

Unified Planning Work Program

Mountainland
Metropolitan Planning
Organization

FY-22

July 2021-June 2022



MAG

Expert Resources. Enriching Lives.

Approved: May 6, 2021

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Acknowledgement

“The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this document do not necessarily reflect the official views or policy of the U.S. Department of Transportation.”

Budget Message

Mountainland MPO Unified Planning Work Program FY22

Regional Planning Committee:

The July 1, 2021 to June 30, 2022 (FY22) Mountainland Metropolitan Planning Organization (MPO) Unified Planning Work Program (Work Program or UPWP) describes the transportation planning work undertaken by Mountainland MPO staff, Utah Department of Transportation (UDOT) staff and the Utah Transit Authority (UTA) staff within the Mountainland MPO planning area.

The Work Program is an annual budget. It illustrates to our members, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and the public where our planning resources are allocated. It describes the planned work, budget, and funding sources to develop an integrated and coordinated transportation planning process that will accommodate Utah County's population doubling from 636,235 in 2019 to over one million people by the year 2050. In comparison, Salt Lake County has one million people residing there today.

The Work Program is funded with the Consolidated Planning Grant (CPG) via Federal Aid Agreement with UDOT and the MAG Federal State Exchange Funds. CPG is one of sixty funds in the larger Mountainland Association of Governments' (MAG) budget. The UPWP FY22 budget is about \$2.8M which is about 10% of the larger FY21 \$25M MAG budget.

This FY22 Work Program \$2,851,656 budget about the same when compared to last years \$2,647,885 budget with a \$203,771 increase from FY21. This is due to Merit and COLA increase in staff costs and our decennial household travel survey with our UDOT, UTA and WFRC partners

This budget proposes to spend \$651,500 or 23% on new special studies including Joint Planning Studies with Wasatch Front Regional Council (WFRC), UDOT, and UTA and Travel Demand Modeling contract with WFRC, Planning Opportunities Contingency aforementioned household travel survey, Streetlight origin and destination data as well as engineering support contracts.

It proposes to spend the remaining \$2,200,156 or 77% of the total budget on thirteen full-time equivalent (FTE) staff 12 department staff and one administrative equivalent. This is the same as year previous.

This year staff will work on development of MAG Regional Transportation Plan, the 2022 Transportation Improvement Program Project selection process, Financial Planning, Travel Demand Modeling, Census projections, Active Transportation Projects, the management of more than \$1M in studies, and \$10M in pass through construction project.

Revenue for this \$2.8 million budget is approximately 93% federal funds from the United States Department of Transportation (USDOT) while 7% is local funds from UTA, UDOT and our local governments.

If you have any questions, please contact Steve Johnson, MAG Financial Officer, or myself.

Respectfully,

Shawn Seager

Regional Planning Director

801-824-1066

sseager@mountainland.org

Executive Summary

Introduction

The annual UPWP describes the transportation planning work for MAG Metropolitan Planning Organization (MPO) conducted by MPO, UDOT, and UTA planning staff. The program gives a general overview of the planning work to be accomplished over the next year by describing the planned work, budget, and sources of funding. The MPO combines its annual planning funds from FHWA and FTA under the CPG via a federal aid agreement administered by UDOT. This grant allows flexibility in funding and carrying projects and programs forward between fiscal years. In addition, MAG manages the STP MAG State Exchange Funds that are part of the revenue for this budget.

Budget Sections	FY22	FY21 (Year Previous)	% Difference
A.-E. Staff Funds	\$2,200,156 or 77%	\$2,095,885	5% increase
F. New Studies & Contracts in Work Program	\$651,500 or 23%	\$552,000	15% increase
Total Work Program	\$2,851,656	\$2,647,885	8% increase

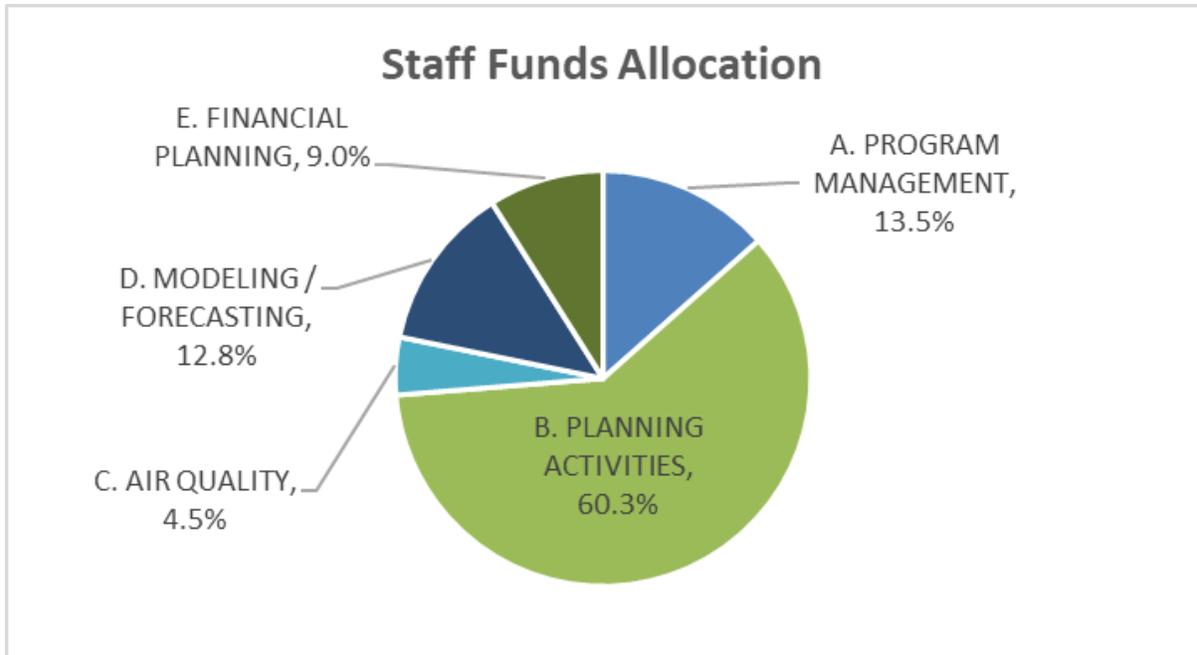
This Work Program is July 1, 2021 to June 30, 2022 and includes 13 FTE staff. Staff funds are **\$2,200,156 or 77%** of the total Work Program annual budget.

Budget Sections

- **Budget Section A - Program Management:** Covers the general management and administrative activities.
- **Budget Section B - Planning Activities:** Includes in-house planning documents and studies, long and short-range transportation plans and programs, technical assistance and interaction with the community's technical and planning staffs, public involvement and input, linking transportation and land use, bicycle and pedestrian facilities planning, congestion management, safety and environmental planning, and transit planning.
- **Budget Section C - Air Quality:** Includes Transportation Improvement Program (TIP) and long-range transportation plan conformity determinations, assists with the preparation of State Implementation Plan (SIP) for air quality, and air quality analysis activities.
- **Budget Section D - Modeling & Forecasting:** Includes travel demand activities, forecasting of socio-economic data, and other transportation and land-use related modeling.
- **Budget Section E - Financial Planning:** Includes programming funds for the Work Program, Regional Transportation Plan, TIP, and exchange funds management.
- **Budget Section F - MPO Studies & Contracts:** Includes studies and contracts continuing from prior years as well as new studies that are new to the Work Program.

Staff Budget Sections A-E

\$2,220,156



Introduction

Unified Planning Work Program

The annual Work Program describes the transportation planning work undertaken by the MPO, UDOT, and UTA within the MPO planning area from July 1, 2020 to June 30, 2021. The Work Program illustrates to member jurisdictions, FHWA, FTA, and the public how planning resources are allocated following regional needs, and describes the planned work, budget, and funding sources.

Metropolitan Planning Organization

MAG is the designated Metropolitan Planning Organization for the Provo/Orem Urbanized Area, otherwise known as the MPO. The MPO is the forum for cooperative transportation decision-making allowing urban area leaders to collaborate planning and programming efforts. The MPO is responsible, together with the Utah Department of Transportation (UDOT) and the Utah Transit Authority (UTA) for conducting the continuing, cooperative, and comprehensive planning process, known as the 3-C planning process.

The transportation planning activities performed by the MPO include highway, active transportation, transit, traffic modeling, air quality, public participation, the linking of transportation and land use, and other governmental coordination at the local, state, and federal levels.

Funding

The MPO acts as a conduit for various federal funds for planning, programming, and implementation. MPO funds are programmed for regional transportation projects, studies, and programs. Funding sources directly available to the MPO for these activities include Provo/Orem Urban Surface

Transportation Program (STP) funds, MAG Small Urban STP funds, Transportation Alternatives Program (TAP) funds, Congestion Mitigation/Air Quality Program (CM/AQ and CM/AQ-PM2.5) funds. All four funding sources are available for projects to all members of the MPO through an application process. Other federal funds the MPO receives and uses for planning related activities and transit planning work come from Planning (PL) and Federal Transit Planning (FTA 5305) funds. The MPO also receives some state funds called Local Planning Assistance (LPA) for staff work and special studies.

In cooperation with UDOT, the MPO exchanges its allotment of Urban STP funds with the state for state sales tax transportation funding. The MPO directly manages projects programmed with these funds. In cooperation with Utah County, the MPO selects projects to be funded with Utah County transportation sales tax projects as well as Utah County vehicle registration corridor preservation funding.

Geographical Location

The MPO area encompasses all municipalities in Utah County and the contiguous unincorporated areas between municipalities. The MPO is bounded on the north by the Salt Lake/Utah County line and is restricted by the Wasatch Mountains on the east. These mountains have such a steep western face; it is unlikely that any major development will occur higher than the foothills. The southern boundary of the MPO is the Utah/Juab County line. Finally, the western boundary reaches to the community boundaries of Cedar Fort, Fairfield, Eagle Mountain, and Saratoga Springs and then south generally just west of the Redwood RD corridor.

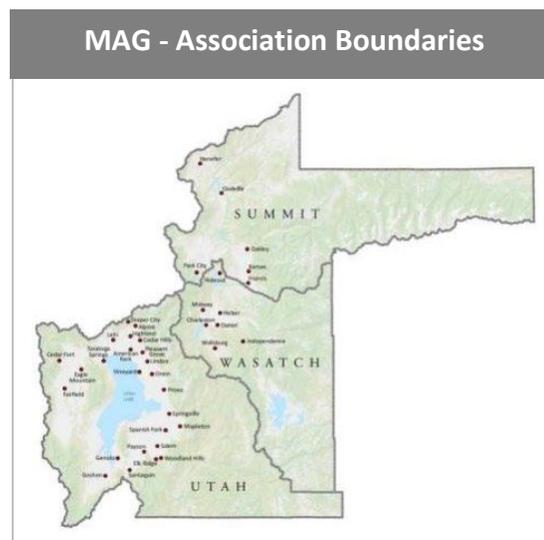
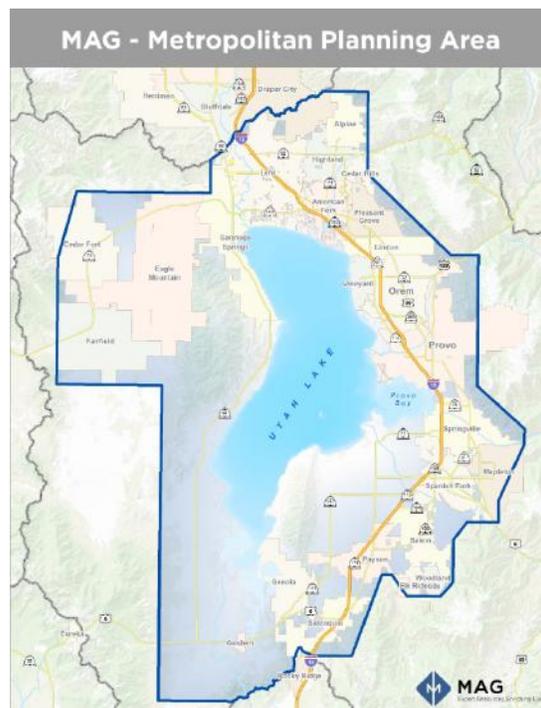
MPO Organization and Management

MAG's Executive Council is the governing board and final policy-making body of the three-county Association. This body approves working budgets and staff policies. It is comprised of mayors, commissioners, and county council members of member jurisdictions within the Association's boundaries of Summit, Utah, and Wasatch counties.

The Mountainland Regional Planning Committee (MPO RPC) is the MPOs board of directors. It was established to direct regional transportation planning work as well as selecting projects to fund with MAG and Utah County transportation funding. The Regional Planning Committee reviews and approves this Work Program, TransPlan50 the MPO's Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), air quality policy, and all other urban transportation plans and programs for the MAG MPO area.

The MPO board is made up of an elected representative from each municipality in Utah County, all three Utah County Commissioners, a UDOT Commissioner, a UTA Trustee, and a Utah Air Quality Board/Senior Staff member. The Federal Highway Administration, Federal Transit Administration, Federal EPA, Federal Railroad Administration, Federal Aviation Administration, and Utah County State Legislative Delegation may be invited to participate at meetings as non-voting members. The public is of course also welcome, with time is allotted for public comment.

The MPO Technical Advisory Committee (MPO TAC) advises and makes recommendations to MPO RPC on technical transportation and land use issues. This committee includes engineers, planners, and technicians who serve as staff to local, state, and federal governments. Local governments may appoint members to fit their needs. The MPO staff serves as liaison between the advisory and policy committees.



Federal Planning Emphasis areas and the FAST Act

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation Act, or "FAST Act." It is the first law enacted in over ten years that provides long-term funding certainty for surface transportation. Guidance is starting to come from FHWA and FTA on how to implement this new bill. This bill has several emphasis areas. Including:

Project Delivery: Speed the permitting processes while still protecting environmental and historic treasures and track projects and interagency coordination processes.

Freight: The FAST Act establishes both formula and discretionary grant programs to fund critical transportation projects that would benefit freight movements.

Innovative Finance Bureau: The FAST Act establishes a new National Surface Transportation and Innovative Finance Bureau within the Department to serve as a one-stop shop for state and local governments to receive federal funding, financing, or technical assistance.

Utah County and Utah are known as self-help governments and have relied on themselves to solve large scale project financing issues.

TIFIA: The Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan program provides important financing

options for large projects and public-private partnerships.

Utah has been very successful financing large-scale transportation projects in the recent past including I-15 reconstruction in Utah County, FrontRunner Commuter Rail, and the UVX Bus Rapid Transit project.

Safety: The FAST Act bolsters the Department's safety oversight of transit agencies and streamlines the Federal truck and bus safety grant programs, giving more flexibility to States to improve safety in these areas.

UDOT has been reaching out to local governments by deploying safety related data via <https://udot.numeric.com/#/>

This site allows the local governments to analyze the crash data and find local solutions to solve local and state problem areas.

UDOT and the Mountainland MPO continue to collaborate on the Utah Strategic Highway Safety Plan with a "Zero Fatalities goal as something we can all live with."

Transit: The FAST Act includes several positive provisions, including reinstating the bus discretionary grant program and strengthening the Buy America requirements that promote domestic manufacturing through vehicle and track purchases.

Ladders of Opportunity: The FAST Act includes several items that strengthen workforce training and improve regional planning. These include allocating slightly more formula funds

to local decision makers and providing planners with additional design flexibilities.

Staff will continue to work with communities on the recently passed Utah Senate Bill 34 linking land use and transportation planning to housing choices and opportunities. Sharing resources and information as well as hands on plan development are critical to helping each jurisdiction comply with state law and improve overall housing planning.

Resiliency Planning:

MAG creates and maintains a Pre-Disaster Hazard Mitigation Plan for the MPO and AOG area. The plan works with FEMA to promote pre-and post-disaster mitigation measures, short-and long- range strategies that minimize suffering, loss of life, and damage to property resulting from hazardous or potentially hazardous conditions to which citizens and institutions within the state are exposed; and to eliminate or minimize conditions which would have an undesirable impact on our citizens, the economy, environment, and the well-being of the State of Utah. This aids in enhancing city and state officials, agencies, and public awareness to the threat that hazards have on property and life and what can be done to help prevent or reduce the vulnerability and risk of each Utah jurisdiction and increases our MPO's resiliency amid natural disasters.

Performance Based Planning and Programming: WFRC, MAG MPO, UDOT and UTA are transitioning to *Performance Based Planning and Programming*.

- The development and implementation of a performance management approach to transportation planning and programming that supports the achievement of transportation system performance outcomes.
- UDOT, UTA, Cache and Dixie MPOs, WFRC, and MAG have developed joint goals, key objectives, and key performance measures.

Regional Goals

Models of Regional Planning Cooperation:

Promote cooperation and coordination across MPO boundaries and across state boundaries where appropriate to ensure a regional approach to transportation planning.

- MAG will continue to coordinate with UDOT, UTA, WFRC, Cache and Dixie MPOs to produce the 4th edition of Utah's Unified Transportation Plan.
- MAG will continue to partner with WFRC, UDOT and UTA in the continued development of our Joint Travel Demand, Land Use Models and other Joint Projects.
- MAG, UTA, UDOT and WFRC are managing the Point of the Mountain Study in concert with the Point of the Mountain State Commission.
- MAG, WFRC, UTA, UDOT, and Cache and Dixie MPO's signed a single unified memorandum of understanding (MOU) for federal performance measures reporting for all MPO's, DOT and transit agencies in the state of Utah.

Transportation Goals and



Goal 1
Update the Regional Highway
System to a Metropolitan
Grid-based Network



Goal 2
Explore Additional
Freeways, Add Capacity



Goal 3
Create a Robust Transit
System



Goal 4
Build a Regionally
Connected Active
Transportation System



Goal 5
Preserve what we have

Budget Section A

Program Management

\$276,124 or 14% Staff Fund

Staff provides organizational and logistical support to the RPC and TAC at the direction of the Mountainland Regional Planning Committee. Meeting's announcements and agendas are distributed approximately 5-7 days prior to the meetings. Agendas are posted in the MAG office, MAG website, and the Utah Public Notice website. All meetings are open to the public.

- *Mountainland MPO Regional Planning Committee:* meets the first Thursday of the month excluding July and December as needed.
- *Utah County Council of Governments* meets the first Thursday of the month excluding July and December as needed.
- *Mountainland MPO Technical Advisory Committee:* meets approximately 10 days prior to Regional Planning meeting excluding June and November.
- *Joint Planning Advisory Committee (JPAC):* meets quarterly as needed on the first Thursday
- *MPO Finance Committee:* meets monthly when needed.

Staff Training: Staff attends training, workshops, participates in regional and national forums, and conferences sponsored by various agencies. Generally, each year, one out-of-state trip and one in area training is planned for each MPO staff member. Training is subject to budget constraints.

MPO Agreements and Contracts: Contracts are updated, if needed, annually between UTA, UDOT and WFRC. A Consultation Procedures MOA was signed with Division of Air Quality (UDAQ) is reviewed yearly. Local cash match agreements are negotiated prior to any study/contract starting.

Additional Agreements:

- Resolution - Urban Transportation Planning Process Certification
- UDOT and UTA Memorandum of Understanding
- Certifications and Assurances for Federal Transit Administration Assistance Programs
- Consolidated Planning Grant Contract

Direct Costs: Direct cost allocates the costs required to support staff activities in the Work Program. Direct costs are divided among the various work categories and funding sources and include:

- Staff Salaries
- Fringe Benefits
- Travel: travel expenses both inside and outside the region; conference registration and other fees associated with attendance at approved functions
- Office Expenses: supplies; subscriptions; repair and maintenance of equipment and copy costs by outside services.
- Copy and Printing Costs: in-house reproductions of documents and handouts for meetings
- Communications: telephones; mobile phones and related programs, postage; supplies and maintenance for postage meter

- Space Cost: utilities; maintenance; janitorial costs; any needed rental/repairs; and common business park fees
- Equipment and Office Furniture: upgrade of office equipment and furniture, trail counters
- Other: legal fees to include advice on contracts, personnel matters; any possible liability for the agency; liability insurance; membership and professional fees; meetings expenses, document and brochure printing, and advertising
- Data Processing: maintenance licenses and contracts; software; computer repairs, and aerial photography data
- Annual MAG audit by outside firms

Indirect Administrative Costs: This procedure allocates the costs of administration (Executive Director, Accounting Department, and their secretarial services) across the Association's various funding programs.

Programmed In-kind: Funds from other sources used as match to CPG.

The office space square footage occupied by the Regional Planning staff in the MAG building is eligible for use as in-kind match for federal funds appropriate for this MPO staff cost. The annual cost per square footage is calculated and is claimed to reduce the amount of municipal funds needed to match federal funds. This Work Program is incorporated into the annual MAG budget for approval by Mountainland Executive Council.

MPO Program Management Products:

- Development of the Unified Planning Work Program
- Attendance staff support at Executive Council, Mountainland MPO Regional Planning Committee, Mountainland MPO Finance Committee, Mountainland MPO Technical Advisory Committee, Utah Valley Trails Alliance, and Advisory Committees
- Attendance at conferences, workshops, and seminars
- Development of the monthly financial reports
- Annual audit
- Development of contracts and agreements
- Development of the FY20 Unified Planning Work Program year-end report for FWHA

Budget Section B

Planning Activities

\$1,325,785 or 60% Staff Fund

This section includes both long and short-range transportation planning activities, projects, studies, public participation, transportation management, transit planning, transportation and land use analysis, bicycle and pedestrian facilities planning, technical engineering assistance, safety and security, environmental planning, community and environmental impact analysis, and interaction with the community's technical and planning staffs.

Regional Transportation Plan Development:

Development on refining the RTP process will continue with the MAG/WFRC joint Real-Estate Market Model (REMM) and Travel Demand Model. REMM works in concert with the travel model to allocate households and employment in areas where transportation investment is being made phase by phase. This allows for a dynamic job and household allocation through time that is reflective of transportation access investment through time. Work on other refinements to the planning process will be conducted.

Point of the Mountain Development Authority:

Cooperate in the future planning and development of the silicone slopes area along with WFRC, UDOT, and UTA.

- Participate in the Transit Alternative Analysis lead by UTA.

Management of Transportation Studies and Support Data: Staff will continue to manage and participate in transportation studies with

our partners to support the development of future projects understand its impacts on vulnerable population and the environment and quantify the benefits of the 2019 RTP.

In the 2020 TIP, approved transportation studies totaling **\$1,512,000** have been assigned by available funding and managed by MPO staff. Most are started or are concluding. They include:

- North Lakeshore Major Highways Corridors Study \$300K
- State St. Transit Study \$310K (\$250K MAG, \$50K UDOT, \$10K UTA)
- SR92 North Regional Traffic Study \$75K MAG, \$75K UDOT funds.
- UPRR Crossings Provo Study \$200K
- Salem City Active Transportation Study \$45K

MAG Utah County Regional Highway Grid Network Study

MAG will continue the study of the urban area highway grid network based off ITE highway spacing guidelines and MAG RTP work. \$115k was contracted for this study. This work includes researching the Institute of Transportation Engineers (ITE) guidelines and create narrative. The study is parsed into a quadrant level analysis with focus on network problem areas and demonstrate benefits and best practices of a connected regional highway grid network. A range of products for different urban types (greenfield vs. built-up environment) are being developed. Modeling will help identify facility size, road cross sections, highway spacing

requirements, access management, the characteristics of different types of facilities and access types, and changes at the neighborhood level with grid connections. The study is also identifying tiers in the regional system for potential ownership (local, county, state), funding options, cost by functional type by jurisdiction, and funding opportunities/funding gap. The end product should include example codes/ordinances to aid cities in development process in creating the grid and demonstrate benefits of grid to the major highway (UDOT) system.

Public Participation

Mountainland MPO recognizes its responsibility and opportunity to inform the public and other agencies of its programs and plans by soliciting and incorporating public input into all planning activities. Citizens, affected public agencies, transportation agencies, private providers of transportation, and other interested parties can and do comment on proposed plans in the early stages of development and throughout the process toward completion of the plans.

Draft and final copies of the various plans and studies are available at the Mountainland office and web site <http://mountainland.org>.

MPO staff follows the Mountainland MPO Public Participation Plan (PPP) in all planning processes. This plan was most recently updated and approved in May of 2019. The updated Public Participation Plan is located at mountainland.org. During the year the staff and member

agencies identify methods and procedures to ensure that the regional transportation planning process and the transportation improvement program comply with Title VI of the Civil Rights Act of 1964.

MPO staff uses the latest census and other data to identify residential, employment, and transportation patterns of low-income, elderly, disabled, and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed. The staff strives to improve its public participation process, by eliminating participation barriers, and engaging target populations and providing language translation services for Limited English Proficient (LEP) individuals.

Each year the MPO sponsors Transportation and Community Planning Open House(s) with UTA, UDOT, and the municipalities within the MPO. An open house allows the public to voice their opinions through written comments, valuable one-on-one exchanges, and some small group discussions. These exchanges help staff detect the changes the public would like to see in the coming years and incorporates their comments into proposed plans and reports.

All interested citizens, local elected officials, identified minority groups, public agencies, private transportation providers, and segments of the community affected by transportation plans, programs and projects are invited. All committee meetings are open to the public.

MPO Public Participation Products:

- Continue work to make website more user friendly for the public.
 - Develop a user-friendly informational web page and survey for the RTP.
 - Provide planning documents in Spanish when requested.
- Monitor the complaint process to assist in addressing any Title VI and nondiscrimination related complaints that may be received.
- Organize the Transportation and Community Planning, and Transportation Improvement Program Open House(s)
- Produce mailing lists, surveys, and committee meeting minute.
- Partner with other transportation agencies for open houses
- Publish special study one pagers.
- Publish meetings and open houses information on the Utah State Public Notice Website.
- Review MAG's Public Participation Plan.
- Conduct public relation outreach and develop content.
- Research and develop new methods for improved outreach.

Transportation Management Systems

A Transportation Management System includes actions to improve traffic flow, reduce air pollution, and traffic congestion.

Congestion Management Process: An effective Congestion Management Process (CMP) can improve the operational efficiency and physical lifespan of the regional transportation system. To

facilitate this, MAG has integrated the Transportation Improvement Program (TIP) selection process with the goals and strategies of the CMP. TIP project selection is driven by the overall strategy of maximizing the efficiency of the existing transportation infrastructure.

MAG staff identifies existing and future congested areas using data derived from the regional travel model combined with a GIS database, micro simulation modeling, and input from local officials via TAC. TAC selects performance measures and evaluation criteria to identify the most congested corridors within the MPO boundaries.

Staff works closely with the TAC to understand the root causes of congestion at specific locations and identifies CMP strategies appropriate to alleviating congestion. The committee is instrumental in setting priorities and recommending the use of funds for new projects to reduce travel-time delays, improve air quality, and conserve energy. The information is then used to develop a list of TIP projects for consideration by the Regional Planning Committee.

MPO Transportation Management Systems Products:

- Work cooperatively with UDOT to define one CMP which addresses all capacity increasing projects identified in the RTP.
- Identify and monitor most

congested corridors.

- Continue integration of the CMP with TIP selection process.
- Develop performance-based planning and programming system with UDOT, UTA and WFRC partners.

Transit Planning

UTA is the transit provider for all of the municipalities within the MPO. UTA operates regional commuter rail service, bus route service, express bus service, paratransit service, travel demand management Rideshare, and vanpool program for the area.

MPO staff works in partnership with UTA in preparing, assessing the effectiveness of, and updating transit plans for current and future service improvements. Transit capital projects and the various studies they require, are programmed, and performed to pursue their implementation from the RTP into the Utah Valley Transit System. Coordination with UTA's Rideshare and vanpool programs are ongoing to promote and maximize the benefit of these programs and the transportation funds in the urbanized area. MPO staff works to promote effective transit solutions and explore land use options even in the form of encouraging Transit Oriented Development (TOD) to maximize the community's investment in its transit infrastructure.

MPO staff works with UTA to develop long-and short-range transit plans for the Mountainland MPO area, which involves reviewing and updating the RTP in

coordination with UTA's Transit Development Plan. This involves transit funding, transit productivity measures, inter-modal center development, park and ride planning, integration with motorized and Active Transportation travel modes, integrates with other long-range studies, recommends possible transit improvements, and looks at equity and system changes within the current transit system.

UTA is completing a Transit Service Choices Study to analyze the current transit service being provides by UTA and receive input from local government about how the service philosophy could be structured and routes redesigned to match the intent of that philosophy.

Transit Capital Projects and Environmental Studies:

1. *FrontRunner South to Payson Coordination*
Commuter Rail - FrontRunner to South Utah County is needed and funded in Phase 1 of the 2050 Regional Transportation Plan.

In preparation of this project MAG has begun a planning study in partnership with UTA and UDOT. MAG will involve all public agency stakeholders to consider developing better bus service now, station location planning and potential land use plans to compliment this future investment. An environmental study is the next step and MAG is working to prepare funding and the expectation of moving toward this next study.

2. *Vineyard FrontRunner Station*

Phase 1 of the Regional Transportation Plan recommends the development of an additional commuter rail station along 800 North in Vineyard. The station is estimated to cost \$14m and will be built in partnership with developers in the area.

3. *Point-of-the-Mountain*

A \$550K Environmental Alternatives Analysis will be advertised soon to relook at the previous light rail alignment and mode from Draper TRAX station to Lehi. MAG, WFRC and Draper are partners with UTA who is leading this study.

4. *North State Street Environmental Analysis*

MAG, UTA, Provo, Orem, Lindon, Pleasant Grove, American Fork, Lehi, and UDOT intend to develop and evaluate transit alternatives on a limited number of corridors within Utah County generally along the I-15 and US-89 corridors as identified in Figure 1: "Study Area". It is assumed that the selected Locally Preferred Alternative (LPA) will consist of a north/south transit line between the Provo FrontRunner Station and Lehi.

Mobility Management Strategy Implementation and the Regional Coordinating Council:

The Mobility Management process is intended to develop various services and business plan to create high-priority coordination between entities that provide public transportation. This would involve entities that provide transportation for individuals with disabilities, older adults, and individuals with limited incomes, and lays out community strategies,

involving all service providers, for meeting these needs and prioritizes services.

A Regional Coordinating Council has been created that is attempting to work cooperatively and to create partnerships for better service to elderly, disabled, and low-income populations. Since the fall of 2017, a volunteer driver service known as Utah Valley Rides was initiated in the Provo and Orem area to provide rides to seniors who qualify. It has a limited schedule and only two vehicles. The service is the result of a partnership with UTA, United Way of Utah County, and MAG. It is hoped that the service will continue to grow and provide longer hours and greater geographical coverage as more vehicles are acquired, more funding received, and more volunteer drivers are found.

MPO Transit Products:

- Develop Regional Transit Plan
- Continue Transit programming for the TIP.
- Work with cities to plan and preserve future locations for FrontRunner commuter rail stations.
- Continue Mobility Management process and the Utah County Regional Coordinating Council.
- Work with the Utah County Coordination Council and mobility manager and funding partners to grow the Utah Valley Rides volunteer shuttle service.
- Continue work with UTA on regional service equity.
- Participate with UTA on transit finance issues and future project development.
- Work with UTA service planning to establish transit productivity standards

through the UTA Service Choice Study that is currently underway and assist with transit core route structure development.

- Work with UTA and cities in the northwest part of the county to study transit service and how it can be enhanced and develop a service plan to deploy new service to those growing communities.

Linking Transportation and Land Use

Respond to legislative requests to study and model true cost of travel, housing and job location associated with government incentives.

Local governments across the Mountainland MPO region recognize the importance of integrating land use and transportation planning at the community level. Some jurisdictions are working to promote more development closer to mass transit. Other communities are looking at ways to bring jobs, housing, and shopping in closer proximity to reduce the need to drive. Still others want to revitalize existing communities to make them walkable and accessible for people without cars.

Staff will assist communities and decision-makers in understanding the relationships between transportation and land use. This assistance may include but is not limited to, micro and macro transportation modeling, land use planning and ordinance development, community surveys, and visualization techniques. Any jurisdiction that is a member of the MPO is eligible to receive

staff assistance.

MPO Linking Transportation and Land Use Products:

- Help communities identify how transportation decisions affect land use, growth patterns, and related community impacts on both regional and local scale.
- Explain how land use patterns affect people's' travel patterns and the overall performance of the transportation system.
- Assist elected and appointed officials as well as the public of the various transportation planning processes including Station Area and TOD plans, statewide planning, metropolitan planning, corridor planning/alternatives analysis, the NEPA process, subarea planning, and project development, and how land use considerations can be integrated into these processes.
- Assist in local comprehensive planning and land use regulatory activities and describe how the process and outcomes of these activities can support local and regional transportation objectives.
- Identify and assist with analytical tools that are available for measuring and forecasting the impacts of transportation and land use decisions.
- Continue the development of the Real Estate Market Model (REMM), in coordination with Wasatch Front Regional Council. REMM forecast land use housing and job allocation through time and is sensitive to the investment in the transportation system through time.

Bicycle and Pedestrian Planning

Utah Valley has exhibited an increasing need and demand for bicycle and pedestrian friendly facilities. These include shared use paths, neighborhood pathways, bike lanes and other in-road improvements, sidewalks, road crossings, transit access, and pedestrian friendly zones.

There is a desire in the community to better identify and preserve this pedestrian and bicycle access through dedicated facilities, and mixed land use development. By encouraging the development of a valley-wide bike and trail pedestrian transportation system and through changes in land use patterns vehicle trips can be reduced and traffic congestion mitigated. This creates a substantial community resource by providing safe transportation alternatives, recreational opportunities, open space preservation and access, and improvements in environmental aesthetics. Such quality-of-life enhancements also has a positive effect on economic vitality.

MAG staff will act as a technical and advisory resource to communities for implementing bicycle and pedestrian improvements.

- Act as project manager as needed in both planning and construction activities.
- Act as a safety resource to communities in identifying and solving problematic high incident bicycle/pedestrian and motor vehicle crash locations, including safety training, warning devices, pedestrian crossing design, transit facility design, and traffic calming techniques.
- Coordinate efforts between all groups interested and involved in building a

bicycle and pedestrian network within Utah Valley, including but not limited to local communities, county, state, and federal agencies, volunteer groups, and regional alliances.

- Provide assistance to local communities in identifying and securing outside funding sources for bicycle and pedestrian improvements, including grant research and grants writing.

MPO Bicycle and Pedestrian Planning Products:

- Continue to coordinate development of the final phase of the Provo River Parkway Trail between Vivian Park and Deer Creek Dam.
- Coordinate with UTA, UDOT, and the cities of Lehi, American Fork, Pleasant Grove, Lindon, and Vineyard on the Rail Trail Feasibility Study. This effort will determine the alignments, costs, and environmental clearances for development of bicycle/pedestrian facilities along the Central Transit Corridor from south Lehi to Vineyard.
- Assist partner agencies in implementation of projects funded by \$20m TIGER grant, specifically bicycle/pedestrian bridges over Timpanogos Highway, Lehi, and over multiple Union Pacific and UTA rail lines to the Provo Intermodal Station.

Corridor Preservation Assistance

Administer the Utah County Corridor Preservation Fund program in conjunction with Utah County. Act as project officer for all partners in the negotiation and acquisition of necessary property rights for planned

facilities. Serve on the UDOT Corridor Preservation Fund Advisory Committee. Serve as liaison between UDOT and local entities in preserving Rights-of-Way on priority state facilities.

MPO Corridor Preservation Assistance Products:

- Update Application Procedures to reflect changes to state law and adopted practices by the MPO.
- Announce and process funding opportunities and application through TAC and RPC.

Technical Assistance

Provide technical assistance to state and local agencies as transportation plans, programs and projects are developed. Planning staff participates with transportation and corridor studies, air quality education and assistance, project teams, environmental study teams, and other planning studies. Information about future travel demand, projected population growth, demographic trends, and traffic expertise is provided to various government agencies as well as individuals, groups, and businesses.

Staff plays an active role in transportation studies, project teams, financial planning, mapping environmental studies, and other activities where planning assistance is needed. Activities that provide critical regional needs are given top priority. Additional assistance is provided as resources allow.

MPO staff continues to coordinate regional planning issues between communities. If the need arises, subcommittees of the Technical Advisory Committees will be appointed to

meet on specific issues.

Demographic and Socio-Economic Monitoring System:

Every three to four years the Gardner Policy Institute (GPI) of the University of Utah generates population projections at the state and county level. The Mountainland MPO produces small area projections (city and traffic analysis zones) using the GPI county number as a control number. The most recent projections from GPI were released July 2017 and were based on Census 2010 data, and 2016 Building Permit data and Work Force Services data. The MPO in early 2019 released the latest municipal projections for the Mountainland area based off the 2017 GPI county data.

This demographic information is used in the travel demand modeling effort and by member jurisdictions in their planning efforts. The travel modeling results include current and projected Vehicle Miles Traveled (VMT) used in air quality analysis, congested roadways, and average daily trips on major roads. The RTP uses modeled data to determine needed capacity increases. The Congestion Management Process also makes use of this data.

The next GPI county and state projections are scheduled for release later in 2021.

Geographic Information System:

Mountainland GIS continues to create and analyze data in all the planning efforts. This includes preparing data received from other agencies and data generated in house. Special

focus is given to 2010 (soon to be 2020) census data as we synthesize and develop data summaries to be used in our land use and transport modeling efforts. GIS serves as a principal tool in the MPO's data development, storage, and analysis activities. GIS displays and maps plans and programs. The MPO continues to disseminate our GIS data via the internet for use by member agencies and the public.

MPO Technical Assistance Products:

- Continue to support and use of various tools being developed by UDOT (UPLAN) to leverage information management and enhance the transportation planning process in the state of Utah.
- Provide assistance and information with regional data sets.
- Provide self-certification training to the elected officials to better understand the requirements of the legislation to which they are certifying adherence.
- Include appropriate credit references and disclaimer statements on all future products and reports that are completed with SPR and PL funding.
- Develop presentations for specific cities, special interest groups, and industry.
- Develop employment data.
- Develop housing data.
- Continue to create and distribute demographic information to elected officials, technical staff and public.
- Continue development of Web Mapping Application.

Budget Section C

Air Quality

\$98,725 or 5% Staff Funds

The work in this section includes preparation of RTP and TIP conformity determination reports, assisting with the preparation of State Implementation Plans (SIP) for air quality, and air quality analysis activities. Utah County is designated as maintenance area, for PM₁₀ (particulate matter under ten microns), non-attainment area for PM_{2.5} (particulate matter under 2.5 microns), and marginal non-attainment for Ozone. The city of Provo is designated as a maintenance area for Carbon Monoxide (CO). All the cities and the County are eligible for federal Congestion Mitigation and Air Quality funds.

PM_{2.5}: In Nov. 2019, EPA published a proposed Maintenance Plan for the Provo and Salt Lake City areas for PM_{2.5} with associated PM_{2.5} and precursor budgets. Until the Maintenance Plan and Attainment re-designation are officially approved at the federal level, MAG makes conformity determination based on the 2008 baseline year. It is anticipated the submitted plan will enable the area it to continue maintaining (not violating) the National Ambient Air Quality Standard (NAAQS) for that pollutant currently established as 35 micrograms per cubic meter.

Ozone: In June 2018, EPA finalized the Ozone designation for the urbanized area of Utah County to Marginal non-attainment. The state anticipates redesignation of areas other than MAG to moderate non-attainment, necessitating a SIP. MAG is working with EPA to submit Ozone inventories for use in the SIP.

MAG is also responsible to submit a Conformity Determination for Ozone. Staff will keep monitoring these pollutant's levels and respond to changes in environmental regulations and mandates. A great deal of staff time is spent on developing mobile source data, discerning the impacts of Travel Control Measures (TCMs), and negotiations with a variety of stakeholders and state and federal requirements.

Carbon Monoxide: Provo City is designated as a maintenance area for CO. Provo City CO maintenance plan was approved by EPA on November 5, 2005 and became effective January 3, 2006. The second 10-year maintenance period was approved in March 2020. In 2026 the state will be eligible to request a reclassification to "unclassified" and retire the non-attainment designation. As part of the second 10-year period, MAG no longer needs to calculate CO emissions for comparison to the Motor Vehicle Emissions Budget and instead does a qualitative analysis.

PM₁₀: Utah County was redesignated as a maintenance area for PM₁₀ effective March 26, 2020. All Conformity Determination Reports for the RTP reflect the budgets established in the Maintenance Plan; in accordance with 40 CFR part 93 requirements.

Work will evolve around interpretation of new rules and guidelines published by the Environmental Protection Agency (EPA) and FHWA in conjunction with the transportation bill, efforts to educate the public and elected officials along with implementation of beneficial air quality

strategies, monitoring ozone, PM_{2.5}, and Green House Gases (GHG) rules. It will converge also on monitoring the effects on the transportation sector of near road NO₂ emissions.

In the efforts to bring the region to attainment of the various pollutants we are challenged with, MAG MPO is actively participating with the Utah Valley Clean Air Taskforce, Utah Valley Sustainability Coalition, and other stakeholder's groups active in the region.

Technical Support: The MAG Regional Planning Committee reviews and approves all policy and technical issues associated with air quality conformity. The committee meets on a regular basis with staff arranging informative meetings for policy decisions. This committee's work is supplemented with individual subcommittees where needed. We are working closely with UDAQ, UDOT, and UTA to assure the accuracy of information distributed and inclusion of their staff in all relevant meetings. An MOA for interagency consultation was updated and signed July 2010.

Development of Traffic Control and Travel Demand Management Measures: In the on-going effort to reduce on road emissions, the MPO is responsible to identify and develop transportation control measures of all types that may be considered in the appropriate State Implementation Plans. MPO staff works with the cities on several signalization projects, IM program improvement proposals and ongoing conformity analyses.

A significant amount of time and effort is diverted towards acquiring proficiency in use of the EPA approved emissions model MOVES3. Staff continues engaging in testing and reporting on all new versions EPA introduces.

MPO Air Quality Products:

- Work with the Interagency Consultation Team to explore viable strategies to address criteria pollutant of concern in Utah County and throughout the state and focus funding on the most cost-effective strategies for non-attainment issues.
- Development of transportation control measures and projected air quality impacts.
- Prepare Emissions inventories for various SIP and Conformity activities.
- Conformity determinations for the transportation plan and TIP.
- Technical support to other agencies and consultants.
- SIP preparation and mobile source data
- Participate in the FHWA and EPA AQ and Transportation Summit Group
- Representing MAG in local Air Quality and Sustainability groups

Budget Section D

Modeling Forecasting

\$282,071 or 13% Staff Funds

The work in this section includes travel demand modeling activities, coordinating, and developing socio-economic forecasts for modeling needs, traffic micro-simulation modeling, and other transportation/land-use activities related to travel demand modeling and forecasting.

MAG MPO uses a regional travel demand model as the principal analytical tool for determining present and future transportation facility needs for the area. This model is jointly maintained and operated by MAG MPO and WFRC. The travel demand model continues to be refined and improved to meet planning and engineering needs and to keep pace with the current state of the practice in travel forecasting. As such, resources continue to be allocated for model development, maintenance, and operation. MAG MPO also continues to develop and maintain the socio-economic data used for the travel demand model.

Travel Demand and Socio-Economic Models: Staff time is allocated to gather and develop travel demand model input data and socio-economic model input data (Real Estate Market Model); run, calibrate, and validate the travel demand model and the socio-economic forecasting model; create, maintain, and update travel demand model highway and transit networks; run and analyze project sets for RTP development and scenario testing; and produce files needed for air quality

conformity determinations. Staff time is also allocated to support other planning activities such as other studies and/or EIS which take place over the course of this work program. MAG MPO currently uses the Real-estate Market Model (REMM) to estimate population distribution.

Traffic Data Collection: UDOT continues to maintain a traffic-monitoring program to meet the federal Highway Performance Monitoring System (HPMS) requirements. Traffic volumes are compiled, published, and distributed annually.

Travel speed and vehicle occupancy data are collected annually. Other data such as peak period factors, AADT to AWDT conversion factors, truck percent, and directional splits are also collected annually. MAG MPO will also work with local agencies to develop a process of sharing and using traffic data they may have that could be used to help calibrate and validate the regional travel demand or micro simulation models.

Safety and Security Modeling: MAG is working in conjunction with UDOT, the Utah Department of Public Safety, and other MPO's to update the Utah Strategic Safety Highway Plan (USSHP). Areas of emphasis include intersection and pedestrian safety as well as rural run-off the road improvements. MAG supports and adopts the goals of the USSHP into project selection.

Evaluate the utility of a new safety review process called the United States Road Assessment Program (USRAP) in conjunction

with UDOT by applying the model to proposed TIP projects by local sponsors.

- Evacuation strategy for emergencies and disasters

Post Disaster Evacuation Modeling:

Develop a methodology based on best practices in the profession for modeling of transportation networks in order to determine the fastest and most effective evacuation strategy in case of a disaster. The model determines the routes that should be taken to minimize the evacuation time. Issues to be addressed:

- Given a geographical area with its underlying transportation network and population to be evacuated, how long will it take to evacuate the area during an emergency?
- What are the bottleneck roads that will impede the traffic?
- How best can the people be sent out to shelters or other locations to minimize the network clearing time?
- If during the evacuation, some of the roads become impassable due to accidents and other unforeseen occurrences, how should we reroute the evacuating population to safety?
- Identify different route scenarios given various hazards (i.e. flooding may require a different evacuation scenario than wildfire)

MPO Modeling & Forecasting Products:

- Databases for model inputs including socio-economic data and highway and transit networks
- Model setup and forecasted travel demand volumes
- Travel time monitoring data

Budget Section E

Financial Planning

\$197,450 or 9% Staff Funds

MAG staff assists in securing funds for transportation projects and improvements. This section explains the programming of funds for the Work Program, RTP, and TIP. State and local governments are experiencing the costs associated with rapid growth. Transit service is limited in the Provo/Orem area with very limited service to the remainder of the county. Commuter Rail service started in December 2012 and greatly expanded service between the MAG and WFRC metro areas. The Utah Valley Express (UVX) opened in 2018 as the first bus rapid transit system in Utah County. It is highly successful carrying over 12,000 riders a day between the county's two universities starting at the Orem FrontRunner Station and ending at the Provo FrontRunner Station.

In 2008 and 2017, the state legislature allocated over \$1.5 billion in funding for major highway projects within the county. Also, voters approved a ¼ cent sales tax for commuter rail construction from Salt Lake City to Provo. In 2009, the state legislature bonded for \$1.4 billion in funds for the reconstruction of the I-15 Freeway from American Fork to Provo. Utah County also approved an additional ¼ cent sales tax to help fund major highway projects. In 2011 the state legislature dedicated all automobile related sales taxes to be allotted to transportation.

These actions represent a major investment into the county which included the I-15 CORE project, Front Runner Commuter Rail expansion and numerous major highway widening projects. The I-15 Technology Corridor project started in 2018, widening and reconstructing the freeway through the Lehi area. The MPO, transportation officials, and our elective officials worked diligently to present the needs to the legislature and public to help gain this funding. In 2021 the UDOT allocated \$350M to construct the Mountain View corridor from Saratoga Springs to Salt Lake County

Since this historic infusion of transportation funding, most large allocations of funding have turned to other areas of the state with the main state transportation funds allocated through 2029. MAG recognizes that there are other areas than need improvement, but with more than half of the growth projected to happen within Utah County through the next 30 years, other resources will need to be identified to keep up with our current rapid growth.

Financial Planning Products:

- Coordination with UDOT and UTA for their individual activities and studies for the Work Program.
- Update Utah's Unified Transportation Plan Financial Model for 2023 application.
- Completion and adoption of the Work Program by the Regional Planning Committee.

- Address financial status and equity in the Transportation Improvement Program.
- Updated project cost estimates, status, and project descriptions.
- Assemble and track the annual list of projects document. This document will reflect the status of all the projects programmed in year one of the previous STIP and distributed to all local jurisdictions and make available on the MAG website.
- Work with UDOT to provide appropriate access to UTA and MAG to ePM so that they can input their TIP information directly which would provide a tool for better communication.
- Evaluate the benefits of updating the TIP on the same frequency as the rest of the state.
- Assist with Project Development of funded projects.

Exchange Program Project Management

MAG and UDOT have agreed to exchange Federal Urban STP funds for state transportation funds. The agreement is made at the beginning of each federal fiscal year and amounts to approximately \$10 million annually. MAG staff manages the projects funded through this program.

- Develop interlocal agreement with project sponsors.
- Monitor project scope, design, and construction.
- Reimburse project eligible costs.
- Provide financial tracking and annual audit.

Unified Planning Work Program

As part of the annual budget and planning activities of the MPO, the Work Program is developed to account for and illustrate all planning activities to be conducted within the MPO area. This program lists work done by the MPO, UDOT, UTA, and other local government activities. A major part of this process is budgeting funds for the various activities and special projects.

- Coordination with UDOT and UTA for their individual activities and studies for the Work Program.
- Completion and adoption of Work Program by the Regional Planning Committee.
- Address financial status and equity.

Transportation Improvement Program

The metropolitan transportation planning process includes development of the Transportation Improvement Program (TIP) for the MPO area. A TIP is developed by the MPO in cooperation with UDOT and UTA. The TIP covers a period of not less than 4 years and includes a priority list of regional projects to be carried out in the first 4 years. Public comment is solicited in accordance with the Mountainland Public Participation Program and FHWA and FTA requirements. At least one formal public meeting is held during development of a TIP update. The TIP is updated annually. Changes to the TIP program are administered through the modifications and amendments through the MPO Technical Advisory Committee and the MPO Regional Planning Committee.

The MPO must make a conformity determination on any new or amended TIP when amendments contain regionally significant projects not from the first phase of the Regional Transportation Plan, in accordance with the Clean Air Act requirements and the EPA conformity regulations. The TIP is financially constrained by year. It is a financial plan that lists projects to be implemented using current revenue sources and proposed revenue sources. The MPO shall develop the financial plan in cooperation with UDOT and UTA. UDOT and UTA must provide the MPO with the estimates of available federal and state funds.

The MPO Technical Advisory Committee recommends projects to the MPO Regional Planning Committee to be included in the TIP. MPO staff gathers information on potential projects and applications from project sponsors for TIP selection. Approved changes by the MPO Regional Planning Committee are listed in the TIP. The TIP is evaluated for conformity and consistency with the State Implementation Plan for air quality. The Mountainland Regional Planning Committee approves the updated TIP and any larger modifications to it. The TIP is submitted to the Governor or his designee for approval.

The MPO is responsible for updating and publishing the TIP with the assistance of UDOT and UTA. The TIP is developed in accordance with FTA C 7005.1 and analyzed in accordance with criteria and procedures for determining conformity, as stated in 40 CFR 51.410. MAG will produce:

- Transportation Improvement Program.

- Updated project cost estimates, status, and project descriptions.
- Track TIP projects for yearly report.
- Assemble and track the annual list of projects document. This document will reflect the status of all the projects programmed in year one of the previous STIP and distributed to all local jurisdictions and make available on the MAG website.
- Work with UDOT to provide appropriate access to UTA and MAG to ePM so that they can input their TIP information which would provide a tool for better communication.
- Assist with Project Development of funded projects.
- Provide Project Management and Oversight of funded projects if a Federal Funds exchange for State Funds is executed with UDOT

Budget Section F

New MPO Studies & Contracts

\$651,500 or 23% of Total Budget

This section covers all new transportation studies and contracts in the MPO.

Travel Demand Modeling

\$83,500

Federal \$77,847, Local Match \$5,653 paid by UTA

MAG operates a joint Transportation Demand Model with WFRC and UTA. WFRC provides additional technical assistance to MAG and contracts with consultants to develop and support the Travel Demand model and Real-estate Market Model. MAG, WFRC and UDOT support the travel demand model coordinator staff position at WFRC to oversee all modeling in the state.

Joint Planning Studies

\$40,000

Federal \$37,292, Local Match \$2,708 paid by UTA

This project funds MAG's participation in joint planning studies with WFRC, UTA and UDOT. The four organizations will continue to collaborate on transportation projects to solve travel demand for a Greater Wasatch Front population projected to double by the year 2040. This group meets monthly to decide what project to pursue. Anticipated projects this year include:

- STRAVA Metro Utah Bicycle dataset
- Utah Parking Modernization Initiative WFRC
- Travel Demand Model Mode Choice Update
- Micromobility Toolset

- Data Resource Consulting Unified Transportation Plan 2019-2050 Document Development
- Unified Transportation Plan 2019-2050 Economic Impact Study
- No Fare Transit Study
- TOD/Centers Capacity Study
- Online Public Engagement

Federal/UDOT Exchange Fund

Construction Management

\$150,000

Federal \$139,845, Local Match \$10,155 paid by interest from exchange deposit

In this new pilot program MAG staff and local governments are finding these heavy construction projects complex and may require a specific skill to manage. Sometimes cities need help managing these large contracts, construction management process, negotiations, or may need technical expertise that current MAG staff lack. These funds will be used to contract with firms to provide on call technical and project development assistance where needed.

Planning Contingency

\$200,000

Federal \$186,460, Local Match \$13,540 paid by local sponsor once obligated.

Planning Contingency will allow the MPO to respond positive to study partnerships, and other unknown events and opportunities that may arise during the fiscal year when appropriate. Local Match will be collected when obligated. In FY21, this category was used to fund the Central Utah Valley Transit Alternative Analysis and the MAG Utah County Regional Highway Grid Network Study.

Household Travel Survey and Street Light Data Purchase

\$178,000

**Federal \$165,949, Local Match \$12,051
paid by UTA.**

MAG MPO, WFRC, UDOT, UTA, Cache MPO, and Dixie MPO are joining together to conduct a statewide household travel survey. The last survey was conducted in 2012. The plan is to have a household travel survey conducted every 10 years to align with the decennial census data release. The purpose of the survey is to analyze household and trip characteristics specific to our planning areas. Each household member will be asked to record their trips for a given day.

In conjunction with the household travel survey, the agencies are purchasing 2019 StreetLight Data and access to their Insights Platform. StreetLight's metrics are currently derived from two types of locational "Big Data:" navigation-GPS data and Location-Based Services (LBS) data from mobile devices. Information we can obtain from the data are origin-destination of trips (includes trip attributes, traveler attributes, trip purpose, and home-work locations), AADT estimates, top routes for zones, segment analysis, and traffic diagnostics. These data will validate the data collected from the household travel survey.

The household travel survey and Street Light Data combined will be used to calibrate and validate the travel demand model as well as multiple other uses for planning.

Utah Department of Transportation (UDOT) receives federal dollars from the Highway Trust Fund (federal gas tax PL, STP, CMAQ, TAP, FTA), which are then passed through to Mountainland MPO as well as the other three MPO's in the state. Administration of these funds carry with it the responsibility of reviewing and monitoring their use. UDOT, through a Stewardship Agreement with the Federal Highway Administration and the Federal Transit Administration, has responsibility for oversight, monitoring progress, and ensuring compliance with federal regulations. UDOT staff supports the technical and policy processes of the Mountainland MPO and assists in developing this annual Unified Planning Work Program. UDOT assists Mountainland MPO with required contracts and agreements and manages the UDOT Planning Section staff. UDOT will coordinate this financial management process with the Mountainland MPO, FHWA, FTA, UDAQ, and UTA.

UDOT recognizes that it is impossible to build our way out of future congestion problems. A shared solution consisting of various elements to an integrated transportation demand management system will be needed to address future needs. UDOT will coordinate with local MAG officials and UTA management to encourage the development of public policy to support strategies and program elements. UDOT will collaborate with MAG and UTA to develop a

comprehensive plan to address these issues. UDOT will assist the MPO in developing the annual Work Program, oversight of metropolitan planning program administration, including financial tracking. Participate and support the MPO's Regional Planning, Congestion Management Process, Technical Advisory Committees, and public outreach meetings, as needed.

UDOT Planning will consult with the Mountainland MPO staff to support efforts to address FTA / FHWA Planning Emphasis Areas and will also focus on the following:

MPO Coordination: UDOT's staff attends congestion management system meetings, technical advisory committees, policy committee meetings, and public outreach meetings as needed.

Air Quality: UDOT Supports interagency coordination between UDAQ and EPA, MPOs for SIP development. Coordinate air quality conformity determinations reviews on Metropolitan Transportation Plan and Transportation Improvement Program. Coordinate annual CM/AQ reports to FHWA.

System Administration: UDOT orchestrates coordinated reviews of Functional Classification of Area Highways and to publish/maintain Statewide Functional Classification Map.

Modeling: UDOT Staff support, coordinate, and offer training for travel demand modeling and traffic simulation modeling. Coordinate efforts to collect traffic counting data.

UDOT Products and Services:

- UDOT reviews and coordinates the plans and programs developed by MAG.
- UDOT monitors the Consolidated Planning Grant expenditures by MAG.
- Assistance to MAG in developing the annual Unified Planning Work Program.
- UDOT participate in special studies.
- ITS coordination/deployment.
- SIP development (Attainment SIPs (PM_{2.5} and Ozone) thru the Interagency SIP Development Work Committees.
- HPMS and VMT yearly updates.
- Recommendations of pedestrian and traffic safety issues to be included in the planning process.
- Attend transportation public open houses.
- Attend public involvement functions as needed.
- Attend Congestion Management and Intelligent Transportation Committee meetings as needed.
- UDOT supports partnering with Local jurisdiction to address needs during project planning and design.
- UDOT supports the expansion of public transit systems in Utah County including

Light Rail extensions, Commuter Rail options, and Bus Rapid Transit, as funding is available.

- UDOT is leading the effort to reduce VMT through the Travelwise Program being implemented in the Wasatch Front area
- Statewide model development and coordination with MPO
- MAG Regional Model peer review
- UDOT is addressing the pedestrian/bicycle issues by coordinating these programs with the MPOs Participate in the Federal Planning.
- Perform Technical concurrence review of long-range planning and TIP for conformity determinations.
- Consult with MAG on all coordinated studies and long-range air quality planning issues.
- Serve as member of state-wide interagency Air Quality Committee working on SIPs / Air Quality issues.
- Coordinate preparation of annual CM/AQ Report. Due to FHWA March 1st, for previous fiscal year ending September 30th.
- Traffic counts.
- Vehicle Miles of Travel (VMT) actual count data
- Truck and other vehicle data for air quality purposes
- Speed Studies as needed.

Utah Transit Authority

UTA's Long Range strategic and local service planning activities:

- Evaluate and provide quality transit services within available resources.
- Coordinate planning of all transit modes for operationally interconnected, effective, and efficient regional transit service.
- Participate with planning partners to address population growth throughout Utah County.
- Evaluate, pilot, and implement new proven technologies to improve the value and operational efficiencies of the service.
- Evaluate the effectiveness and cost of service for disadvantaged populations including people with disabilities, senior citizens, minorities, and low income.
- Assist in the development of a Human Services Transportation Coordinated Plan.

UTA Public Involvement: In partnership with UTA's Customer Experience and Communications Departments, MAG is committed to providing an open, transparent and productive public involvement process.

Each year, UTA and its Timpanogos Business Unit are represented at numerous public hearings and meetings, including the annual MAG transportation open houses.

UTA's website, www.rideuta.com, as well as other social media applications (i.e. Facebook, Twitter, Instagram, and YouTube) provide

more opportunities for UTA to give timely service updates to riders. Additionally, UTA has an online newsroom and social media hub that can be accessed at www.rideuta.com/news as well as an online civic engagement forum called Open UTA. Open UTA provides visitors opportunities to interact with UTA representatives as well as provide feedback and comments on a variety of UTA topics.

UTA Planned Public Participation:

- UTA's Customer Experience and Communications Departments staff is well trained and educated in communications and public engagement and are available to support all public outreach initiatives.
- UTA has three "change days" per year. Proposed changes to routes that affect 33 percent or more of miles, hours or trips or 25 percent of route alignment, advertised for public hearings. Minor changes to routes are publicized by other methods including social media and fliers in vehicles.
- All major capital projects and transit studies hold open houses, hearings, or community meetings. Notices for environmental work on major capital projects are published in local newspapers. Environmental documents are available for public review.
- The public is given opportunities to comment on projects of significant

regional impact, program of projects, service, and fare changes.

- UTA participates annually in MAG's transportation open houses.
- UTA's website, www.rideuta.com, provides an excellent source of public information about UTA and its projects. Public comments can be received through the website, via email or via phone. When appropriate, public hearing press releases and newsletters are distributed to local and regional news outlets.
- UTA's online civic engagement forum, Open UTA, offers residents an opportunity to comment on a variety of UTA-related topics without having to attend an in-person meeting.
- Public meetings, hearings and open houses are published on the Utah Public Notice website and UTA's website and are promoted through UTA's social media channels and the local news media.
- In 2019, UTA performed a targeted outreach to receive input on the balance of bus service that is intended to carry more riders and transit service that is intended to cover more area.
- In 2019 and 2020, UTA will use specialized professional services to perform an on-board survey of transit riders to assist in understanding valuable data to use in transit service planning and travel model calibration.

Provo Orem Bus Rapid Transit (BRT):

The Utah Valley Express (UVX) service opened in the fall of 2018 while construction on some of the infrastructure was still being completed. This new service increases travel capacity via high capacity, high frequency (6 minutes peak, 10 minutes off-peak) transit service that serves the University Parkway and University Avenue corridors in Orem and Provo. The project was fully completed in December 2018.

UTA Products and Services:

- Business Unit Service Support/Strategic Planning/Performance Based Service Planning.
- Financial/Budgeting Plans and Transit Development Plan.
- National Transit Database (NTD) Data Collections and Reports.
- Surveys/Research.
- Bus Stop Master Plan Update.
- Track and measure park and ride demand and assess the need for future park and ride lots.
- Development and refinement of the IT Plan for Technology Improvements.
- Transit Oriented Development/Joint Development.
- Safety/Security, Emergency Planning.
- Rideshare Program/Marketing.
- Electronic Document Management.
- Geographic Information (GIS).
- ADA Planning.
- Workforce Development Planning.
- Asset Management Planning for State of Good Repair.
- Initiatives/Sustainability/Facilities.

- Public Hearings, Meetings, and Open Houses.
- Transit Section of this Unified Planning Work Program.
- Financial Strategies in the Transit Financial Plan (TFP).
- UTA TIP/STIP Coordination with Utah County.
- Annual Service Plan Evaluation and Recommendations for the Timpanogos Business Unit Plan.
- Support Wasatch Choice 2050 Visioning Work along with MPOs, UDOT and other transportation planning partners.
- Regional Service Equity Study.
- Reliability and Ridership Reports.
- Federal and State Compliance Reporting.
- Federal Grant Funding Submissions.
- Compliance with Local, State and Federal Audits.
- Updates to Emergency Preparedness and Safety Programs.
- ADA Compliance Reviews.
- Title VI Compliance Evaluations of any proposed Service and Fare Changes and Completion of an FTA Title VI Report.
- Public Information and Open Houses Related to Long Range and Local Service Plans.
- Mobility Management Meetings and Strategic Plan Development.
- UTA will continue to evaluate air quality impacts of projects in their environmental studies. UTA will also partner and support local air quality improvement initiatives when requesting funds through the Congestion Management/Air Quality (CMAQ) program.
- UTA will work with MAG to prioritize projects and ensure that all projects would have the most benefit for helping Utah County work on improving air quality. UTA is currently involved with several local and state, local and national programs and projects that are focused on promoting clean fuel transit vehicles as an alternative to single-occupant automobiles.
- Participate in Technical Committee meetings.
- Participate in the Regional Planning Committee.
- Partner in the development of scenarios for the Regional Transportation Plan.
- Lead or participate in corridor or area studies to develop plans or advance projects.
- Become an active participant in plans to improve Air Quality and other environment concerns.
- Visioning with stakeholders, community partners, and MAG for transportation improvements in Utah County.
- Work with MAG, FTA, UDOT, and FHWA to assure a cohesive federal and state. planning process for major capital projects.
- Participate as a member of the Joint Projects Committee.
- Work to encourage transit-oriented development in local land use planning.
- Assist the local mobility council in preparing and updating the Human Services Transportation Coordinated Plan and mobility projects and administering the FTA mobility grant process.

- Provide technical assistance for transit funding issues and regional planning programs, service, and capital projects.
- Continue to develop the Transit Financial Plan scenario planning model as the basis for UTA's budgeting process in collaboration with MAG.
- Prepare financial reports/economic forecasts.
- Analyze resources, evaluate, and revise the Timpanogos Business Unit Strategic Plan as needed.
- Evaluate grant opportunities and submission requirements with the UTA Grants Management Team.
- TIP/STIP projects come from an adopted Regional Plan and UTA's Transit Development Program.
- UTA works with MAG and WFRC in the development of the Regional Travel demand model to improve the ability to model a variety of mode choice options (i.e. non-motorized trips). UTA will continue in joint efforts with MAG, UDOT, and WFRC, to advance modeling improvements.
- Monitor bus ridership, performance, and reliability.
- Monitor ADA announcements and wheelchair boarding on fixed route buses and track bicycle usage via improved counting methodologies.
- Monitor and evaluate pass holder (Eco, ED, Farepay, etc.) usage in order to optimize customer convenience in accessing the transit system.
- Evaluate impacts of service and fare changes in Utah.
- Consider the customer experience throughout all points of a transit journey.
- Perform internal system or service analyses as needed to continually assess the effectiveness and efficiency of the existing system.

MAG Staff Expenses, New Studies and Rollover Studies Funding Tables

Contributions/Revenue

New STAFF FUNDS Revenue	FAA/EXCHANGE	LOCAL MATCH	TOTAL
New Metropolitan Planning (PL)	\$824,277	\$59,856	\$884,133
New Federal Transit Administration 5303	\$253,610	\$18,416	\$272,026
New Federal Sub Total	\$1,077,887	\$78,272	\$1,156,159
New STP MAG Exchange	\$937,318	\$70,679	\$1,043,997
Total New Staff Fund	\$2,051,205	\$148,951	\$2,200,156
New MPO Studies & Contracts Revenue			
New STP MAG Exchange	\$607,393	\$44,107	\$651,500
Total New Staff & Studies Revenue	\$2,658,599	\$193,057	\$2,851,656

New Local Match	UTA	MPO Match	In-Kind Building	LPA	Total
Sections A-E ~ Staff	\$18,416	\$35,000	\$44,434	\$51,100	\$148,951

Allocation/Expenses

Staff Funds Expenditures	Staff Months	FAA/Exchange	Local Match	Total
A. Program Management	21	\$276,124	\$20,051	\$296,175
B. Planning Activities	94	\$1,235,983	\$89,752	\$1,325,735
C. Air Quality	7	\$92,041	\$6,684	\$98,725
D. Model & Forecasting	20	\$262,975	\$19,096	\$282,071
E. Financial Planning	14	\$184,083	\$13,367	\$197,450
Total Staff Funds	156	\$2,051,205	\$148,951	\$2,200,156
F. New MPO Studies & Contracts				
Travel Demand Model/Joint Planning Studies		\$607,393	\$44,107	\$651,500
Total New Staff and New Studies Expenditures		\$2,658,599	\$193,057	\$2,851,656

Total Funds FY21 MAG UPWP

New Federal & Exchange Funds	Local Match	Rollover Studies and Contracts	Grand Total
\$2,658,599	\$193,057	0	\$2,851,656

MAG Staff Expenses, New Studies and Rollover Studies

Staff Salaries (13 FTEs)	\$1,153,051
Fringe Benefits	\$538,899
Travel	\$39,000
Office Expense	\$4,670
Copy & Printing Costs	\$2,767
Communications	\$18,910
Space Costs	\$18,218
Equipment & Office Furniture	\$24,000
Other	\$39,000
Data Processing	\$40,000
Audit	\$11,513
Indirect Costs: Administration & Accounting	\$230,610
Programmed & In-Kind Contracts	\$79,500
Sub-Total	<u>\$2,220,156</u>
New Studies & Contracts	\$651,500
Grand Total	\$2,851,656

Mountainland AOG Jurisdictional Cash Assessments FY21

DRAFT



Jurisdictional Cash Assessments | Jul 2021 - Jun 2022

Past Budgets

	2019 Census Population Estimate	Special Assessment					General Assessment .25 Per Capita	FY-21/22 Grand Total	FY-20/21 Grand Total	FY-19/20 Grand Total
		UC Strategic Plan	UC Aging Services	UC MPO Match	Wasatch RPO	Special Assessment Total				
Summit County	42,145									
Coalville	1,596						\$500	\$500	\$500	\$500
Francis	1,574						\$500	\$500	\$500	\$500
Henefer	979						\$200	\$200	\$200	\$200
Kamas	2,276						\$569	\$569	\$559	\$544
Oakley	1,740						\$500	\$500	\$500	\$500
Park City	8,526						\$2,132	\$2,132	\$2,126	\$2,095
Summit Unic.	25,454						\$6,364	\$6,364	\$6,360	\$6,240
Utah County	636,235									
Alpine	10,498	\$585	\$587	\$410		\$1,582	\$2,625	\$4,207	\$4,245	\$4,235
American Fork	33,161	\$1,848	\$1,855	\$1,294		\$4,997	\$8,290	\$13,288	\$13,143	\$12,057
Cedar Fort	395	\$22	\$22	\$15		\$60	\$200	\$260	\$261	\$262
Cedar Hills	10,083	\$562	\$564	\$393		\$1,520	\$2,521	\$4,040	\$4,129	\$4,220
Draper	2,220	\$124		\$87		\$210	\$555	\$765	\$763	\$770
Eagle Mountain	38,391	\$2,140	\$2,148	\$1,498		\$5,786	\$9,598	\$15,383	\$14,395	\$13,150
Elk Ridge	4,335	\$242	\$242	\$169		\$653	\$1,084	\$1,737	\$1,638	\$1,534
Fairfield	145	\$8	\$8	\$6		\$22	\$200	\$222	\$222	\$223
Genola	1,567	\$87	\$88	\$61		\$236	\$500	\$736	\$739	\$741
Goshen	915	\$51	\$51	\$36		\$138	\$200	\$338	\$344	\$351
Highland	19,175	\$1,069	\$1,073	\$748		\$2,890	\$4,794	\$7,683	\$7,753	\$7,741
Lehi	69,724	\$3,887	\$3,900	\$2,721		\$10,507	\$17,431	\$27,938	\$26,690	\$25,607
Lindon	11,100	\$619	\$621	\$433		\$1,673	\$2,775	\$4,448	\$4,434	\$4,479
Mapleton	10,731	\$598	\$600	\$419		\$1,617	\$2,683	\$4,300	\$4,110	\$3,991
Orem	97,828	\$5,453	\$5,472	\$3,817		\$14,743	\$24,457	\$39,200	\$39,415	\$39,950
Payson	20,303	\$1,132	\$1,136	\$792		\$3,060	\$5,076	\$8,135	\$8,013	\$8,122
Pleasant Grove	38,258	\$2,133	\$2,140	\$1,493		\$5,766	\$9,565	\$15,330	\$15,531	\$15,861
Provo	116,618	\$6,501	\$6,524	\$4,550		\$17,574	\$29,155	\$46,729	\$47,167	\$47,911
Salem	8,621	\$481	\$482	\$336		\$1,299	\$2,155	\$3,454	\$3,423	\$3,352
Santaquin	12,865	\$717	\$720	\$502		\$1,939	\$3,216	\$5,155	\$4,961	\$4,758
Saratoga Springs	33,282	\$1,855	\$1,862	\$1,299		\$5,016	\$8,321	\$13,336	\$12,688	\$12,090
Spanish Fork	40,913	\$2,281	\$2,289	\$1,596		\$6,166	\$10,228	\$16,394	\$16,151	\$16,106
Springville	33,310	\$1,857	\$1,863	\$1,300		\$5,020	\$8,328	\$13,347	\$13,380	\$13,595
Vineyard	11,866	\$661	\$664	\$463		\$1,788	\$2,967	\$4,755	\$4,063	\$2,536
Woodland Hills	1,590	\$89	\$89	\$62		\$240	\$500	\$740	\$742	\$745
Utah Unic.	8,341	\$15,000	\$15,000	\$10,500		\$40,500	\$2,085	\$42,585	\$42,607	\$42,684
Wasatch County	34,091									
Charleston	487				\$143	\$143	\$200	\$343	\$345	\$346
Daniel	1,077				\$316	\$316	\$500	\$816	\$825	\$828
Heber	17,082				\$5,011	\$5,011	\$4,271	\$9,281	\$9,034	\$8,777
Hideout	998				\$293	\$293	\$200	\$493	\$493	\$489
Interlaken	235				\$69	\$69	\$200	\$269	\$269	\$268
Midway	5,280				\$1,549	\$1,549	\$1,320	\$2,869	\$2,896	\$3,281
Wallsburg	385				\$113	\$113	\$200	\$313	\$314	\$311
Wasatch Unic.	8,547				\$2,507	\$2,507	\$2,137	\$4,644	\$4,648	\$4,406
UDOT (RPO)					\$10,000	\$10,000		\$10,000	\$10,000	\$10,000
Totals	712,471	\$50,000	\$50,000	\$35,000	\$20,000	\$155,000	\$179,297	\$334,297	\$330,574	\$326,352

4/19/2021

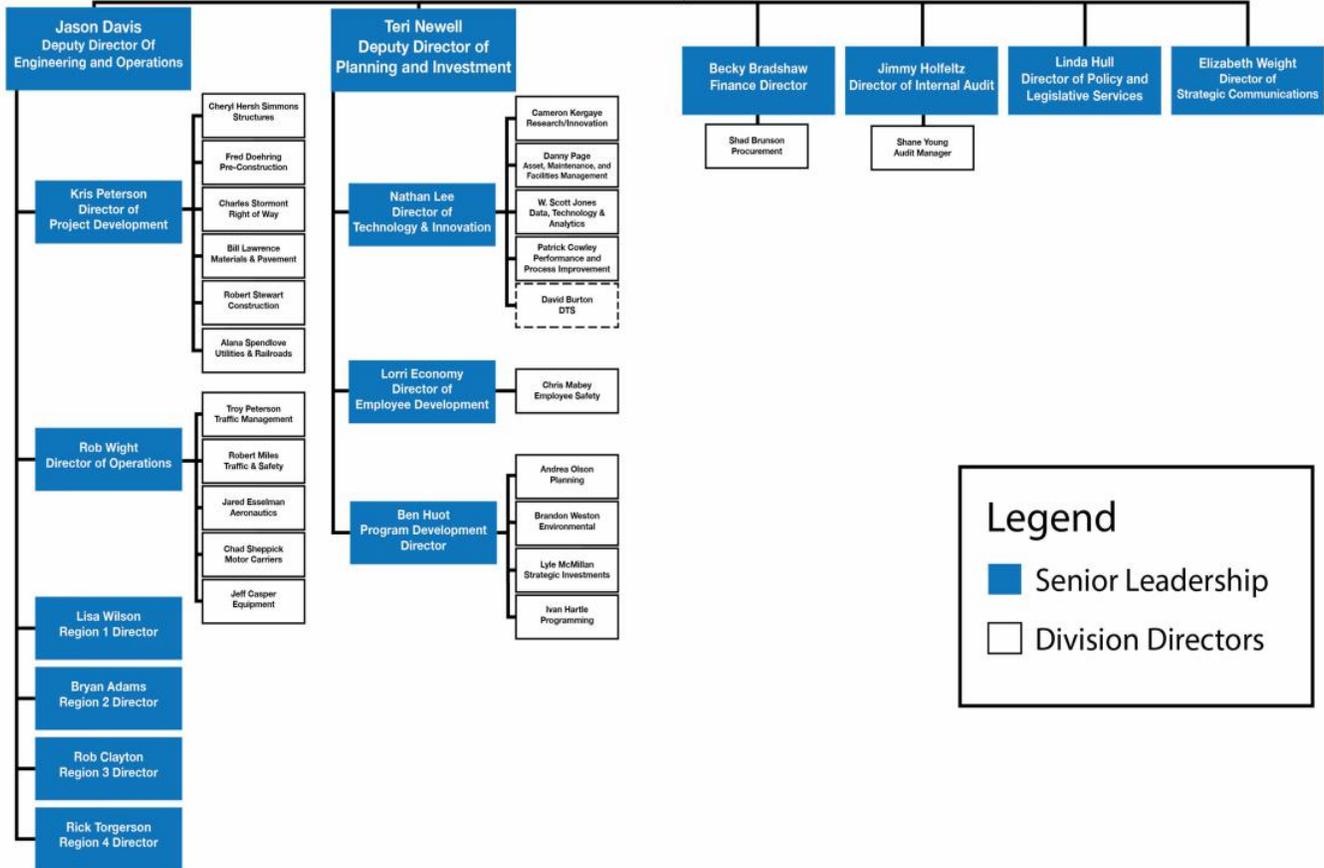
Mountainland Association of Governments



Utah Department of Transportation



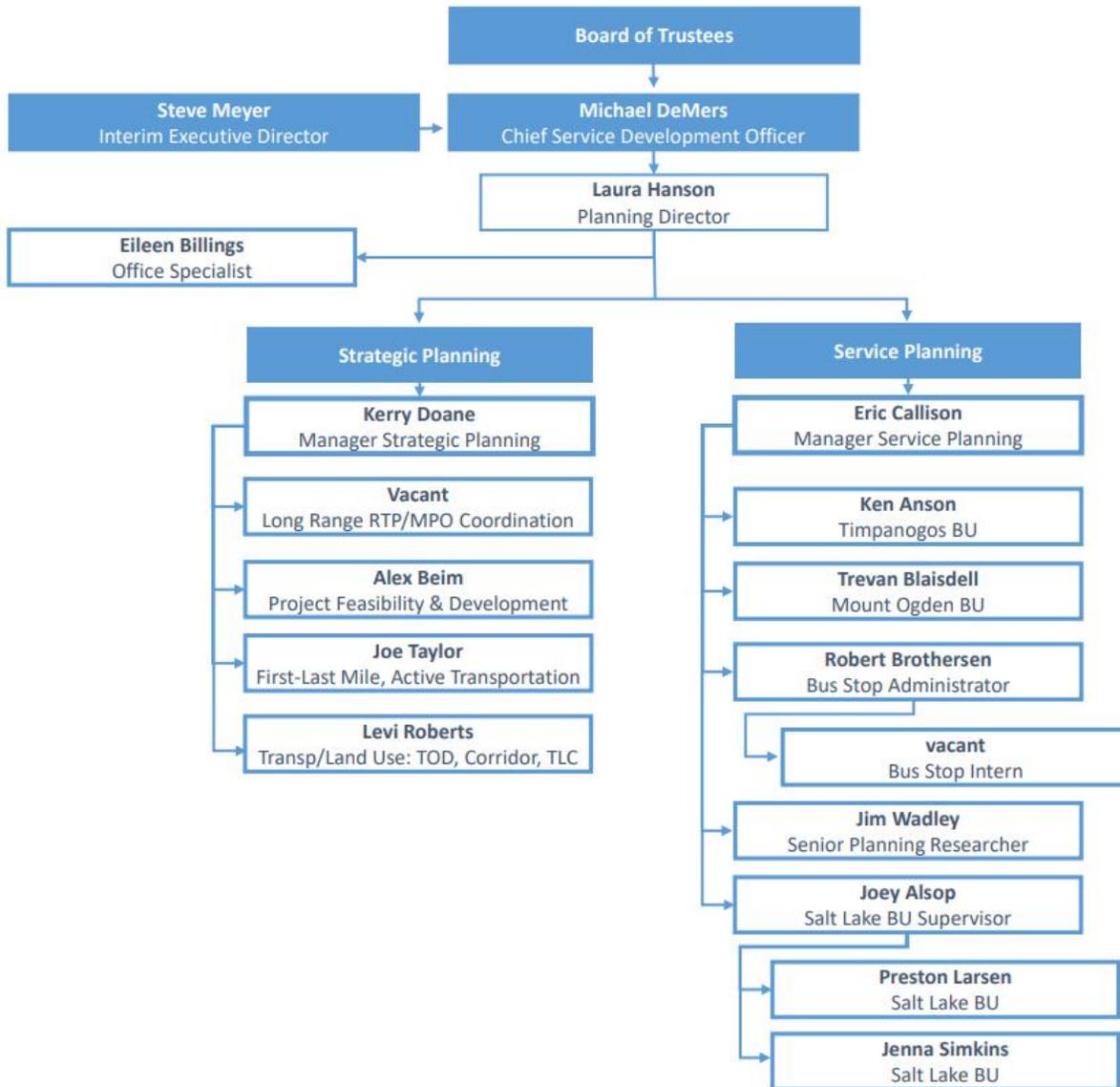
Carlos Braceras
Executive Director



Legend

- Senior Leadership
- Division Directors

Utah Transit Authority



Acronyms & Terms

AADT	Annual Average Daily Traffic
ADA	American Disability Act
AWDT	Average Week Day Traffic
AOG	Association of Governments
ARRA	American Recovery & Re-Investment Act
BRT	Bus Rapid Transit
FAA	Federal Aid Agreement
Cache MPO	Cache Metropolitan Planning Organization
CM/AQ	Congestion Mitigation and Air Quality Management (Federal Funds)
CMP	Congestion Management Process
CPG	Consolidated Planning Grant
Dixie MPO	Dixie Metropolitan Planning Organization
DOT	Department of Transportation
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
GPI	Gardner Policy Institute
HPMS	Highway Performance Monitoring System
LPA	Local Planning Assistance
MAG	Mountainland Association of Governments
MAP-21	Moving Ahead for Progress in the 21 st Century
MOA	Memorandum of Agreement
MPO	Metropolitan Planning Organization
MVEB	Motor Vehicle Emission Budget
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
NTD	National Transit Database
PL	Planning Funds (Federal Funds)
PM₁₀	Particulate Matter under 10 Microns in size
PM_{2.5}	Particulate Matter under 2.5 Microns in size
PMO	Project Management Oversight
PPP	Public Participation Program
RTP	Regional Transportation Plan
SIP	State Implementation Plan for air quality
SPR	State Planning Research
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program (Federal Funds)
TAP	Transportation Alternatives Program
TCM	Traffic Control Management

TDM	Travel Demand Management
TDP	Transit Development Program
TIFIA	Transportation Infrastructure Finance Innovation Act
TIP	Transportation Improvement Program
UDAQ	Division of Air Quality, Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
WORK PROGRAM	Unified Planning Work Program
USDOT	United States Department of Transportation
UTA	Utah Transit Authority
VMT	Vehicle Miles Traveled
WFRC	Wasatch Front Regional Council



M A G

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Mountainland Metropolitan Planning Organization

**586 East 800 North
Orem, Utah 84097
801-229-3800
www.mountainland.org**