

Private sources may also be considered for public transit improvements which could provide benefits to their particular interests. For example, businesses or developers may be willing to or required to support capital expenses or operating costs for transit services that provide special benefits to their development such as a reduced need for parking or increased accessibility.

Following is a brief list of programs used to fund transportation projects within the Dixie MPO:

FEDERAL HIGHWAY ADMINISTRATION

- Surface Transportation Program (STP)
 - Dixie MPO cities
- Congestion Mitigation / Air Quality (CMAQ) (Available only after Dixie MPO reaches nonattainment status)
- Carbon Reduction Program Funds (CRP)
- Interstate Maintenance (IM)
- National Highway System (NHS)
- Surface Transportation Program

- Urbanized Area
- Small Urban
- Flexible (Any-Area)
- Transportation Enhancements
- Highway Safety Improvement Program (HSIP)
- Hazard Elimination
- Bridge Replacement
- Off System Local
- Off System Optional
- Federal Lands Access Program funds (FLAP)
- High Priority Projects (HPP)
- Transportation Improvement Projects (TI)
- Recreational Trails
- Transportation Alternatives Program (TAP)

FEDERAL TRANSIT ADMINISTRATION

- (5307) Block Grant Funds
- (5309) Discretionary Funds
- (5310) Services for elderly and disabled
- (5311) Grants for Outside Urban Area
- (5340) High Density States Program
- (5316) Job Access and Reverse Commute
- (5317) New Freedom Program
- (5339) Bus and Bus Facilities Grant Program

STATE OF UTAH

- State Construction
- State General Funds
- State Traffic
- Corridor Preservation Funds
- Transportation Investment Funds (TIF)
- TIF Active Program
- Transit TIF Program
- Legislature Directed Spending packages

LOCAL

- County (B Funds)
- City (C Funds)
- General Funds
- Transit Sales Tax
- Corridor Preservation Fund
- Local Option Sales Taxes for Transportation
- Local Option Sales Taxes for Transit
- Building impact fees

PRIVATE

- Donations / User Fee
- Developer Funded Projects
- Public/Private Partnerships

Unified Plan Process

To create a fiscally constrained long-range transportation plan, the Dixie MPO joined with the Utah Department of Transportation, the Utah Transit Authority and other MPOs to create the Utah Unified Plan Financial Working group to make common assumptions regarding current and future funding sources available for transportation. This effort projected revenues, inflation rates, estimated construction costs, and the cost of future rights-of-way. The Dixie MPO Executive Committee also examined local funding options and adopted a series of additional future funding assumptions associated with transportation. Below is a discussion of these assumptions, an outline of current funding sources, and a policy document supporting acquisition of future federal, state, and local funding for transportation projects.

State (Future) Funding Assumptions

Expenditure assumptions are based upon uniform costing of projects by each MPO, UDOT, and UTA. Revenue projections are based upon assumptions agreed upon by the parties for each major revenue stream from federal, state and local revenues. The parties involved met on several occasions to review and finalize the following assumptions. The major discussion points focused on the growth assumptions from the previous update, information from state agencies including the consensus committee at state level, and other long-range forecasting methods developed by the group. The following table provides a summary of the major assumptions used to generate revenue projections and the source and/or methodology used to generate the projections.

Table 1. Revenue Sources and Growth Rates

Revenue Source	2019-2050 Growth Rates	Growth Rate Source ¹
UDOT revenue assumptions		
Federal revenues	2019-2023: 3.49% 2024-2050: 1.50%	Federal Apportionment AAGR (2002-2017) Consensus
Motor fuel	2019-2023: 2.40% 2024-2050: 1.48%	Cash flow 2018-2022 Historic consumption AAGR (1996-2016)
Special fuel	3.02%	Historic consumption AAGR (1996-2016)
Registration fees & permits	3.03%	Historic weighted AAGR (1997-2017)
B & C road funds	Growth assumed in the ca to calculate the B&C Fund	lculation of registration fees (see above), which are used s.
Registration increases	3.03%	Historic AAGR (1997-2017)
Sales tax (TIF) ²	4.20%	Historic AAGR (1997-2017)
MPO revenue assumptions		
Local option sales tax	Cache MPO: 4.76% Dixie MPO: 6.66% MAG: 5.52% Rural (UDOT): 4.20% WFRC: 3.81%	Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017)
UTA sales tax revenue		
UTA sales tax	Cache MPO: 4.76% Dixie MPO: 6.66% MAG: 5.52% Rural (UDOT): 4.20% WFRC: 3.81%	Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017) Historic AAGR (1997-2017)
Other expense assumptions		
Roadway preservation needs	4.50%	Provided by UDOT and represents construction cost inflation and the addition of lane miles to the system.
Transit capital cost inflation	4.00%	Provided by UTA and represents construction cost inflation.
Transit operating and maintenance cost inflation	2.75%	Provided by UTA and represents operation and maintenance cost inflation.
Notes: 1. AAGR: Average Annual Growth Rate 2. TIF: Transportation Investment Fund		

Local (Future) Funding Assumptions

The Dixie MPO Executive Committee agreed that in addition to current funding sources, it was reasonable to expect the following *local* revenues to become available for transportation in the future:

• The equivalent of a county-wide sales tax increase of "one quarter of one percent" implemented by the end of 2029.

• The equivalent of county-wide vehicle registration fee increases of \$10 by the year 2027.

Constraints through 30-year planning phases

These future funding assumptions, taken together with existing funding sources were calculated and documented in a "Regional Transportation Plan Financial Report" as agreed upon through the Unified Plan Financial Working Group and endorsed by the Dixie MPO Transportation Executive Council.

The Financial Report projected an annual inflation rate of 3.49 percent to 5 percent on all cost projections (a conservatively high estimate based on past experience). Future revenues were also forecast using a conservatively low estimate. Utah's shifting population was also figured into these assumptions based on projections by the Governors' Office of Management and Budget (GOMB). Currently the Dixie MPO is home to 6 percent of the state's population. The Governor's Office projects the Dixie MPO population will reach 7.8 percent of state the population by 2050. This plan presumes that state revenue will flow to Washington County proportionate to population growth.

Federal formula funds also provide subsidies to the Dixie MPO for planning, environmental assessments and project seed money. These federal dollars come from FHWA's Surface Transportation Program and FTA's Transit Programs with an approved 2% inflation rate.

Projected Transportation Revenues

The table below shows the total revenues assumed for projects in all three phases of the long-range plan. Total expenditures are detailed in the "Project & Phasing List" in Chapter 6.

ROADWAY CAPACITY COS (CONSTRAINED NEEDS)	TS			
	Phase 1 2023-2032	Phase 2 2033-2042	Phase 3 2034-2050	Total 2023-2050
State Road New/Capacity				
Needs	351,274,232	477,312,689	361,714,025	1,190,300,946
Local Roads of Regional				
Significance Needs	556,118,987	611,243,895	611,766,749	1,779,129,631
Local Road Needs	-	-	-	-
Total	907,393,219	1,088,556,585	973,480,774	2,969,430,577
2023 Cost Estimates	77,239,181	104,183,415	(38,818,774)	142,603,823

When compared with the needs list and anticipated costs in Chapter 6, these funding assumptions seem adequate in Phase 1 of the RTP. However, a re-evaluation of revenue needs may be appropriate in 2027 when this plan is updated.

Chapter 6 – Existing and Proposed Transportation Facilities

Methodology

As discussed in Chapter 4, the Dixie MPO's CUBE modeling platform was used to analyze the transformation of traffic demands as conditions change in the future. The CUBE Model applied

mathematical forecasting formulas to population growth, job growth, land use changes, socio-economic data, expected trip generations, trip distributions, and mode choice of travelers (transit vs. cars vs. walking/biking).

These forecasts were then imposed on the existing road networks, transit facilities, and pedestrian trails. Then projects were conceptualized to address the forecast changes in traffic congestion by identifying "hotspots" in each phase of the plan.

Phase One looked at the changes expected in years 2023 to 2032. The associated project list was then created to address traffic congestion hotspots anticipated by 2032 together with the forecast changes in population, job creation, etc.

Phase Two looked at travel demand changes from 2033 to 2042 with a similar project list to address those additional traffic demands anticipated by 2042.

Likewise, Phase Three looks to the 2050 horizon.

Current Network

An inventory of the current MPO road network is best noted through use of the Traffic Congestion 2050 - No-Build map in Appendix B. The roads noted in red and black indicate areas of concern or traffic congestion in 2050 if no additional projects are built.

Future Network

The Traffic Congestion 2050 - Build map, also included in Appendix B illustrates areas of concern, or traffic congestion in the year 2050 assuming that the plan projects are all built and



in use at that time. Again, roads noted in red and black indicate areas of concern or traffic congestion in 2050 after all planned projects are built.

Projects and Phasing

The next several pages list a variety of transportation projects identified using the methodology outlined in chapters 3, 4, and 5 above. Projects range from highway widening to bridge and overpass construction, as well as proposed new corridors. Additionally, some UDOT projects of interest are listed even though they may lie outside the MPO boundaries because those corridors provide vital transportation connections to Urban area residents.

The Projects and Phasing Map is also included in Appendix B. The legend to the right is used for project phase identification on the Projects and Phasing Map and in the list below:



2023 FINAL PLAN

Phase 1 (2023-2032)

	May 21, 2023											
Projec t #	Rout e	Categor y	City	Lengt h	Phas e Need	Project Description	Project Concept	Estimated Cost in 2022 dollars				
1.a		Regional	I	3.00	1	Old Highway 91 (I), 200 E to 600 W	Reconstruction	Under Const./Funded				
1.b		Regional	I		1	Old Highway 91 (I), 600 W to Shivwits Reservation		24,804,000				
3		Regional	SC	0.70	1	Red Mountain Drive, Pioneer Parkway to Western Corridor	New Construction	8,550,000				
6		Regional	SG	3.00	1	Gap Canyon Pkwy from Sunbrook Drive to Dixie Drive	New Construction	18,720,000				
7	SR-8	State	UDOT	1.48	1	Sunset Blvd. widen to 6-lanes from Valley View Dr to 1400 W	Minor Widen/Striping	6,552,000				
8		Regional	SG	2.10	1	Little Valley Road, Widen from 2830 South to Commerce Drive	Widen/Reconstruct	4,770,000				
9		Regional	SG	0.90	1	Southern Hills Parkway Phase I, Banded Hills Dr. to Commerce Dr.	New Construction	6,344,000				
11		Regional	SG	0.25	1	Tech Ridge Dr. to Black ridge Dr.	Developer New Const.	-				
12.a	SR- 18	State	UDOT	2.00	1	SR-18 Segment 1: from St. George Blvd to Main Street / Drainage & Intersections	Intersection Improvements	Under Const./Funded				
13		Regional	SG	2.80	1	Desert Color Pkwy from Lagoon Pkwy to So. Pkwy Exit 3 w/interchange	Developer New Const.	-				
15		Regional	SG	1.40	1	100 South, Widen from 700 East to Bluff St	Re-Striping	27,000				
17		Regional	SG	1.00	1	700 South, Widen from 700 East to Bluff St	Re-Striping	20,400				
23		Regional	SG	0.90	1	Commerce Drive- extend road from Little Valley Rd. to Southern Hills Pkwy w/bridge	Widen/Reconstruct	900,000				
25		Regional	W	0.50	1	Red Hills Parkway (W), Middleton Dr. to Green Springs	Widen/Reconstruct	4,680,000				
27		Regional	SG	2.70	1	Southern Hills Pkwy from Commerce Drive to Southern Parkway Exit 5 /bridge	New Construction	24,752,000				
30		Regional	W	1.00	1	Green Springs and Telegraph Intersection Improvements	Widen/Reconstruct	2,080,000				

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31		Regional	SG	2.02	1	3000 East from 1580 South to Horseman Park Dr 5 Lane Road	Developer New Const.	-		
32		Regional	SG	0.20	1	Wal-Mart / Home Depot Connection between Washington & St. George	New Construction	1,890,000		
34.b		Regional	W	1.00	1	George Washington Blvd. from 240 West to Washington Fields Road	Developer New Const.	-		
34.c		Regional	W	1.00	1	George Washington Blvd. from Camioreal Rd Southern Corridor	New Construction	Under Const./Funded		
35		Regional	SG/W	1.30	1	Merrill Road from 3000 E. (SG) to 20 E (W)	Widen/Reconstruct	11,700,000		
36	I-15	State	UDOT	1.00	1	I-15 Milepost 11 Interchange and Corridor Lane Widening, MP 10 to MP 13	New Construction	Under Const./Funded		
37		Regional	W	0.90	1	Wash. Fields Road, Lost Ridge Dr. to George Wash Blvd. (Phase IV A & B) Widening	Developer New Const.	10,608,000		
39		Regional	W	2.90	1	Washington Fields Road from Warner Valley Road to Airport Parkway	Developer New Const.	-		
42		Regional	Н	1.50	1	Purgatory Road	New Construction	39,936,000		
43a	SR-9	State	UDOT	1.00	1	SR-9 Segment 2: Purgatory Rd. (5300 W) Interchange	New Interchange	50,325,000		
43b	SR-9	State	UDOT	1.00	1	SR-9 Segment 3: Telegraph Street Interchange	New Interchange	55,000,000		
46		Regional	Н	3.60	1	Turf Sod Road from 4300 West to Southern Parkway	New Construction	31,680,000		
48		Regional	Н	0.70	1	2800 West, SR-9 to 600 North	New Construction	Under Const./Funded		
50		Regional	Н	0.60	1	2300 South from 3400 West to 700 West (Phase I-III along sewer ROW)	Widen/Reconstruct	37,024,000		
51		Regional	Н	2.50	1	3000 South from 1150 West to 3000 West	New Construction	23,040,000		
52		Regional	Н	0.60	1	1400 West Street from SR-9 to 600 North	New Construction	5,310,000		
53		Regional	Н	0.50	1	1150 West Street, from 600 North to SR-9	Widen/Reconstruct	2,655,000		
54		Regional	Н	2.20	1	700 West from 600 North to Airport Road	Widen/Reconstruct	7,920,000		
55		Regional	SG		1	Traffic Control Center ITS	ITS	600,000		
58		Regional	Н	2.46	1	3400 West from Dixie Springs Drive to SR-9	New Construction	23,130,000		
60		Regional	SG	0.50	1	100 South Underpass at I-15 in St. George	Widen/Reconstruct	14,040,000		

2023-2050 REGIONAL TRANSPORTATION PLAN											
61.a		Regional	Ι	0.50	1	Western Corridor North (I), Old Highway 91 to 400 East	New Construction	4,888,000			
61.b		Regional	SC/I	0.90	1	Western Corridor North, 400 East City Boundary to City Boundary	New Construction	8,528,000			
61.c		Regional	I	1.20	1	Western Corridor North (I), City Boundary to Snow Canyon Parkway	New Construction	11,440,000			
62		Regional	SG/SC	1.52	1	Connector road from Old Hwy 91 to Gap Canyon Pkwy in St. George	New Construction	22,152,000			
64		Regional	SG	0.54	1	Cloud Drive Phase 2 - Indian Hills Drive to Dixie Drive	New Construction	3,780,000			
66		Regional	SG	2.70	1	Hidden Valley Drive Frontage Road - east side of I-15 from MP 2 to MP 4	New Construction	16,016,000			
68		State	UDOT	4.60	1	Northern Corridor Phase 1 (First 2 Lanes)	New Construction	45,760,000			
69.a		Regional	SG		1	River Road, Widening/intersection improvements, Blvd. to Riverside Dr.	Widening	15,392,000			
69.b		Regional	SG	4.50	1	River Rd, Widening/intersection improvements, Boulder Springs Rd to Brigham Rd	Widening	25,480,000			
75	SR-7	State	UDOT	1.00	1	SR-7 Desert Canyon Dr to Airport Access (2nd barrel)	New Construction	18,512,000			
83		State	UDOT		1	I-15 Widening from MP 6-8	Widen	Under Const./Funded			
90		Regional	SG	0.50	1	1450 South Extension to Crosby Way	New Construction	13,832,000			
95	SR-9	State	UDOT	3.20	1	SR-9, increase capacity from SR-59 to Southern Parkway	Widen/Reconstruct	65,000,000			
97		Regional	SG	3.00	1	Cottonwood Springs Dr from Red Hills Pkwy to Northern Corridor	New Construction	10,080,000			
113		Regional	W	3.00	1	Long Valley Road	Developer New Const.	-			
116		Regional	Н	1.20	1	Sand Hollow Road from SR-9 to Southern Parkway	Widening	97,400,000			
117		Regional	SG	1.50	1	Airport Parkway from North Airport Access to West Airport Rd	New Construction	12,150,000			
127		State	UDOT	3.30	1	Construct Toquerville Bypass or Widen/Reconstruct SR-17 from MP1.1 to I-15	New Construction	Under Const./Funded			
129		Regional	SG	0.50	1	700 South widening under I-15 in St. George	Widen/Reconstruct	13,624,000			
130		Regional	W	0.90	1	4750 South from Airport Parkway to Washington Fields Road	Developer New Const.	4,160,000			
143	SR- 34	State	UDOT	0.50	1	SG Blvd/Red Cliffs Dr - Intersection improvements	Widen/Reconstruct	5,000,000			

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Regional Needs

\$ 584,427,400

Regional Funding 105% Assumption \$ 556,118,987

Continued on Other Side

	Phase 2 (2033-2042)											
Projec t #	Rout e	Categor y	City	Lengt h	Phas e Need	Project Description	Project Concept					
2		Regional	I	1.50	2	Red Mountain Blvd. (200 East) (I), Old Highway 91 to Center Street	Reconstruction	\$ 13,230,000				
78		Regional	SC	1.50	2	Pioneer Parkway, Lava Flow Drive to Red Mountain Drive	Widen to 5 lanes	23,800,000				
80		Regional	SG	1.90	2	Dixie Dr - Widen to 7-lane section from Gap Canyon Pkwy Dr to Blackridge	New Construction	20,400,000				
81		Regional	SG	0.50	2	New Interchange at West end of Northern Corridor	Widen/Reconstruct	55,000,000				
84	I-15	State	UDOT	3.00	2	I-15 Widening (4th Lane) in Southbound direction from MP 16-13	Widen/Reconstruct	20,240,000				
87		Regional	SG	1.80	2	Quality Drive from Commerce Dr to Hidden Valley Rd	New Construction	13,860,000				
88	I-15	State	UDOT	0.30	2	Leeds North Interchange @ MP 23.7	Interchange Upgrade	74,000,000				
92		Regional	Н	2.70	2	3300 South from Rlington Parkway to 3000 West	New Construction	9,720,000				
93		Regional	Н	2.60	2	1500 South from 700 West to 3000 West	New Construction	25,740,000				
96		Regional	EWC	2.50	2	Toquerville to Leeds Connector Road	New Construction	49,200,000				
98		Regional	Н	2.00	2	1500 West from 1300 South to 3000 South	New Construction	20,160,000				
100		Regional	SG	1.00	2	Connector Road from Southern Hills Pkwy to West Airport Rd	New Construction	16,600,000				
101		Regional	Н	7.00	2	1150 West from 2300 South to 4700 South (Phase III)	New Construction	35,460,000				
103		Regional	SG	4.30	2	Airport Loop Road from Banded Hills to Airport Parkway	New Construction	26,200,000				
106		Regional	W	0.70	2	Extend Main Street to 100 East, south of 400 South	New Construction	2,160,000				
107		Regional	W	0.80	2	Washington Fields Rd 3650 So. to Stucki Farms widen to 5-lanes (Phase V.b)	Developer New Const.					

						2023-2050 REGIONAL TRANSPORTATION PLAN		
108		Regional	W	1.10	2	Wash. Fields Road - Stucki Farms to Warner Valley Rd. 5-lane section (Phase VI.b)	Developer New Const.	-
109	SR-7	State	UDOT	4.00	2	So. Parkway Segment IIIa (SG & W), Airport to Warner Valley Road (2nd Barrel)	New Construction	64,800,000
110		Regional	SG/W	1.50	2	So. Pkwy East Frontage Road from Deseret Canyon Dr to So. Pkwy Interchange 9	New Construction	63,400,000
112	SR-7	State	UDOT	4.00	2	So. Parkway Segment IIIb, Warner Valley Rd. to Washington Dam Rd. (2nd Barrel)	New Construction	88,200,000
115	SR-7	State	UDOT	3.20	2	So. Parkway Segment IVa, Wash. Dam Rd to Sand Hollow (2nd barrel)	New Construction	65,400,000
118		Regional	Н	0.40	2	130 North from 3400 West to 3700 West	New Construction	3,510,000
119		Regional	Н	1.30	2	200 North from 2800 West to 3400 West	New Construction	10,440,000
120		Regional	Н	4.90	2	3000 West from 150 South to Southern Parkway	New Construction	47,700,000
121	SR-7	State	UDOT	4.60	2	So. Parkway Segment IVb, Sand Hollow to 3000 S (2nd Barrel)	New Construction	90,200,000
122	SR-7	State	UDOT	3.30	2	So. Parkway Segment V, 3000 S to SR-9 (2nd Barrel)	New Construction	66,200,000
123		Regional	Н	4.60	2	2750 West from 150 South to 3000 West	New Construction	69,840,000
124		Regional	Н	2.70	2	1300 South from 200 West to 3000 West	New Construction	30,060,000
125.a		Regional	Н	6.80	2	Rlington Parkway from 400 South to 3000 South	New Construction	53,190,000
125.b		Regional	Н	6.80	2	Rlington Parkway from 3000 South to 4700 South/1100 West Intersection	New Construction	
126		Regional	Н	1.30	2	1150 West from 400 South to 2300 South (Phase II)	Reconstruction	18,270,000
128		Regional	SG		2	Traffic Control Center ITS	ITS	600,000
131		Regional	W	1.30	2	Interchange 8 Road from Airport Parkway to SP East Frontage Road	New/Developer	-
153	I-15	State	UDOT	2.00	2	I-15 Lane Widening from MP 2-4	Widen	55,440,000
157		Regional	Н	1.60	2	SR-9 South Frontage Road, Southern Parkway to Sand Hollow Road	Developer New Const.	32,400,000
158		Regional	Н	0.70	2	3000 West, 200 North to 600 North	Developer New Const.	6,120,000
167		Regional	Н	0.50	2	2800 West, 600 North to North City Limits	Shared City/Developer New	_

2023-2050 REGIONAL TRANSPORTATION PLAN									
168		Regional	L	1.00	2	North Babylon Road from Leeds/Toquerville Connector to Leeds Main Street	New Construction	21,200,000	
175		Regional	W		2	2000 South Widening (Wash. City)	Developer Widening	-	
				•					
						110%	Phase 2 State Needs State Funding Assumption	\$ 524,480,000 477,312,689	
						109%	Regional Needs Regional Funding Assumption	\$ 668,260,000 \$ 611,243,895	
						Phase 3 (2043-2050)			
Projec t #	Rout e	Categor y	City	Lengt h	Phas e	Project Description	Project Concept		
76					neea				
		Regional	I	1.10	3	Kwavasa Drive (I) in Kayenta	Widen/Reconstruct	37,800,000	
77		Regional State	I UDOT	1.10	3 2	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel)	Widen/Reconstruct New Construction	37,800,000 79,352,000	
77 82		Regional State State	I UDOT UDOT	1.10 10.00 7.20	Need 3 2 2	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel) Northern Corridor - Phase 2 (Second 2 Lanes)	Widen/Reconstruct New Construction New Construction	37,800,000 79,352,000 45,760,000	
77 82 85		Regional State State Regional	I UDOT UDOT SG	1.10 10.00 7.20 0.50	Need 3 2 2 2 2	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel) Northern Corridor - Phase 2 (Second 2 Lanes) Man O Warl-15 Crossing between Pioneer Rd to Hidden Valley Dr	Widen/Reconstruct New Construction New Construction New Construction New Construction	37,800,000 79,352,000 45,760,000 35,000,000	
77 82 85 86		Regional State State Regional Regional	I UDOT UDOT SG W	1.10 10.00 7.20 0.50 5.10	Need 3 2 2 2 3	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel) Northern Corridor - Phase 2 (Second 2 Lanes) Man O Warl-15 Crossing between Pioneer Rd to Hidden Valley Dr Pecan Road through Warner Valley (Warner Valley Road to So. Parkway)	Widen/Reconstruct New Construction New Construction New Construction New Construction New Construction	37,800,000 79,352,000 45,760,000 35,000,000 89,000,000	
77 82 85 86 89		Regional State State Regional Regional	I UDOT UDOT SG W SG	1.10 10.00 7.20 0.50 5.10 3.00	Need 3 2 2 2 3 3	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel) Northern Corridor - Phase 2 (Second 2 Lanes) Man O Warl-15 Crossing between Pioneer Rd to Hidden Valley Dr Pecan Road through Warner Valley (Warner Valley Road to So. Parkway) 400 East I-15 Ped Tunnel Crossing	Widen/Reconstruct New Construction	37,800,000 79,352,000 45,760,000 35,000,000 89,000,000 14,080,000	
77 82 85 86 89 94		Regional State State Regional Regional Regional	I UDOT UDOT SG W SG SG	1.10 10.00 7.20 0.50 5.10 3.00 1.90	Need 3 2 2 3 3 3 3 3 2	Kwavasa Drive (I) in Kayenta Western Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel) Northern Corridor - Phase 2 (Second 2 Lanes) Man O Warl-15 Crossing between Pioneer Rd to Hidden Valley Dr Pecan Road through Warner Valley (Warner Valley Road to So. Parkway) 400 East I-15 Ped Tunnel Crossing River Road, Widen to 5-lane section from Enterprise Dr to So. Pkwy	Widen/Reconstruct New Construction New Construction New Construction New Construction New Construction New Construction Widening	37,800,000 79,352,000 45,760,000 35,000,000 89,000,000 14,080,000 40,600,000	
77 82 85 86 89 94 114		Regional State State Regional Regional Regional Regional	I UDOT UDOT SG W SG SG SG W	1.10 10.00 7.20 0.50 5.10 3.00 1.90 1.50	Need 3 2 2 3 3 3 3 3 3 3 3 3 3	Kwavasa Drive (I) in KayentaWestern Corridor, Sun River Parkway to Gap Canyon Pkwy (1st Barrel)Northern Corridor - Phase 2 (Second 2 Lanes)Man O Warl-15 Crossing between Pioneer Rd to Hidden Valley DrPecan Road through Warner Valley (Warner Valley Road to So. Parkway)400 East I-15 Ped Tunnel CrossingRiver Road, Widen to 5-lane section from Enterprise Dr to So. PkwyWarner Valley Road from Southern Parkway to the road through Warner Valley	Widen/Reconstruct New Construction Widening New Construction	37,800,000 79,352,000 45,760,000 35,000,000 89,000,000 14,080,000 40,600,000 28,400,000	

2023-2050 REGIONAL TRANSPORTATION PLAN										
136		Regional	SG		3	Traffic Control Center ITS	ITS		-	
137	SR- 59	State	UDOT	3.70	2	SR-59 - Widen from Main St to Hurricane City limits	Widen/Reco	onstruct	115,600,000	
138	SR-9	State	UDOT	6.40	2	SR-9 Segment 4 - Widen to 6-Lanes from I-15 to Southern Parkway	Widen/Reco	onstruct	127,000,000	
139		Regional	Н	24.20	3	Warner Valley Road - Extend from Pecan Road to Honeymoon Trail Road	New Constr	ruction	82,800,000	
140		Regional	SG	1.30	2	Snow Canyon Parkway- Widen to 7-lane section from 2000 N to SR-18	Widen/Reco	Instruct	29,200,000	
147		Regional	SG/W	3.20	2	George Washington Blvd. from River Road to Washington Fields Road	Widen to 7	Lanes	63,200,000	
152		Regional	W	1.70	3	Washington Fields Road - Widen from Warner Valley to 3650 S to 7-lane section	Widenir	ng	34,200,000	
156		Regional	Н	1.30	3	Turf Sod Connector Road, Turf Sod Road to Purgatory Road	New Constr	ruction	3,870,000	
162		Regional	SG	0.60	2	Sunset Blvd, widen to 7-lanes from 1400 West to Dixie Drive	Widenir	ng	11,200,000	
166		Regional	I	3.00	3	Old Highway 91 (I), Pioneer Parkway to Shivwits	Widen to 5	Lanes	66,000,000	
184		Regional	W.Count y			Sheep Bridge Road hard surface	New Constr	ruction		
						110%	Phase 3 State Needs State Funding Assumption	3	\$ 399,312,000 \$ 361,714,025	
						88%	Regional Nee Regional Funding Assumption	ds J	\$ 535,350,000 \$ 611,766,749	
	Unfunded Needs List									
12.b	SR- 18	State	UDOT	2.00	2	(Bluff St.) SR-18 Segment 2: from 100 S to Main Street Widen to 7 Lanes	Widen/Reco	onstruct	34,200,000	
91		state	TBD	4.00	3	Babylon Road	New Constr	ruction	59,800,000	

						2023-2050 REGIONAL TRANSPORTATION PLAN		
104	SR- 59	State	UDOT	1.20	2	SR-59 from MP 22 to Big Plain Junction	Widening	g 127,600,000
134	I-15	State	UDOT	11.50	2	I-15 MP Exit 16 to Exit 27 Widening to 3 lanes	Widening	g 173,800,000
146		State	Н	0.10	3	I-15 - Install interchange at 5500 West	New Constru	rction 74,000,000
148		State	TBD	6.70	3	Honeymoon Trail Road from south end of Warner Valley and Southern Parkway	New Constru	uction 42,300,000
149	SR- 18	State	UDOT	0.30	2	SB Flyover at the Sunset/Bluff St intersection	Widen/Recor	18,000,000
159	I-15	State	UDOT	0.30	2	I-15 MP 8 Industrial Road direct connect	New Constru	uction 9,600,000
161	I-15	State	UDOT	2.60	2	I-15 MP 13 to MP 16 NB (4th Lane) with 3-lane exit at MP 16	New Constru	action 26,290,000
169	I-15	State	UDOT	3.00	3	Addition of Aux lanes from Port of Entry to Southern Parkway	Widening	g 18,700,000
170	I-15	State	UDOT	6.00	2	Addition of NB & SB Aux lanes from Exit 13 to Exit 16	Widening	g 47,080,000

631,370,000

Chapter 7 – Safety Management

Introduction

The Dixie MPO is committed to excellence in transportation planning. One area of planning will be given a lot of attention is 'Safety Management'. On the pages to follow, data and information will be presented that illustrates issues related to 'Safety and Security' as well as 'Traffic Safety'. Some ways those issues can be mitigated through objective identification and specific strategies, or projects intended to lessen their impact are also presented.

The UDOT has put significant efforts into safety related data and campaigns. That information is used as a part of the Dixie MPO planning effort. For more information on the UDOT campaign, please refer to the UDOT web site at http://www.udot.utah.gov.

Safety Performance Measures

As of 2019, the Federal Highway Administration has released performance measures to aid MPOs in planning and goal setting activities as long-range plans are drafted. The performance measure for "Safety" involves a look at "Serious Injury and Fatal Crashes," combined with the goal of reducing the number and rate of these crashes over time. The Dixie MPO agrees with this guidance and has set goals accordingly.

Consideration of projects that increase safety or that may lead to the reduction of serious injury and fatal crashes is integrated into the Dixie MPO project selection process. Furthermore, the MPO annually reviews the Utah Safety Index Map to identify potential projects for the Highway Safety Improvement Program.

State Safety Leadership Team

UDOT's Office of Traffic and Safety is facilitating an on-going safety plan and strategy in cooperation with many local, regional, state, and federal partners. Each MPO in Utah is a



member of this leadership team. One of the most visible projects has been the "ZERO Fatalities: A Goal We Can All Live With" program. Receiving national attention, this icon is becoming known throughout the entire state.

The primary program goals and objectives endorsed by the team and MPO boards will rely on education, outreach, and multi-agency partnering to accomplish them. Current Emphasis Areas include increasing use of safety restraints, improving intersection safety, and reducing aggressive driving and distracted driving, drowsy driving, truck safety, pedestrian and bicycle safety, and impaired driving. Various safety groups and governmental agencies have partnered on this statewide media campaign.

Continuing Safety Areas include enhancement of child safety, older driver safety, and transit system safety. Ongoing planning to improve pedestrian safety, bicycle safety, motorcycle safety, younger driver safety, and rural road safety will be coincided with increasing work zone safety and promoting safer truck travel. Special areas that may be visited and promoted periodically include enhancement of safety management systems, crash data systems, and emergency services capabilities.

UDOT, in conjunction with several road safety partners has created initiatives to promote road safety in Utah. One of those initiatives is the Utah Comprehensive Safety Plan. As noted on UDOT's website: "The Utah Comprehensive Safety Plan was developed by the Utah Safety Leadership Team, which consists of approximately 20 different private and governmental groups (including UDOT) interested in promoting roadway safety. The plan outlines several different roadway safety emphasis areas and notes what needs to be done from an engineering, education, and enforcement standpoint to achieve a reduction in fatalities for each emphasis area. Implementation and evaluation of the plan are also discussed." This plan can be accessed from the UDOT link noted above. Additionally, the State Freight Plan, addressed in Chapter 15 focuses on the safe movement of freight through the state.

Traffic Safety

The frequency and severity of traffic accidents is of major concern as transportation facilities are planned and developed. Crash data is now available to the MPO that identifies the location and contributing factors of traffic crashes throughout the area. Serious and fatal crash information is summarized on Map No. 5 - Traffic Crashes in Appendix B.

UDOT continues to provide crash data to the Dixie MPO for planning purposes. Map 5 in Appendix B and the chart below illustrate the incidence of severe injury and fatal crashes in Washington County between 2010-2022 categorized by severity and contributing factors.

Washington County – Serious Injury and Fatal Crashes by Contributing Factor2010-2022.



Figure 1 - Incidence of Severe and Fatal Crashes - 2010 - 2022 - Source: UDOT, protected under 23 USC 409 An analysis completed by Cambridge Systematics shows several contributing factors to crashes in Washington County. Common crash factors for our area include: multiple vehicles, intersection related crashes, aggressive driving/speeding, young drivers, single vehicle crashes, older drivers, roadway departure crashes, improper use of safety equipment, distracted driving, CMV involved crashes, overturn/rollover, crashes in work zones, and impaired driving.

From that analysis several possible focus areas were identified. The following are areas that will be given greater review:

Roadway Departures

The 2018 statistics from the Fatality Analysis Reporting System (FARS) show that national, there were 33,654 fatal crashes resulting in 36,560 fatalities. 45% of the fatalities were in rural areas while 53% were in urban areas. The fatality rate per 100 million vehicle miles traveled was 2 times higher in rural areas than un urban areas (1.68 and 0.86, respectively).

Nearly 36 percent of the fatal crashes were single-vehicle Run-Off-the-Road (ROR) crashes on various road types.

For two-lane, undivided, non-interchange, non-junction roadways exclusively, there were

8,901 (24 percent) single-vehicle ROR crashes recorded. There are more than twice as many ROR fatal crashes on rural roads than on urban roads, partly due to the higher speeds on rural roads, and the greater mileage, and lack of additional lanes, and median separation.

Some of the most prevalent contributing factors are listed below with a brief explanation of the problem. Objectives and strategies to address these factors also follow.

Restraint Use

Of the 22,215 passenger vehicle occupants killed in motor vehicle crashes in 2019, 47% were not

wearing seat belts. NHTSA estimates that 14,955 lives were saved in 2017 through the proper use of seat belts. An additional 2,549 people could have been saved if they had been wearing a seat belt.

Intersection Accidents

Un-signalized

Intersections constitute only a small part of the overall highway system, yet intersection-related crashes constitute more than 50 percent of all crashes within urban areas and over 30 percent in rural areas (Kuciemba and Cirillo, 1992). Fatal intersection crashes are a smaller portion of the total picture, suggesting that severity of crashes at intersections is lower than elsewhere.



Figure 2 Intersection Conflict Point Diagram

Signalized

Intersections constitute only a small part of the overall highway system, yet intersection related crashes constitute more than 20 percent of fatal crashes. It is not unusual that crashes are concentrated at intersections, because intersections are the point on the roadway system where traffic movements most frequently conflict with one another. Good geometric design combined with good traffic control can result in an intersection that operates efficiently and safely.

Aggressive Driving

While estimates of the problem vary, perceptions among both law enforcement and drivers are that aggressive driving is becoming more prevalent. According to a National Highway Transportation Safety Administration (NHTSA) survey about aggressive driving attitudes and behaviors, more than 60 percent of drivers see unsafe driving by others, including speeding, as a major personal threat to themselves and their families. More than half admitted to driving aggressively on occasion. The Surface Transportation Policy Project estimated that aggressive actions contributed to 56 percent of all fatal crashes. However, without a clear



definition of aggressive driving, these broad assertions are difficult to support.

Older Drivers

Between 2012 and 2050, the United States will experience considerable growth in its older population. In 2050, the population aged 65 and over is projected to be 83.7 million almost double the estimated population of 54 million in 2019, according to the US Census Bureau. By 2030, one in five Americans will be age 65 or older. In 2019, there were 5,195 people 70 and older killed. In 2017, older people made up 18 percent of all traffic fatalities during the year. As people age, a decline in sensory, cognitive, or physical functioning can make them less-safe drivers, as well as more vulnerable to injury once in a crash. Yet older Americans depend on automobiles for meeting their transportation needs.

The real safety concern for the older driver arises when one also takes into consideration their increased likelihood of being injured or killed in a crash. The older population traffic fatality rate per 100,000 US resident was 14.2 in 2019 vs 14.7 in 2010.

Objectives & Strategies

The Dixie MPO is focusing on the above contributing factors because of the impacts they pose in our area. Although these factors pose significant concerns it is possible to help alleviate those concerns through the adoption and implementation of objectives and strategies addressing each area. The listing below includes strategies which if implemented will help the Dixie MPO to address each focus area:

Roadway Departures (RD)

- RD1 Keep vehicles from encroaching on the roadside
 - Install shoulder, edge-line, or mid-lane rumble strips where needed
 - Provide improved highway geometry for horizontal curves
 - Provide enhanced pavement markings
 - Provide skid-resistant pavement surfaces
 - Apply shoulder treatments
 - Eliminate shoulder drop-offs
 - Widen and/or pave shoulders
 - Add medians or median separation where appropriate
 - RD2 Minimize the likelihood of crashing into an object or overturning if the vehicle travels off the shoulder
 - Design safer slopes and ditches to prevent rollovers
 - Provide appropriate clear zones
 - Remove/relocate objects in hazardous locations
 - Delineate trees or utility poles with retro-reflective tape
- RD3 Reduce the severity of the crash
 - Improve design of roadside hardware
 - Improve design and application of barrier and attenuation

Intersections

Un-signalized

- I.1 Management of access points near un-signalized intersections
 - Implement driveway closures/relocations
 - Implement driveway turn restrictions

- I.2 Reduce the frequency and severity of intersection conflicts through geometric design improvements
 - Provide left-turn lanes at intersections
 - Provide bypass lanes at T-intersections (Hi-T designs)
 - Provide deceleration lanes and right-turn lanes at intersections
 - Provide right-turn acceleration lanes at intersections
 - Provide full-width paved shoulders in intersection areas
 - Restrict or eliminate turning maneuvers by use of medians
 - Restrict or eliminate turning maneuvers by providing channelization or closing median openings
 - Close or relocate "high-risk" intersections
 - Reduce lane off-sets through intersections
 - Improve pedestrian and bicycle facilities to reduce conflicts between motorists and nonmotorists
- I.2 Improve sight distance at un-signalized intersections
 - Clear sight triangles on stop- or yield-controlled approaches to intersections
 - Clear sight triangles in the medians of divided highways near intersections
 - Eliminate parking that restricts sight distance

I.3 Improve driver awareness of intersections as viewed from the intersection approach for both daytime and nighttime driving

- Improve visibility of intersections by providing enhanced signing and delineation
- Improve visibility of the intersection by providing lighting
- Improve sight distances around intersections
- Provide a stop bar on minor road approaches
- Install larger regulatory and warning signs at intersections
- 1.4 Choose appropriate intersection traffic control to minimize crash frequency and severity
 - Provide all-way stop-control at appropriate intersections
 - Eliminate all-way stop control where not warranted
 - Provide roundabouts at appropriate locations
- 1.5 Improve driver compliance with traffic control devices and traffic laws at intersections
 - Provide targeted public information and education on safety problems at specific intersections
- I.6 Reduce operating speeds on specific intersection approaches
 - Post appropriate speed limit on intersection approaches
- 1.7 Guide motorists more effectively through complex intersections
 - Provide turn path markings
 - Provide lane assignment signing or marking at complex intersections
 - Meet or exceed MUTCD signing and striping requirements

Signalized intersection

- 1.8 Reduce frequency and severity of intersection conflicts through traffic control and operational improvements
 - Restrict or eliminate turning maneuvers
 - Employ signal coordination

- Improve operation of pedestrian and bicycle facilities at signalized intersections
- Remove unwarranted signals
- Provide advance intersection warnings where needed on higher speed road
- 1.9 Reduce frequency and severity of intersection conflicts through geometric improvements
 - Provide/improve left-turn channelization
 - Provide/improve right-turn channelization
 - Improve geometry of pedestrian and bicycle facilities
 - Reduce un-necessary delays
 - Reduce lane off-sets through the intersection
 - Improve night-time signing and visibility
- Improve sight distance at signalized intersections
 - Clear sight triangles
 - Avoid curved approach roads
 - Adjust median landscaping to allow for proper sight distance
 - Add back plates to enhance contrast between signals and their surroundings
 - Add supplemental signal heads to enhance signal visibility

Aggressive Driving

1.10

- AD.1 Deter aggressive driving in specific populations, including those with a history of such behavior, and at specific locations
 - Conduct educational and public information campaigns
- AD.2 Improve the driving environment to eliminate or minimize the external triggers of aggressive drivers
 - Change or mitigate the effects of identified elements in the environment
 - Reduce nonrecurring delays and provide better information about these delays

Older Drivers

- OD.1 Plan for an aging population
 - Establish a broad-based coalition to plan to address older adults' transportation needs
- OD.2 Improve the roadway and driving environment to better accommodate the special needs of older drivers
 - Provide advance warning signs
 - Provide advance-guide and street name signs
 - Provide all-red clearance intervals at signalized intersections



- Provide more protected left turn signal phases at highvolume intersections
- Provide offset left-turn lanes at intersections
- Improve lighting at intersections, horizontal curves, and railroad grade crossings
- Increase overall sign size (letters and numbers)
- Use higher reflective sign sheeting to provide improved recognition
- Encourage compliance with new retro-reflectivity standards
- Improve roadway delineation
- Replace painted channelization with raised channelization
- Reduce intersection skew angle
- Improve traffic control at work zones
- OD.3 Reduce the risk of injury and death to older drivers and passengers involved in crashes
 - Increase seatbelt use by older drivers and passengers through public education campaigns
 - Provide "mature driver" stickers for all drivers over 65

Dixie MPO SS4A Safety Action Plan Promise

As of 2023, the Dixie MPO received a \$1 million award from the Safe Streets and Roads Discretionary Grant Program (provided by Bipartisan Infrastructure Law under the Biden administration) to develop a Safety Action Plan in Washington County, Utah. This funding will be available through FY2023-2026. The Safety Action Plan Grant will allow the MPO to analyze all roadway safety and roadway fatality concerns within Washington County and how to plan to reduce roadway fatalities and serious injuries.

Chapter 8 – Security

The world has come to understand, since September 11, 2001, that our security is of utmost importance. We are fortunate to have a very active and comprehensive Emergency Management Office in Washington County that addresses road infrastructure as it relates to emergency evacuation.

Washington County Emergency Management

The Washington County Emergency Management Office has developed an Emergency Management Plan. The plan includes a County response to a variety of emergency situations which may occur in and around our communities. An evacuation Annex portion of the plan identifies procedures to coordinate evacuation needs during times of a natural, man-made, technological, and Homeland Security emergencies or disaster. The following information is intended to provide information about the Washington County Emergency Management plan



and not be a comprehensive report. Please reach out to Washington County Emergency Services for the entire plan or to speak with the County Emergency Manager. 435-301-7360

The portion of the Washington County Emergency Management Plan as it relates to transportation coordination is referred to as the Evacuation Annex and is outlined below. The purpose of Annex B, Evacuation, is to coordinate evacuation needs during times of a natural, man-made, or technological Homeland Security emergency or disaster.

The Evacuation Annex includes information regarding action, coordination, and preparation. The sections of this annex are:

Situation and Assumption

- Situation
- Assumptions

Concept of Operation

- General
- Mitigation Phase
- Preparation Phase
- Response Phase
- Recovery Phase

Direction and Control

This section declares who will is responsible for direction and control for specific situations. The federal government deals with nuclear attach, decision-making and implementation uses the Incident Command System, Incident Commanders delegates authority to deal with incidents, Washington County Sheriff's Offices coordination of on-scene large-scale evacuations in areas that are reliant of their office, the Emergency Operations Center is used for all emergency transportation resources, and the ultimate authority for protective action decision-making in the County rests with the Board of County Commission or their designees.

Organization and Assignment

The organization for protective action decision-making and implementation is the same as the emergency response, law enforcement, and support organizations used during emergencies and daily operations as defined in the basic plan. These responsibilities fall under the categories listed below, each with their own list of responsibilities. The full list of responsibilities is found in the Washington County Emergency Management Plan.

- Incident Commander
- Washington County Emergency Services
- Transportation Unit
- Washington County Council on Aging
- Washington County Sheriff's Office
- Utah Highway Patrol
- Fire, Rescue and Emergency Medical Services
- Washington County School District
- Washington County Public Works
- Washington County Road Department
- Southwest Utah Health Department
- Washington County Public Information Officer
- American Red Cross
- Utah Department of Transportation

Evacuation planning also will include consideration of:

1. The area to be evacuated.

2. Pick-up points where persons without private transportation will gather for evacuation by public transport.

3. Designated evacuation routes to be used by all vehicles during the evacuation.

4. Location of traffic control points.

5. Safe areas or buildings which provide some temporary measure of protection for evacuees from an actual or threatening disaster.

6. Location of reception centers where evacuees will be sent prior to moving to shelters or mass care shelters.

7. Designated mass care shelters that provide emergency sheltering and feeding of large numbers of evacuees.

8. Location of medical aid stations on evacuation routes, at temporary safe areas, and mass care shelters.

9. The time available for a reasonably risk-free evacuation.

10. Any personal belongings for the evacuated public.

Coordination with professional emergency managers

It is important to reach out to potential partners and develop a relationship in order to develop and foster a solid and lasting relationship. Building a network of professionals that work in the areas of security and emergency management that coordinates on a routine basis, regardless of whether a specific project is being developed, is critical to being able to smoothly incorporate these partners when beginning a new project.

The Washington County Emergency Management Office has worked diligently over the years to coordinate with all emergency management professionals.

Objective and Goals

To help to maintain a safe and secure environment the Dixie MPO will work towards meeting goals in cooperation with the Washington County Emergency Management Office and as stated below.

Objective

Work within existing networks to support the efforts of the Washington County Emergency Management Office.

Goals

1 Become more aware of the efforts of the Washington County Emergency Management Office.

2 Use the County Emergency Management contact list to begin a dialogue regarding evacuation planning for applicable projects.

3 Work with emergency managers to identify the best evacuation routes through the transportation network.
Chapter 9 – Congestion Management

A primary measure of a transportation system's success is that system's ability to accommodate traffic demands while minimizing traffic delay and congestion. The Dixie MPO Travel Demand Model forecasts growth in future traffic demands due primarily to the area's expected population growth. Following is a brief analysis of impacts associated with traffic congestion:

For this 2023 plan update, the 2050 "Build" Scenario (meaning all planned projects are constructed by 2050) and the 2050 "No-Build" Scenario (meaning no additional projects are constructed) were compared to render two outputs:

• The "Network Vehicle Delay" comparing the number of vehicle hour delays in 2050 under the two scenarios (chart at the right).



• The "total travel time" or a collective measure of the hours people would spend traveling on an average day in 2050 under each of the two scenarios (chart below).

The build scenario shows an overall reduction in Network Vehicle Delays of 38,500 hours per day (less idling/delayed vehicles). The build scenario also shows a reduction 41,600 hours a day of in Network Travel Times (more efficient travel throughout the network).

The societal cost of travel time delays includes an increase of air pollution as vehicles sit idling in traffic, a loss of productivity as motorists spend more time on the road, an increase in fuel costs, decreased safety, and an increase in motorist stress levels.

Managing congestion on a constrained transportation network (while accommodating population growth) requires careful decision making and the addition of network connections. The proper mix of highways, surface roads, public and private transit, bicycle and pedestrian facilities must be found to help maintain the quality of life and economic vitality desired in Utah's Dixie.

Condition	2050 Daily Network Hours Traveled	
	Travel Time (hours)	
No Build	294,900	
Build	253,300	

Objectives and Goals

The Dixie MPO recognizes the potential for extreme traffic congestion and will strive to support congestion reducing efforts.

Objective

The Dixie MPO will encourage the reduction and management of traffic congestion through the implementation of useful transportation tools as well as construction of appropriate infrastructure.

Goals

- Support the use of transportation tools including ITS Message Boards, the Traffic Control Center (TOC), Traffic Management efforts, Ramp Metering, Reversible Lanes, Cross-over left turn lanes and other state of the art tools.
- 2. Support the use of appropriate Transit Projects including the implementation of a Transit line from St. George to Springdale and possibly to from St. George to the local airport.
- 3. Identify and support the construction of Transportation infrastructure projects aimed at reducing congestion.
- 4. Encourage and recommend congestion reducing tools in each new project.
- 5. Use the Travel Demand Model to identify congestion delay and measure the reduction progress.

Chapter 10 – Corridor Preservation

Corridor preservation is the practice of purchasing future rights of way many years ahead of planned transportation projects as an effort to reduce overall costs to taxpayers. Estimates indicate that the early and well-planned purchase of transportation corridors can result in significant cost savings in the acquisition of right of way. The degree of importance for corridor preservation increases in areas like the Dixie MPO where high population growth is anticipated as developers and homebuilders are not always cognizant of the impacts their actions could have on the overall transportation community.

In 2009, the Washington County Board of Commissioners implemented a "\$10 per vehicle" annual registration fee to endow a corridor preservation fund that is administered by the county-wide Council of Governments (COG). The Dixie MPO encourages all municipalities to anticipate and address corridor preservation needs within their own boarders – and to utilize the Washington County Corridor Preservation Fund:

The COG is made up of elected leaders from throughout Washington County. The Council meets at least annually to review a list of priority projects and program funds from the Local Transportation Corridor Preservation Fund. The Fund is accumulating about \$1.5 million of revenues annually for acquisition of

future rights-of-way. To receive funding, projects must be on the COG project priority list and be supported by a majority of Council members.

Objectives and Goals

Preservation of future transportation corridors is critical now and in the future; the Dixie MPO will work towards meeting goals and objectives to assist this worthy cause.

Objective

Coordinate with the COG to edit the list of priority projects and select right-of-way acquisitions that maximize the effective use of the Washington County Corridor Preservation Fund.

Goals

- 1. Encourage all municipalities to anticipate and address corridor preservation needs within their own boarders.
- 2. Assist with the efforts of Washington County Public Works in preparing the Annual Master Priority Corridor Preservation Project List.
- 3. Notify Dixie MPO members aware of opportunities to use the Preservation Fund.
- 4. Become more aware of project needs and look for opportunities to preserve important transportation corridors through use of the Fund.
- 5. Work with Dixie MPO partners to identify opportunities for corridor preservation.

Chapter 11 – Environmental Mitigation

The primary purpose of the Dixie Regional Transportation Plan is to identify what transportation projects are needed in accordance with the values of safety, increased mobility, decreased traffic congestion, quality of life, economic development, and limited financial constraints.

Dixie MPO recognizes that transit, road, and trail projects bring positive and negative impacts to the natural and built environments. While corridor planning requires only a broad consideration of environmental impacts, Dixie MPO respects the more detailed environmental analyses required of each project prior to final design and construction. The MPO strives to establish steering and stakeholder committees to guide early corridor planning studies. Committees are comprised of resource agencies that consider impacts to air quality, farmland, fish and wildlife, historical/archeological resources, geologic hazards, floodplains, water quality, and wetlands.

Following is a brief discussion of potential environmental issues that may require further consideration, impact analysis, and environmental mitigation on a project-by-project basis prior to final alignment selection, design engineering, and construction:

Impacts

Farmland Impacts

Preservation of farmland is increasingly difficult in the Dixie Region. The shrinking availability of land, incentives to sell and give way to development, and the area's harsh desert environment are combining to reduce the supply of farmable land within the Dixie MPO planning boundary. Incentives for jurisdictions to protect and preserve farm environments may not be strong enough to overcome these market forces that are driving a growth in population and consuming once farmable land for commercial and residential use.

Geologic Hazards

The geologic diversity within the State of Utah is well known and much of that diversity and topographical constraint exists in the Dixie MPO area. The region is susceptible to earthquakes, rock fall, landslides, expansive soils, etc. Due to recent area events, natural hazards have become an increasing concern for area planners and constructors. Natural Hazard information can be obtained by visiting the Five County Natural Hazard Mitigation Plan website



(hazardmitigationplan.org). The MPO encourages transportation solutions to take in to account the

known geologic hazards in plans, designs, and construction to prevent, avoid, or mitigate as much as possible current, ongoing, and future geologic events.

Fish and Wildlife Impacts

The following table presents federally threatened and endangered species, State sensitive species found throughout the Dixie Region. Although these species are identified for planning purposes and early corridor preservation studies, more detailed investigation of impacts, avoidance, or mitigation are generally required as individual projects advance through the environmental clearance process.

Federally Listed Species in the Dixie MPO planning area

This list was compiled using the Information for Planning and Construction (IPaC*) tool from the U.S. Fish & Wildlife Service; other federally listed species likely occur in Utah Counties. This list is the current list from IPaC as of March 14, 2023.

Common Name
Utah Prairie Dog
California Condor

California Least Tern Mexican Spotted Owl Southwestern Willow Flycatcher Scientific Name Cynomys parvidens Gymnogyps californianus Sterna antillarum browni Strix occidentalis lucida Empidonax traillii extimus Critical Status Habitats Threatened EXPN** Endangered Threatened Y / Final Endangered Y / Final

Yellow-billed Cuckoo	Coccyzus americanus	Threatened	
Desert Tortoise	Gopherus agassizii	Threatened	Y / Final
Northern Mexican	Thamnophis eques megalops	Threatened	
Gartersnake			
Virgin River Chub	Gila seminuda	Endangered	Y / Final
Woundfin	Plagopterus argentissimus	Endangered	Y / Final
Monarch Butterfly	Danaus plexippus	Candidate	
Dwarf Bearclaw-poppy	Arctomecon humilis	Endangered	
Fickeisen Plains Cactus	Pediocactus peeblesianus ssp. fickeiseniae	Endangered	
Gierisch Mallow	Sphaeralcea gierischii	Endangered	Y / Final
Holmgren Milk-vetch	Astragalus holmgreniorum	Endangered	Y / Final
Jones Cycladenia	Cycladenia humilis var. jonesii	Threatened	
Shivwits Milkvetch	Astragalus ampullarioides	Endangered	Y / Final
Siler Pincushion Cactus	Pediocactus (=Echinocactus,=Utahia) sileri	Threatened	
Ute Ladies'-tresses	Spiranthes diluvialis	Threatened	

* Information for Planning and Construction (IPaC) from the U.S. Fish & Wildlife Service – March 14, 2023

** Experimental Population Non-Essential

Note: Please contact the U.S. Fish and Wildlife Service (801-975-3330) for the purpose of consultation under the Endangered Species Act.

"Certain birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

"Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures [...].

"The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in [the] project location. [...] This is not a list of every bird found in this location, nor a guarantee that every bird on this list will be found in your project area. [...]

"For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds" on this list please visit the IPaC tool." (IPaC U.S. Fish & Wildlife Service)

Birds of Conservation Concern								
Common Name	Scientific Name	Level of Concern	Breading Season					
Bald Eagle	Haliaeetus leucocephalus	Non-BCC Vulnerable	Breeds Oct 15 to Aug 31					
Bendire's Thrasher	Toxostoma bendirei	BCC Rangewide (CON)	Breeds Mar 15 to Jul 31					
Black Swift	Cypseloides niger	BCC Rangewide (CON)	Breeds Jun 15 to Sep 10					

Black-chinned Sparrow	Spizella atrogularis	BCC Rangewide (CON)	Breeds Apr 15 to Jul 31
California Gull	Larus californicus	BCC Rangewide (CON)	Breeds Mar 1 to Jul 31
Cassin's Finch	Carpodacus cassinii	BCC Rangewide (CON)	Breeds May 15 to Jul 15
Clark's Grebe	Aechmophorus clarkii	BCC Rangewide (CON)	Breeds Jun 1 to Aug 31
Clark's Nutcracker	Nucifraga columbiana	BCC - BCR	Breeds Jan 15 to Jul 15
Costa's Hummingbird	Calypte costae	BCC - BCR	Breeds Jan 15 to Jun 10
Evening Grosbeak	Coccothraustes vespertinus	BCC Rangewide (CON)	Breeds May 15 to Aug 10
Golden Eagle	Aquila chrysaetos	Non-BCC Vulnerable	Breeds Dec 1 to Aug 31
Grace's Warbler	Dendroica graciae	BCC - BCR	Breeds May 20 to Jul 20
Lesser Yellowlegs	Tringa flavipes	BCC Rangewide (CON)	Breeds elsewhere
Lewis's Woodpecker	Melanerpes lewis	BCC Rangewide (CON)	Breeds Apr 20 to Sep 30
Long-eared Owl	asio otus	BCC Rangewide (CON)	Breeds Mar 1 to Jul 15
Marbled Godwit	Limosa fedoa	BCC Rangewide (CON)	Breeds elsewhere
Olive-sided Flycatcher	Contopus cooperi	BCC Rangewide (CON)	Breeds May 20 to Aug 31
Pinyon Jay	Gymnorhinus cyanocephalus	BCC Rangewide (CON)	Breeds Feb 15 to Jul 15
Rufous-winged Sparrow	Aimophila carpalis	BCC Rangewide (CON)	Breeds Jun 15 to Sep 30
Virginia's Warbler	Vermivora virginiae	BCC Rangewide (CON)	Breeds May 1 to Jul 31
Western Grebe	aechmophorus occidentalis	BCC Rangewide (CON)	Breeds Jun 1 to Aug 31
Willet	Tringa semipalmata	BCC Rangewide (CON)	Breeds elsewhere
BCC - Birds of Conservation Conce	rn; CON - Birds of Conservation Concern in C	Continental USA; BCRs - Bird Conserv	vation Regions

Historical/Archeological Impacts

Historical and archeological sites are other components that are not easily measured, but add character and quality of life in the Dixie Region. Avoidance, mitigation, and restorations are options to consider as planned solutions reach the environmental analysis phase.

Although the Dixie Region has not been completely surveyed for archaeological resources, the MPO boundary areas are likely to contain numerous archaeological sites.

The ancestral Southern Paiute are believed to have moved into this region sometime between AD 1000 and 1300. They were hunters and gatherers who practiced a seasonal round of resource collection and processing over a broad and diverse landscape. In southern Utah, however, some Southern Paiute groups became small-scale farmers and diverted water from the Virgin and Santa Clara Rivers and other smaller streams to cultivate garden plots. Euro-American explorers to this region, including Dominguez and Escalante in 1776 and Jedidiah Smith in the 1820s, reported seeing irrigation ditches and small check dams constructed by the Southern Paiute to divert water from the rivers and streams onto their fields of corn, beans, and squash. A Southern Paiute site, located on private land near the study area, was excavated by archaeologists from Brigham Young University in the 1980s. This site contained evidence of maize cultivation that dated to AD 1700 and 1830 (Allison 1988).

As part of the NEPA process, consultation will be required with Native American tribes that may have an interest in the study area. Final determination of tribes to include in the consultation process will be

made during the NEPA process. The tribes with interest in the study area include the Hopi Tribe; the Navajo Nation; the Paiute Indian Tribe of Utah and its Shivwits, Cedar, Indian Peak, and Kanosh Bands; the Uintah/Ouray Ute; the Las Vegas Paiute; the Moapa Paiute; and the Kaibab Paiute.

Few surveys of historic resources have occurred within the study area. Historic resources in the study area relate to the 18th and 19th century Euro-American explorations. In 1776, two Franciscan priests from New Mexico, Dominguez and Escalante, traveled through southern Utah looking for an overland route to the Spanish colonies in California. This travel route came to be known as the Old Spanish Trail. The main branch of the Old Spanish Trail followed the Santa Clara River south from Mountain Meadows and then veered to the west over the low pass of Utah Hill (old Highway 91). In 2001, the Old Spanish Trail was designated as a National Historic Trail.

By the early 1850s, the first colonies were being established by members of the Church of Jesus Christ of Latter-day Saints in southern Utah. Some of the structures built by these colonies may be found in the study area; these structures include irrigation systems along the Santa Clara and Virgin Rivers and sites associated with stock animals.

Water-body and Floodplain Modification

Washington County in cooperation with FEMA and other agencies has produced an updated floodplain plan to deal with the aftermath of the January 2005 Flood in Dixie and to prevent and control floodwaters in future significant storm events. This plan is available at the offices of Washington County. The FEMA Digital Flood Insurance Maps greatly assist planning around and through flood plain areas. These and other maps are available at the FEMA web site or through any of the Washington County City offices that participate in the Federal Flood Insurance Program. The Washington County Flood Control Authority was formed as an intergovernmental body that deals with regional flood control issues within the county. Transportation needs solutions/projects must be planned designed and built with these requirements and conditions in mind.

Water Quality Impacts

Water quality can be greatly impacted by the number of impermeable surfaces (including roadways) in a region. Hard surfaces lead to polluted runoff instead of the water table's natural percolation cycle. Most of the larger communities within the MPO boundaries participate in the Utah Pollutant Discharge Elimination System (UPDES) programs. These programs administered through the Utah Department of Environmental Quality (DEQ) are designed to reduce or eliminate pollutants from surface runoff in conjunction with the EPA Clean Water Act.

Wetland Impacts

Wetlands provide an invaluable resource to our ecosystem. Section 404 of the Clean Water Act protects wetlands from development without a permit issued by the Army Corps of Engineers. Designing the roadways to protect the wetlands within the Dixie Region is in accordance with the requirements of the Clean Water Act and leads to a more sustainable community. A local office of the Army Corps of Engineers has been established and is available for further information.

Climate Change

While local discussions of climate change effects are minimal within the Dixie MPO, more and more attention is being directed within the state concerning this issue. MPO executives and planners regularly discuss flood control plans and recognize the need to construct roads and bridges to accommodate heavy runoff volumes and to facilitate the local needs for drainage; however, climate change may also have an effect on this and other aspects of transportation. Flooding events in 2005 and 2011 stimulated

local awareness of potential hydrology concerns in a changing environment and validated the need to over-plan bridge facilities and other flood treatments within the flood plains and waterways of Southwestern Utah. Changes in temperature, precipitation and extreme weather events have the potential to negatively affect the populations throughout the MPO.

A document titled "Climate Change and Public Health in Utah" provides an accessible overview and description of the influence of environmental factors on climate change and health in Utah. Many identified indicators could have an effect on how transportation is looked at and planned in the future.

Air Quality

Washington County, Utah, is currently considered an attainment area as defined by the Clean Air Act and therefore is not regulated by the EPA or the Utah Division of Air Quality. However, proper planning will be required if the region reaches non-attainment status in the coming years. In non-attainment status, plans to reduce personal automobile dependency would become vital. Although there are many sources of air pollution, including ambient air moving in from other parts of the region, auto emissions, vapor gases, and dust are common contributors to air pollution locally. Mode/trip decisions, reducing single occupancy vehicles, improving traffic flow and recovering gaseous vapors are some of the ways to protect the quality of air. These and other strategies will be looked at and recommended to local governments for their consideration and adoption. The Dixie area has been growing rapidly for many years and will continue to grow to build-out conditions and must look seriously at protecting its air shed quality.

The MPO anticipates continued growth in vehicle miles of travel, and the associated congestion and traffic delays that come with population growth. Some societal trends are catching hold toward the use of more energy efficient vehicles, and alternate modes of transportation such as bicycles, but the potential for air quality problems, especially for Ozone, is real for Utah's Dixie. The MPO will continue to endorse air-quality protection initiatives.

Integration of NEPA into the Planning Process

While the above elements are important components of the natural and built environment in the Dixie Region, each deserves its own thoughtful and comprehensive analysis on a project by project basis. At this point in the planning process, the Regional Transportation Plan does not attempt to perform a comprehensive Environmental Analysis or Environmental Impact Statement. Rather, the RTP is a list of projects that are deemed necessary to meet the growing regional transportation demands through 2050. Project alignments are mapped for planning and modeling purposes only with the expectation that adjustments may be necessary, or mitigation remedies required, as individual projects move through the environmental clearance processes as regulated by the National Environmental Policy Act (NEPA). Likewise, individual projects are not fully designed, engineered or final alignments set until that project is selected for funding priority and, where necessary, justified through an environmental clearance processe.

Unified and Cooperative Planning Processes

In 2009, public and private planners throughout Utah began creating the unified planning tool "U-Plan" – a web-based information platform designed to allow road and utility planners to jointly access information on rights-of-way, infrastructure lines, environmental concern areas, habitat areas, and other built and natural resources. The Dixie MPO views U-Plan as an integral tool within the transportation planning process and encourages outside agencies to participate.

Objective and Goals

The Dixie MPO recognizes that there are many environmental challenges throughout its planning boundary that must be considered when planning and constructing regional transportation corridors. As a result, a number of strategies have been identified throughout this chapter.

Objective

The Dixie MPO understands the need consider these environmental challenges in the planning stages and will strive to incorporate environmental solutions into its planning process.

Goals

- 1. To support the environmental processes associated with requirements for federally funded projects.
- 2. To become more aware of the historical and geological issues of the area.
- 3. Commission necessary studies and investigations to support the planning process.
- 4. Stay abreast of changes in environmental requirements throughout the planning area and specifically those related to air quality with special emphasis on ozone.
- 5. Support the plans, strategies, and Task Force identified in this chapter.
- 6. Be committed to the Dixie MPO work plan as described above.

Chapter 12 – Active Transportation

As noted in the Chapter 3, pedestrian, bicycle, and micromobility facilities are an integral part of the area's transportation system. Active transportation provides a myriad of economic, environmental and social benefits for the region. Vision Dixie calls for the implementation of "complete streets" criteria to ensure streets and roads accommodate all users including drivers, transit riders, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities. Complete Street designs are also intended to improve motorist attitude and behavior toward other street users.

Dixie MPO Staff and the Technical Advisory Committee have been coordinating efforts to develop a more safe, attractive, and better-connected system of active transportation infrastructure. The region already includes an extensive array of trails, and some shared roadways and bike lanes. However, walking and cycling for transportation purposes is often inconvenient and unsafe, as the current transportation system lacks meaningful connections to destinations.

The Dixie MPO Regional Active Transportation Plan. Identifies projects and policies in the region that can create a transportation network conducive to cycling, walking, and micromobility. Dixie MPO has continued to implement long-range active transportation planning efforts by updating and adopting the Regional Active Transportation Plan. The 2023-2050 Plan was put together through coordinating with local municipalities, applying project to general phasing, identifying priorities, and aligning it with the UDOT Unified Plan. The plan is located at this web link:

The Active Transportation Plan recommends a network of connected facility types, including bike lanes, shared roadways, shared-use paths, and various crossing improvements. Map 8 illustrates those projects.

The Dixie MPO Active Transportation Plan has been introduced into each municipality's transportation plan, with some cities opting to improve or further develop a more localized Active Transportation Plan. The Cities of St. George, Washington, and Hurricane have adopted Active Transportation Plans that are wrapped into their Master Transportation Plans.

Objectives and Goals

Objective

Improve conditions to make cycling and walking for transportation more safe, attractive, and convenient.

Goals

- Facilitate the appropriate design, construction, and maintenance of bicycle and pedestrian facilities.
- 2. Support a multimodal transportation system for all new construction and reconstruction projects.



3. Encourage policies and programs that improve bicycle and pedestrian safety.

Dixie MPO Regional Active Transportation Plan (2023-2050

Phase 1 Projects (2023 - 2032)

Project			Length		Project Conc
#	Name	City	(mi)	Beginning and End	/Facility Type
1	1150 West	Н	0.59	1150 West Street (H), from 600 North to SR-9	Bike Lane
2	W 2060 South	Н	0.61	From 2300 South to 700 West	Bike Lane
4	3000 South	н	2.23	3000 South (H) from 1150 West to 3000 West	Paved Shared Path
5	3400 West	Н	0.50	3400 West from Dixie Springs Drive to 2310 South	Bike Lane
6	3400 West	Н	0.57	3400 West from Flora Tech Road to SR-9	Bike Lane
7	3400 West	Н	1.47	3400 West from 2310 South to Flora Tech Road	Bike Lane
8	Purgatory Road	Н	2.64	From SR-9 extending 2.64 miles south	Paved Shared Path
10	700 West	Н	2.75	700 West (H) from 600 North to Airport Road	Bike Lane
11	DIXIE SPRINGS DR	Н	3.64	2300 South (H) from 3400 West to 1150 West	Paved Shared Path
12	DIXIE SPRINGS DR	Н	2.57	From Turf Sod Road to 3400 West	Paved Shared Path
13	STATE ST	н	2.99	SR-9 Segment 1: Virgin River Bridge to SR-7 (3- Lanes Each Dir.)	Paved Shared Path
14	TURF SOD RD	Н	4.09	From Washington Dam Road to 4300 West	Paved Shared Path
16	Connector Trail	Н	0.53		Shared Use P
17	Virgin River Trail	Н	5.94	Virgin River Trail near Country Way to SR-9	Shared Use P
18	SAND HOLLOW RD	н	1.03	Sand Hollow Road (H) from SR-9 to Sand Hollow Resort Pkwy	Paved Shared Path
19	400 S	I	0.12	400 S - From 100 W to 200 W	Multi-Use Par Trail
20	400 S	I	0.32	400 S - From Cordero Dr to Western Corridor	Multi-Use Par Trail
21	400 S	I	0.10	400 S - From Puerto Dr to Cordero Dr	Multi-Use Par Trail
25	450 N	I.	0.44	450 N - From Kwavasa Dr to 400 W	Multi-Use Par Trail
26	800 S	I	0.45	800 S - From Old Hwy 91 to Red Mountain Blvd	Multi-Use Pa Trail
27	Bike Path/multipurpose trail around Ivins Reservoir	I	0.89	Bike Path/multipurpose trail around Ivins Reservoir	Multi-Use Par Trail
28	Bike path/multipurpose trail between upper & lower reservior	I	0.07	Bike path/multipurpose trail between upper & lower reservior	Multi-Use Pa Trail

34	Crescent Moon Trail	I	0.08	Crescent Moon Trail from East side of Reservior to West Lake Dr	Multi-Use Pa Trail
35	Guy Ln	I	1.07	Guy Ln - From Finess Wy to Western Corridor	Multi-Use Pa Trail
36	Guy Ln	I	0.13	Guy Ln - From Fitness Way to Old Hwy 91	Multi-Use Pa Trail
37	Kayenta Pkwy	I	0.24	Kayenta Pkwy - From West Lake Dr to Kwavasa Dr	Multi-Use Pa Trail
38	Kwavasa Dr	I	0.23	Kwavasa Dr - From 200 N to Center St	Multi-Use Pa Trail
39	Kwavasa Dr	I	0.29	Kwavasa Dr - From 300 S to Old Hwy 91	Multi-Use Pa Trail
41	Kwavasa Dr	I	1.09	Kwavasa Dr - From Kayenta Pkwy to 200 N	Multi-Use Pa Trail
45	Paiute Dr	I	0.82	Paiute Dr - From Kwavasa to Taviawk Dr	Multi-Use Pa Trail
48	Red Mountain Blvd	I	0.18	Red Mountain Blvd - From Desert Rose Wy to Old Hwy 91	Multi-Use Pa Trail
49	Snow Canyon Pkwy	I	0.54	Snow Canyon Pkwy - From 1355 Snow Canyon Pkwy to Just south of Black Deset Dr.	Multi-Use Pa Trail
50	Snow Canyon Pkwy	I	0.18	Snow Canyon Pkwy - From Docena Dr to 1355 Snow Canyon Pkwy	Multi-Use Pa Trail
51	Taviawk Dr.	I	0.61	Taviawk Dr Wintook to West Shinava Dr.	Multi-Use Pa Trail
52	Trail Underpass (or overpass on Center St near Snow Canyon Dr	I	0.02	Trail Underpass (or overpass on Center St near Snow Canyon Dr	Underpass or Overpass
53	Trail Underpass (or overpass) on Old Highway 91 @ Western Corridor / (West)	I	0.03	Trail Underpass (or overpass) on Old Highway 91 @ Western Corridor - Combined w project #54 (54 was moved from this list as it is now combined with 53).	Underpass or Overpass
55	Trail Underpass (or overpass) on Old Highway 91 near Anasazi Rd.	I	0.03	Trail Underpass (or overpass) on Old Highway 91 near Anasazi Rd.	Underpass or Overpass
56	Tuacahn Wash Trail	I	0.31	Tuacahn Wash Trail - From 400 S to Western Corridor	Multi-Use Pa Trail
57	Tuacahn Wash Trail	I	0.33	Tuacahn Wash Trail - From Mesa Vista Dr to 400 S	Multi-Use Pa Trail
58	Tuacahn Wash Trail Extension	I	0.09	Tuacahn Wash Trail Extension - From Tuacahn Dr to Center St	Multi-Use Pa Trail
59	Unnamed	I	0.28	Unnamed - From Sage Wy to Center St and 800 W	Multi-Use Pa Trail
60	West Lake Dr/Kayenta Pkwy/Sage Way	I	0.26	West Lake Dr/Kayenta Pkwy/Sage Way	Multi-Use Pa Trail
61	Western Corridor	I	1.01	Western Corridor - From 800 E to Snow Canyon Pkwy	Multi-Use Pa Trail

410	Confluence Park North Regional Trail	LV	1.25	From Confluence Park bridge heading north approximately 1.25 miles	Multi-use Pav
411	Confluence Park Power Plant Trail	LV	0.32	From confluence Park bridge to the old powerplant	Multi-use Pav
414	Main Street Buffered Bike Lane	LV	1.82	From 300 S. at SR-9 to Main Street and Main Street from 300 S. to the Zion Corridor Trail on the north side of town.	Buffered Bike
461	Oak Grove Drive/Silver Reef Rd Path	Le	1.40	From I-15 to the Forest rd.	Multi-use Pav
64	Red Mountain Drive Shared Use Path	SC	0.86		Multi-Use Pa Trail
430	Inner Heights Loop Trail [A] Phase 1 Portion	SC	0.73	Western Corridor -From East Cordero Dr to end of Bella Vista Dr	Multi-Use Pa Trail
431	Inner Heights Loop Trail [B] Phase 1 Portion	SC	0.75	East Cordero Dr to End of Trail CT	Multi-Use Pa Trail
432	Inner Heights Loop Trail [C] Phase 1 Portion	SC	0.48	Rachel Dr to Pioneer Parkway	Multi-Use Pa Trail
433	Inner Heights Loop Trail [E] Phase 1 Portion	SC	0.25	Tuscany to Pioneer	Multi-Use Pa Trail
434	Inner Heights Loop Trail [F]	SC	0.14	Red Mountain Road	Multi-Use Pa Trail
435	Inner Heights Loop Trail [G]	SC	0.01	Red Mountain Road and north of Pioneer Parkway	Multi-Use Pa Trail
436	Inner Heights Loop Trail [H]	SC	0.02	Red Mountain Road and north of Pioneer Parkway	Multi-Use Pa Trail
65	1140 S Trail	SG	0.24	1140 S Trail	Multi-Use Pa Trail
66	1670 South Trail (1450 South Road Extension)	SG	1.30	1670 South Trail (1450 South Road Extension)	Multi-Use Pa Trail
70	3210 East	SG	0.74	3210 East	Multi-Use Pa Trail
71	3430 East Trail (Developer Built)	SG	0.82	3430 East Trail (Developer Built)	Multi-Use Pa Trail
72	Atkinville Trail	SG	0.25	Atkinville Trail	Multi-Use Pa Trail
73	Banded Hills Trail	SG	1.71	Banded Hills Trail	Multi-Use Pa Trail
74	Black Hill Trail	SG	0.41	Black Hill Trail	Multi-Use Pa Trail
75	Bloomington Sun River Trail Extension	SG	1.47	Bloomington Sun River Trail Extension	Multi-Use Pa Trail
76	Desert Canyons Parkway Trail - South of SR7 (Devel	SG	0.50	Desert Canyons Parkway Trail - South of SR7 (Devel	Multi-Use Pa Trail

77	Desert Canyons Parkway Trail - South of SR7 (Devel	SG	0.16	Desert Canyons Parkway Trail - South of SR7 (Devel	Multi-Use Pa Trail
78	Desert Canyons Parkway Trail - South of SR7 (Devel	SG	2.61	Desert Canyons Parkway Trail - South of SR7 (Devel	Multi-Use Pa Trail
79	Desert Canyons Parkway Trail - South of SR7 (Devel	SG	0.16	Desert Canyons Parkway Trail - South of SR7 (Devel	Multi-Use Pa Trail
80	Desert Canyons Parkway Trail - South of SR7 (Devel	SG	0.50	Desert Canyons Parkway Trail - South of SR7 (Devel	Multi-Use Pa Trail
81	Desert Canyons Trail System South of SR7	SG	0.39	Desert Canyons Trail System South of SR7	Multi-Use Pa Trail
82	Desert Color Trail System	SG	1.42	Desert Color Trail System	Multi-Use Pa Trail
83	Desert Color Trail System	SG	4.00	Desert Color Trail System	Multi-Use Pa Trail
84	Desert Color Trail System	SG	0.04	Desert Color Trail System	Multi-Use Pa Trail
85	Desert Color Trail System	SG	0.27	Desert Color Trail System	Multi-Use Pa Trail
86	Desert Color Trail System - Atkinville South Trail	SG	0.50	Desert Color Trail System - Atkinville South Trail	Multi-Use Pa Trail
87	Desert Color Trail System - Atkinville Trail North	SG	0.77	Desert Color Trail System - Atkinville Trail North	Multi-Use Pa Trail
88	Divario	SG	2.14	Divario	Multi-Use Pa Trail
89	Enterprise Dr Trail	SG	0.46	Enterprise Dr Trail	Multi-Use Pa Trail
90	Gap Canyon Trail	SG	2.40	Gap Canyon Trail	Multi-Use Pa Trail
91	Halfway Wash Trail (North Section)	SG	0.35	Halfway Wash Trail (North Section)	Multi-Use Pa Trail
92	Hidden Valley Trail	SG	0.32	Hidden Valley Trail	Multi-Use Pa Trail
93	Hidden Valley Trail	SG	0.65	Hidden Valley Trail	Multi-Use Pa Trail
94	Lizard Wash Park Connector Trail	SG	0.14	Lizard Wash Park Connector Trail	Multi-Use Pa Trail
95	Medallion Drive Trail (Developer Built)	SG	0.62	Medallion Drive Trail (Developer Built)	Multi-Use Pa Trail
96	Middleton Wash Trail Extension South	SG	0.42	Middleton Wash Trail Extension South	Multi-Use Pa Trail
97	Rim Rock Wash Trail Extension South	SG	0.40	Rim Rock Wash Trail Extension South	Multi-Use Pa Trail
98	River Road Trail	SG	2.07	River Road Trail	Multi-Use Pa Trail

99	Santa Clara River Trail	SG	0.62	Santa Clara River Trail	Multi-Use Par
100	Santa Clara River Trail	SG	0.20	Santa Clara River Trail	Multi-Use Pa
					Trail
102	Seegmiller Canal Trail	SG	0.67	Seegmiller Canal Trail	Multi-Use Par
103	Seegmiller Canal Trail	SG	1.78	Seegmiller Canal Trail	Multi-Use Pa
					Trail
104	Sky West Connector Sidepath	SG	0.07	Sky West Connector Sidepath	Multi-Use Pa
					Trail
105	Slick Rock Trail	SG	0.20	Slick Rock Trail	Multi-Use Pa Trail
106	Slick Rock Trail	SG	0.09	Slick Rock Trail	Multi-Use Pa
					Trail
107	Southern Hills Parkway	SG	0.48	Southern Hills Parkway (Developer Built)	Multi-Use Pa
	(Developer Built)				Trail
108	Southern Hills Parkway	SG	0.36	Southern Hills Parkway (Developer Built)	Multi-Use Pa
	(Developer Built)				Trail
109	Southern Hills Prkwy Trail	SG	0.37	Southern Hills Prkwy Trail	Multi-Use Pa
110	Southorn Hills Drivey Trail	SC	0.50	Southorn Hills Drivey Troil	I rail
110	Southern Hills Prkwy ITali	30	0.50		Trail
113	Tech Ridge Trails	SG	0.15	Tech Ridge Trails (Developer Built)	Multi-Use Pa
					Trail
114	Tech Ridge Trails	SG	0.23	Tech Ridge Trails (Developer Built)	Multi-Use Pa
					Trail
115	Tech Ridge Trails	SG	0.25	Tech Ridge Trails (Developer Built)	Multi-Use Pa
116	Tech Ridge Trails	SG	0 17	Tech Ridge Trails (Developer Built)	Multi-Lise Pa
110	reen nuge mais	50	0.17		Trail
117	Tech Ridge Trails	SG	0.18	Tech Ridge Trails (Developer Built)	Multi-Use Pa
					Trail
118	Tech Ridge Trails	SG	0.23	Tech Ridge Trails (Developer Built)	Multi-Use Pa
110	T 1 N 1 T 1		0.44		Trail
119	Tech Ridge Trails	SG	0.14	Tech Ridge Trails (Developer Built)	Multi-Use Pa
120	Tech Ridge Trails	SG	2 81	Tech Ridge Trails (Developer Built)	Multi-Use Pa
120			2.01		Trail
121	Tech Ridge Trails	SG	0.25	Tech Ridge Trails (Developer Built)	Multi-Use Pa
					Trail
122	Tech Ridge Trails	SG	0.15	Tech Ridge Trails (Developer Built)	Multi-Use Pa
100	Task Didas Tasik		0.12	Task Dides Task (Developed 2, 11)	
123	i ech kidge Trails	SG	0.12	iech Ridge Trails (Developer Built)	IVIUITI-Use Pa
124	Tech Ridge Trails	SG	0.11	Tech Ridge Trails (Developer Built)	Multi-Lise Par
127		50	0.11		Trail

125	Tech Ridge Trails	SG	1.69	Tech Ridge Trails (Developer Built)	Multi-Use Pa Trail
126	Tech Ridge Trails	SG	0.05	Tech Ridge Trails (Developer Built)	Multi-Use Par Trail
128	Tuweep Dr. trail	SG	1.29	Tuweep Dr. trail	Multi-Use Pa Trail
129	Virgin River North Trail	SG	1.60	Virgin River North Trail	Multi-Use Par Trail
130	Virgin River South Trail - Springs Park to Mall D	SG	0.77	Virgin River South Trail - Springs Park to Mall D	Multi-Use Par Trail
460	700 E Curb Separated Cycle Track	SG	1.00	700 E Curb Separated Cycle Track - Temple Springs Trail to 700 S	Multi-Use Pa Trail
132	Touqerville Bypass	Т	5.42	New two-way road bypassing the Center of Touqerville due to the increase of traffic. 4' shoulders will be added for active transportation. 8' multi-use path on both sides of the road.	Multi-Use Pa Trail
151	Red Hills Parkway	W	2.26	1000 East to City Limit	Bike Lane
157	Southern Parkway Trail	W	5.15	From Long Valley Rd. south to City Boundary	Shared Use P
135	300 East RRFB	W	N/A	300 East & 300 North to	RRFB
136	300 East Trail	W	1.01	Telegraph Street to Virgin River Trail North	Shared Use P
139	3650 South Trail	W	2.27	City Limit to City Limit	Shared Use P
141	Canal Trail	W	7.01	Virgin River Trail to Medallion Drive	Shared Use P
142	Canal Trail Connector	W	0.04	Canal Trail to Camino Real	Shared Use P
143	Coral Canyon Elementary RRFB	W	N/A	Canyon Crest Avenue & Willow Springs Drive to	RRFB
144	Curb Extensions for Riverside School Crossing	W	N/A	Harvest Lane & 2500 South to	Curb Extension
145	Fairway Drive RRFB	W	N/A	Fairway Drive & Existing Cart Path to	RRFB
146	Green Spring Drive	W	0.22	Buena Vista Boulevard to Telegraph Street	Shared Use P
147	Green Spring Drive	W	0.17	Telegraph Street to City Limit	Shared Use P
148	I-15 Millcreek Trail Undercrossing	W	N/A	I-15 & Millcreek Trail to	Grade Separa Crossing
149	Merrill Road	W	1.29	3000 East to Washington Fields Road	Separated Bil
150	Millcreek Trail	W	0.35	Millcreek Trail to 300 North	Shared Use P
152	Red Hills Parkway/Buena Vista Boulevard	W	0.97	Red Hills Parkway/Buena Vista Boulevard Bike Lane to Main Street	Bike Lane
153	Red Hills Parkway/Buena Vista Boulevard	W	0.34	City Limit to Red Hills Parkway/Buena Vista Boulevard BBL	Bike Lane
154	Sandia Road/2000 South	W	1.57	Merrill Road to Washington Fields Road	Buffered Bike
155	South Nichols Peak/Merrill Road Trail	W	1.32	Sandia Road to Washington Fields Road	Shared Use P

156	Southern Parkway Connector Trail	W	0.23	Washington Dam Road to SR-7 EB On-Ramp	Shared Use P
158	Telegraph Street	W	1.26	300 East to Sienna Hills Park Trail	Shared Use P
160	Three Rivers Trail System West	W	0.36	Virgin River Trail to Canal Trail	Shared Use P
162	Virgin River Trail Overcrossing	W	N/A	Virgin River & Canal Trail to	Grade Separa Crossing
163	Virgin River Trail/Country Way	W	0.15	North of Bridge to 500' South of Bridge	Shared Use P
171	Washington Parkway (Future)	W	2.97	City Limit to I-15 Off-Ramp	Separated Bil
					Phase 1 Tota

Phase 2 Projects (2033-2042)

Project			Length		Project Conc
#	Name	City	(mi)	Beginning and End	/Facility Type
172	Virgin River Trail	Η	9.07	From SR-9 real Quail Lake Estates to the LaVerkin Confluence Park/Virgin River Trail	Shared Use P
173	Gould Wash Trail	Н	2.76	From the Virgin River Connector Trail at 600 N to near the Three Falls Trailhead	Shared Use P
174	Virgin River Trail	Η	1.22	From the LaVerkin Confluence Park/Virgin River Trail to the LaVerkin/Hurricane Bridge on SR-9	Shared Use P
175	Virgin River Trail	Н	2.81	From the LaVerkin/Hurricane Bridge on SR-9 to the Diversion Dam	Shared Use P
176	Hurricane Canal Trail	Η	2.33	From the Gould Wash North to the Virgin River just East of the LaVerking/Hurrican Bridge	Shared Use P
177	Virgin River Trail	Н	0.20	Connector Trail at from Ridge to the Virgin River Trail at about 2600 S	Shared Use P
178	1150 West	Н	3.57	1150 West (H) from 2300 South to 4700 South (Phase III)	Paved Shared Path
179	1150 West	Н	2.37	1150 West (H) from 100 South to 2300 South (Phase II)	Bike Lane
180	1300 South	Н	1.02	1300 South (H) from 1150 West to 180 West	Bike Lane

181	1300 South	Н	2.42	1300 South (H) from 3000 West to 1150 West	Paved Shared Path
182	1500 South	Н	2.97	1500 South (H) from 700 West to 3000 West	Paved Shared Path
183	1500 West	Н	2.03	1500 West (H) from 1300 South to 3000 South	Paved Shared Path
184	290 North	Н	1.15	290 North (H) from 2800 West to 3400 West	Paved Shared Path
185	Rlington Parkway	Н	6.03	Rlington Parkway from 600 South to 4400 South	Paved Shared Path
186	2750 West	Н	5.09	2750 West (H) from 150 South to 3000 West	Paved Shared Path
187	3000 West	Н	0.76	3000 West (H), 290 North to 600 North	Paved Shared Path
188	3000 West	Н	0.21	3000 West (H) from SR-9 Frontage Road to 650 South	Bike Lane
189	3000 West (H)	Н	5.23	3000 West (H) from 650 South to Southern Parkway	Paved Shared Path
190	3300 South (H)	Н	1.07	3300 South (H) from Rlington Parkway to 3000 West	Paved Shared Path
191	So. Parkway Segment V	Н	3.23	So. Parkway Segment V, 3000 S to SR-9 (2nd Barrel)	Paved Shared Path
192	Southern Pkwy	Н	2.50	So. Parkway Segment IVb, Sand Hollow to 3000 S (2nd Barrel)	Paved Shared Path
193	SAND HOLLOW RD	Н	2.91	Sand Hollow Road (H) from SR-9 to Sand Hollow Resort Pkwy	Paved Shared Path
194	SR-9 South Frontage Road	Н	1.12	SR-9 South Frontage Road, 2900 West to Sand Hollow Road	Paved Shared Path
195	STATE ST	Н	3.06	SR-9 (H), From 100 West to Southern Parkway	Bike Lane
196	400 S	I	0.07	400 S - From 25 W to 75 W	Multi-Use Pa Trail
197	400 S	I	0.12	400 S - From Main St to 85 E	Multi-Use Pa Trail
198	400 S	I	0.38	400 S - From Rd Mountain Blvd to Coyote Wy	Multi-Use Pa Trail
199	Bike Path/multipurpose trail from Northeast side of Reservior to Keleva Trl	I	0.38	Bike Path/multipurpose trail from Northeast side of Reservior to Keleva Trl	Multi-Use Pa Trail
200	Center St	I	0.09	Center St - From 600 W to 525 W	Multi-Use Par Trail
201	Eventing Star Dr & Wintook Dr	I	0.44	Eventing Star Dr & Wintook Dr - From Kayenta Pkwy to Taviawk Dr	Multi-Use Par Trail
202	Kayenta Pkwy	I	0.62	Kayenta Pkwy - From Kwavasa Dr to Evening Star Dr	Multi-Use Par Trail
203	Kayenta Pkwy	I	0.45	Kayenta Pkwy - From Old Hwy 91 to Sage Way	Multi-Use Pa Trail

204	Kwavasa Dr	I	0.32	Kwavasa Dr - From Center St to 250 S	Multi-Use Par Trail
205	Kwavasa Dr	I	1.09	Kwavasa Dr - From Kayenta Pkwy to 200 N	Multi-Use Pa Trail
206	Old Hwy 91	I	0.72	Old Hwy 91 - From 200 W to Red Mountain Blvd	Multi-Use Par Trail
207	Old Hwy 91	Ι	0.30	Old Hwy 91 - From Anasazi Rd to 800 W	Multi-Use Par Trail
208	Pioneer Pkwy	I	0.15	Pioneer Pkwy - From Old Hwy 91 to 400 W	Multi-Use Par Trail
209	Sage Way	I	1.11	Sage Way - From Kayenta Pkwy to Old Hwy 91	Multi-Use Par Trail
210	Western Corridor	I	0.45	Western Corridor - From Old Hwy 91 to 400 E	Multi-Use Par Trail
413	Zion Corridor Trail (LaVerkin)	LV	4.39	From LaVerkin Overlook Rd. to crossing north of town to Confuence Park	Multi-use Pav
437	Inner Heights Loop Trail [I]	SC	0.46	Unnamed-Black Desert	Multi-Use Pa Trail
438	Inner Heights Loop Trail [J]	SC	0.26	Unnamed-Black Desert	Multi-Use Pa Trail
439	Inner Heights Loop Trail [K]	SC	0.18	Unnamed-Black Desert	Multi-Use Pa Trail
440	Inner Heights Loop Trail [L]	SC	0.08	Unnamed-Black Desert	Multi-Use Pa Trail
441	Inner Heights Loop Trail [M]	SC	0.08	Unnamed-Black Desert	Multi-Use Pa Trail
442	Inner Heights Loop Trail [N]	SC	0.44	Unnamed-Black Desert	Multi-Use Pa Trail
443	Inner Heights Loop Trail [O]	SC	0.75	Unnamed-Black Desert	Multi-Use Pa Trail
444	Inner Heights Loop Trail [P]	SC	0.39	Pioneer Bike Lane to Tamarack TRL	Multi-Use Pa Trail
445	Pioneer Bike Lane [Q]	SC	2.12	Pioneer	Bike Lane
446	Inner Heights Loop Trail [R]	SC	0.12	Stefanie Lane-From Lava Cove to 2500 W Cir	Multi-Use Pa Trail
447	Inner Heights Loop Trail [S]	SC	0.13	Canyonview West to Canyonview Ball Parks	Multi-Use Pa Trail
448	Inner Heights Loop Trail [T]	SC	0.06	Canyonview south ball park to Canyonview north ball parks	Multi-Use Pa Trail
211	1375 North Powerline Trail	SG	0.30	1375 North Powerline Trail	Multi-Use Pa Trail
212	700 South I-15 Path	SG	0.24	700 South I-15 Path	Multi-Use Par Trail
213	Airport Parkway Trail	SG	0.88	Airport Parkway Trail	Multi-Use Pa Trail

214	Bloomington Sun River Trail	SG	0.94	Bloomington Sun River Trail	Multi-Use Pa Trail
215	Chandler Drive Trail	SG	0.48	Chandler Drive Trail	Multi-Use Pa Trail
216	Chandler Drive Trail	SG	0.36	Chandler Drive Trail	Multi-Use Par Trail
217	Connector Trail	SG	0.04	Connector Trail	Multi-Use Par Trail
218	Connector Trail	SG	0.03	Connector Trail	Multi-Use Pa Trail
219	Copper Cliff Trail	SG	2.63	Copper Cliff Trail	Multi-Use Pa Trail
220	Desert Canyons Trail System North of SR7	SG	0.98	Desert Canyons Trail System North of SR7	Multi-Use Pa Trail
221	Desert Color Trail System	SG	4.84	Desert Color Trail System	Multi-Use Par Trail
222	Desert Color Trail System	SG	0.79	Desert Color Trail System	Multi-Use Pa Trail
223	Desert Color Trail System	SG	0.97	Desert Color Trail System	Multi-Use Par Trail
224	Desert Color Trail System	SG	0.93	Desert Color Trail System	Multi-Use Pa Trail
225	Desert Color Trail System	SG	0.77	Desert Color Trail System	Multi-Use Par Trail
226	Desert Color Trail System	SG	1.25	Desert Color Trail System	Multi-Use Pa Trail
227	Desert Color Trail System	SG	0.52	Desert Color Trail System	Multi-Use Pa Trail
228	Desert Color Trail System	SG	0.09	Desert Color Trail System	Multi-Use Pa Trail
229	Fort Pearce Wash A Trail	SG	2.35	Fort Pearce Wash A Trail	Multi-Use Pa Trail
230	Fort Pierce Wash Trail B	SG	2.17	Fort Pierce Wash Trail B	Multi-Use Pa Trail
231	Fort Pierce Wash Trail C	SG	2.10	Fort Pierce Wash Trail C	Multi-Use Pa Trail
232	Halfway Wash to Mathis Park Connector Trail	SG	0.98	Halfway Wash to Mathis Park Connector Trail	Multi-Use Pa Trail
233	Horseman Park Drive Trail	SG	0.09	Horseman Park Drive Trail	Multi-Use Par Trail
234	Middleton Wash North Trail	SG	1.25	Middleton Wash North Trail	Multi-Use Pa Trail
235	Middleton Wash North Trail	SG	0.25	Middleton Wash North Trail	Multi-Use Par Trail

	236	Middleton Wash Trail East Extension	SG	0.41	Middleton Wash Trail East Extension	Multi-Use Par Trail
	237	Northern Corridor Trail	SG	1.96	Northern Corridor Trail	Multi-Use Par Trail
	238	Pine View Park Connector Trail	SG	0.39	Pine View Park Connector Trail	Multi-Use Par Trail
	239	Rim Rock Trail - Extension North	SG	0.59	Rim Rock Trail - Extension North	Multi-Use Par Trail
	240	Rim Rock Wash Trail Extension South	SG	0.32	Rim Rock Wash Trail Extension South	Multi-Use Par Trail
	241	Sand Hollow Wash Trail Extension South C	SG	0.88	Sand Hollow Wash Trail Extension South C	Multi-Use Par Trail
	242	Sand Hollow Wash Trail/Mathis Park Connector	SG	0.08	Sand Hollow Wash Trail/Mathis Park Connector	Multi-Use Par Trail
	243	Southern Hills Trail (Developer Built)	SG	1.18	Southern Hills Trail (Developer Built)	Multi-Use Par Trail
	244	State Route 7 (Southern Parkway) Trail	SG	2.06	State Route 7 (Southern Parkway) Trail	Multi-Use Par Trail
	245	State Route 7 (Southern Parkway) Trail	SG	1.99	State Route 7 (Southern Parkway) Trail	Multi-Use Par Trail
	246	The Trails Loop Trail	SG	3.05	The Trails Loop Trail	Multi-Use Par Trail
	247	The Trails Loop Trail	SG	3.05	The Trails Loop Trail	Multi-Use Par Trail
	248	Tonaquint Trail System	SG	1.16	Tonaquint Trail System	Multi-Use Par Trail
	249	Tonaquint Trail System	SG	0.28	Tonaquint Trail System	Multi-Use Par Trail
	250	Tonaquint Trail System	SG	0.24	Tonaquint Trail System	Multi-Use Par Trail
	251	Tonaquint Trail System	SG	0.38	Tonaquint Trail System	Multi-Use Par Trail
	252	Tonaquint Trail System	SG	0.35	Tonaquint Trail System	Multi-Use Pa Trail
	253	Tonaquint Trail System	SG	0.03	Tonaquint Trail System	Multi-Use Pay Trail
	254	Siena Hills Park Trail Undercrossing	W		Siena Hills Park Trail & Telegraph St to	Grade Separa Crossing
	255	Washington Parkway Trail I-15 Undercrossing	W		Washington Parkway Trail & I-15 to	Grade Separa Crossing
ſ	256	20 East	W	2.40	2000 South to City Limit	Buffered Bike
	257	240 West	W	1.27	Merrill Road to City Limit	Bike Lane
	258	500 South	W	0.10	Main Street to 100 East	Bicycle Boule
	259	Buena Vista Boulevard	W	1.29	Main Street to Washington Parkway	Separated Bil

ſ	260	Buena Vista Trail	W	1.25	Main Street to Washington Parkway	Shared Use P
	261	Canal Trail	W	0.32	4200 South to City Limit	Shared Use P
	262	Country Way	W	0.17	500' South of Bridge to Washington Dam Road	Shared Use P
	263	Dogtown Park Path	W	0.17	100 East to 300 East	Shared Use P
	264	Grapevine Trail	W	1.17	Washington Parkway Trail to Highland Park Loop Trail West	Shared Use P
	265	Highland Park Loop Trail	W	0.06	Coral Canyon Trail to Highland Park Loop Trail West	Shared Use P
	266	North SITLA Block Trail	W	2.32	Washington Parkway (Future) to Washington Parkway Trail	Shared Use P
	267	Northern Parkway Trail	W	2.99	City Limit to Grapevine Trail	Shared Use P
	268	Pine View Park Trail	W	0.48	City Limit to East End of Pine View Park	Shared Use P
	269	Riveredge Road/Apache Drive	W	0.33	Three Rivers Trail System to Seminole Way	Shared Use P
	271	St. George City Connector	W	0.28	Future Western Terminus to Northern Parkway Trail	Shared Use P
	272	St. George City Connector	W	0.40	St. George City Connector to City Limit	Shared Use P
ſ	273	St. George City Connector	W	0.68	Future Trail 101 (St. George) to City Limit	Shared Use P
	274	Stucki Farms Trail	W	0.92	3650 South to 4485 South	Shared Use P
	275	Stucki Farms Trail	W	1.87	Stucki Farms Trail to Warner Valley Rd	Shared Use P
	276	Telegraph Street	W	3.58	Washington Parkway to SR-9	Separated Bil
	277	Telegraph Trail	W	0.90	East of Fourteen Fairward Drive to West of Razor Ridge Drive	Shared Use P
	278	Telegraph Trail	W	0.30	Razor Edge Park Trail to SR-9	Shared Use P
	279	Telegraph Trail	W	0.82	Telegraph Substation to Highland Park Loop Trail	Shared Use P
	280	Virgin River South Trail	W	1.75	Pine View Park Trail to Washington Fields Rd	Shared Use P
ſ	281	Warm Springs Park Trail	W	0.14	Buena Vista Boulevard to Warm Springs Trail	Shared Use P
	282	Warner Valley Reservoir Connector	W	0.72	<null> to <null></null></null>	Shared Use P
	283	Washington Fields Road	W	3.63	3650 South to Warner Valley Rd	Buffered Bike
	415	Virgin River Trail (LaVerkin Bridge)	LV	1.09	From the Dwellings down to the Virgin River and up the River approximately 1 mile.	Multi-use Pav
	416	Virgin River Sandtrap Trail	LV	1.40	From the Sandtraps at the Virgin River north to SR-9.	Multi-use Pav
	428	Virgin River Trail Overcrossing	W		Virgin River & 300 East to	Grade Separa Crossing
ſ						Phase 2 Tota
-						

Phase 3 Projects (2043-2050)

Project			Length		Project Conc
#	Name	City	(mi)	Beginning and End	/Facility Type
284	STATE ST	Н	6.62	SR-9 Segment 4 - From I-15 to Southern Parkway	Paved Shared Path
285	HWY 59	н	3.32	SR-59 (H) - From Main St to Gould Wash Road	Paved Shared Path
286	200 W/400 N - From 450 N at 200 W to 80 W at at 400 N	I	0.20	200 W/400 N - From 450 N at 200 W to 80 W at at 400 N	Multi-Use Pa Trail
287	400 S - From 85 E to Red Mountain Blvd	I	0.12	400 S - From 85 E to Red Mountain Blvd	Multi-Use Pa Trail
288	400 S - From Coyote Wy to Puerto Dr	I	0.11	400 S - From Coyote Wy to Puerto Dr	Multi-Use Pa Trail
289	450 N - From 350 W to 200 W	I	0.18	450 N - From 350 W to 200 W	Multi-Use Pa Trail
290	800 S - From Red Mountain Blvd to 400 E	I	0.24	800 S - From Red Mountain Blvd to 400 E	Multi-Use Pa Trail
291	Abby Gate Shurtleff Park Trail North Extension	I	0.13	Abby Gate Shurtleff Park Trail North Extension	Multi-Use Pa Trail
292	Bike Path/multipurpose trail from Mallow Way to 450 N	I	0.36	Bike Path/multipurpose trail from Mallow Way to 450 N	Multi-Use Pa Trail
293	Western Corridor - From Souther City Boundary to Old Hwy 91	I	0.80	Western Corridor - From Souther City Boundary to Old Hwy 91	Multi-Use Pa Trail
449	Inner Heights Loop Trail [U]	SC	2.41	Residential Standard -East of Colby Loop to Frei's Field	Multi-Use Par Trail
450	Inner Heights Loop Trail [V]	SC	0.06	Bonelli Trl to Santa Clara Dr	Multi-Use Par Trail
451	Inner Heights Loop Trail [W]	SC	0.33	Old Farm Road -Santa Clara Dr to Residential Standard	Multi-Use Pa Trail
452	Inner Heights Loop Trail [X]	SC	0.50	Sunset Blvd -Santa Clara Dr to Frei's Field	Multi-Use Pa Trail
453	Inner Heights Loop Trail [Y]	SC	0.51	Lava Flow -Sunset Blvd to Cinder	Multi-Use Pa Trail
454	Inner Heights Loop Trail [Z]	SC	0.59	Sunset Blvd to West of 510 N Cir	Multi-Use Par Trail

	455	Inner Heights Loop Trail [A]	SC	0.65	Marion Ct to Malaga Ave -End of Malaga then north to Marion CT	Multi-Use Pa Trail
	456	Inner Heights Loop Trail [B]	SC	0.58	Gates Ln to End Clary Hills DR	Multi-Use Pa Trail
	457	Inner Heights Loop Trail [C]	SC	0.51	South of Hillside Way south to unnamed -South Hills	Multi-Use Par Trail
	458	Inner Heights Loop Trail [d]	SC	1.25	Unnamed -South Hills	Multi-Use Pa Trail
	459	Inner Heights Loop Trail [E]	SC	0.31	Clary Hills Drive south to unnamed -South Hills	Multi-Use Par Trail
	294	Airport Butte	SG	3.26	Airport Butte	Multi-Use Pa Trail
	295	Airport East Trail (Washington Field Tie-in)	SG	0.80	Airport East Trail (Washington Field Tie-in)	Multi-Use Pa Trail
	296	Airport East Trail (Washington Field Tie-in)	SG	0.39	Airport East Trail (Washington Field Tie-in)	Multi-Use Pa Trail
	297	Airport East Trail (Washington Field Tie-in)	SG	1.03	Airport East Trail (Washington Field Tie-in)	Multi-Use Pa Trail
	298	Airport East Trail (Washington Field Tie-in)	SG	0.50	Airport East Trail (Washington Field Tie-in)	Multi-Use Pa Trail
	299	Brigham Road/Hidden Valley Trail System	SG	3.19	Brigham Road/Hidden Valley Trail System	Multi-Use Pa Trail
	300	Price City Hills Trail System	SG	0.15	Price City Hills Trail System	Multi-Use Pa Trail
	301	Price City Hills Trail System	SG	0.61	Price City Hills Trail System	Multi-Use Pa Trail
	302	Price City Hills Trail System	SG	0.69	Price City Hills Trail System	Multi-Use Pa Trail
	303	Price City Hills Trail System	SG	0.74	Price City Hills Trail System	Multi-Use Par Trail
	304	Price City Hills Trail System	SG	0.26	Price City Hills Trail System	Multi-Use Pa Trail
	305	Price City Hills Trail System	SG	1.72	Price City Hills Trail System	Multi-Use Par Trail
	306	Price City Hills Trail System	SG	1.41	Price City Hills Trail System	Multi-Use Pa Trail
	307	Price City Hills Trail System	SG	0.34	Price City Hills Trail System	Multi-Use Par Trail
	308	Price City Hills Trail System	SG	0.55	Price City Hills Trail System	Multi-Use Par Trail
	309	Price City Hills Trail System	SG	0.30	Price City Hills Trail System	Multi-Use Pa Trail
	310	Price City Hills Trails to Ft. Pierce Trails	SG	1.92	Price City Hills Trails to Ft. Pierce Trails	Multi-Use Pa Trail
-						

311	Western Parkway - Sun River Trail	SG	0.73	Western Parkway - Sun River Trail	Multi-Use Pa Trail
312	Western Parkway Trail	SG	3.50	Western Parkway Trail	Multi-Use Pa Trail
313	300 East	W	1.00	South Nichols Peaks Rd to 3650 South	Bike Lane
314	Future Road	W	0.89	City Limit to Washington Fields Road (Future)	Separated Bil
315	Future Trail 19	W	2.50	City Limit to City Limit	Shared Use P
316	Millcreek Trail	W	0.02	Millcreek Trail to Washington Parkway (Future)	Shared Use P
317	Purgatory Road	W	2.64	City Limit to Washington Dam Rd	Bike Lane
318	Purgatory Road	W	0.22	City Limit to Continues NE-ward	Bike Lane
319	Silver Falls Drive	W	0.03	Washington Fields Road to Camino Real	Shared Use P
320	Stucki Farms Trail	W	1.87	Warner Valley Rd to City Limit	Shared Use P
321	Telegraph Street	W	0.57	Highland Parkway to Coral Canyon Boulevard	Shared Use P
322	Three Rivers Trail System East	W	0.48	Canal Trail to City Limit	Shared Use P
323	Warner Valley Road	W	0.77	Washington Fields Road to City Limit	Separated Bil
324	Washington Fields Road	W	3.63	Warner Valley Rd to City Limit	Buffered Bike
325	St. George City Connector	W	0.76	From Future Trail 19 to Southern Parkway	Shared Use P
326	I-15 Grapevine Trail Undercrossing	W		Church Rocks Trail (North of I-15) to Grapevine Trail	Grade Separa Crossing
327	Virgin River Trail Overcrossing	W		Virgin River & ~East of Alveo Drive to	Grade Separa Crossing
328	Virgin River Trail Overcrossing	W		Virgin River & ~Cottonwood Wash to	Grade Separa Crossing
					Phase 3 Tota

Unfunded Projects

Project			Length		Project Conc
#	Name	City	(mi)	Beginning and End	/Facility Type
329	2000 South Path	SG	0.38		Multi-Use Pa
					Trail
330	270 South Connector Path	SG	0.08		Multi-Use Pa
					Trail
331	750 North Halfway Wash	SG	0.3		Multi-Use Pa
	Connector Trail				Trail
332	750 North Path	SG	0.41		Multi-Use Pa
					Trail
333	Bloomington Hills Dr Bike Lane	SG	1.66		Bike Lane
334	Bluff Street Path	SG	3.05		Multi-Use Pa
					Trail
335	Brigham Rd Path under/near I-15	SG	0.16		Multi-Use Pa
					Trail
336	Commerce Dr Sidepath	SG	1.44		Multi-Use Pa
					Trail
337	Confluence Park Connector Trail	SG	0.68		Multi-Use Pa
					Trail
338	Desert Color Pkwy/Hidden Valley	SG	1 19		Multi-Use Pa
000	Trail		1.15		Trail
220	Diagonal St Buffered Bike Lane	SG	1 1 2		Ruffored Rike
3/0	Diagonal St Buffered Bike Lane	SG	1.10		Buffered Bike
340	Divie Dr Bike Lane	SG	2.76		Bike Lane
342	Dixie Dr Bike Lane	SG	0.96		Bike Lane
342	Future Trail-19	SG	1 76		Multi-Use Pa
545		50	1.70		Trail
344	Future Trail 19	SG	0.15		Multi-Use Pa
					Trail
345	Future Trail 19	SG	0.36		Multi-Use Pa
					Trail
346	Future Trail 20	SG	0.5		Multi-Use Pa
					Trail
347	Future Trail 23	SG	0.31		Multi-Use Pa
					Trail
348	Gap Canyon Trail South	SG	1.12		Multi-Use Pa
					Trail
349	Green Spring Dr Trail	SG	0.32		Multi-Use Pa
					Trail
350	Green Valley Neighborhood Trail	SG	0.27		Multi-Use Pa
					Trail
351	Green Valley Neighborhood Trail	SG	1.6		Multi-Use Par
	North				Trail
352	Green Valley Neighborhood Trail	SG	1.12		Multi-Use Pa
	South				Trail
L	1	1		1	1

	353	Indian Hills Dr Bike Lane	SG	2.57	Bike Lane
	354	Lago Vista Dr Trail	SG	0.22	Multi-Use Pa
					Trail
	355	Lava Flow Dr Bike Lane	SG	0.62	Bike Lane
	356	Little Valley Rd Bike Lane	SG	1.81	Buffered Bike
	357	Mall Dr / 2500 South Bike Lane	SG	1.17	Bike Lane
	358	Mall Drive Trail connection to	SG	0.06	Multi-Use Pa
		VRNT			Trail
	359	Man-O-War Underpass	SG	0.06	Multi-Use Pa
					Trail
	360	Millcreek Trail Extension	SG	1.93	Multi-Use Pa
					Trail
	361	Pioneer Rd Bike Lane	SG	2.88	Bike Lane
	362	Plantation Dr Path	SG	0.17	Multi-Use Pa
					Trail
	363	Red Cliffs Dr Path	SG	2.07	Multi-Use Pa
					Trail
	364	Red Hills Pkwy Trail Extension	SG	1.09	Multi-Use Pa
	265	Dine De als Miech, Tueil Foster sien	66	0.02	
	365	RIM ROCK Wash Trail Extension	SG	0.82	Multi-Use Pa
					ITAII
	366	Riverside Dr Connector Trail	SG	0.02	Multi-Use Pa
	267	Diverside Drive / 2050 Feet Deth	50	F 40	
	307	Riverside Drive / 3050 East Path	30	5.49	Trail
	368	Sandia Rd / 2000 South Bike	SG	0.92	Bike Lane
	500	Lane	50	0.52	Dike Lane
	260	Sentieri Vista Dr Trail	SG	0.00	Multi-Lico Pa
	505		50	0.05	Trail
	370	Sir Monte Dr Connector Path	SG	0.17	Multi-Use Pa
					Trail
	371	Snow Canyon Pkwy Bike Lane	SG	3.07	Bike Lane
	372	St. George Future Trail-19	SG	0.72	Multi-Use Pa
					Trail
	373	St. George Future Trail-20	SG	0.26	Multi-Use Pa
					Trail
	374	St. George Future Trail-82	SG	3.06	Multi-Use Pa
					Trail
	375	St. George Mall Dr./2500S Bike	SG	1.04	Bike Lane
		Lane			
	376	St. George Red Cliffs Dr.	SG	0.21	Multi-Use Pa
		Sidepath			Trail
	377	Sunset Blvd Separated Bike Lane	SG	1.99	Separated Bil
- 6					

378	Sunset Blvd Separated Bike Lane	SG	0.33	Separated Bil
379	Temple Springs Park Trail	SG	0.16	Multi-Use Par Trail
380	Temple Springs Park Trail	SG	0.15	Multi-Use Pa Trail
381	Temple Springs Trail Connector	SG	0.12	Multi-Use Pa Trail
382	Tonaquint Trail System	SG	0.36	Multi-Use Pa Trail
383	Tonaquint Trail System	SG	0.86	Multi-Use Par Trail
384	Tonaquint Trail System	SG	0.55	Multi-Use Pa Trail
385	Unnamed-Halfway Wash- MathisParkConnectUnderDixieDr	SG	0.06	Multi-Use Pa Trail
386	Unnamed - 2050 E	SG	0.28	Multi-Use Pa Trail
387	Unnamed - 2050 E Spur	SG	0.05	Multi-Use Pa Trail
388	Unnamed - Airport Butte to Airport East Trail	SG	0.88	Multi-Use Par Trail
389	Unnamed - Airport Prkwy to Desert Canyons Trail Sy	SG	1.22	Multi-Use Pa Trail
390	Unnamed - Brigham Road System-Bloomington Hills Dr	SG	0.07	Multi-Use Pa Trail
391	Unnamed - Christensen Park to Virgin River Trail	SG	0.02	Multi-Use Pa Trail
392	Unnamed - Copper Cliffs Trail to Banded HillsTrail	SG	0.05	Multi-Use Pa Trail
393	Unnamed - Desert Canyon area east of SR-7	SG	0.35	Multi-Use Pa Trail
394	Unnamed - Desert Canyons Prkwy under SR-7	SG	0.24	Multi-Use Pa Trail
395	Unnamed - Fort Peirce Wash Trail (Portion of C)	SG	0.25	Multi-Use Pa Trail
396	Unnamed - Medallion Drive	SG	0.31	Multi-Use Pa Trail
397	Unnamed - Price City Hills Trail System	SG	0.62	Multi-Use Pa Trail
398	Unnamed - Sand Hollow Wash Trail to Country Ln	SG	0.06	Multi-Use Pa Trail

399	Unnamed - South end of Future Trail-19	SG	2.65		Multi-Use Pa Trail
400	Unnamed - SR-7 to Desert Canyons Prky Trail System	SG	0.36		Multi-Use Pa Trail
401	Unnamed - Sugar Leo Rd to Virgin River Trail	SG	0.18		Multi-Use Pa Trail
402	Unnamed - Web Hill	SG	0.43		Multi-Use Pa Trail
403	Vernon Worthen Park Path	SG	0.34		Multi-Use Par Trail
404	Web Hill Trail Extension	SG	0.34		Multi-Use Pa Trail
405	Tabernacle St Separated Bike Lane	SG	1.72		Separated Bil
406	Westridge Drive Bike Lane	SG	0.31		Bike Lane
407	Westridge Dr Separated Bike Lane	SG	0.6		Separated Bil
408	Main Street Buffered Bike Lane	SG	0.53	From Tabernacle north to park	Buffered Bike
409	Main Street Buffered Bike Lane	SG	.68	From 700 S to Bluff	Separated Bil

Unfunded To

Chapter 13 – Transit Service

SunTran provides transit service for the City of St. George, Washington and Ivins, currently operating fixed bus routes and paratransit (ADA) service between 6:00 AM and 8:00 PM Monday through Saturday. There is no service on Sundays or major holidays. The system consists of seven fixed bus routes, five of which operate on 40-minute headways with two operating on 80-minute headways. SunTran has experienced significant ridership growth since its inception in 2003 (See graph below). Areas being served by transit include: downtown St. George, Red Cliffs Mall, Dixie State University, the Dixie Center, the Dixie Downs area, Bloomington, Washington City and Ivins City. Map 9 shows the seven existing fixed SunTran routes, as well as potential routes for expansion.

SunTran continues to grow substantially in ridership and several studies and plans point to the need for expanded and improved transit service in the Dixie region to develop a more balanced transportation system and provide a greater range of transportation choices, particularly for those with limited mobility. In a past onboard transit survey, 90% of respondents stated it was important to expand SunTran service to new places in the area. This survey also indicated that the majority of SunTran riders rely on the service to meet their daily transportation needs, with 76% of respondents stating that they did not have another option (besides riding SunTran) for making their trip.

Subsequent studies have shown that additional transit lines to Santa Clara, La Verkin, Hurricane City and Zion National Park are feasible if public support, financing, and governance issues can be ironed out. In 2018 and 2019 Washington County and the Washington County Council of Governments have been actively working to resolved financing and governance issues in order to expand transit services from St. George to Springdale. Washington City elected officials have also sought funding to support local transit needs.

Potential Transit Expansion Areas

Transit expansion areas have been identified within St. George City, Washington City, Hurricane City and Springdale. Planners and elected officials throughout the Dixie Area continue to value public transit services to low-wage earners and to tourists to the area.



Public support for expanded transit services is also growing.

St. George to Springdale

Under state legislation, elected officials within Washington County implement a one quarter of one percent sales tax in 2019 to fund transportation projects (including transit services) as requested by a contingency of cities within the County. The elected officials' intent was to create a new funding stream for roads and to establish a transit line between St. George City and Springdale. The Utah Department of Transportation granted \$16,000,000 toward the establishment of a Springdale transit line to enhance the economy, support tourism, and reduce congestion. The intent in establishing transit services to Springdale is to serve the local workforce who live outside the area, and to reduce visitor demand on the limited number of parking stalls within Springdale City

In 2016 The St. George to Springdale Public Transit Feasibility Study recommended that a route between Springdale and St. George is viable and could attract an annual ridership of 272,000 trips. Zion National Park sees over four million visitors annually (see chart at right). Once inside the park visitors are required to use a transit service to reach their final trailhead destinations. The 2016 study suggested that these visitors are already competent and accepting of transit use and would likely embrace transit lines prior to reaching the Park if they were established. Service sector employees would also benefit from transit services between the two areas.



Hurricane and Zion National Park Corridor

The Dixie Bus Rapid Transit Feasibility Study (BRT study) and the Hurricane to Zion Canyon Transit Study both point to the potential short term and long-term viability of transit service in this corridor. The BRT study evaluated the potential for long-term feasibility of transit service between central St George City and Hurricane City and central St George City and the airport. The study suggests that when the service area reaches 252,000 people and 143,000 jobs, BRT service will be viable. However, conventional bus service should be implemented to serve existing demand. Map 9 displays the potential alignments for these routes.

The *Hurricane to Zion Canyon Transit Study* evaluates and recommends transit service between Hurricane and Zion National Park. After analyzing demand in the corridor, the study recommends implementing fixed-route transit service with 60-minute headways. The study emphasizes that transit would only be viable in this corridor provided that a transit connection is also provided between St George and Hurricane.

The next step toward implementing transit in this corridor is to provide an implementation plan for transit service in the short term, which identifies service characteristics, fare structure, and funding, given resources that are available at the present time. This service is likely to be provided initially through an inter-local agreement with St George City, Hurricane, Springdale, and other communities in the corridor.

Hurricane City

Transit expansion in Hurricane has been considered for implementation in phases between 2023-2053. Phase 1 will begin with transit stops as suggested by the 2016 *St. George to Springdale Public Transit Feasibility Study* along SR 9 for the purpose of servicing local use and use of transit to Springdale and Zion National Park. Phase 2 of the transit plan will implement a second line creating a transit loop system like those in neighboring cities. Phase 3 include multiple lines of transit servicing Hurricane's high traffic routes.

La Verkin City

With addition of the Springdale Transit Service Line, a transit stop for the route to Springdale will be provided in La Verkin. As transit ridership is studied after the Springdale line is completed, additional local stops in La Verkin will be taken into consideration but ultimately deemed necessary by the level of demand as needed.

Touquerville City

Due to budget constraints, service to Tourqueville was not feasible at the time of planning. With exception to a possible service stop for the Springdale Transit Line, the City of Touquerville does see the expansion of bus transit as a likely outcome within the next 20 to 30 years. However, at the current rate of change, expansion of roadway networks and possible housing development growth, transit services could be seen as beneficial for future connections to surrounding areas in La Verkin and Hurricane to meet accessibility needs.

Leeds City

With anticipated rapid growth of new development in Leeds, likelihood of transit being implemented also grows. Allow the expected time of Leeds receiving transit will not be until more development and residential growth expands to the necessary standards for services needed to be met. Further study and growth in Leeds must be done to determine the feasibility of transit expansion before any decisions are made.

Washington City

A concept route to Washington City was presented in the *Dixie MPO Regional Transit Study*. In 2014, Washington City began the process of formulating an agreement with SunTran to institute a fixed route that connects to the existing bus system with complementary para-transit service. Washington City Council was successful in establishing transit services in 2019 and anticipates additional service in coming years.

Santa Clara City

Due to budget constraints, service to lvins City was initially instituted without service to Santa Clara City, which the bus passes through "doors closed" on the route. However, service to this community would benefit a large population of residents, not currently being served. The Dixie MPO will support coordination efforts between lvins, St George City, and Santa Clara City to provide public transit service to Santa Clara City, given adequate funding and public support.

St George Airport

As noted above, a bus rapid transit line, servicing St George Airport is a viable service in the long term. However, in the short-term interim bus service should be provided to begin phasing toward a BRT line. The *St George Urbanized Area Short Range and Long-Range Transit Plan* (2006) identifies an express route to the airport. To maximize efficiency, the route schedule should be coordinated with air service.

Coordination of Transportation Modes

As regional transit service is improved and expanded, coordination with other modes of transportation is essential to offering alternative transportation options. Every trip on fixed-route public transportation begins and ends with another mode, whether it be cycling, walking or driving. Due to additional demand, SunTran has recently purchased additional capacity on its bicycle racks. SunTran Management indicates that demand for wheelchair users on transit has also risen substantially in recent years. In addition, SunTran is partnering with the Five County Association of Governments to improve conditions for passengers at bus stops by installing bus shelters. The *Southwest Utah Coordinated Human Service Public Transportation Plan* identifies the need for a last mile study to identify needed improvements for transit users on roadways near transit. Furthermore, as transit expands to Hurricane, Zion National Park and the Airport, consideration for Park-and-ride locations should be given.

Improved connections to inter-city bus and shuttle services are necessary to connect residents with the greater region. Greyhound, St George Shuttle, and Salt Lake Express currently offer services to Salt Lake City, Las Vegas and other nearby cities. However, these services are not well-connected to SunTran. Coordination with each entity is needed to improve the experience of transit users.

Coordination among providers to match users to the appropriate transit service or services is the focus of the Five County AOG Mobility Management Program. The Five County Regional Mobility Council guides this program, while coordinating human service and public transportation services throughout the region. The Dixie MPO will continue to support mobility management efforts to coordinate and expand services to meet the needs of seniors, persons with disabilities, and low-income individuals, as well as the greater community. The *Coordinated Human Service Transportation Plan* includes mobility management and other strategies to meet these needs.

Funding and Governance for Expanded Transit Service

In 2012, a *Dixie MPO Regional Transit Study* was completed to evaluate the governance and funding options available to the Dixie region for expansion and diversification of transit service. The study includes a case study of six transit organizations of similar size to illustrate the variety of governance and funding options for public transportation.

The study recommends a phased approach toward developing a regional transit service, beginning with improved service in St George and initial service to adjacent cities through inter-local agreements, followed by the establishment of a Regional Transit District, which is supported with a dedicated multi-jurisdictional funding for transit. This is only possible through public support, which should be gauged throughout the process.

As noted above, the first phase is currently being implemented through inter-local agreements in Ivins, with the initial phases of such agreements occurring in Washington City and the Hurricane/Zion Corridor. In 2018 the Utah Department of Transportation granted \$15 million to expand transit services from St. George to Springdale contingent on local support to continue the service for at least 10 years. The Washington County Commission passed a one quarter of one percent sales tax increase in June 2019 to demonstrate that support. The Dixie MPO supports the region's elected officials as they plan for improved regional transit services.

Objectives and Goals

Objective

Enhance and expand public transportation to build a more balanced transportation system

Goals

- 1. Provide technical assistance to SunTran and cities in the region to plan for and implement expanded transit service
- 2. Support efforts to develop a regional transit district or authority
- 3. Identify sustainable funding sources for public transportation and assist with procuring funds

4. Support the mobility management program to coordinate transportation services and meet the needs of residents with limited mobility

Chapter 14 – Public Involvement

Commitment to Public Involvement

The International Association of Public Participation defines five levels of public involvement in the IAP2 Spectrum of Public Participation. These five levels are 1) Inform, 2) Consult, 3) Involve, 4) Collaborate, and 5) Empower.

Public involvement is vital as the Dixie MPO plans transportation facilities through 2050. The MPO uses a web site, legal notices of meetings, news releases and a variety of newsletters to **inform** constituents of meetings, studies, plans, and opportunities to become involved in the planning process.

The MPO also sponsors an annual "Dixie Transportation Expo" to gather public comments and respond to inquiries, consult with citizen groups, and collaborate with-them to realize potential solutions. An estimated 400 to 1,000 people attend the "Expo" annually to ask questions and comment on individual projects, plans, studies, environmental issues, future initiatives, etc. as transportation plans are laid and as projects move forward through the process from concept to construction. The "Expo" is scheduled annually the second Tuesday of February.



In some areas, the MPO has also found ways to empower citizen committees to directly influence plans for the future. The Vision Dixie process discussed earlier in this document was based on citizen input and attempts to capture the public's vision for the metropolitan area of the future – and then plan to that vision. The bicycle/pedestrian trail section of this plan was also reviewed and expanded through the efforts of a citizen's committee. In addition, the Southern Utah Truckers Association has given comments about roadway improvements that can be made to help freight move more smoothly through our communities.

Moving forward, the MPO is committed to include public involvement initiatives in its decision-making efforts, to communicate public concerns to MPO voting members, and to educate the public on MPO deliberation, options, strategies, and plans of regional significance.

Public Comments:

Public comments are currently being taken for this 2023-2050 Regional Transportation Plan and will be summarized in a separate document.

Chapter 15 - Freight

As a small MPO, the Dixie MPO has a seat on the State-wide Freight Mobility Group. The group is charged with the drafting of a State-wide Freight Plan including a Primary Freight Network Map. That plan is the backbone of this chapter and the map is found here as Map 11. The state-wide plan is being drafted and currently includes the information below:

Purpose of Freight Planning

The primary purpose of the freight planning effort is to guide cost effective capital and operating investments in the state freight system to ensure maximum benefit and efficient movement of goods. This plan makes a case for the importance of investing federal and state funds in freight priority projects and programs through the following: an overview of the essential role of freight to our economy; a discussion on the condition and performance of Utah's transportation's assets and system; and a summary of the policies, strategies, and institutions that support freight.

This chapter incorporates key points, findings, and projects from Utah's Unified Transportation Plan 2019-2050, and the Dixie MPO Long-Range Plan. Please refer to Chapter Four of this plan and the State Freight Plan for demographic, population and other specific information

Utah's Freight Employment

There are a variety of jobs within the transportation industry here in Utah. Notice in the following table that the highest paying jobs are in the pipeline industry, but it also has the fewest people employed. The highest numbers of jobs are in the trucking industry, but they also have the second lowest annual income.

2022 Freight Employment and Salary by Transportation Industry							
	Industry	Number Employed	Average Annual Salary				

Aviation		7,780	\$91,920		
Railroad		1,021	\$77,772		
Pipeline		286	\$116,844		
Trucking		19,612	\$57,936		
Warehousing		13,486	\$51,120		
	Total	42,185	Average	\$79,118	

Source: Utah Department of Workforce Services, 2022 1st Quarter Industry Data.

Trucking

According to FHWA's Highway Statistics, Utah has the highest percentage of truck traffic in the U.S. at 23 percent, while the average is 12 percent nationwide. Utah businesses have quick access to competitive trucking services to meet any logistics needs across the continent.

Utah's Primary Freight Network (Highways)

Originally defined in 2005 as Utah Primary Freight Corridors, Utah has amended the name to be consistent with the FAST ACT and to distinguish between highway and railroad corridors. Utah's PFN highways consist of Interstate Routes, Critical Rural Freight Routes, Critical Urban Freight Routes, and Energy Routes. The following table shows the number of miles by route type in Utah.

Utah's Primary Freight Network Highway Mileage 2017

Route Type	Mileage
Interstate Routes	904.90
Critical Rural Freight Routes	182.10
Critical Urban Freight Routes	91.2
Secondary Routes	911,32
Intermodal Connectors	18.28
Total	2,107.80

Map #11 shows Utah's PFN highways.

The PFN highways are statewide and include routes within the boundaries of the four MPOs, which include Cache MPO, Dixie MPO, Mountainland Association of Governments (MAG), and the Wasatch Front Regional Council (WFRC). Only 14 percent of Utah's PFN highways are located within the MPO areas. The following table shows the route types and number of miles by MPO.

Metropolitan Planning Organizations and Statewide Highway Freight Network Mileage

Route Type	Cache	Dixie	MAG	WFRC	Statewide	Total
					Rural	
Interstate Routes	0	28.17	44.35	145.22	687.16	904.90
Critical Rural Freight Routes	0.00	0.00	0.00	0.00	182.10	182.10
Critical Urban Freight Routes	6.80	5.43	5.43	72.15	0.00	91.20
Secondary Routes	28.24	22.39	6.14	15.76	838.79	911.32
Intermodal Connectors	0.00	0.00	0.00	6.78	11.50	18.28
Total Route Miles	35.04	57.38	55.92	239.91	1,719.55	2,107.80
There are four main grants or loan programs that are available to Utah counties and incorporated municipalities for highway related infrastructure improvements. While these programs do not specifically identify the use of these funds for freight improvements, it does not prohibit them either. The four main programs include the following:

Class B & C Road Funds State Infrastructure Bank Loan Fund UDOT Flexible Match on Federal-Aid Projects Off-System Bridge Soft Match Credit Program

Strengths & Needs

As one of the first states to identify its PFN highways way back in 2005, Utah early on focused its research and improvement funding on those routes with the highest truck traffic volumes. Over the last decade UDOT has conducted extensive outreach and research with the trucking industry including the Southern Utah Truckers Association (SUTA). Many of the system improvement projects across the state and most of the projects in Washington County had direct input from SUBA and have been included on the State Freight Project List – excerpt shown below:

County	Entity	Route	Project Description	Length (miles)	Improvement Type	Estimated Cost in Millions ¹
Cache	UDOT	S.R. 30	Widen to 4 lanes from 1000 West to S.R. 23 (MP 102.3 to MP 108.7)	6.4	Widening	\$66
Carbon	UDOT	S.R. 10	Widen to 4 lanes from 3000 South to U.S. 6 (MP 65.4 to MP 67.7)	2.3	Widening	\$8
Carbon	UDOT	S.R. 10	Widen to 4 lanes from 2000 South to 2500 South (MP 66.2 to MP 66.8)	0.6	Widening	\$3
Carbon	UDOT	S.R. 10	Widen to 4 lanes from Ridge Road to 3000 South (MP 64.2 to MP 65.7)	1.5	Widening	\$7
Duchesne	UDOT	U.S. 40	Add EB passing lane from MP 97.7 to MP 99.1, Bridgeland	1.4	Passing Lane	\$5
Duchesne	UDOT	U.S. 40	Add WB passing lane from MP 101.7 to MP 103.1, West of Myton	1.4	Passing Lane	\$4
Duchesne	UDOT	U.S. 40	Intersection improvements at MP 82.1, MP 111.5, and S.R. 87 at MP 1.1	NA	Operational	\$5
Duchesne	UDOT	U.S. 40	Add EB passing lane from MP 65.2 to MP 67.6, East of Fruitland	2.4	Passing Lane	\$9
Emery	UDOT	U.S. 6	Add WB passing lane from MP 290.7 to MP 291.7	1.0	Passing Lane	\$2
Emery	UDOT	U.S. 6	Add EB and WB from MP 291.7 and 293.7	2.0	Passing Lane	\$9
Emery	UDOT	U.S. 6	Add WB passing lane from MP 266.8 and 269.9	3.1	Passing Lane	\$7
Emery/Carbon	UDOT	U.S. 6	Extend WB passing lane from MP 261.2 to MP 262.0	0.8	Passing Lane	\$2
Garfield	UDOT	U.S. 89	Add NB passing lane from MP 121.4 to MP 122.4	1.0	Passing Lane	\$2
Garfield	UDOT	U.S. 89	Add NB passing lane from MP 135.0 to MP 137.0	2.0	Passing Lane	\$5
Garfield	UDOT	U.S. 89	Add SB passing lane from MP 113.3 to MP 114.0	0.7	Passing Lane	\$2
Iron	UDOT	S.R. 20	Add WB passing lane from MP 7.5 to MP 10.0	2.5	Passing Lane	\$6
Kane	UDOT	U.S. 89	Add NB acceleration/passing lane from MP 99.0 to MP 100.0	1.0	Passing Lane	\$2
Kane	UDOT	U.S. 89	Extend SB passing lane from MP 76.5 to MP 76.7	0.2	Passing Lane	<\$1
Kane	UDOT	U.S. 89	Extend NB passing lane from MP 75.2 to MP 75.5	0.3	Passing Lane	\$1
Kane	UDOT	U.S. 89	Add NB passing lane from MP 38.0 to MP 42.0	4.0	Passing Lane	\$9
Kane	UDOT	U.S. 89	Add NB passing lane from MP 50.0 to MP 53.0	3.0	Passing Lane	\$7
Kane	UDOT	U.S. 89	Extend NB passing lane from MP 73.0 to MP 73.9	0.9	Passing Lane	\$2
Kane	UDOT	U.S. 89	Extend NB passing lane from MP 74.4 to MP 74.9	0.5	Passing Lane	\$1
Kane	UDOT	U.S. 89	Extend SB passing lane from MP 76.9 to MP 77.9	1.0	Passing Lane	\$2
Kane	UDOT	U.S. 89	Add NB passing lane from MP 15.0 to MP 16.0	1.0	Passing Lane	\$2
Kane	UDOT	U.S. 89	Add SB passing lane from MP 16.0 to MP 17.0	1.0	Passing Lane	\$2

Table 9.6 – Utah's Secondary Highway Freight Network Phase One Projects (2017-2024)



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San Juan	UDOT	U.S. 191	Add NB and SB passing lanes at various locations MP 103.0 to MP 107.0	4.0	Passing Lane	\$9
San Juan	UDOT	U.S. 191	Add SB passing lane from MP 90.1 to MP 91.3	1.2	Passing Lane	\$3
San Juan	UDOT	U.S. 191	Add NB passing lane from MP 41.0 to MP 42.0	1.0	Passing Lane	\$2
San Juan	UDOT	U.S. 191	Extend SB passing lane from MP 79.0 to MP 79.2	0.2	Passing Lane	<\$1
San Juan	UDOT	U.S. 191	Extend NB passing lane from MP 67.8 to MP 68.0	0.2	Passing Lane	<\$1
San Juan	UDOT	U.S. 191	Extend NB passing lane from MP 66.3 to MP 66.9	0.6	Passing Lane	\$1
San Juan	UDOT	U.S. 191	Extend SB passing lane from MP 69.0 to 71.0	1.1	Passing Lane	\$3
San Juan	UDOT	U.S. 191	Extend SB passing lane from MP 93.0 to 93.7	0.7	Passing Lane	\$2
Uintah	UDOT	U.S. 40	Add EB passing lane and center turn lane from MP 122.4 to 125.0, Gusher	2.6	Passing Lane	\$12
Wasatch	WRPO	U.S. 40	Intersection improvements at U.S. 189 (Hub)	NA	Operational	<\$1
Wasatch	WRPO	U.S. 40	Widen to 5 lanes from U.S. 189 (Hub) to Mill Road	1.5	Widening	\$6
Wasatch	WRPO	U.S. 40	New interchange at S.R. 32	NA	New Interchange	\$25
Wasatch	UDOT	U.S. 40	Add WB passing lane from MP 35.1 to MP 39.0, West of Strawberry Res.	3.9	Passing Lane	\$11
Wasatch	UDOT	U.S. 189	Add EB and WB passing lanes from MP 22.0 to MP 28.9, Wallsburg to Heber	6.9	Widening	\$27
Wasatch	UDOT	U.S. 40	Add WB passing lane from MP 31.2 to MP 32.7, Daniels Canyon North of Summit	1.5	Passing Lane	\$5
Washington	UDOT	S.R. 59	Add SB passing lane from MP 15.7 to MP 17.0	1.3	Passing Lane	\$3
Washington	UDOT	S.R. 59	Add EB and WB passing lanes from MP 13.0 to MP 14.1	1.1	Passing Lane	\$5
Washington	UDOT	S.R. 59	Add SB passing lane from MP 17.3 to MP 17.8	0.5	Passing Lane	\$1
Washington	UDOT	S.R. 59	Add EB and WB passing lanes from MP 2.0 to MP 3.5	1.5	Passing Lane	\$4
Washington	UDOT	S.R. 59	Add EB and WB passing lanes from MP 8.2 to MP 9.1	0.9	Passing Lane	\$2
Washington	UDOT	S.R. 59	Widen WB from MP 12.3 to MP 12.7	0.4	Widening	\$2

The PFN is generally in good shape but does have some roadway improvement needs. Please refer to the State of Utah Freight Plan for further detail.

Strategic Goals with Objectives

Dixie MPO's three strategic goals are as follows:

- 1. Zero Crashes, Injuries, and Fatalities
 - Dixie MPO is committed to safety, and we won't rest until we achieve zero crashes, zero injuries, and zero fatalities.
- 2. Preserve Infrastructure
 - We believe good roads cost less, and through proactive preservation we maximize the value of our infrastructure investment for today and the future.
- 3. Optimize Mobility
 - Dixie MPO optimizes traffic mobility by adding roadway capacity and incorporating innovative design and traffic management strategies.