



UNIFIED PLANNING WORK PROGRAM
FY 2022 and FY 2023



REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

**UNIFIED PLANNING WORK PROGRAM
FISCAL YEARS 2022-2023**

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Approved by the Regional Transportation Commission of Southern Nevada on May 20, 2021

Approved by Federal Highway Administration & Federal Transit Administration on
Date To Be Determined, 2021.

Regional Transportation Commission of Southern Nevada
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May 20, 2021

Sondra Rosenberg
Assistant Director of Planning
Nevada Department of Transportation
1263 S. Stewart Street
Carson City, NV 89712

Dear Sondra,


RE: UNIFIED PLANNING WORK PROGRAM FOR FISCAL YEARS 2022-2023

The Unified Planning Work Program (UPWP) for Fiscal Years 2022-2023 was approved by the Regional Transportation Commission of Southern Nevada on May 20, 2021. An electronic copy of the UPWP for Fiscal Years 2022-2023 is included in this transmittal for your review and approval.

Once notification of State and Federal approval is received, the UPWP document will be distributed to all interested parties and posted on the RTC web site.

Please feel free to contact me at (702) 676-1662 if you have any questions or comments.

Sincerely,

DocuSigned by:

Andrew Kjellman
586D33CF1FA44C3...
Acting Director MPO

Attachment

cc: Enos Han, FHWA
Alex Smith, FTA
Jason Love, NDOT
Kevin Verre, NDOT
Mark Costa, NDOT
Melissa Chandler, NDOT
David Swallow, RTC

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U.S. Department
of Transportation
**Federal Highway
Administration**

Nevada Division

June 22, 2021

705 North Plaza St. Suite 220
Carson City, NV 89701
775-687-1204

Kristina Swallow, Director
Nevada Department of Transportation
1263 South Stewart Street
Carson City, NV 89712

Attention: Sondra Rosenberg, Assistant Director Planning

**Re: Approval of the Regional
Transportation Commission of
Southern Nevada FY 2022/2023 Unified
Planning Work Program Approval**

Dear Ms. Swallow:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have reviewed the Fiscal Year (FY) 2022/2023 Unified Planning Work Program (UPWP) for the Regional Transportation Commission of Southern Nevada (RTCSNV) as submitted by your June 1, 2021, letter received on June 9, 2021. The UPWP submitted for approval covers 2 fiscal years. The total federal amount of estimated metropolitan planning funding for the 2 fiscal year period is \$11,264,648.20 with a local match of \$902,922.80. Based on this review and in accordance with the *Memorandum of Understanding between the FHWA, Nevada Division and the FTA, Region IX*, FHWA approves this work program for FTA 49 USC Section 5303 and FHWA Metropolitan Planning (PL) funding for the time period of July 1, 2021 to June 30, 2023.

This approval authorizes reimbursement for metropolitan planning activities eligible under 23 USC 134, 135, 505 or 49 USC 5303-5305, 5313(b) and the provisions of 23 CFR Parts 420 and 450. Funds shall be administered in accordance with the provisions of 49 CFR Part 18 and 23 CFR Part 420. Prior approval is required for changes including:

1. Increase in federal funds,
2. Cumulative transfers of 10 percent of the total federal funds or \$100,000 for work already approved,
3. Changes in the scope or objectives of activities,
4. Extending the period of performance past the approved work program period,
5. Transferring substantive programmatic work to a third party (e.g., consultant work not identified in the original work program),
6. Capital expenditures including purchase of equipment.

Work beginning July 1, 2021 is authorized by this letter subject to FMIS authorization approval which will be completed by our office in coordination with NDOT. Reimbursement is subject to the availability of federal funds. Please contact Enos Han, FHWA Nevada Division, at (775) 687-5331 or Alex Smith, FTA Region IX, at (415) 734-9472 if you have any questions regarding this approval.

Sincerely,



Enos Han
Planning Program Manager

cc: Melissa Chandler, Corridor Planning & Special Studies Program Lead, NDOT
Andrew Kjellman, Director, RTC of Southern Nevada
Rush Wickes, Senior Transportation Planner, RTC of Southern Nevada
Kevin Verre, Assistant Chief Multi-Modal and Program Development, NDOT
Alex Smith, Community Planner, FTA

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PREFACE

The Fiscal Years 2022-2023 Unified Planning Work Program (UPWP) is developed bi-annually by the Metropolitan Planning Organization (MPO) component of the Regional Transportation Commission of Southern Nevada (RTC). It documents metropolitan transportation planning activities performed with federal, state and local transportation funds in the Southern Nevada region. It details planning activities scheduled to occur during the two-year period (the RTC and state fiscal year or as abbreviated herein, "SFY") beginning July 1, 2021 and ending June 30, 2023 within the region.

The UPWP plays a central role in the RTC's federally-mandated responsibilities as the state designated MPO to ensure a comprehensive, coordinated, and continuing transportation planning process for the Las Vegas urbanized area. To this end, the UPWP has been assembled in consultation with the local, state, and federal agencies involved in supporting the area's multi-modal transportation system. A request for proposals submission period was conducted with invitations for project proposals being sent to all member jurisdictions, area non-profit organizations and other organized communities in the Southern Nevada region.

The studies, plans and/or data collection activities that have been incorporated into the work program foster comprehensive planning and lend support in evaluating local alternatives for improving mobility and access. This document includes information related to project description; functional (agency) responsibilities; project budget; project time line; and the corresponding products expected with completion for each of the planning activities identified in the SFY 2022-2023 UPWP.

The UPWP for Fiscal Years 2022-2023 was prepared in April, 2021; adopted by the Board of the Regional Transportation Commission of Southern Nevada in May, 2021; and approved by the Federal Highway Administration and Federal Transit Administration in June, 2021.

UPWP Amendments are commonly prepared throughout the planning period to reflect changing planning priorities and update project costs. The purpose of this amendment document is to reflect changes due to emerging planning needs, and the rescheduling or reallocating of funds designated for UPWP projects.

1: Introduction

The Unified Planning Work Program (UPWP) identifies transportation planning activities to be undertaken in the Southern Nevada region using funding allocated by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

The Regional Transportation Commission of Southern Nevada (RTC) is the agency designated by the state of Nevada to act as the Metropolitan Planning Organization (MPO) for Clark County. As the MPO, the RTC coordinates transportation planning activities with member agencies within the metropolitan planning area. The planning process brings together the RTC, local government agencies, transit operators, local public service organizations, and the Nevada Department of Transportation (NDOT) to discuss regional priorities and to select and program planning activities for inclusion in the UPWP.

The RTC receives annual federal allocations from the FHWA and the FTA for metropolitan planning activities identified in the UPWP. The UPWP also includes planning tasks that are state or locally funded. The planning tasks included in the SFY 2022-2023 UPWP are organized into two main categories of activities:

1. Core Planning Activities: these activities address the core MPO requirements for meeting federal certification of the metropolitan planning process, including research and data gathering.
2. Planning Studies: these activities evaluate regional planning priorities by using the planning study approach that produces solutions and alternatives which may later become the basis for projects funded for implementation in the Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP).

The 2022-2023 UPWP covers the two-year period from July 1, 2021 through June 30, 2023.

Regional Planning Prospectus

The Federal Highway Administration (FHWA) requires that a metropolitan planning agreement be developed between the various parties involved in the regional transportation planning process.

This agreement must clearly define the roles and responsibilities of each party in cooperatively carrying out the transportation planning process and must include specific provisions for cooperatively developing and sharing information related to the development of financial plans that support the Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), and development of the annual listing of obligated projects.

In response to this federal requirement, the RTC has coordinated with the Nevada Department of Transportation (NDOT) and the local jurisdictions to develop the 'Southern Nevada Regional Planning Prospectus'. This document, which is included as an Appendix to this SFY 2022-2023 UPWP, outlines the specific roles and responsibilities of the RTC, NDOT, and the local agencies in carrying out the federal transportation planning process in the Southern Nevada region.

The Metropolitan Planning Area

The Las Vegas Metropolitan Planning Area is often referred to as 'Southern Nevada' to distinguish the activities of regional agencies from the jurisdictional functions of the Clark County government.

The 2021 population estimates cited below are from the "Nevada County Population Projections – 2019 to 2038", which are prepared by the Nevada State Demographer¹.

The state demographer projected a 2021 population of 2,293,391 for Clark County, Nevada, which comprises more than 73 percent of the state's population. Most of the people of Southern Nevada reside in the Las Vegas Valley, which is the name given locally to the urbanized area that includes the following cities:

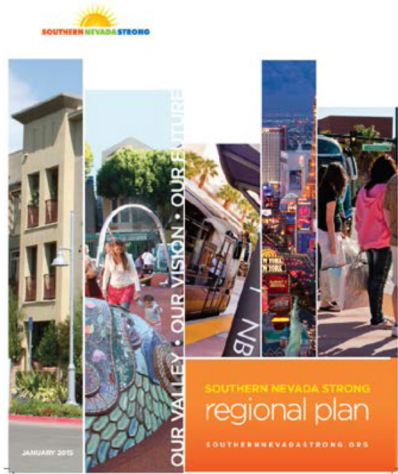
- The City of Las Vegas (pop 653,350)
- City of Henderson (pop 317,660)
- The City of North Las Vegas (pop 255,327)

Additionally, the Las Vegas Valley also includes the unincorporated areas of Clark County that are within the urban Land Disposal Boundary designated by the Bureau of Land Management (BLM) under the Southern Nevada Public Lands Management Act of 2002.

The total population of the unincorporated areas within the Las Vegas urbanized area is approximately 935,626. Communities outside the Las Vegas Valley urban area include the cities of Boulder City (population 16,188), which adjoins the Las Vegas Valley to the southeast; and the City of Mesquite (population 23,827), located in the northeastern corner of Clark County.

The unincorporated community of Laughlin, in the southern part of the County, is home to a population of 10,001. A similar number of people live in the various communities of the Moapa Valley, which lies halfway between Las Vegas and Mesquite. The remainder of Clark County is sparsely populated desert environment, much of which is protected from development under various federal, state, and local statutes and policies.

Southern Nevada Strong



In late 2011, the U.S. Department of Housing and Urban Development (HUD) awarded a \$3.5 million grant to the Southern Nevada Regional Planning Coalition to develop a comprehensive region-wide sustainable community plan. Development of the Southern Nevada Strong Regional Plan was led by the City of Henderson and, once adopted, the region determined that the RTC would be the administrator of that plan.

Approved in early 2015, this plan provides an integrated and coherent framework to guide community development in Southern Nevada over the next 20 years.

Recommendations developed through this planning effort include strategies for improving access to transit; making neighborhoods more pedestrian and bicycle friendly; re-orientation of land use and development patterns to reduce VMT and lessen dependency on single occupancy vehicles; and strategies to nurture neighborhood cohesion and public engagement.

The effort will also include application of the concepts developed by Southern Nevada Strong to four opportunity sites: Maryland Parkway; Boulder Highway; Downtown North Las Vegas; and the Las Vegas Medical District. The overall

goal of the plan will be to ensure the continued prosperity of the Southern Nevada economy while respecting and preserving its unique desert environment and improving the quality of life of its residents and the long-term integrity of its communities.

Since 2016, the RTC's MPO has expanded to include a Regional Planning team, which has identified discrete projects within the UPWP to support and research best practices for local agencies to implement the goals of the SNS plan. The team is also continually raising awareness of the vision of the Regional Plan through education and ongoing communications at the same time tracking regional progress through regional indicators.

Additionally, projects which implement one of the strategies identified in the Southern Nevada Strong Regional Plan are identified in the UPWP with the following SNS logo.



Air Quality

Air quality is monitored by the Clark County Department of Air Quality and Environmental Management (DAQEM). The RTC does conduct subtasks that ultimately have a positive impact on air quality in the region through providing reduced congestion, and multi-modal options for users of the transportation system. In the FY 2022-2023 UPWP these projects include:

- 201-2116 – Travel Demand Model
- 202-3710 Bicycle and Pedestrian Planning
- 202-9035 On-Board Mobility Plan
- 301-9120 Complete Streets Implementation Study

Further detail on the scopes of work for these studies are provided in the task sheets section later in this document.

RTC Board of Commissioners

The RTC governing Board of Commissioners is composed of elected officials appointed from each of the local jurisdictions in Clark County. The Director of the Nevada Department of Transportation serves as an ex-officio member of the RTC Board for participation in matters pertaining to the metropolitan planning organization.

The current composition of the RTC Board of Commissioners is:

- Debra March (Chair) – City of Henderson
- Carolyn Goodman – City of Las Vegas
- Justin Jones – Clark County
- Tick Segerblom – Clark County
- Isaac Barron – City of North Las Vegas
- George Gault – City of Mesquite Councilman
- Stavros Anthony – City of Las Vegas
- Kiernan McManus – City of Boulder City
- Kristina Swallow – Director of the Nevada Department of Transportation (NDOT) – ex-officio

2: The FAST ACT

The Fixing America's Surface Transportation Act, or "FAST Act," was signed into law on December 4th, 2015, making it the first long-term surface transportation funding program to be enacted in more than 10 years. The Act will enable states and local governments to move forward with their critical transportation projects with the added confidence and reliability of a federally funded source. Although the act largely maintains previous program structures and funding shares between highways and transit, there were several significant changes made as part of the new FAST Act, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance critical freight projects.



SOURCE:

<https://www.transportation.gov/fastact>

Below are several summary points regarding key provisions within the FAST Act.

Project Delivery

The FAST Act adopted a number of administration proposals to further speed the permitting processes, (i.e., reducing the bureaucratic red tape) while still protecting environmental and historic treasures, including codifying the online system to 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, providing for the first time in USDOT history a dedicated source of federal funding for federal projects, including multimodal projects.

Transit

The bus discretionary grant program is reinstated, along with the strengthening of the "Buy America" requirements that promote domestic manufacturing and purchasing.

Other provisionary sections include Transportation Infrastructure Finance and Innovation Act (TIFIA), Safety, Innovative Financing and "Ladders of Opportunity."

Community Connections

A connected community is one that is safe, accessible, affordable, convenient, and that features reliable multimodal mobility options. It is accessible to all transportation users and connected to other communities through sustainable and resilient transportation networks and systems in a state of good repair. Connected communities come in all varieties of sizes, contexts, and locations (i.e. large urban, small urban, suburban, and rural).

From a programmatic perspective, Community Connections is about using transportation innovations, partnerships, and technologies to bring communities together and to connect people to services and opportunities. In the transportation project context, a Community Connection is an individual facility, asset, or service that connects people to services and opportunities.

In combining the program and project-level approaches, Community Connections projects are those that:

- Engage communities more effectively.
- Improve multimodal access.
- Revitalize communities or enhance economic competitiveness.
- Deliver successful outcomes.

Several ongoing studies identified in this document also pertain to providing transportation choices to Southern Nevada residents. These studies address ladders of opportunity by identifying improved connections between homes, work, school, and other important destinations. In particular the following studies address transportation choice:

- 101-3500-20 Environmental Justice/ Title VI/Ladders of Opportunity;
- 202-3710-20 Bicycle and pedestrian planning;
- 301-9120-20 Complete Streets Implementation Study.

THE TEN FEDERAL PLANNING FACTORS:

- (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- (2) Increase the safety of the transportation system for motorized and non-motorized users;
- (3) Increase the security of the transportation system for motorized and non-motorized users;
- (4) Increase accessibility and mobility of people and freight;
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (7) Promote efficient system management and operation;
- (8) Emphasize the preservation of the existing transportation system;
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation; and
- (10) Enhance travel and tourism.

Consideration of the planning factors shall be reflected, as appropriate, in the metropolitan transportation planning process.

The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment and housing and community development.

3: Fiscal Year 2020 and 2021 UPWP Major Accomplishments

Bruce Street – Green and Complete Street -

The purpose of the Bruce Street Green and Complete Streets Study is to conduct a technical analysis on the feasibility of implementing multi-modal infrastructure throughout the Bruce Street corridor from Charleston Boulevard to North Las Vegas Boulevard and provide recommendations on complete and green street elements.

It was been the desire of the City of Las Vegas to revitalize the Bruce Street corridor from an unattractive, wide, high-speed, auto-oriented street into a major multi-modal link between Downtown North Las Vegas and Downtown Las Vegas. The intent is to improve Bruce Street for nearby residents and school children, improve pedestrian and bicycle comfort and safety, and integrate sustainable practices to improve civic (open) spaces for the community.

Low-cost spot improvements recommended for Bruce Street are anticipated to provide immediate benefits to the corridor with minimal capital costs. Spot improvements are aimed at improving safety and comfort for all users of the corridor. Improvements recommended along Bruce Street included:

- Sidewalk Infill
- Enhanced Transit Stops
- School Zone Flasher Upgrades
- Enhanced Pedestrian Facilities
- Enhanced Signage
- Restriping of Corridor

Two design concepts were developed for the development of the property adjacent to and under the I-515/U.S. 95 viaduct. Both concepts were developed based on ideas, concepts, and feedback from the public and the TAC. Public survey results indicated a need for open space/park amenities and enhanced landscaping along the corridor.

Stadium District Transportation Plan -

This Stadium District Plan is the result of a two-year collaborative process that engaged citizens, property and business owners, land developers, and local and regional agencies to articulate a vision, strategies, guidelines, and recommendations that would support potential changes in development within the area surrounding the new Allegiant Stadium.

The Stadium District is a 1.25 square-mile area around Allegiant Stadium, located west of both Dean Martin Drive and Interstate 15, south of Tropicana Avenue, and north of the Union Pacific Railroad spur. The district's western boundary is also the Union Pacific Railroad spur. This study and plan consider both the district and the proximate areas in Clark County.

Allegiant Stadium provides an immense opportunity for economic prosperity for Clark County residents and businesses; it serves as a catalyst that will drive changes in land use and travel patterns within the Stadium District and the area surrounding the stadium.

Clark County's mission is to guide the process of developing a vision for the area, to support the change in the Stadium District, and to provide tools that support this transformation and unleash potential.

The study examined how to improve infrastructure within the stadium district to enhance pedestrian accessibility, circulation, comfort and safety as well as opportunities for improving multimodal connectivity.

RTCSNV Regional Transportation Plan Amendments, Clark 21-04 and Clark 21-07.

These amendments added projects requested by the Nevada Department of Transportation listed on our RTP page:

<https://www.rtcsnv.com/projects-initiatives/transportation-planning/planning-studies-reports/access-2050-regional-transportation-plan/#amendments>

4: Fiscal Years 2022-2023 UPWP Development Approach

The UPWP is developed in consultation with state and local entities according to federal guidelines. The UPWP budget for SFY 2022-2023 includes RTC Staff Costs associated with the development and implementation of core regional planning activities and project management of professional services contracts for planning studies.

The FAST Act encourages metropolitan areas to improve regional mobility through the provision of safe, efficient, and convenient transportation systems. The preceding federal legislation (MAP-21) also requires the development of performance measures to allow quantitative evaluation of regional transportation investments, along with criteria established by FHWA and FTA.

Specifically, these criteria preclude the use of federal planning funds for system operation plans, project development engineering, or design studies for activities required under the National Environmental Policy Act (NEPA). In general, the expectation for the projects and

studies included in the UPWP is to enhance the transportation environment of the Southern Nevada region and expand multimodal options.

This program extends well beyond enhancements to the regional roadway network. Pedestrian, bicycle, transportation safety, and transit facilities are also considered. Overall, the objective of the UPWP is to facilitate development of a multimodal transportation system that serves both the Las Vegas urbanized area and the surrounding rural areas of Clark County.

There is an emphasis in the UPWP on conducting studies that will serve to improve both the mobility of the Southern Nevada residential commuting population and ensuring the efficient flow of freight and commercial goods that serve our regional economy. This program of projects will also provide mobility and accessibility benefits to tourists traveling into and around the Southern Nevada region.

A guiding component of this UPWP is the Access 2050 Regional Transportation Plan, which was adopted in February 2021. This RTP guides the development of Southern Nevada's transportation system through the year 2050. The RTP includes recommendations from the On-Board Mobility Plan, which is also identified in this UPWP and will develop new and innovative mobility strategies for implementation in Southern Nevada. A mobility and accessibility strategy already identified and programmed for continued funding in this UPWP is transit oriented development and the related ongoing Livable Centers Study Program.

5: Planning Funds and SFY 2022-2023 UPWP Budget

There are two primary sources of federal funding available to support the MPO transportation planning functions. The Federal Highway Administration (FHWA) administers funds under the Metropolitan Planning Area Program ('PL'), while the Federal Transit Administration (FTA) administers funds under the 'Section 5303' Program. Funds appropriated by Congress under these programs are apportioned among the states for distribution to the MPO areas within the state.

Consolidated Planning Grant

In 2013, the RTC of Southern Nevada entered into a memorandum of understanding (MOU) to participate in the U.S. Department of Transportation Consolidated Planning Grant program (CPG). Under the CPG Agreement, FHWA PL and FTA 5303 funds are consolidated into a single source to fund the activities authorized under the UPWP. NDOT and the four MPOs in the state have also agreed to a formula under which the CPG funds are distributed between the MPO areas.

SFY 2022-2023 Funding Elements

The funding expected to be available for the SFY 2022-2023 UPWP is based on three elements:

First, the amount expected to be expended through the end of June, 2021 and hence the balance of the funds that will be carried forward to FY 2022. Second, the CPG funding for FFY 2022 reflects the anticipated apportionment from the FAST Act as agreed to by NDOT and the State's four MPOs. Third, RTC is required to contribute at least 5% of the costs of the UPWP program from local, nonfederal sources. The result is set out in the following table:

FY 2022 and FY 2023 Projections Funding Availability

The period covered by the SFY 2022-2023 UPWP corresponds with the RTC and State Fiscal Year (SFY) spanning two fiscal state fiscal years starting July 1, 2021 and ending June 30, 2023. Federal CPG funds are apportioned and distributed for the Federal Fiscal Year (Federal FY) that starts October 1 each year.

Therefore, the only funds available to be expended during the period thru the end of September are those carried forward from the previous fiscal year. Likewise, the UPWP always needs to show sufficient balance at the end of the UPWP period to cover expenditures until the start of the next federal Fiscal Year the following October.

FY 2022 and FY 2023 Projections

Federal FY 2022 Distribution for RTC of Southern Nevada				
		FY 2022 Allocations and Awards	Federal Allocation (95%)	Local Match (5%)
	2022 FHWA Metropolitan Planning (PL) Funds	\$ 2,301,843.57	\$ 2,186,751.39	\$ 115,092.18
+	2022 FTA 5303 Statewide Metropolitan Planning Fund	\$ 1,004,031.11	\$ 953,829.55	\$ 50,201.56
+	FY 2021 Estimated Carryover	\$5,425,090.17	\$ 5,153,835.66	\$ 271,254.51
=	FY 2022 Updated Funding Amount	\$8,730,964.85	\$ 8,294,416.61	\$ 436,548.24

Federal FY 2023 Distribution for RTC of Southern Nevada				
		FY 2023 Allocations and Awards	Federal Allocation (95%)	Local Match (5%)
	2023 FHWA Metropolitan Planning (PL) Funds	\$ 2,301,843.57	\$ 2,186,751.39	\$ 115,092.18
+	2023 FTA 5303 Statewide Metropolitan Planning Fund	\$ 1,004,031.11	\$ 953,829.55	\$ 50,201.56
+	FY 2022 Estimated Carryover	To Be Determined in 2022		
=	FY 2023 Updated Funding Amount	\$ 3,305,874.68	\$ 3,140,580.95	\$ 165,293.73
	Combined FY 2022 and FY 2023 Updated Funding Amount (rounded to nearest dollar)	\$ 12,036,840		

Concept Projects and Studies for Consideration in Future Years

For the FY 2022 and FY 2023 – a formal call for new projects was not made due to fiscal constraint. However, during their consultation briefing with the RTC, the local entities were encouraged to mention concepts for projects they would like to be considered for a future UPWP.

Potential Future UPWP Projects

Entity:	Potential Future UPWP Project(s)
Mesquite	<ul style="list-style-type: none"> • Mesquite bicycle plan update as part of update to master plan.
Clark County	<ul style="list-style-type: none"> • Livable Centers Study – Regional Redevelopment • Future Growth along I-15 South Corridor – Industrial Area Impacts
City of Las Vegas	<ul style="list-style-type: none"> • Livable Centers Study – Charleston Boulevard Corridor • Incorporation of Cycle Track Feasibility and Route Identification Study into FY 2023 Regional Bicycle and Pedestrian Plan Update.
City of North Las Vegas	<ul style="list-style-type: none"> • Connecting Neighborhoods – Lake Mead Corridor Study is a project that can take place in the future following the conclusion of the Comprehensive Master Transportation Study.
City of Henderson	<ul style="list-style-type: none"> • Complete streets – Lake Mead Parkway • Regional Roundabout Criteria Study • Union Pacific Railroad Right of Way Study • Study of freight parking in industrial areas. • Participate in high-level freeway system planning with NDOT to assist coordination for project identification and prioritization. • Study transit solutions to better connect Nevada State College to College of Southern Nevada in Henderson. And also regional options to better connect centers of higher learning with transit options.
RTC of Southern Nevada	<ul style="list-style-type: none"> • Regional Bicycle and Pedestrian Counts – Phase III • Applied Behavioral Economics – Research Study • Applied Behavioral Economics – Testing and Implementation • Livable Centers Study – Project 4

Fiscal Years 2022 and 2023 UPWP Task budgets

Initiated with the SFY 2015 UPWP, the RTC streamlined the budget process in groups of activities to be performed under the UPWP into seven main tasks:

1. Planning Administration, Coordination and Outreach (Task 101)
2. Data Collection and Analysis (Task 201)
3. Long Range Transportation Planning (Task 202)
4. Multi-Modal Transportation Planning (Task 301)
5. Intelligent Transportation Systems Planning (Task 302)
6. Regional Policy Plan Administration (Task 501)
7. Regional Planning and Research (Task 601)

Proposed activities under the SFY 2022-2023 UPWP are grouped under one of these seven tasks. Individual activities are described as Sub-Tasks with each task. State and Federal agencies will track Consolidated Planning Grant expenditures with reference to the budgets for these seven tasks. This will simplify accounting procedures and also reduce the need for frequent amendments to respond to minor changes in the budget for individual line items.

Detailed information on the objective, scope and timeline of the various UPWP activities within each task is presented by Sub-Task in Chapter 6, as in previous UPWP documents. Budgetary information by Sub-Task is presented for information and to assist RTC with monitoring progress.

Funding via Consolidated Planning Grant (PL) and Local Match – Fiscal Year 2022 and Fiscal Year 2023

	UPWP Task Costs in FY 2022	UPWP Task Costs in FY 2023	Total Consolidated Planning Grant Amount FY 2022-2023	Total Local Match Amount FY 2022-2023
Task 101 - Planning	\$ 1,220,000.00	\$ 1,245,000.00	\$ 2,341,750.00	\$ 123,250.00
Task 201 - Data Collection	\$ 1,173,000.00	\$ 3,210,000.00	\$ 4,163,850.00	\$ 219,150.00
Task 202 - Long Range Transportation Planning	\$ 240,000.00	\$ 365,000.00	\$ 574,750.00	\$ 30,250.00
Task 301 - Multimodal Transportation Studies	\$ 3,355,611.00	\$ 480,000.00	\$ 3,643,830.45	\$ 191,780.55
Task 302 - Intelligent Transportation System Studies	\$ 100,000.00	\$ 0.00	\$ 95,000.00	\$ 5,000.00
Task 501 – Regional Policy Plan Administration	\$ 250,380.00	\$ 215,605.00	\$ 179,439.00	\$ 286,546.00
Task 601 – Regional Planning	\$ 156,487.50	\$ 156,487.50	\$ 266,028.75	\$ 46,946.25
Total	\$ 6,495,478.50	\$ 5,672,092.50	\$11,264,648.20	\$ 902,922.80
<i>Last updated: March 31, 2021</i>	<i>Sum of UPWP Task Costs: \$12,167,571.00</i>		<i>Sum of Anticipated PL/Local Matches Reimbursement: \$12,167,571.00</i>	

Fiscal Year 2022-2023 Unified Planning Work Program Budget -

UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
Task 101	Planning Administration, Coordination and Outreach												
101-1500-22	General Outreach	\$50,000	\$30,000	\$80,000	\$76,000	\$4,000	\$0	\$50,000	\$30,000	\$80,000	\$76,000	\$4,000	\$0
101-2300-22	Stakeholder Coordination	\$0	\$70,000	\$70,000	\$66,500	\$3,500	\$0	\$0	\$70,000	\$70,000	\$66,500	\$3,500	\$0
101-2310-22	Planning Administration	\$100,000	\$515,000	\$615,000	\$584,250	\$30,750	\$0	\$100,000	\$515,000	\$615,000	\$584,250	\$30,750	\$0
101-3100-22	Unified Planning Work Program	\$0	\$85,000	\$85,000	\$80,750	\$4,250	\$0	\$0	\$85,000	\$85,000	\$80,750	\$4,250	\$0
101-3200-22	Transportation Improvement Program	\$0	\$105,000	\$105,000	\$99,750	\$5,250	\$0	\$0	\$105,000	\$105,000	\$99,750	\$5,250	\$0
101-3500-22	Environmental Justice/Title VI/Ladders of Opportunity	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0
101-3600-22	Misc. (INRIX, ArcGIS, Transcad)	\$130,000	\$15,000	\$145,000	\$137,750	\$7,250	\$0	\$130,000	\$20,000	\$150,000	\$142,500	\$7,500	\$0
101-9200-22	Southern Nevada Strong Transportation Implementation	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0
101-9205-22	Transit Oriented Development	\$0	\$40,000	\$40,000	\$38,000	\$2,000	\$0	\$0	\$40,000	\$40,000	\$38,000	\$2,000	\$0
101-9210-22	Community and Stakeholder Engagement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Task 101 Total	\$280,000	\$940,000	\$1,220,000	\$1,159,000	\$61,000	\$0	\$280,000	\$965,000	\$1,245,000	\$1,182,750	\$62,250	\$0

Task 201													
Data Collection													
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
201-2116-22	Travel Demand Model	\$0	\$420,000	\$420,000	\$399,000	\$21,000	\$0	\$0	\$420,000	\$420,000	\$399,000	\$21,000	\$0
201-2206-22	Annual Population Forecast	\$15,000	\$3,000	\$18,000	\$17,100	\$900	\$0	\$15,000	\$3,000	\$18,000	\$17,100	\$900	\$0
201-2230-23:	Travel Demand Model Enhancements & Validation	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$15,000	\$415,000	\$394,250	\$20,750	\$0
201-4015-22	Technical Support for RTP/TIP and Conformity Determination	\$150,000	\$10,000	\$160,000	\$152,000	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-9215-22	Land Use and Transportation Scenario Planning	\$150,000	\$10,000	\$160,000	\$152,000	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-9220-22	GIS Analysis & Visualization RTCSNV MPO TDM data, Project Interactive Maps	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0
201-9225-22:	Integrating Exploratory Modeling and Simulation Modeling into Regional Transportation Planning **	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0

UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
201-9230-22:	Southern Nevada Freight Plan Update	\$160,000	\$20,000	\$180,000	\$171,000	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-9235-22:	Congestion Management Process	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0
201-9240-22:	Decennial Census Analysis	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0
201-9245-23:	2023 Household Travel Survey	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$15,000	\$1,215,000	\$1,154,250	\$60,750	\$0
201-9250-23:	2023 Transit O-D On Board Survey	\$0	\$0	\$0	\$0	\$0	\$0	\$662,000	\$15,000	\$677,000	\$643,150	\$33,850	\$0
201-9255-23:	2023 Las Vegas Visitor Survey	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000	\$15,000	\$365,000	\$346,750	\$18,250	\$0
201-9260-22:	Next Generation NHTS OD Flow passive Data project -Add On (One Year GPS Data with trip purposes, truck)	\$130,000	\$5,000	\$135,000	\$128,250	\$6,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 201 Total		\$605,000	\$568,000	\$1,173,000	\$1,114,350	\$58,650	\$0	\$2,627,000	\$583,000	\$3,210,000	\$3,049,500	\$160,500	\$0

Task 202		Long Range Transportation Planning											
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
202-3325-22	Performance Based Planning	\$0	\$60,000	\$60,000	\$57,000	\$3,000	\$0	\$0	\$60,000	\$60,000	\$57,000	\$3,000	\$0
202-3710-22	Bicycle and Pedestrian Planning	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0
202-3715-22	Transportation Safety Planning	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0
202-9005-22	Regional Transportation Plan & Visioning	\$0	\$35,000	\$35,000	\$33,250	\$1,750	\$0	\$120,000	\$40,000	\$160,000	\$152,000	\$8,000	\$0
202-9035-22	On Board Mobility Plan	\$25,000	\$20,000	\$45,000	\$42,750	\$2,250	\$0	\$25,000	\$20,000	\$45,000	\$42,750	\$2,250	\$0
202-9040-22	Coordinated Human Service Transportation Plan Development	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0
Task 202 Total		\$25,000	\$215,000	\$240,000	\$228,000	\$12,000	\$0	\$145,000	\$220,000	\$365,000	\$346,750	\$18,250	\$0

Task 301 Multimodal Transportation Studies													
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
301-3905-22	Regional High Speed Rail Station	\$200,000	\$10,000	\$210,000	\$199,500	\$10,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3910-22	Regional Commuter Center Study	\$75,000	\$10,000	\$85,000	\$80,750	\$4,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3915-22	Northwest Las Vegas Traffic Study	\$300,000	\$10,000	\$210,000	\$294,500	\$15,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3925-22	Henderson Sustainable Mobility Plan	\$300,000	\$10,000	\$310,000	\$294,500	\$15,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3930-22	Regional Transit Center Study	\$150,000	\$10,000	\$160,000	\$152,000	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3935-22	Traffic Signal Communication System Gap Analysis	\$200,000	\$10,000	\$210,000	\$199,500	\$10,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3940-22	City of North Las Vegas Comprehensive Master Transportation Study	\$250,000	\$10,000	\$260,000	\$247,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3950-22	Livable Centers Study - Project Three	\$250,000	\$10,000	\$260,000	\$247,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3960-22	Maryland Parkway Corridor Transit Oriented Development Plan – City of Las Vegas *+	\$20,000	\$2,000	\$22,000	\$20,900	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0

UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
301-3965-22	Maryland Parkway Corridor Transit Oriented Development Plan - Clark County	\$20,000	\$2,000	\$22,000	\$20,900	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3980-22	Regional Bicycle and Sidewalk Inventory	\$200,000	\$25,000	\$225,000	\$213,750	\$11,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3985-22	Regional Walkability Plan	\$180,000	\$10,000	\$190,000	\$180,500	\$9,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3990-22	Regional Transportation System Health Impact Assessment Standards and Cost Benefit Analysis	\$140,000	\$10,000	\$150,000	\$142,500	\$7,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9115-23	Planning and Infrastructure Needs for Emerging Transportation Technologies	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	\$25,000	\$205,000	\$194,750	\$10,250	\$0

UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant (95%)	SFY 2022 Local Match (5%)	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
301-9270-22	Livable Centers Study – Project Two	\$250,000	\$10,000	\$260,000	\$247,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9275-22	Stadium District Transportation Plan	\$75,000	\$10,000	\$85,000	\$80,750	\$4,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9285-22	Transit Oriented Development Implementation Study	\$250,000	\$25,000	\$275,000	\$261,250	\$13,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9290-22 **	Southern Nevada HOPE Grant Study	\$61,111	\$25,000	\$86,111	\$81,805	\$4,306	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9295-23	Regional Bicycle and Pedestrian Plan Update	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$25,000	\$275,000	\$261,250	\$13,750	\$0
301-9300-22	Perfect Storm Special Events Management Study	\$250,000	\$7,500	\$257,500	\$244,625	\$12,875	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 301 Total		\$3,151,111	\$204,500	\$3,355,611	\$3,187,830	\$167,781	\$0	\$430,000	\$50,000	\$480,000	\$456,000	\$24,000	\$0
<p>*+ - Maryland Parkway Corridor TOD Study will receive FTA Planning Grant for \$300,000 total in lieu of CPG funding. The local match for this study that is required is \$100,000; \$50,000 to be paid by City Of Las Vegas and \$50,000 from RTC of Southern Nevada.</p> <p>** - HOPE Grant consists of \$125,000 grant from FTA and \$13,890 local match for professional services contract of \$138,890. The \$5,000 in RTC staff time is the only amount covered by CPG funding.</p>													

Task 302 Intelligent Transportation System Planning													
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant	SFY 2022 Local Match	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant (95%)	SFY 2023 Local Match (5%)	SFY 2023 Anticipated External Funding Grants
302-2500-22	TSMO Business Case Development	\$0	\$100,000	\$100,000	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 302 Total		\$0	\$100,000	\$100,000	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 501 Regional Policy Plan Administration													
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant	SFY 2022 Local Match	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant	SFY 2023 Local Match	SFY 2023 Anticipated External Funding Grants
501-1000-22	Regional Plan Core Administration	\$0	\$69,550	\$69,550	\$13,910	\$55,640	\$0	\$0	\$69,550	\$69,550	\$13,910	\$55,640	\$0
501-1010-22	Regional Plan Updates	\$0	\$69,550	\$69,550	\$34,775	\$34,775	\$0	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0
501-1050-22	Indicator Tracking and Mapping	\$0	\$27,820	\$27,820	\$13,910	\$13,910	\$0	\$0	\$27,820	\$27,820	\$13,910	\$13,910	\$0
501-1100-22	Community Planning Academy	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0
501-1150-22	Outreach and Communications	\$0	\$34,775	\$34,775	\$0	\$34,775	\$0	\$0	\$34,775	\$34,775	\$0	\$34,775	\$0
501-1160-22	Annual Southern Nevada Strong Implementation Report	\$0	\$13,910	\$13,910	\$2,782	\$11,128	\$0	\$0	\$13,910	\$13,910	\$2,782	\$11,128	\$0
Task 501 Total		\$0	\$250,380	\$250,380	\$98,413	\$151,967	\$0	\$0	\$215,605	\$215,605	\$81,026	\$134,579	\$0

Task 601 - Regional Planning and Research													
UPWP Task	Task Name	SFY 2022 Professional Services Contracts	SFY 2022 RTC Staff Costs	SFY 2022 Total Professional Services and RTC Staff Costs	SFY 2022 Consolidated Planning Grant	SFY 2022 Local Match	SFY 2022 Anticipated External Funding Grants	SFY 2023 Professional Services Contracts	SFY 2023 RTC Staff Costs	SFY 2023 Total Professional Services and RTC Staff Costs	SFY 2023 Consolidated Planning Grant	SFY 2023 Local Match	SFY 2023 Anticipated External Funding Grants
601-1010-22	Future Housing Inventory and Needs Analysis	\$0	\$52,163	\$52,163	\$49,554	\$2,608	\$0	\$52,163	\$52,163	\$49,554	\$2,608	\$0	\$0
601-1020-22	Extreme Heat Events Coordinated Response Study	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0	\$0
601-1040-22	Tree Canopy Social Equity Impacts Research Project	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0	\$0
601-1050-22	Improving Equity in Citizen Engagement Study	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0	\$34,775	\$34,775	\$33,036	\$1,739	\$0	\$0
Task 601 Total		\$0	\$156,488	\$156,488	\$133,014	\$23,473	\$0	\$0	\$156,488	\$156,488	\$133,014	\$23,473	\$0
TOTAL FOR UPWP 2022-2023		\$4,061,111	\$2,434,368	\$6,495,479	\$6,015,608	\$479,870	\$0	\$3,482,000	\$2,190,093	\$5,710,093	\$5,285,140	\$424,952	\$0

Total of Projects Funded in FY 2022-FY 2023: \$11,856,352;
Projected FY 2021 Carryover + FHWA/FTA PL/5303 Funding for FY 2022 and 2023: \$12,036,840 Balance: \$180,487

6. Sub-task Descriptions -

Task 101 – Planning Administration, Coordination and Outreach

This task covers the core planning activities of the Metropolitan Planning Organization. These include: The annual development and maintenance of the Unified Planning Work Program (UPWP); The maintenance of the Transportation Improvement Program (TIP) The maintenance of the Regional Transportation Plan (RTP) Also included are the MPO’s responsibilities for Environmental Justice and for compliance with Title VI of the Civil Rights Act.

Task 101 includes the RTC Staff Costs associated with these core programs, coordination with local, state and federal partners, coordination with other stakeholders and general outreach. Any consultant support related to these core activities is covered under other tasks, so the only costs identified are those associated with RTC staff time and related in-house expenditures.

Specific Sub-Tasks are:

- 101-1500, General Outreach
- 101-2300, Stakeholder Coordination
- 101-2310, Planning Administration
- 101-3100, Unified Planning Work Program
- 101-3200, Transportation Improvement Program
- 101-3500, Environmental Justice and Title VI
- 101-3600, Miscellaneous Supporting Activities
- 101-9200, Southern Nevada Strong – Transportation Implementation
- 101-9205, Transit Oriented Development

Task 101, 2022-2023 Budget

The following costs are included under Task 101:

	FY 2022	FY 2023
RTC Staff Costs	\$ 280,000	\$ 280,000
Professional Services Costs	\$ 940,000	\$ 965,000
Combined Costs	\$ 1,220,000	\$ 1,245,000
The source of funds for Task 101 is		
Consolidated Planning Grant	\$ 1,159,000	\$ 1,182,750
Local Funds	\$ 61,000	\$ 62,250

Sub-Task 101-1500-22 – General Outreach

Purpose:

Throughout the transportation planning process, RTC staff performs various functions concerning the time and materials used for advertising, preparation, and conducting public involvement activities associated with the development and implementation of plans and programs.

Community Engagement and Outreach have become increasingly important activities for the RTC and MPO. This task will fund a support contract for a community engagement specialist that will help the RTC's MPO improve public outreach and enhance the agency's ability to communicate with the public to develop a better understanding of public needs and wants related to transportation planning and specific studies or projects led by the MPO. Activities could include scheduling and arranging public outreach activities, public surveys, developing and reviewing public outreach materials, helping maintaining public contact databases, supporting federally-required public comment activities, and other related tasks as they arise.

Public surveys that are representative of the demographics of Southern Nevada is included in this task. Surveys may be reoccurring or special. However, surveys related to a specific sub-task are included in that specific section, and are not included as part of this sub-task. Surveys are an important tool to gather public opinions and attitudes about general transportation-related issues and assist in developing a regional vision.

Previous Work:

- Public outreach, meetings and promotion in support of the Regional Transportation Plan (RTP);
- Transportation Improvement Program (TIP);
- the Unified Planning Work Program (UPWP) projects and studies;
- the Public Participation Plan (PPP).

Methodology:

- Through both mainstream and innovative means the RTC will develop, coordinate, and conduct public outreach related to all activities listed in the UPWP.

Examples include: conducting public meetings, participating in “pop-up meetings”, having a presence at community events, publishing documents, developing press releases, utilizing translation services and addressing and tracking public comments.

- General outreach is led by the RTC’s Department of Government Affairs, Media, and Marketing.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency);
Clark County; City of Las Vegas; City of North Las Vegas; City of Henderson; City of Boulder City; City of Mesquite, Nevada Department of Transportation

Budget:

Sub-Task 101-1500-22	FY 2022	FY 2023
Total Project Cost	\$ 80,000	\$ 80,000
Professional Services Contract	\$ 50,000	\$ 50,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 30,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 76,000	\$ 76,000
Local Match (5%)	\$ 4,000	\$ 4,000

Schedule and Deliverables:

- Report on public outreach activities.
- Inventory of display materials in support of RTC public outreach activities.
- General Outreach is an on-going activity

**Sub-Task 101-2300-22 –
Stakeholder Coordination**

Purpose:

Stakeholder Coordination covers all activities related to the continued coordination of the Southern Nevada regional transportation planning process with local agencies, Nevada Department of Transportation, U.S. Department of Transportation, and also the coordination of activities with other regional planning agencies on inter-regional issues.

Methodology:

- General liaison with the Nevada Department of Transportation (NDOT), coordination in development of the State Highway Safety Plan (SHSP) and Southern Nevada Transportation Study (SNTS), participation in meetings, workshops, and coordination with NDOT in development of the Southern Nevada Regional ITS Architecture, participation in activities of the Southern Nevada Regional Planning Coalition (SNRPC), and inter-regional meetings and workshops. Similar stakeholder coordination tasks may arise during the period of performance for this Work Program.
- Stakeholder Coordination is performed by the Metropolitan Planning Organization, Government Affairs, Media and Marketing, and Executive Management.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Nevada Department of Transportation, Southern Nevada Regional Planning Coalition (SNRPC)

Budget:

Sub-Task 101-2300-22	FY 2022	FY 2023
Total Project Cost	\$ 70,000	\$ 70,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 70,000	\$ 70,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 66,500	\$ 66,500
Local Match (5%)	\$ 3,500	\$ 3,500

Schedule and Deliverables:

- Coordination with local, state, and federal agencies on Southern Nevada regional transportation planning issues.
- Stakeholder Coordination is an on-going activity.

Sub-Task 101-2310-22 – Planning Administration

Purpose:

Activities included under this Sub-Task include the overall administration of the Metropolitan Planning Organization (MPO) transportation planning process. These tasks are on-going activities required to meet federal and state regulations. Professional transportation planning services provided by consultant support are included under this sub-task and may cover the full range of activities required by Federal, State, regional, and sub-regional processes for multimodal transportation planning.

Methodology:

- Planning Administration occurs through the conduct of various meetings of regional stakeholders, including the Transportation Access Advisory Committee, Executive Advisory Committee, Nevada Department of Transportation liaison meetings, Metropolitan Planning Subcommittee, RTC Board of Commissioners, and multiple other regional transportation coordination committees and groups. RTC staff travel to and from meetings, workshops, and conferences located outside of the region is a necessary function of this task. Travel includes applicable fees related to registration, lodging, per diem meals, air fare, and transportation in support of UPWP eligible activities. Also included in this task item is professional development of RTC staff through the maintenance of RTC staff membership in professional planning organizations. The Unified Planning Work Program (UPWP) describes the range of work activities for which consultant support may be required.

Expected Products:

- Continuous coordination with local agencies and stakeholders, inclusion of feedback and concepts discussed during committee meetings and other special meetings into the development and administration of the Southern Nevada Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), and UPWP, including coordination of modifications and amendments to these documents.
- RTC agency membership in transportation-related national organizations; e.g. Association of Metropolitan Planning Organizations, National Association of Regional Councils, etc. is a function of this task.
- Administration of professional services contracts as outlined in the Fiscal Years 2022 and 2023 UPWP.
- Examples of professional planning services to be performed by consultant support may include, but will not be limited to the following: lead project and contract management, provide technical assistance to local agencies, support scenario planning analysis, perform financial analysis, participate in performance-based planning and programming, perform environmental justice analyses, support air quality conformity analysis, assess emerging technologies such as autonomous vehicles and electric vehicles, support development of transportation planning surveys, provide public involvement and stakeholder coordination support, analyze regional economic and demographic trends, and design and/or recommend database management systems used to store, classify and edit data, etc.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County Department of Air Quality, Nevada Department of Transportation, Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA).

Budget:

Sub-Task 101-2310-22	FY 2022	FY 2023
Total Project Cost	\$ 615,000	\$ 615,000
Professional Services Contract	\$ 515,000	\$ 515,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 100,000	\$ 100,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 584,250	\$ 584,250
Local Match (5%)	\$ 30,750	\$ 30,750

Schedule and Deliverables: Planning Administration is an ongoing activity.

**Sub-Task 101-3100-22-
Unified Planning Work Program**

Purpose: The Unified Planning Work Program (UPWP) includes coordination of transportation planning activities in the Southern Nevada region during the fiscal year.

Previous Work:

- The UPWP is updated annually and previous work includes the development, administration, and amending of the document.

Methodology:

- RTC staff will, through stakeholder communication and the oversight of RTC committees develop, administer, amend, and implement the UPWP as required. The Metropolitan Planning Organization (MPO) is responsible for this task.

Participating Agencies:

- Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Nevada Department of Transportation, Regional Transportation Commission of Southern Nevada (Lead Agency), Federal Highway Administration (FHWA), Federal Transit Administration (FTA).

Budget:

Sub-Task 101-3100-22	FY 2022	FY 2023
Total Project Cost	\$ 85,000	\$ 85,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 85,000	\$ 85,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 80,750	\$ 80,750
Local Match (5%)	\$ 4,250	\$ 4,250

Schedule and Deliverables:

- Amendments/modifications to the Fiscal Year 2022-2023 UPWP and future development of the Fiscal Years 2024 and 2025 UPWP.
- Work related to the UPWP is on-going.

Sub-Task 101-3200-22 – Transportation Improvement Program

Purpose: Activities included under this Sub-Task include administration and maintenance of the current FY 2019-2022 Transportation Improvement Program (TIP), including processing of modifications and amendments.

Previous Work:

- Development and maintenance of the TIP is an on-going activity. Most recently the SFY 2019-22 TIP was approved by the RTC of Southern Nevada Board of Commissioners on February 9, 2017.

Methodology:

- Determine that sufficient federal, state, and local revenue sources are available to fund projects programmed in the TIP.
- Ensure that all non-exempt projects included in the TIP and subsequent amendments come from a conforming Long Range Transportation Plan, as required under the Clean Air Act Amendments of 1990.
- Ensure that the TIP gives priority to eligible Transportation Control Measure (TCM) projects as identified in the air quality State Implementation Plans.
- Utilize the RTC Project Evaluation and Prioritization Process to select projects for inclusion in the TIP.
- Coordinate administration and maintenance of the TIP program with the Statewide TIP (STIP) by NDOT to ensure subsequent integration of the Clark County TIP into the STIP.
- Provide reasonable opportunity for public comment in accordance with the RTC Public Participation Plan and federal regulations.
- Incorporate Environmental Justice and ADA considerations, as appropriate.
- Prepare modifications and amendments to the TIP.
- Coordinate modifications and amendments of the TIP program with the Statewide TIP (STIP) by NDOT, to ensure subsequent integration of changes to the Clark County TIP into the STIP.
- Participate in the development of eSTIP.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Nevada Department of Transportation,

Budget:

Sub-Task 101-3200-22	FY 2022	FY 2023
Total Project Cost	\$ 105,000	\$ 105,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 105,000	\$ 105,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 99,750	\$ 99,750
Local Match (5%)	\$ 5,250	\$ 5,250

Schedule and Deliverables:

- Fiscal Year 2022-25 TIP update.
- The TIP is an on-going activity.

**Sub-Task 101-3500-22 –
Environmental Justice/ Title VI / Ladders of Opportunity**

Purpose:

Activities included under this Sub-Task include development of products and procedures to implement Executive Order 12898: ‘Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations’, the Civil Rights Act of 1964- Title VI, and provide Ladders of Opportunity to traditionally underserved populations in accordance with subsequent USDOT Guidance and Regulations.

Previous Work:

- Title VI Program Update Report (2010), Civil Rights Act of 1964-Title VI Program Report (1998), Title VI Program Update Report (2009), and Title VI Reports for the MPO and Transit (2013).

Methodology:

- Completion of Environmental Justice updates to monitor the effectiveness of the transportation system in providing Ladders of Opportunity for low-income, minority, elderly, and traditionally underserved populations as required.
- The Metropolitan Planning Organization (MPO) is responsible for this task.

Participating Agencies:

- Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County Department of Air Quality, Nevada Department of Transportation, Regional Transportation Commission of Southern Nevada (Lead Agency), Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA).

Budget:

Sub-Task 101-3500-22	FY 2022	FY 2023
Total Project Cost	\$ 30,000	\$ 50,000
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 50,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 28,500	\$ 47,500
Local Match (5%)	\$ 1,500	\$ 2,500

Schedule and Deliverables:

- Environmental Justice, Title VI, and Ladders of Opportunity are on-going activities.

**Sub-Task 101-3600-22 –
Miscellaneous**

Purpose:

This task item covers all activities related to efficient planning administrative work as well as to provide for costs associated with planning and administration including but not limited to travel, membership dues, software licenses, office supplies, copying and printing, traffic probe data acquisition, professional licenses, registration, lodging, and meals in support of other UPWP eligible activities.

Additional potential software programs and licenses that may be utilized to enhance regional transportation planning may include, but are not limited to: Stata, Sugar Access, Community Remarks, INRIX, Streetlight and timekeeping software to track RTC staff hours and UPWP tasks.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 101-3600-22	FY 2022	FY 2023
Total Project Cost	\$ 145,000	\$ 150,000
Professional Services Contract	\$ 130,000	\$ 130,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 15,000	\$ 20,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 137,750	\$ 142,500
Local Match (5%)	\$ 7,250	\$ 7,500

Schedule and Deliverables:

- Miscellaneous supports on-going activities.

Sub-Task 101-9200-22 - Southern Nevada Strong – Transportation Implementation



Purpose:

The RTC is the administrating agency to the Southern Nevada Strong (SNS) Regional Plan. A major component of the Plan is the Implementation Matrix which includes a vision to increase transportation choice. There are over 50 strategies to implement through increasing transportation choice in Southern Nevada. The project will help facilitate best practices in investing in a multi-modal transportation system that is safe, efficient, accessible, and equitable and supports reinvestment in Southern Nevada’s existing communities.

Methodology:

Southern Nevada Strong Transportation Implementation occurs through the Increase Transportation Choice theme within the Southern Nevada Strong Implementation matrix which could include applying specific strategies like but not limited to:

- Pursuing a regional policy change to require roadways to be designed for target speeds as recommended in the Complete Streets Design Guidelines for Livable Communities, based on the context of the corridor and overall safety and comfort of all users, including pedestrians and bicyclists, and require justification for all target design speeds and speed limits
- Encouraging the development of design standards and land use policies that require investments in low-income or at-risk communities to include the basic attributes such as sidewalks, adequate lighting, street trees, and other strategies to create walkable communities, with special attention to designing for shade and heat absorbent materials to provide respite to transit riders.
- Promoting “Complete Streets” cross section revisions whenever corridor reconstruction or reconfiguration occurs. Activities could include removing block walls, limiting cul-de-sacs, increasing sidewalk and bike lane widths, reducing curb cuts, and limiting driveways.
- Working with local stakeholders, support more stringent criteria to justify roadway capacity expansion and ensure that any capacity expansions accommodate viable multi-modal transportation options.
- Working with local bike groups and transportation advocates to update the RTC’s multi-modal transportation plan and identify strategies to increase safety and make walking and bicycling more viable as primary transportation modes.
- Also included in this task item is professional development of RTC staff through the maintenance of RTC staff membership in professional planning organizations.
- The Metropolitan Planning Organization (MPO) / SNS staff is responsible for this task.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 101-9200-22	FY 2022	FY 2023
Total Project Cost	\$ 50,000	\$ 50,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 50,000	\$ 50,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 47,500	\$ 47,500
Local Match (5%)	\$ 2,500	\$ 2,500

Schedule and Deliverables:

Southern Nevada Strong Transportation Implementation is an on-going activity.

**Sub-Task 101-9205-22 -
Southern Nevada Strong – Transit Oriented Development**



Purpose:

The Southern Nevada Strong Regional Plan goal is to encourage investment in development in which jobs, housing, transportation and community amenities combine to create places that support economic opportunity and healthy options for all people, regardless of income level. This project will support implementation of TOD goals and strategies identified in Southern Nevada Strong.

Previous Work:

The projects and studies that have been previously completed and that identify transit-oriented development (TOD) as a strategy that improve economic competitiveness, invest in complete communities and increase transportation choice for Southern Nevada are Southern Nevada Strong, Access 2040 Regional Transportation Plan

Methodology:

The project will facilitate partners to implement Southern Nevada Strong goals and strategies in TOD which includes:

- Helping partners match land use and transportation plans with regional economic development plans,
 - Assisting partners in fostering development of the healthcare and education sectors, locally serving sectors that would enhance quality of life for residents to better integrate with existing land uses and create a better environment to attract new workers; Helping partners ensure that Southern Nevada offers a range of place types to attract and retain future workers, visitors, businesses and entrepreneurs;
 - Enhancing the role of small businesses and entrepreneurs as leaders in economic diversification and revitalization;
 - Helping partners stabilize and strengthen existing neighborhoods through place making improvements; Encouraging an adequate supply of housing with a range of price, density, ownership, size and building types;
 - Helping partners promote resource-efficient land use and development practices;
- Developing a modern transit system that is integrated with vibrant neighborhood and employment centers, better connecting people to their destinations

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 101-9205-22	FY 2022	FY 2023
Total Project Cost	\$ 40,000	\$ 40,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 40,000	\$ 40,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 38,000	\$ 38,000
Local Match (5%)	\$ 2,000	\$ 2,000

Schedule and Deliverables:

Transit Oriented Development is an on-going activity.

Task 201: Data Collection and Analysis

This task covers the gathering of data needed to support the MPO's planning activities and the analysis of that data as part of the development of the Regional Transportation Plan and other planning studies.

Activities include:

- The maintenance of the regional travel demand forecast model and upgrades to keep up with the state-of-the-practice;
- Execution of model runs and analysis to support traffic and transit studies and the demonstration of air quality conformity;
- Undertaking travel surveys to support the calibration of the model;
 - Improving the technical capability of the RTC to perform more detailed transportation analyses needed by RTC, NDOT or our partner local agencies;
- Development of population and land use forecasts;
- RTC's participation in a region program of traffic counts; and,
- Developing techniques and methods to inventory bicycle and pedestrian activity.

Several of these activities will require extensive professional support from outside consultancies. The costs of professional services contracts are included under Task 201. Task 201 includes the RTC Staff Costs associated with these data collection and analytical activities as well as the procurement of professional services contracts and their administrative and financial oversight

Specific Sub-Tasks are:

201-2116, Travel Demand Model

201-2206, Annual Population Forecast

201-2230, Travel Demand Model Enhancements and Validation Work Program

201-4000, Transportation Networking Company (TNC) Data Analysis

201-4015, Technical Support for RTP/TIP and Conformity Determination

201-4020, Visitor & Freight Model Components Update

201-9215, Land Use and Transportation Scenario Planning

201-9220, GIS Analysis and Visualization

201-9225, Integrating Exploratory Modeling and Simulation Analysis into Regional Transportation Planning

201-9230, Southern Nevada Freight Plan Update

Task 201, Fiscal Years 2022 and 2023 Budget

The following costs are included under Task 201:

Task 201 Budget	FY 2022	FY 2023
Professional Services Contract	\$ 605,000	\$ 2,627,000
RTC Staff Costs	\$ 568,000	\$ 583,000
Total for Task 201	\$ 1,173,000	\$ 3,210,000
The source of funds for Task 201 is:		
Consolidated Planning Grant (95%)	\$ 1,114,350	\$ 3,049,500
Local Match (5%)	\$ 58,650	\$ 160,500

Sub-Task 201-2116-22 - Travel Demand Model

Purpose:

Travel Demand Forecasting (TDF) is an essential tool that the RTC employs to estimate future travel conditions and regional mobility needs. The information generated from the process provides decision makers with the background to determine future transportation system improvement needs, which are programmed into the Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP).

Previous Work:

- RTC 2009 model update;
- FY 2013-2035 Regional Transportation Plan (RTP) modeling results, including modifications and amendments;
- FY 2013-2016 Transportation Improvement Program (TIP) modeling results and amendments;
- Travel Demand Modeling run results for various corridor studies by either consultants or RTC; Travel Demand Modeling run results by consultants in coordination with RTC modeling technical support.

Methodology:

- Improve the network structure and coding procedures and qualities (ongoing).
- Update the travel demand model network with all highway, roadway, and transit networks, park and ride facilities, and intersection signal projects with regard to any amendments to the 2017-2040 RTP.
- Test and apply the update versions of the RTC Travel Demand Model as they are developed under UPWP Task 201-2230.
- Coordinate with the consultant to resolve any technical issues that may arise during routine modeling activities.
- Research and implement the incorporation of bicycle and pedestrian trips and 'Complete Streets' design elements into RTC modeling procedures.
- Develop tools to transform data and networks from the Trans CAD model to VISSIM.
- The work is performed by RTC modeling staff and the project consultant.

Schedule and Deliverables:

- Updated model inputs, highway and transit networks.
- Model results as needed to support RTP amendments or model data needs of UPWP studies.
- VISSIM modeling results for corridors and/or intersections.
- Tests of air quality emissions projections using 'MOVES'.
- Report detailing modeling results.
- Modeling work is an on-going activity.

Budget:

Sub-Task 201-2116-22	FY 2022	FY 2023
Total Project Cost	\$ 420,000	\$ 420,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover Amount	\$ 0	\$ 0
RTC Staff Costs	\$ 420,000	\$ 420,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 399,000	\$ 399,000
Local Match (5%)	\$ 21,000	\$ 21,000

Schedule and Deliverables:

- Population Forecasts: Long-Term Projections for Clark County, Nevada.
- Completion Date: June, 2023

**Sub-Task 201-2206-22 -
Annual Population Forecast**

Purpose:

To provide long-term population forecasts for the Southern Nevada region. Results of this task will be used as control totals for development of the RTC Planning Variables, which are inputs to the RTC Travel Demand Model.

Previous Work:

- Annual Population Forecasts are an on-going activity.

Methodology:

- Coordinate with local jurisdictions, SNWA, and CBER to develop regional population projections, report progress, and discuss issues raised during the planning process.
- The work is performed by RTC modeling staff and the project consultant.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Nevada Department of Transportation, Southern Nevada Water Authority, Clark County School District, Las Vegas Convention and Visitors Authority, University of Nevada, Las Vegas,

Budget:

Sub-Task 201-2206-22	FY 2022	FY 2023
Total Project Cost	\$ 18,000	\$ 18,000
Professional Services Contract	\$ 0	\$ 15,000
Professional Services Contract Carryover	\$ 15,000	\$ 0
RTC Staff Costs	\$ 3,000	\$ 3,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 17,100	\$ 17,100
Local Match (5%)	\$ 900	\$ 900

Schedule and Deliverables:

- Population Forecasts: Long-Term Projections for Clark County, Nevada.
- Completion Date: June, 2023

201-2230-23

Travel Demand Model Enhancements & Validation Phase 1

Purpose:

Travel demand models (TDM) use current travel behavior to predict future travel patterns from a sample of travel behavior data. Models are critical tools for transportation planners and engineers who use the model to forecast the transportation needs of the communities they serve. TDM helps transportation professionals assess the pros and cons of different options for meeting those needs. The purpose of this project is to update RTC's current travel demand model with more recent modeling approaches like tour based model and destination choice model that can better present the travel behaviors of the residents, visitors, and commercial vehicles.

Previous Studies:

- 2014 Travel Demand Model Update
- RTC 2009 model update.
- FY 2013-2035 Regional Transportation Plan (RTP) modeling results, including modifications and amendments.
- FY 2013-2016 Transportation Improvement Program (TIP) modeling results and amendments.
- Travel Demand Modeling run results for various corridor studies by either consultants or RTC.

Methodology:

1. Planning, scope of work, and consultant selection (Phase 1)
This task includes preparing a detailed scope of work for the RFP process and researching for the current practices on developing a travel demand model. Finally, choose a qualified consultant to perform the update.
2. Outreach (Phase 1)
This is an opportunity for local policy maker and planner to have an opportunity to voice their opinion about their expectation for RTC's travel demand model
3. Model Design and collaborating with other data collection projects (Phase 1)
Once the model design is completed, the consultant shall work with household travel survey, onboard travel survey, and visitor survey consultants to ensure the data needed for the model update project is collected in those studies.
4. Model Developments (Phase 1 and Phase 2)
The model will take about 8 months to develop. RTC will work with the consultant closely to ensure the final product fits RTC and local's needs
5. Reports and Presentations (Phase 2)
In this task, reports and presentation will be prepared for local planning agencies and RTC staff.
6. Staff Training (Phase 2)
Staff will learn how to use the model after the model is developed.

Participating Agencies:

- RTC of Southern Nevada
- Nevada Department of Transportation
- City of Las Vegas
- Clark County
- City of North Las Vegas
- City of Henderson
- Clark County Department of Air Quality Management

Budget:

Sub-Task 201-2230-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 415,000
Professional Services Contract	\$ 0	\$ 400,000
RTC Staff Costs	\$ 0	\$ 15,000
Consolidated Planning Grant (95%)	\$ 0	\$ 394,250
Local Match (5%)	\$ 0	\$ 20,750

Schedule and Deliverables:

Start: July 2022

Finish: May, 2023

Duration: Approximately 10 months

Deliverables: Monthly report, technical memos, and final reports

Sub-Task 201-4015-22
Technical Support for RTP/TIP and Conformity Determination

Purpose:

Obtain professional support for the RTP Development/Amendment and Air Quality Determination when there are urgent needs for RTP Amendment or Air Emission Model update required by the EPA.

Previous Studies:

RTC 2014 Travel Demand Model
 2014 Las Vegas Visitor Survey
 RTCSNV ABM Pilot Project – Development population Synthesizer

Methodology:

This project will hire a consultant for professional support for RTP Development/Amendment and Air Quality Determination, especially when there are urgent needs for RTP Amendment or Air Emission Model updates required by the United States Environmental Protection Agency (EPA). Detailed methodology and tasks are to be determined and included in the Request for Proposals (RFP).

Participating Agencies:

- RTC of Southern Nevada

Budget:

Sub-Task 201-4015-22	FY 2022	FY 2023
Total Project Cost	\$ 160,000	\$ 0
Professional Services Contract	\$ 150,000	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 152,000	\$ 0
Local Match (5%)	\$ 8,000	\$ 0

Schedule and Deliverables:

Start: July, 2019
 End: June, 2022
 Duration: Approximately 2 year

Sub-Task 201-9215-22
Land Use and Transportation Scenario Planning

Purpose:

Consultant support to perform land use and transportation scenario planning. UrbanSim is an example software platform that may be utilized to perform this analysis. UrbanSim is a simulation platform for supporting planning and analysis of urban development, incorporating the interactions between land use, transportation, the economy, and the environment.

The use of an integrated modeling platform, and performing scenario planning, will fill an important role in the planning process to develop and maintain the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), the Regional Plan administered by Southern Nevada Strong (SNS), as well as contribute to regional transit planning efforts. Scenario planning will also contribute to local agencies in their development of long-range comprehensive plans and consistency with regional plans. The Unified Planning Work Program (UPWP) describes the range of work activities for which consultant provided scenario planning analysis may contribute.

Previous Work:

- Rapid Policy Analysis Tool
- Envision Tomorrow –software practice and basic training

Expected Products:

- Conduct Regional Land Use Working Group meetings and meet with representatives from local entities and stakeholders to get input for scenario assumptions.
- Continuous coordination with local agencies and stakeholders to develop land use scenarios and provide scenario input files.
- Develop baseline local data files as required, and perform model validation tests.
- Perform model simulation runs with all scenarios.
- Convert model output into input files for possible integration into the regional travel demand model.
- Assess scenario impacts on land use and transportation and the integrated relationships.
- Present scenario planning results and findings to local entities to demonstrate the relationships between land use and transportation.
- Facilitate and support integration of scenario planning findings into local agency and regional planning efforts.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 201-9215-22	FY 2022	FY 2023
Total Project Cost	\$ 160,000	\$ 0
Professional Services Contract	\$ 150,000	\$ 0
RTC Staff Time	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 152,000	\$ 0
Local Match (5%)	\$ 8,000	\$ 0

Sub-Task 201-9220-22
GIS Analysis and Visualization

Purpose:

The latest Federal Planning Rule for Metropolitan Planning calls for increased use of visualization to communicate planning-related information and concepts. This task will be an ongoing in-house process to improve and maintain the Regional Transportation Commission’s GIS mapping and visualization capacity, and deploy that capacity to better meet FHWA and FTA requirements.

Previous Work:

The Regional Transportation Commission has an established GIS program, and GIS has been an integral part of the agency’s required planning processes.

Methodology:

Increased use of GIS for analysis and visualization will require the following basic steps:

- Maintain transportation-related data layers;
- Maintain and operate an online Project Assessment Tool (PAT) that allows analysis of planned or potential transportation projects;
- Develop GIS-based analysis or visualization materials as needed or requested by RTC agency stakeholders.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 201-9220-22	FY 2022	FY 2023
Total Project Cost	\$ 20,000	\$ 20,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 20,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 19,000	\$ 19,000
Local Match (5%)	\$ 1,000	\$ 1,000

Schedule and Deliverables:

- GIS Analysis and Visualization is an on-going task.

**Sub-Task 201-9225-22-
Integrating Exploratory Modeling and Simulation Analysis into Regional Transportation Planning**

Purpose:

The RTC is trying to understand the future impacts of connected and autonomous vehicles, as well as other emerging transportation technologies. Given the tremendous uncertainty surrounding these technologies, a key anticipated element of the planned approach is integrating quality real world data – which is currently very sparse – due to the speculation about the variety of technologies and their impacts in some useful manner so that the agency can make informed recommendations and decisions. Having an improved modeling tool for analyzing and understanding these impacts will be critical for the agency to succeed in the future.

Previous Work:

Boulder Highway Multimodal Transportation Study

Methodology:

This project will apply robust decision-making to regional planning via employing the EMA tool to gain an understanding of the impact that the rapid technological evolution has on the movement of people and goods on surface transportation system. The project will also identify and address hurdles in the application of an exploratory analysis through the southern Nevada region case study. Another objective of this project is to demonstrate that precise prediction is not necessary for addressing future transportation challenges, and there is more than one way to use travel modeling tools for regional surface transportation system planning. Throughout this project, RTC modelers will work closely with planners and others in the agency to test various policies and strategies.

Participating Agencies:

Regional Transportation Commission of Southern Nevada

Budget: The contract costs for the project will be paid for with a non-PL FHWA award and non-federal PL funds. **The only PL money involved will be for staff time in the amount of \$20,000.**

Sub-Task 201-9225-22	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 20,000
Funding Sources		
Federal Grant – Integrated Exploratory Modeling	\$ 0	\$ 0
Local Funding	\$ 0	\$ 0
FHWA / State Research Funds (CPG)	\$ 19,000	\$ 19,000
Local PL Match	\$ 1,000	\$ 1,000

Schedule:

Anticipated Start Date: August, 2018

Anticipated End Date: June, 2023

Sub-Task 201-9230-22 Southern Nevada Freight Plan Update

Purpose: This plan builds on previously collected information and other studies to assess the capabilities of the infrastructure to support and facilitate freight movement. In June 2015, the RTC completed Southern Nevada Regional Goods Movement Master Plan. This was the first regional freight plan and provided a snapshot of the region's freight transportation system, a forecast of future freight demand, and recommendations to address regional freight deficiencies.

In January 2017, Nevada Department of Transportation completed Nevada State Freight Plan which laid a strategic framework for freight mobility and economic competitiveness for the State of Nevada. As per federal regulations 23 CFR 450.306(4):

"... the MPO shall integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures and targets described in State transportation plans and transportation processes required as part of a performance-based program including appropriate (metropolitan) portions of the State Freight Plan (MAP-21 Section 1118)."

To meet this, the RTC regional freight plan will need to be updated to incorporate the Nevada State Freight Plan, as well as re-evaluate and outline the regional vision and framework to improve regional freight mobility.

This plan update will serve to fulfil the freight-related goals of the State of Nevada and federal requirements and provisions reflected in MAP-21, which requires that the metropolitan planning processes provide for consideration of projects and strategies to increase the accessibility and mobility of people and freight; and enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Previous Work:

- Southern Nevada Regional Goods Movement Master Plan (2015) - RTC of Southern Nevada
- Nevada State Freight Plan (2017) - Nevada Department of Transportation

Methodology:

- Establish a technical advisory committee. This committee will discuss study objectives and desired outcomes. They will receive information regarding supply chains, truck trip generators and the patterns and challenges of freight and goods movement in the Las Vegas area.
- Convene land use and economic development subcommittee to brain storm possible land use related freight strategies that could possibly impact economic development.
- Hold a scenario planning and freight strategies workshop was held to immerse the TAC in differing future scenarios to prioritize freight strategies.
- Profile goods movement on supply chain activities and commodity flows into, out of and within the region.
- Conduct performance measure analysis to identify current choke points for freight in the regional roadway network.
- Identify actions that need to be completed to implement the policy and project recommendations identified elsewhere in the plan.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 201-9230-22	FY 2022	FY 2023
Total Project Cost	\$ 180,000	\$ 0
Professional Services Contract	\$ 160,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 171,000	\$ 0
Local Match	\$ 9,000	\$ 0

Schedule and Deliverables:

Start Date: January, 2020

Anticipated End Date: June, 2022

Duration: 30 months

201-9235-22 Congestion Management Process

Purpose:

The purpose of congestion management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. The congestion management plan emphasizes the feasibility of cost-efficient strategies such as Travel Demand Management (TDM) and Transportation Systems Management (TSM). TDM focuses on user behavior modification strategies to reduce single-occupancy vehicles (SOV) and shift travel away from peak periods. TSM involves effective management of existing infrastructure through intersection improvements, signalization changes and freeway optimization.

Previous Studies:

The Congestion Management Process is a continual process for the RTC with recurring updates.

Methodology:

The CMP process involves the collection and analysis of a variety of different types of data. These include: 1) traffic volume counts; 2) speed and travel time data; 3) archived ITS /operations data; 4) private sector electronic traffic data sets; 5) transit data; 6) bicycle and pedestrian data; 7) crash data 8) travel survey data.

This data is accumulated and analyzed. Variables impacting congestion are determined, such as locations of major trip generators, seasonal and time of day variations in traffic, work trips versus non-work trips as well as the incidents non-recurring congestion occurring from crash locations. Congestion benchmarks are established to designate whether a corridor being studied is considered to have congestion now or forecast to have so in the future.

Four tiers of strategies to mitigate congestion are also considered for applicability to each corridor. These tiers are 1) reducing person trips and vehicle miles traveled; 2) shifting automobile trips to other modes; 3) strategies to improve roadway operations and 4) adding capacity.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency)
- Southern Nevada FAST
- NDOT

Budget:

Sub-Task 201-9235-22	FY 2022	FY 2023
Total Project Cost	\$ 30,000	\$ 30,000
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 30,000
Consolidated Planning Grant (95%)	\$ 28,500	\$ 28,500
Local Match (5%)	\$ 1,500	\$ 1,500

Schedule and Deliverables:

- Congestion Management Process is a continual task.
- Annual Congestion Management Process report

201-9240-22 Decennial Census Analysis

Purpose:

Every 10 years, the U.S. Census Bureau conducts a census to determine the number of people living in the United States. The U.S. Census Bureau conducts the census in years ending in zero, on Census Day, which is April 1.

The Decennial Census is the main source to provide an accurate population count in the U.S. The data can be used to perform population trend analysis, land use model allocation, travel demand model estimation, validation and calibration, and to identify the transit service needs.

Previous Studies:

- 2018 Livable Centers Study
- 2018 Boulder Highway Multimodal Study
- 2019 SNS community Engagement tool

Methodology:

RTC team will perform in-depth population trend analyses using the 2020 decennial census along with other historical data. The analyses will be performed at the regional level, sub-regional level, and district level. A final report will be generated to provide the information about how the population is changed in the past few decades.

Participating Agencies:

RTC of Southern Nevada

Budget:

Sub-Task 201-9240-22	FY 2022	FY 2023
Total Project Cost	\$ 30,000	\$ 30,000
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 30,000
Consolidated Planning Grant (95%)	\$ 28,500	\$ 28,500
Local Match (5%)	\$ 1,500	\$ 1,500

Schedule and Deliverables:

Start: July, 2022

End: June, 2023

Duration: One year

Deliverable: Decennial Census Analysis Report.

201-9245-23 - Household Travel Survey

Purpose:

Household Travel Survey (HHTS) is one of the data sources that allow one to analyze trends in personal and household travel. It includes daily non-commercial travel by all modes, including characteristics of the people traveling, their household, and their vehicles.

HHTS data is used to explore topics on travel behavior, traffic safety, congestion, the environment, energy consumption, demographic trends, bicycle and pedestrian studies, the mobility sharing economy, and transit planning for planning and policy applications.

The survey will collect trip data from the sampled household on the trip's origin/destination, length, purpose, mode of travel, and time of day information during a specific 24-hour travel day. Household social economic and GPS data may also be collected. Ideally, the survey data collection should be completed before the end of the school year and sufficient number of households should be sampled

Previous Studies:

- 1996 Travel Survey
- 2005 Travel Survey
- 2014 Household Travel Survey

Methodology:

1. Planning, scope of work, and consultant selection -
This task includes preparing a detailed scope of work for the RFP process and researching for the current practices on conducting a household travel survey. Finally, choose a qualified consultant to conduct the survey.
2. Outreach-
This is an opportunity for local policy maker and planner to add questions to the survey if needed.
3. Survey Design -
The survey shall be designed based on the inputs from the locals, and the needs of RTC's next generation travel demand model.
4. Sampling Plans -
Once the survey questions are defined, a sampling plan shall be develop to ensure the samples can properly represent the population in the study area
5. Data Collection
Household socio-economic data and trip information of the selected households will be collected during this stage.

6. Data Processing and Quality Check -
During the data collection process, the data will be verified and processed to ensure there are enough valid samples to represent the population in the study area.
7. Implementation and completion of the household survey data collection -
In this task, all final documents shall be prepared and presentations shall be made to present the result.

Participating Agencies:

- RTC of Southern Nevada
- Nevada Department of Transportation
- City of Las Vegas
- Clark County
- City of North Las Vegas
- City of Henderson
- Clark County Department of Air Quality Management

Budget:

Sub-Task 201-9245-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 1,215,000
Professional Services Contract	\$ 0	\$ 1,200,000
RTC Staff Costs	\$ 0	\$ 15,000
Consolidated Planning Grant (95%)	\$ 0	\$ 1,154,250
Local Match (5%)	\$ 0	\$ 60,750

Schedule and Deliverables:

Start: July 2022

End: May, 2023

Duration: 10 months

Deliverables: Monthly report, technical memos, final reports, and final survey database

201-9250-23 - Transit Origin-Destination Onboard Survey

Purpose:

The purpose of the onboard survey project is to improve RTC's travel demand model. RTC's travel demand model must demonstrate that the model adequately grasps each of the key transit markets within the region and reflects the characteristics and behavior of riders within those markets. The availability of a current transit on-board survey data is the key source of data that is required to inform the specification, development, calibration, and validation of the model.

The on-board rider survey data provides useful insight into the nature of those markets, and often reveals that a standard regional model is not sufficient to address all of the unique markets served by transit. For example, the transit system may serve significant numbers of university students, travelers to special events (sporting, cultural, general entertainment), air passengers, or visitors.

Another valuable use of on-board survey data is the formation of observed trip matrices and the assignment of those matrices to the transit network. The process assists in analyzing and evaluating (1) the integrity of the survey, (2), the integrity of the network, and (3), the sufficiency of the transit path building parameters. The results of this analysis may result in revisions or corrections to survey geocoding, network coding procedures and assumptions, or path building parameters.

Previous Studies:

- 2014 Transit Onboard Survey
- Transit Origin and Destination On-Board Survey (2006-2007)
- Before and After Studies for RTC Transit (On-Board Survey on Boulder Highway and Sahara Avenue)
- Maryland Parkway Alternative Analysis (On-Board Survey for Route 109)

Methodology:

1. Planning, scope of work, and consultant selection -
This task includes preparing a detailed scope of work for the RFP process and researching for the current practices on conducting an onboard survey. Finally, choose a qualified consultant to conduct the survey.
2. Outreach –
This is an opportunity for local policy maker and planner to add questions to the survey if needed.
3. Survey Design -
The survey shall be designed based on the inputs from the locals, and the needs of RTC's next generation travel demand model.
4. Sampling Plans -
Once the survey questions are defined, a sampling plan shall be developed to ensure the samples can properly represent the population in the study area
5. Data Collection -
Riders' basic information and the trip information will be collected during this stage.

6. Data Processing and Quality Check -
During the data collection process, the data will be verified and processed to ensure there are enough valid samples to represent the population in the study area.
7. Implementation and completion of the household survey data collection -
In this task, all final documents shall be prepared and presentations shall be made to present the result.

Participating Agencies:

- RTC of Southern Nevada
- Nevada Department of Transportation
- City of Las Vegas
- Clark County
- City of North Las Vegas
- City of Henderson
- Clark County Department of Air Quality Management

Budget:

Sub-Task 201-9250-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 677,000
Professional Services Contract	\$ 0	\$ 662,000
RTC Staff Costs	\$ 0	\$ 15,000
Consolidated Planning Grant (95%)	\$ 0	\$ 643,150
Local Match (5%)	\$ 0	\$ 33,850

Schedule and Deliverables:

Start: July, 2022

End: May, 2023

Duration: 10 months

Deliverables: Monthly report, technical memos, final reports, and final survey database

201-9255-23 - Las Vegas Visitor Survey

Purpose:

The purpose of this study is to quantify the impact of tourists, convention attendees, and other business visitors on travel demand in the area. This will provide a better overall understanding of the people who visit the region, where they go once they arrive, and the modes of transportation they use. The surveys will gather information on visitor trip origins and destinations, modes of travel, and actual trips that visitors make for meals, business meetings, entertainment, and other recreational destinations. The data collected will be used to better understand visitor travel, to update trip production rates by trip purpose as inputs into the regional travel demand forecast model, and to support enhanced transit operations and route planning.

Previous Studies:

- Hotel Visitor Survey, 2014
- Hotel Visitor Intercept Survey, 2006
- Hotel Visitor Intercept Survey, 1996

Methodology:

- Task 1 – Issue a Request for Proposals (RFP) and select a consultant (or consultant team)
- Task 2 – Survey Planning
 - Develop scope of work and schedule
 - Develop survey sample size and strategy
 - Develop final survey instrument
 - Select hotels to be surveyed
 - Plan data input/select software
- Task 3 – Conduct Survey
 - Pretest the survey instrument
 - Implementation of the visitor survey
 - Carry out survey monitoring and quality assurance
- Task 4 – Data Development
 - Develop survey database, including GIS database
 - Carry out internal and external survey validation activities
- Task 5 – Report Development
 - Develop report, statistics, and graphics
 - Develop final database
 - Develop software documentation
 - Present report to RTC committees and RTC Board of Commissioners

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Las Vegas Convention and Visitors Authority (LVCVA)

Budget:

Sub-Task 201-9255-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 365,000
Professional Services Contract	\$ 0	\$ 350,000
RTC Staff Costs	\$ 0	\$ 15,000
Consolidated Planning Grant (95%)	\$ 0	\$ 346,750
Local Match (5%)	\$ 0	\$ 18,250

Schedule and Deliverables:

Start: July, 2022

End: June, 2023

Duration: one year.

Deliverables: Monthly report, technical memos, final reports, and final survey database

**201-9260-22 -
Next Generation OD Flow Passive Data Project – Add-On**

Purpose:

Conducted by the Federal Highway Administration (FHWA), the National Household Travel Survey (NHTS) is the authoritative source on the travel behavior of the American public. It is the only source of national level data that allows researchers to analyze trends in personal and household travel. It includes daily non-commercial travel by all modes as well as traveler characteristics.

FHWA has launched the Next-Generation National Household Travel Survey (NextGen NHTS) to establish a more continuous travel monitoring program with national and local data products. In addition to a probabilistic core travel survey, NextGen NHTS also includes an origin-destination (OD) data program that will produce multimodal passenger and truck travel OD tables at the national and local levels from passively collected data sources. University of Maryland (UMD) has been competitively selected to produce the OD data for the NextGen NHTS program.

The add-on program allows RTC to be part of the project to collect more local samples with a lower cost.

Previous Studies:

None

Methodology:

RTC will be working with Federal Highway Administration to develop the scope work and attending the working group meeting periodically.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 201-9260-22	FY 2022	FY 2023
Total Project Cost	\$ 135,000	\$ 0
Professional Services Contract	\$ 130,000	\$ 0
RTC Staff Costs	\$ 5,000	\$ 0
Consolidated Planning Grant (95%)	\$ 128,250	\$ 0
Local Match (5%)	\$ 6,750	\$ 0

Schedule and Deliverables:

Start: July 2021

End: June, 2022

Duration: One Year

Deliverables: Monthly report, technical memos, final reports, and final survey database

Task 202: Long Range Transportation Planning

The next update of the Regional Transportation Plan will need to address a number of issues in more depth than is supported by current knowledge, data and policies.

This task covers a number of key MPO practices related to the provisions of MAP-21 & the FAST Act and related topics of regional concern that RTC anticipates addressing more extensively in future long-range planning activities, including the next RTP.

Activities include:

- Development and application of visioning techniques as part of efforts to engage the community in RTP development;
- Creation of a framework for performance-based planning in accordance with MAP-21 and the FAST Act;
- On-going coordination of transit with human services;
- Development of policies and proposals related to bicycle and pedestrian planning;
- Development of policies and proposals related to the various aspects of transportation safety planning.

Some of these activities will require professional support from outside consultancies but the greater part of the work will be performed with RTC resources. The Task 202 budget reflects this.

Specific Sub-Tasks are:

202-3325, Performance-Based Planning

202-3710, Bicycle and Pedestrian Planning

202-3715, Transportation Safety Planning

202-9005, Regional Transportation Plan & Visioning

202-9035, On Board Mobility Plan

202-9040, Coordinated Human Service Transportation Plan Implementation

Task 202, 2022-2023 Budget

The following costs are included under Task 202:

Task 202 -	FY 2022	FY 2023
Total Task Group Cost	\$ 240,000	\$ 365,000
Professional Services Contracts	\$ 25,000	\$ 145,000
Professional Services Contracts Carried Over	\$ 0	\$ 0
RTC Staff Costs	\$ 215,000	\$ 220,000
The sources of funds for Task 202 are:		
Consolidated Planning Grant (95%)	\$ 228,000	\$ 346,750
Local Funds (5% match)	\$ 12,000	\$ 18,250

Sub-Task 202-3325-22 - Performance-Based Planning

Purpose:

Advance the current practices in data management, documentation, monitoring and analysis to meet the performance management goals and objectives of FAST Act.

Previous Work:

- Access2050, Regional Transportation Plan for Southern Nevada 2021-2050 (2021)
- Access2040, Regional Transportation Plan for Southern Nevada 2017-2040 (2017)
- Transportation Improvement Impacts (Appendix 4) to the FY 2013-2035 Regional Transportation Plan (RTP);
- Las Vegas Valley Arterial Development Study (2009);
- RTC FAST Dashboard;
- NDOT Crash GIS database

Methodology:

- Research federal statutes, regulations, and guidance related to performance measures.
- Research examples of performance measure objectives and targets implemented by other regional transportation planning agencies.
- Coordinate with NDOT, RTC Transit, and RTC FAST on goals, objectives, and targets to meet required U.S. DOT performance measure regulations.
- Document existing RTC performance measures and objectives by category; such as highway, arterial, transit, multimodal, safety, freight, and sustainability.
- Analyze baseline conditions, trends, and expected system performance.
- Identify and analyze potential alternative transportation scenarios to meet performance measure objectives and targets.
- Analyze performance outcomes based on anticipated funding levels.
- Identify additional data in Southern Nevada that is readily available to support supplementary performance measures and objectives.
- Develop, update, and maintain a database of the selected performance measure objectives and targets as part of an on-going, long-term effort.
- Develop and document best practices for monitoring and evaluation procedures and standards.
- Monitor system performance relative to identified targets.
- Evaluate observed impacts of investments and strategies.
- Develop statistics and graphics using the performance measure objectives and targets.
- Present the selected performance measure objectives to selected RTC committees.
- Develop recommendations regarding linkages between the selected performance measures, the Congestion Management Process (CMP), and project prioritization processes.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency)
- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- Nevada Department of Transportation
- Private sector freight industry partners

Budget:

Sub-Task 202-3325-22	FY 2022	FY 2023
Total Project Cost	\$ 60,000	\$ 60,000
Professional Services Contract	\$ 60,000	\$ 60,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 57,000	\$ 57,000
Local Match (5%)	\$ 3,000	\$ 3,000

Schedule and Deliverables:

- Performance Based Planning is a continual task.
- Analysis of performance-based planning and programming approaches implemented by other regional transportation planning agencies nationwide.
- A report documenting the establishment and integration into the RTC metropolitan planning process of a performance-based approach to transportation decision making in support of national goals.
- Database of the selected performance measure objectives and targets.
- Recommendations for performance measure linkage to the CMP and RTC project prioritization processes.

**Sub-Task 202-3710-22 -
Bicycle & Pedestrian Planning**

Purpose:

This task includes planning activities related to the continued efforts in the development and expansion of an interconnected regional bicycle and pedestrian transportation network, and the evaluation of the key role these networks play in the development and implementation of the Southern Nevada ‘Complete Streets’ strategy. Pedestrian safety has become an increasingly critical concern in the region, and training for improved pedestrian safety and awareness is included in this task item.

Previous Work:

- Complete Streets Design Guidelines for Livable Communities (2012),
- Regional Bicycle Network Gap Analysis (2014),
- Southern Nevada Transportation Safety Plan,
- Southern Nevada Strong Regional Plan (2015),
- Regional Bicycle and Pedestrian Plan (2016),
- RTC Regional Transportation Plan for FY 2013–2035

Methodology:

- Maintain and implement the Regional Bicycle and Pedestrian Plan (2017)
- Develop implementation strategies and work with local partner agencies to advance recommendations from the Regional Bicycle and Pedestrian Plan;
- Update the RTC website to include new bicycle and pedestrian information and coordinate with RTC Communications staff on improving the RTC Regional Bicycle Network web page.
- Continue development of the Southern Nevada ‘Complete Streets’ initiative, which includes:
- Coordination with the jurisdictional planning/community development departments in supporting their Complete Streets planning efforts and incorporation of Complete Streets policies into their plan documents.
- Coordination with multiple stakeholders in development of an RTC Complete Streets Funding Program, which targets set-asides for certain fund sources and determines project eligibility.
- Development of a regional pedestrian safety and awareness training program.

Budget:

Sub-Task 202-3710-22	FY 2022	FY 2023
Total Project Cost	\$ 50,000	\$ 50,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 50,000	\$ 50,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 47,500	\$ 47,500
Local Match (5%)	\$ 2,500	\$ 2,500

Schedule and Deliverables:

- Additional bicycle and pedestrian planning, safety and awareness campaigns, and inter jurisdictional coordination are an on-going task.

**Sub-Task 202-3715-22 -
Transportation Safety Planning**

Purpose:

To participate in the Strategic Highway Safety Plan (SHSP) & the Zero Fatalities Goal

Previous Work:

- RTC Pedestrian Safety Action Plan (2009),
- RTC Regional Transportation Plan for FY 2013–2035 (2012),
- RTC Bicycle and Pedestrian Plan (2008 & 2016 Update),
- Southern Nevada Transportation Safety Plan (2015).

Methodology:

RTC will continue to participate in the implementation of the Nevada State Strategic Highway Safety Plan (SHSP) to attain its Zero fatalities goal and further move towards implementation of the Southern Nevada Transportation Safety Plan. RTC staff participates in the Nevada Executive Committee on Transportation Safety (NECTS) overseeing the SHSP. RTC staff participates in Technical Working Group advising the NECTS on transportation safety in the development, update, and implementation of the SHSP. Other transportation safety committees in which the RTC staff involved are the Traffic Records Coordinating committee (TRCC) and Pedestrian Task Force.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Nevada Department of Transportation, City of Las Vegas, Clark County, City of North Las Vegas, City of Henderson

Budget:

Sub-Task 202-3715-22	FY 2022	FY 2023
Total Project Cost	\$ 20,000	\$ 20,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 20,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 19,000	\$ 19,000
Local Match (5%)	\$ 1,000	\$ 1,000

Schedule and Deliverables:

- Interim report on task elements
- Final Transportation Safety Plan
- Final Bicycle and Pedestrian Safety Action Plan, completion date: June 2023

Sub-Task 202-9005-22 Regional Transportation Plan & Visioning

Purpose:

The RTC implemented an extensive outreach effort to engage the public on development of a transportation vision for Southern Nevada in 2016. The Visioning Process helped gauge public sentiments on the transportation priorities for the region. These results of the Visioning Process influenced development of the Access2050 Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP).

Additionally, the results are anticipated to influence the processes by which the RTC will prioritize projects in the future for funding as well as measure their performance. The results of this public outreach activity will be incorporated into the Regional Transportation Plan. Work with project sponsors will also be required in order for the document to reflect regional priorities. The development of the RTP and TIP will follow the Public Participation Plan to ensure the public is given the opportunity to stay engaged prior to approval.

Previous Work:

- Access2050, Regional Transportation Plan for Southern Nevada 2021-2050 (2021)
- Access2040, Regional Transportation Plan for Southern Nevada 2017-2040 (2017)
- RTC Transportation Improvement Program for FY 2019–2022 (2019) ;
- RTC Transportation Improvement Program for FY 2017–2021 (2017) ;
- RTC Public Participation Plan (amended in 2012) ;
- Southern Nevada Transportation Safety Plan (2015);

Task Elements:

- Develop a revision to the Access2040 RTP that incorporates the following changes and updates:
- New federally-funded projects that fully subscribe new funds available under the FAST Act;
- New regionally-significant local projects that will be funded with fuel revenue indexing passed by voters in November 2016; and
- Other changes and updates as needed to implement best planning practices related to long-range transportation planning.
- Develop a complete set of transportation-related indicators that will show how the Southern Nevada region is implementing the Access2050 RTP;
- Facilitate community outreach meetings, workshops, charrettes, or other public participation opportunities;
- Prepare materials for public outreach in both English and Spanish including text and graphics on the website, online and/or printed surveys, agenda materials, media releases, topic papers, fact sheets, and mailings.
- Refine project prioritization process by synthesizing the results of the visioning process as well as information from key stakeholders to develop a project prioritization process.
- Develop different performance measures and metrics by which to assess the state of affairs as it relates to transportation for the region.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada,
- Nevada Department of Transportation,
- City of Las Vegas,
- Clark County,
- City of North Las Vegas,
- City of Henderson,
- City of Mesquite,
- City of Boulder City

Budget:

Sub-Task 202-9005-22	FY 2022	FY 2023
Total Project Cost	\$ 35,000	\$ 160,000
Professional Services Contract	\$ 0	\$ 120,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 35,000	\$ 40,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 33,250	\$ 152,000
Local Match (5%)	\$ 1,750	\$ 8,000

Sub-Task 202-9035-22 On Board Mobility Plan

Purpose:

With growing regional interest in high-capacity transit (HCT) to serve residents and visitors, the RTC seeks to conduct a study that will provide a coordinated and comprehensive approach for promoting sustainable transportation and transit supportive land use patterns.

HCT is transit service that can improve reliability and carry more people at higher speeds than a standard fixed route bus. Capacity can be expanded through increasing the number of vehicles, vehicle size, frequency, travel speed or a combination of these elements. There is a range of HCT services in use nationally and internationally including bus rapid transit (BRT), light rail transit (LRT), commuter rail, modern streetcar, and heavy rail (subway).

This task will provide RTC staff-level planning support for a larger study effort that will develop a HCT plan for Southern Nevada. Development of the HCT plan will be based on projected economic market analysis, future land use changes, corridor analysis, transportation modeling, stakeholder and public involvement, and an analysis of transit capital and operating costs. It is anticipated that this study will produce a recommended set of corridors, corridor miles, preferred HCT technology, and the optimal number of stations for a potential HCT system. This planned HCT network information will then enable the RTC and local agency partners to proceed with long-range land use planning to develop specific station area typologies and a potential future transit-oriented development incentive program to ensure development patterns and densities can support HCT.

Previous Work:

- Maryland Parkway Environmental Assessment (2016);
- Transportation Investment Business Plan (2016);
- Southern Nevada Strong (SNS) Regional Plan (2015);
- Las Vegas Valley Long Range Transit Survey (2005);
- Las Vegas Valley Transit System Development Plan (2002).

Methodology:

RTC staff will manage the study to identify characteristics of the built environment and transportation corridors in Southern Nevada that may be compatible for HCT. Study findings will enable the RTC and regional partners to understand the scope of potential HCT investments, evaluate tradeoffs, and better conceptualize additional planning needs.

Task 1: Project Management

the RTC Project Manager will communicate regularly with the selected consultant and conduct monthly project management functions to ensure the project progresses according to schedule, within budget, and that deliverables meet the quality standards expected by the RTC and its partners. These functions include coordination with internal consultant staff, RTC and participating agency staff, as well as monthly progress reports, accounting and invoicing.

Task 2: Stakeholder Coordination

Assist in the coordination with other ongoing studies at the RTC, NDOT, and RTC local member agencies. RTC staff will coordinate with local agencies having experience in population and employment projections, redevelopment planning, comprehensive planning, and zoning issues will be important to ensure local factors are represented in the study methodology.

Task 3: Community and Public Involvement

This study necessitates coordinated outreach to the general public. RTC staff and the selected consultant will create and implement a public outreach strategy and assist the RTC in all matters related to public involvement (distributing public information, newsletters, presentation materials, briefings, meeting summaries, and information for posting on the RTC web site).

Task 4: Study Methodology and Data Collection

RTC staff will help document the existing regional transportation policy framework, and conduct research on national and international efforts to implement sustainable transportation strategies. The methodology will cover sustainability indicators and their means of measurement. The evaluation will include methods to forecast the impact of transit projects on these measures.

Task 5: Transit Supportive Land Use in Southern Nevada

By focusing compact development around transit stations, transit-supportive developments capitalize on public infrastructure investments and promote sustainability. Extensive research has been completed that identifies built environment characteristics necessary to support varying levels of HCT investment. The RTC seeks to consolidate this research, and verify (or develop) targets that are specific to the built environment attributes of Southern Nevada. This effort will help inform the stakeholder group and the public about the relationship between transportation and land use, and help establish the rationale for ranking potential HCT corridors.

Task 6: HCT Corridor Screening and Data Collection

One of the first study tasks that RTC staff will assist the consult with will be to identify priority HCT investments for transit corridors identified in the Regional Transportation Plan 2013-2035, Las Vegas Valley Long Range Transit Survey (2005), and by stakeholders.

Task 7: Prepare and Evaluate Land Use Scenarios

Up to two (2) alternative land use scenarios will be prepared. The two scenarios will be compared to each other and to a base case scenario. The overall purpose of this task is twofold: 1) to determine the potential travel demand impacts associated with alternative land use scenarios along specified transit corridors; and 2) to determine the economic viability of each alternative land use scenario.

Task 8: HCT Corridor Modeling

Of the top ranked HCT corridors and those with appropriate land use characteristics from the scenario planning, RTC staff will help identify and describe conceptual HCT mode(s) and their respective project limits from the land use scenario analysis. Conceptual HCT modes identified should have a basis in local knowledge of the corridor, constraints, existing plans, transit supportive land use, HCT corridor screening, and stakeholder and public input.

Task 9: HCT System Plan Scenarios

Using information from the corridor modeling and the land use scenario analysis, RTC staff will assist the consultant in packaging the most promising conceptual HCT corridors together into a complete system of transit investments. Corridors that do not perform relatively well with the HCT corridor modeling will be excluded from further analysis and not included in HCT system plan scenarios.

Task 10: HCT System Plan Scenario Cost Analysis

RTC staff will review the consultant prepared capital and operating cost estimates for each HCT system plan scenario. Costs for each scenario should be presented to additionally understand the approximate cost for each individual HCT component proposed.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Project Manager),
- Nevada Department of Transportation,
- RTC Local Member Agencies,
- UNLV Center for Business and Economic Research (CBER)

Budget:

Sub-Task 202-9035-22	FY 2022	FY 2023
Total Project Cost	\$ 45,000	\$ 45,000
Professional Services Contract	\$ 25,000	\$ 25,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 20,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 42,750	\$ 42,750
Local Match (5%)	\$ 2,250	\$ 2,250

Schedule and Deliverables:

Start Date: July, 2022

End Date: June, 2023

Duration: one year

Deliverables: RTC staff will review an administrative draft of each deliverable prior to distribution for external review.

202-9040-22

Coordinated Human Service Transportation Plan Implementation

Purpose:

Federal transit law requires that projects selected to receive funding under the Enhanced Mobility for Individuals and Individuals with Disabilities (Section 5310) Program are “included in a locally developed, coordinated public transit-human services transportation plan”. The Coordinated Transportation Plan focuses on improving mobility for older adults, persons with disabilities, and low-income populations. Developed through stakeholder engagement, plan goals include: 1) expand mobility options and resources, 2) increase awareness of transportation, 3) leverage technology, 4) improve connections to transit facilities, and 5) expand regional collaboration. Additionally, the plan outlines strategies for achieving these goals and related implementation actions, potential funding sources, and roles.

The RTC Board adopted the Coordinated Transportation Plan update in July 2020. The RTC MPO facilitates plan implementation in collaboration with a Stakeholder Advisory Committee and tracks changes needed for the next plan update that will begin in 2023.

Previous Work:

- RTC Coordinated Public Transit-Human Services Transportation Plan (2015)
- Southern Nevada Coordinated Public Transit-Human Services Transportation Plan (2020)

Methodology:

- Co-facilitate quarterly meetings of a Stakeholder Advisory Committee, completed in collaboration with BlindConnect.
- Build agreement on annual work plans and assist in the formation of subcommittees that implement plan strategies.
- Participate in meetings of subcommittees and project teams.
- Lead and support plan implementation actions as identified in annual work plans.
- Track plan implementation and funding opportunities.
- Continue to update the plan project webpage.
- Identify plan revision needs such as new services, transportation gaps, data, and trends in preparation for the next update.

Participating Agencies and Organizations:

- AARP
- BlindConnect
- Catholic Charities
- Clark County
- Clark County School District
- Economic Opportunity Board of Clark County
- Guinn Center for Policy Priorities
- Helping Hands of Vegas Valley
- Nevada Department of Transportation
- Nevada PEP
- Nevada Senior Services
- Opportunity Village

- Regional Transportation Commission of Southern Nevada
- Rural Regional Behavioral Health Policy Board
- Silver Summit Health Plan
- Southern Nevada Regional Housing Authority
- Southern Nevada Transit Coalition
- State of Nevada
- Three Square

Budget:

Sub-Task 201-9245-22	FY 2022	FY 2023
Total Project Cost	\$ 30,000	\$ 30,000
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 30,000
Consolidated Planning Grant (95%)	\$ 28,500	\$ 28,500
Local Match (5%)	\$ 1,500	\$ 1,500

Schedule and Deliverables: Coordinated Transportation Plan implementation and plan updates are ongoing activities.

Task 301: Multimodal Transportation Studies

While the primary focus of the planning program in the coming year will be on tasks supporting the development of the next Regional Transportation Plan update, RTC maintains a robust program of planning studies to assist RTC and its partner agencies in framing solutions to emerging transportation challenges across the region.

Activities include or have included:

- Studies that support the implementation of “complete street” concepts in various local jurisdictions and circumstances – often these studies also have a significant safety component;
- Working with the Clark County School District to improve the planning of access to schools in the interests of improving the mobility and safety of students;
- Further developing our undertaking of freight traffic and the need for targeted investments to support freight movement;
- Assisting Clark County with a review of the planning process as it relates to parking provision;
- RTC has supported a local initiative to develop a more sustainable regional planning framework using a Grant issued under the Sustainable Communities Program of the US Department of Housing and Urban Development. The UPWP includes a task to study the potential to implement this framework in a corridor where possible transportation capital improvements were studied under the 2014 UPWP;
- Assisting the City of Mesquite in a review and update of the way it reviews the transportation impacts of proposed developments.
- Many of these activities are being undertaken by outside consultancies under professional services contracts with RTC. The costs of these professional services contracts are included under Task 301. This Task also includes the RTC Staff Costs associated with the procurement of professional services contracts and their administrative and financial oversight.

Specific Sub-Tasks are:

- 301-3905, Regional High Speed Rail Connection (RTCSNV)
- 301-3910, Regional Commuter Center Study (City of Henderson)
- 301-3915, Northwest Las Vegas Traffic Study (City of Las Vegas)
- 301-3925, Henderson Sustainable Mobility Plan (City of Henderson)
- 301-3930, Regional Transit Center Study (City of Henderson)
- 301-3935, Traffic Signal Communication System Gap Analysis (City of Las Vegas)
- 301-3940, City of North Las Vegas Comprehensive Master Transportation Study
- 301-3950, Livable Centers Study - Project Three (RTCSNV)
- 301-3960, Maryland Parkway Transit Oriented Development – Las Vegas (RTCSNV)
- 301-3965, Maryland Parkway Transit Oriented Development – Clark County (RTCSNV)
- 301-3980, Regional Bikeway and Sidewalk Inventory (RTCSNV)
- 301-3985, Regional Walkability Plan (RTCSNV)
- 301-3990, Regional Transportation System Health Impact Assessment Standards and Cost Benefit Analysis (RTCSNV)
- 301-9115, Planning and Infrastructure Needs for Emerging Transportation Technologies (RTCSNV)
- 301-9270, Livable Centers Study – Project Two (RTCSNV)
- 301-9275, Stadium District Transportation Plan – (Clark County Comprehensive Planning)
- 301-9285, Transit Oriented Development Implementation Study (RTCSNV)
- 301-9290, Southern Nevada HOPE Grant Study (RTCSNV)

301-9295, Regional Bicycle and Pedestrian Plan Update (RTCSNV)
301-9300, Perfect Storm Special Events Study (Clark County Public Works)

Task 301, FY 2022-2023 Budget

The following costs are included under Task 301:

	FY 2022	FY 2023
Task Costs	\$ 3,355,611	\$ 480,000
Work Carried Over from SFY 2021	\$ 0	\$ 0
Professional Services Contracts	\$ 3,151,111	\$ 430,000
RTC Staff Costs	\$ 204,500	\$ 50,000
The sources of funds for Task 301 are:		
Consolidated Planning Grant (95%)	\$ 3,187,830	\$ 456,000
Local Funds (5% match)	\$ 167,781	\$ 24,000
Grant Funding	\$ 0	\$ 0

Sub-Task 301-3905-22 Regional High Speed Rail Station Connection

Purpose:

In late 2018, Fortress Investment Group filed a prospectus with the Securities and Exchange Commission providing details about building a new 185-mile dual-track high speed rail line (Brightline) between Las Vegas and Victorville, California. The start of the construction of this privately funded project is still pending.

Recently, the company entered into an agreement to acquire roughly 38 acres in the resort corridor area for the Las Vegas high speed train station. The goal of this study would be to investigate transportation routes and alternatives to connect the proposed high speed train **station to other activity centers in the region**. If viable transportation options are not provided to and from this future site, it is expected that traffic and congestion could increase dramatically.

Previous Work:

- City of Las Vegas Mobility Master Plan - May 2016
- Transportation Investment Business Plan - April 2016
- 2014 Southern Nevada Visitor Survey - January 2016
- Community Mobility Study for Central Las Vegas - September 2013
- I-15 Resort Corridor Study - December 2009
- Las Vegas Visitor Mobility Strategy Study - April 2008

Methodology:

- Creation of a study working group with key stakeholders to determine important goals and objectives.
- Collection of data on RTC transit routes, roadway networks, and land-use characteristics in the region.
- Review of existing roadway and transit networks and infrastructure in the Las Vegas Valley.
- Creation of a list of corridors that should be examined to facilitate travel between the high-speed rail station and activity centers.
- Conducting outreach meetings with key stakeholders to receive support on potential corridors for transit, shuttles, taxis, ride share etc.
- Identification of any potential connections within these preferred corridors.
- Recommendations for roadway and transit improvements that would best serve the new rail station.
- Identification of possible funding sources to supplement existing local funds for both the development and maintenance of identified facilities.
- Development of draft and final reports.
- Present the findings to the City Council, County Commission and RTC Boards.

Participating Agencies:

- RTC of Southern Nevada
- City of Las Vegas,
- Clark County
- City of Henderson
- Las Vegas Convention and Visitors Authority

Budget:

Sub-Task 301-3905-22	FY 2022	FY 2023
Total Project Cost	\$ 210,000	\$ 0
Professional Services Contract	\$ 200,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 199,500	\$ 0
Local Match (5%)	\$ 10,500	\$ 0

Expected Products:

Draft and final report;
Presentations to the RTC Board and local jurisdictions.

Schedule:

Start Date: July, 2021

End Date: June, 2022

Expected Duration: 12 months

Sub-Task 301-3910-22
Regional Commuter Center Study

Purpose:

To integrate the proposed high-speed bullet train, providing services between Southern California and Las Vegas Valley, with the local transportation system and provide efficient access to local entertainment business venues.

Identify land uses and infrastructure adjacent to or incorporated into the Commuter Center for the creation of an activity hub and ridership generation. It would identify two to three opportunity sites based on land use plans and/or anticipated development.

Previous Work:

Methodology:

- Stakeholder engagement;
- Research of case studies;
- Community outreach (i.e. surveys, focus groups, etc.);
- Analysis of potential locations;
- Existing land use and infrastructure assessment;
- Analysis of ridership and operation;
- Analysis of multi-modal transportation connectivity;
- Funding.

Participating Agencies:

- City of Henderson,
- City of Las Vegas,
- City of North Las Vegas,
- Clark County,
- Nevada Department of Transportation (NDOT)

Budget:

Sub-Task 301-3910-22	FY 2022	FY 2023
Total Project Cost	\$ 85,000	\$ 0
Professional Services Contract	\$ 75,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 80,750	\$ 0
Local Match (5%)	\$ 4,250	\$ 0

Schedule and Deliverables:

Start Date: July, 2021

End Date: June, 2022

Duration: one year

Deliverables:

1. Research summaries and recommendations;
2. Meeting agendas and summaries;
3. Public engagement marketing materials;
4. Survey and focus groups materials;
5. Meeting presentations;
6. Final study.

Sub-Task 301-3915-22 Northwest Las Vegas Traffic Study

Purpose:

The goal of this project is to develop a time-phased implementation plan for corridor and intersection improvements within the rapidly-growing northwest region of the City of Las Vegas (CLV) to minimize current and avoid future travel delays to motorists.

The traffic signal network and associated arterial roadway system in the northwest region of CLV, bounded by Buffalo Drive to the east and Centennial Parkway to the south, has grown at an astounding rate. Currently, there are 34 existing traffic signal systems, 15 of which were constructed in the last ten years and nine in the last five years. By the end of Fiscal Year 2020, this figure was anticipated to increase again by nearly 40%, as another 13 are in the final stages of design. Due to this rapid and somewhat fragmented growth over a large land area, current and consistent traffic data is not available. As a result, the traffic signal system timings are not coordinated, causing unnecessary delays to motorists.

This study will evaluate the current conditions of the transportation network and model what the network will look like as the planned traffic signal improvements, arterial expansions, and land development projects are completed. Prioritized recommendations will be developed for short-, medium-, and long-term improvements to arterial corridors and intersections, providing a systemic approach for implementation of future improvements in this area.

Previous Work:

- Currently, there are 34 existing traffic signal systems, 15 of which were constructed in the last ten years and nine in the last five years.
- By the end of FY 2019, this figure is anticipated to increase again by nearly 40%, as another 13 are in the final stages of design.

Methodology:

- Perform origin-destination analysis to identify existing traffic patterns entering and exiting the study area at key junctions.
- Identify key corridors within the study area and collect both morning and evening traffic counts at major intersections in those key corridors.
- Analyze performance of key corridors based on data collection using traffic simulation and other appropriate traffic analysis tools including development of a no-build travel demand model scenario to identify current roadway and intersection capacity constraints, bottlenecks and limitations of the system.
- Level of service (LOS) analysis for intersection delay including speed, travel time, delay and queuing at signalized intersections, including validation of left and right turn storage capacity at major intersections.
- Meet with project stakeholders, RTCNV, City of Las Vegas, Clark County and NDOT.

Participating Agencies:

- City of Las Vegas
- RTC of Southern Nevada
- Clark County
- Nevada Department of Transportation

Budget:

Sub-Task 301-3915-22	FY 2022	FY 2023
Total Project Cost	\$ 310,000	\$ 0
Professional Services Contract	\$ 300,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 294,500	\$ 0
Local Match (5%)	\$ 15,500	\$ 0

Expected Products:

The final product would be a report detailing all data collection tasks, traffic projection calculations, and traffic signal system timing analysis. The report would provide:

- Prioritized list of corridors for which to produce coordinated traffic signal timing plans
- Identification of corridor improvements to be added to the five-year CIP

Schedule:

Start Date: July, 2021

End Date: June, 2022

Sub-Task 301-3925-22 Henderson Sustainable Mobility Plan

Purpose:

This project will result in a single integrated, holistic transportation strategy that ensures optimum levels of human health and well-being for all residents of the City of Henderson, together with enhanced mobility performance and value for money. The coordinated, multi-modal transportation plan will comprise bicycle, pedestrian, transit, curb management, freight and new mobility options in addition to considering all user functional abilities.

Previous Work:

- Southern Nevada Strong,
- Henderson Strong,
- Complete Streets Evaluation,
- Regional Bicycle and Pedestrian Plan,
- RTC On Board
- Henderson ADA Study
- Various Freight Plans

Methodology:

- “State of the City Transportation System” data collection effort to establish baseline user data
- Community visioning including long-term mobility targets
- Modal status evaluations and reports
- Draft connected mobility plan considering all modes
- Network approach to Complete Streets to ensure all modes are accommodated at a network level. A network of streets is individually prioritized for automobile travel, bicycle travel, transit, and walking.
- Project development
- Public outreach
- Final report

Task Elements:

- Baseline data
- Visioning results
- Status Report
- Outreach results
- Final report

Participating Agencies:

- City of Henderson
- Regional Transportation Commission of Southern Nevada (RTC),
- Nevada Department of Transportation (NDOT),

Budget:

Sub-Task 301-3925-22	FY 2022	FY 2023
Total Project Cost	\$ 310,000	\$ 0
Professional Services Contract	\$ 300,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 294,500	\$ 0
Local Match (5%)	\$ 15,500	\$ 0

Expected Products:

- Summary of baseline mobility status
- Mobility targets and measures of effectiveness
- Reports
- Maps

Schedule and Deliverables:

Start Date: July, 2021

End Date: December, 2022

(Estimated time 18 months)

Sub-Task 301-3930-22
Regional Transit Center Study

Purpose:

This study will help identify new transit centers in areas that are not yet served, particularly the northeast, east, and central portions of Southern Nevada, due to anticipated growth and higher demand for transit service. The study will examine how to facilitate access where significant population densities reside and work which are not currently served with a transit center and to capture increased ridership with strategically located transit centers throughout the region. The study will also identify the need for connectivity of various existing and future transit options.

Previous Work:

- On Board High-Capacity Transit Study

Methodology:

- Conduct public workshops with stakeholders and steering committee members.
- Prepare a technical memorandum summarizing the selection of suitable Transit Center locations.
- Perform market study assessments including land use, infrastructure and supportive transit ridership analysis.
- Develop an evaluation criteria matrix.
- Identify potential funding resources.

Participating Agencies:

- City of Henderson
- Regional Transportation Commission of Southern Nevada (RTC),
- Nevada Department of Transportation (NDOT),

Budget:

Sub-Task 301-3930-22	FY 2022	FY 2023
Total Project Cost	\$ 160,000	\$ 0
Professional Services Contract	\$ 150,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 152,000	\$ 0
Local Match (5%)	\$ 8,000	\$ 0

Expected Products:

- A public outreach plan will be developed to engage stakeholders and members of the public.
- Public participation tools will be used to capture the community’s input and feedback.
- First and last mile connections will be studied.
- Primary and secondary suitable transit center site locations will be identified.
- A transit center market study assessment will be conducted.
- Zoning analysis will be conducted.
- Projections of population, employment, ridership and market demand will be made.
- An evaluation criteria matrix for the transit center will be created.

- Project will follow a study timeline.

Schedule and Deliverables:

Start Date: August, 2022

End Date: June, 2023

Project Timeline: one year

Sub-Task 301-3935-22

Traffic Signal Communication System Gap Analysis

Purpose:

The City of Las Vegas has nearly 600 signalized intersections within its jurisdictional boundaries, of which approximately 40% are not connected with reliable high-speed communications to monitor and maintain the traffic signal. The objective of this project is to study the existing traffic signal communications network and perform a gap analysis of the coverage network for the City of Las Vegas. The work would benefit both the City and RTC FAST teams to continue to provide a high-level traffic signal system for the traveling public.

Previous Work:

Currently the City and RTC FAST have some of this information already available in maps and other documentation that would provide a starting point for the analysis and development of a project list.

Project Scope:

In order to achieve the objectives, this study proposes to:

- Collect existing infrastructure connectivity and type of communication media (mostly complete but some gaps exist)
- Identify corridors with existing connectivity pathways (empty conduit)
- Develop a map indicating gaps in connectivity coverage
- Develop priority lists of projects to fill-in gaps in coverage
- Develop estimated cost estimates for future projects

Consultant responsibility would be to compile this information, analyze, and provide prioritized alternatives for future project development.

Methodology:

This study would consist of the following:

- Analyze existing documentation
- Develop maps and documentation of existing infrastructure
- Analyze construction costs for future communication project to fill the gaps in infrastructure
- Prioritize corridor improvements and provide estimated construction costs

Participating Agencies:

- City of Las Vegas
- RTC FAST

Budget:

Sub-Task 301-3935-22	FY 2022	FY 2023
Total Project Cost	\$ 210,000	\$ 0
Professional Services Contract	\$ 200,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 199,500	\$ 0
Local Match (5%)	\$ 10,500	\$ 0

Schedule and Deliverables:

Start Date: December, 2020

End Date: December, 2021

Duration: one year

Deliverables: The final product would be a report detailing the initial assessment report, identification of locations without communication network connectivity, identification of areas/roadways with less-than-optimal communications network reliability, and a project priority list to fill in the communication gap with cost estimates of each project.

Sub-Task 301-3940-22

City of North Las Vegas Comprehensive Master Transportation Study (CMTS)

Purpose:

The primary purpose of this study is to develop a cohesive, long-range transportation plan that will serve as a guide for the City of North Las Vegas when making future land use and multimodal transportation improvement project decisions. The City's need for this study is to determine the existing system performance, increase economic vitality, improve community livability, and enhance transportation conditions along regional transportation routes.

The roadway network needs to be evaluated to identify solutions to improve safety, mobility, and to optimize traffic operations. This will allow for an efficient transportation system that links communities within the City by all modes of transportation. With the ultimate goal of developing a regionally cohesive framework of multimodal transportation improvements, the City of North Las Vegas aims to update the current Master Plan of Streets and Highways in order to provide a guiding document that provides realistic and feasible solutions to the current and future transportation needs of the area. The context sensitive solutions provided by this study will allow the City to more efficiently improve its infrastructure while connecting to and promoting regionally significant network improvements.

The goal is to achieve a transportation system that will address demand and capacity, employ appropriate technologies and join transit, roadway and pedestrian/bicycle facilities into a safe, efficient and environmentally sensitive network. This study will also help determine future multi-modal transportation needs; the most practical way to achieve them; and update the Master Plan of Streets and Highways to incorporate the study's recommendations.

Previous Work:

- CNLV – Citywide Pedestrian and Bicycle Master Plan (2019)
- CNLV – Complete Streets Policy
- CNLV – Complete Streets Corridor Ranking Study (UPWP)
- CNLV – Master Plan of Streets and Highways
- CNLV – Major Downtown Corridor Study (UPWP)
- CNLV – North 5th Street Transit Supportive Concept Plan
- SNRPC – Southern Nevada Strong Regional Policy Plan
- CCSD – Safe Routes to School Walk Audits
- RTC – Northeast Valley Transportation Network Study
- RTC – Truck Arterial Route Study
- RTC – Southern Nevada Regional Goods Movement Master Plan
- RTC – Regional Schools Multimodal Transportation Access Study
- RTC – Decatur Boulevard Transit Study
- RTC – Regional Bicycle Gap Analysis
- RTC – Regional Bicycle and Pedestrian Plan for Southern Nevada

Methodology:

- Collect and review existing information, planned projects, maps, and relevant studies.
- Research best practices for developing a Master Plan of Streets and Highways using Complete Streets methodology.
- Use RTC regional model to assist with determining anticipated traffic volumes.
- Identify locations where pavement widths may be reduced to provide improved/enhanced pedestrian and/or bicycle facilities.
- Evaluate existing street sections to determine if changes are required to better serve all users.
- Develop typical street sections using Complete Streets methodology for a complete and efficient roadway network throughout the City (including the Apex industrial area).
- Develop a City master plan for current and future multi-use paths and bike-ways.
- Identify corridors for transit-oriented development.
- Identify right-of-way needs and cost.
- Final report and presentations

Participating Agencies:

- City of North Las Vegas,
- Regional Transportation Commission of Southern Nevada (RTC),
- Nevada Department of Transportation (NDOT),
- City of Las Vegas,
- Clark County School District

Budget:

Sub-Task 301-3940-22	FY 2022	FY 2023
Total Project Cost	\$ 260,000	\$ 0
Professional Services Contract	\$ 250,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 247,000	\$ 0
Local Match (5%)	\$ 13,000	\$ 0

Expected Products:

Development of a Master Transportation Study for the City of North Las Vegas that includes an updated Master Plan of Streets and Highways.

Schedule:

Start Date: August, 2021

End Date: June, 2023

Duration: 22 months

Sub-Task 301-3950-22 Livable Centers Study - Project Three -

Purpose:

The Livable Centers Program is annual program that is led by the Regional Transportation Commission of Southern Nevada (RTC) in partnership with a selected local jurisdiction. The program aims to develop quality, walkable, mixed-use places, increase multi-modal travel choices, improve environmental quality, and promote economic development, housing choices, and better health outcomes. Livable Centers are connected and accessible to multiple modes of travel. Livable centers often times have a catalytic project that has the strength to encourage additional improvements in the area.

Previous Work:

The RTC of Southern Nevada managed and/or assisted jurisdictions on previous and ongoing initiatives that support this planning work. The plans, studies and initiatives are listed below:

- Access 2040 (MPO Regional Transportation Plan, 2017) – Strengthen Regional Economic Competitiveness; Maintain and Enhance Quality of Life for Southern Nevadans; Ensure Sustainable Use of Infrastructure and Resources.
- Southern Nevada Strong (Regional Plan, 2015) – The Livable Centers program aligns with the four themes of the Southern Nevada Strong Regional Plan:
 - Improve Economic Competitiveness and Education;
 - Invest in Complete Communities;
 - Increase Transportation Choice; and
 - Building Capacity for Implementation
- RTC’s On Board Regional Transit Plan-Developed a TOD Briefing Book (April, 2018) – Creating a regional TOD Typology that establishes a region vision
- Livable Centers Study Pilot Program Phase I and Phase II (FY 18 and FY 19)

Methodology:

- Task 1: Community / Stakeholder Engagement:
- Task 2: Existing Conditions & Needs Assessment:
- Task 3: Develop a vision, objectives and strategies of study area
- Task 4: Design guidelines
- Task 5 Draft Study
- Task 6: Implementation of Study outcomes
- Task 7: Performance Measures and tracking outcomes
- Task 8: Final Plan

Participating Agencies:

- A selected local jurisdiction within Clark County and the RTC of Southern Nevada

Budget:

Sub Task 301-3950-22	FY 2022	FY 2023
Total Project Cost	\$ 260,000	\$ 0
Professional Services Contract	\$ 250,000	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 247,000	\$ 0
Local Match (5%)	\$ 13,000	\$ 0

Schedule and Deliverables:

Start Date: July, 2021

End Date: June, 2022

Duration: one year

Deliverables: Community and Stakeholder Engagement Plan, Design Guidelines, Final Study

Sub-Task 301-3960-22

Maryland Parkway Corridor Transit Oriented Development Plan – City of Las Vegas

Purpose:

The Maryland Parkway Corridor Transit Oriented Development (TOD) Plan is to provide a framework to identify and plan fixed-guideway transit station areas with the greatest potential. Maryland Parkway is a vital corridor for the Las Vegas Valley, extending from McCarran International Airport to Downtown Las Vegas, and connecting many high-activity centers, such as the University of Nevada, Las Vegas (UNLV) and many commercial and residential areas.

Investments in multimodal transportation infrastructure could improve mobility along the corridor for motorists, transit riders, bicyclists and pedestrians enhance that will access to the surrounding areas.

Previous Work:

- Access 2040 – Regional Transportation Plan (2017)
- Southern Nevada Strong – Regional Plan (2015)
- Vision 2045 Downtown Las Vegas Master Plan (2016)
- RTC On Board Regional Transit Plan (2018)
- RTC/EPA Infill Development Strategies (2016)
- RTC Maryland Parkway Environmental Assessment (2018)
- Las Vegas Municipal Code – Title 19.09 – “Form Based Code”
- Vision 2045 Downtown Las Vegas Master Plan (2016)

Methodology:

- 1. Community Stakeholder Engagement: Create a community engagement plan and implement a community engagement process that fosters meaningful participation of stakeholders and the community at large.
- 2. Existing Conditions and Needs Assessment: Collect any data necessary to evaluate existing transportation and land use conditions and recommend improvements within the project study area.
- 3. Workforce Housing Plan: Create a plan for preserving affordable housing and creating housing options for all incomes. Part of this task will focus on enhancing mixed use development within a form-based code (currently under consideration for adoption by the City of Las Vegas for Downtown districts) so residents of any income level have other transportation options to commute and take care of daily needs.
- 4. Market Analysis of Districts and Transit Stops with greatest TOD: The analysis will identify market readiness, regulatory opportunities and form-based zoning needs within the corridor. An analysis will also provide a foundation to guide public and private investment within station areas.
- 5. Station Area TOD Plans: Draft a TOD plan that will create strategies and policies that help create a vision to increase housing and employment options for all income levels and support economic development that encourages private investment within station area locations along the corridor.
- 6. Value Capture Toolkit: Identify and quantify opportunities for value capture.
- 7. Performance measures template.

- 8. Final plan approval with value capture performance measures tracking templates: Develop a final plan report summarizing existing conditions, market analysis, recommended development and infrastructure projects, implementation strategy and all other specific elements.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (RTC),
- City of Las Vegas

Budget:

Sub-Task 301-3960-22	FY 2022	FY 2023
Total Project Cost	\$ 22,000	\$ 0
Professional Services Contract	\$ 20,000	\$ 0
RTC Staff Time	\$ 2,000	\$ 0
Funding Sources		
Consolidate Planning Grant (0%)	\$ 20,900	\$ 0
FTA Planning Grant	\$ 1,100	\$ 0
Local Match	\$ 22,000	\$ 0
Total Local Match for entire project (\$100,000) will be paid for by RTC for \$50,000 and City of Las Vegas for \$50,000.		

Expected Products:

- Existing conditions and needs assessment for the Maryland Parkway corridor (02/2020)
- Market Analysis of Transit Stops with greatest TOD (09/2020)
- Workforce Housing Plan (01/2021)
- Station Area TOD Plan (01/2021)
- Value Capture Toolbox (03/2021)
- Performance Measures (05/2021)
- The Maryland Parkway Corridor TOD Plan is expected to be completed by 06/2022

Schedule:

Start Date: July, 2021

End Date: June, 2022

Expected Duration: one year

Sub-Task 301-3965-22

Maryland Parkway Corridor Transit Oriented Development Plan – Clark County

Purpose:

The Maryland Parkway Corridor Transit Oriented Development (TOD) Plan is to provide a framework to identify and plan fixed-guideway transit station areas with the greatest potential. Maryland Parkway is a vital corridor for the Las Vegas Valley, extending from McCarran International Airport to Downtown Las Vegas, and connecting many high-activity centers, such as the University of Nevada, Las Vegas (UNLV) and many commercial and residential areas.

Investments in multimodal transportation infrastructure could improve mobility along the corridor for motorists, transit riders, bicyclists and pedestrians enhance that will access to the surrounding areas.

Previous Work:

- List Prior Studies Here
- Access 2040 – Regional Transportation Plan (2017)
- Southern Nevada Strong – Regional Plan (2015)
- Vision 2045 Downtown Las Vegas Master Plan (2016)
- RTC On Board Regional Transit Plan (2018)
- RTC/EPA Infill Development Strategies (2016)
- RTC Maryland Parkway Environmental Assessment (2018)
- Las Vegas Municipal Code – Title 19.09 – “Form Based Code”
- Vision 2045 Downtown Las Vegas Master Plan (2016)

Methodology:

- 1. Community Stakeholder Engagement: Create a community engagement plan and implement a community engagement process that fosters meaningful participation of stakeholders and the community at large.
- 2. Existing Conditions and Needs Assessment: Collect any data necessary to evaluate existing transportation and land use conditions and recommend improvements within the project study area.
- 3. Workforce Housing Plan: Create a plan for preserving affordable housing and creating housing options for all incomes. Part of this task will focus on enhancing mixed use development within a form-based code (currently under consideration for adoption by the City of Las Vegas for Downtown districts) so residents of any income level have other transportation options to commute and take care of daily needs.
- 4. Market Analysis of Districts and Transit Stops with greatest TOD: The analysis will identify market readiness, regulatory opportunities and form-based zoning needs within the corridor. An analysis will also provide a foundation to guide public and private investment within station areas.
- 5. Station Area TOD Plans: Draft a TOD plan that will create strategies and policies that help create a vision to increase housing and employment options for all income levels and support economic development that encourages private investment within station area locations along the corridor.
- 6. Value Capture Toolkit: Identify and quantify opportunities for value capture.
- 7. Performance measures template.

- 8. Final plan approval with value capture performance measures tracking templates: Develop a final plan report summarizing existing conditions, market analysis, recommended development and infrastructure projects, implementation strategy and all other specific elements.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (RTC),
- Clark County

Budget:

Sub-Task 301-3965-22	FY 2022	FY 2023
Total Project Cost	\$ 22,000	\$ 0
Professional Services Contract	\$ 20,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 2,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 20,900	\$ 0
Local Match (5%)	\$ 1,100	\$ 0

Expected Products:

- Existing conditions and needs assessment for the Maryland Parkway corridor (02/2020)
- Market Analysis of Transit Stops with greatest TOD (09/2020)
- Workforce Housing Plan (01/2021)
- Station Area TOD Plan (01/2021)
- Value Capture Toolbox (03/2021)
- Performance Measures (05/2021)
- The Maryland Parkway Corridor TOD Plan is expected to be completed by 06/2021

Schedule:

Start Date: July, 2021

End Date: June, 2023

Expected Duration: 2 years

Sub-Task 301-3980-22 Regional Bicycle and Sidewalk Inventory

Purpose:

The Regional Bikeway and Sidewalk Inventory will determine the presence of bike facilities and sidewalks along existing major roadways and establish a consistent GIS database for active transportation facilities. The inventory will also provide a resource for:

- Tracking and facilitating implementation of the Regional Bicycle and Pedestrian Plan;
- Identifying locations of existing bicycle and pedestrian facilities and gaps;
- Identifying sidewalk accessibility deficiencies and maintenance needs;
- Integrating active transportation facilities into regional transportation modeling;
- Establishing baselines for regional transportation performance measures related to biking, walkability, and equity; and
- Developing and updating future regional scale biking, trail, sidewalk, and accessible path of travel maps for public education and navigation.

Previous Work:

- RTC Regional Bicycle and Pedestrian Plan (2017)
- RTC Policies and Procedures, Policy for Reimbursement of Maintenance Costs for Off-Street Shared Use Paths (2019)
- RTC Bicycle and Pedestrian Plan (2008)
- Neon to Nature app and mobile app
- Sidewalk, bikeway, and trail data maintained by the various jurisdictions in Southern Nevada
- Data provided from open sources (e.g. OpenStreetMap)
- RTC MPO Transportation Model

Methodology:

- Identify and obtain existing bikeway and sidewalk GIS data;
- Obtain input and reach agreement on the bikeway and sidewalk GIS schema/classifications;
- Determine needs, methods, and roles for long-term GIS data maintenance; and obtain input on interim and final milestone products including the GIS inventory data, user guide, and maps.
- Identify key stakeholders, which may include transportation infrastructure GIS data managers, map and mobile app creators, planners, and engineers, such as those from federal, state and local agencies. The range of responsibilities represented will include personnel responsible for maintaining roadway data sets, implementing ADA transition plans and accessible path of travel maps, safety management plans, roadway design or engineering and maintenance.
- Facilitate initial dialogue among stakeholders to identify existing methods of capturing and maintaining data for roads, bikeways, and sidewalks (e.g. following new roadway projects). Identify potential long-term maintenance approaches for the Regional Bikeway and Sidewalk Inventory GIS data based on existing resources and capacity, which may inform the complexity and attributes included in the geodatabase schema.
- Collect data for bikeways and sidewalks along approximately 1750 linear miles of roadways when measured at the centerline (3500 miles total when measured in both directions) using Mobile LIDAR.
- The consultant will use GIS tools and methods that may be replicated by RTC and/or agency staff for ongoing database management. Collect the data contiguously, and prioritize areas with low car ownership or high densities of pedestrian injuries and fatalities. Strive for high geospatial accuracy

(e.g. features follow sidewalk centerlines) using the most appropriate state plane projected coordinate system.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (lead)
- Southern Nevada Health District
- Nevada Department of Transportation
- UNLV
- Clark County
- City of Las Vegas
- City of North Las Vegas
- Boulder City
- Get Outdoors Nevada

Budget:

Subtask 301-3980-22	FY 2022	FY 2023
Total Project Cost	\$ 225,000	\$ 0
Professional Service Contract	\$ 200,000	\$ 0
RTC Staff Costs	\$ 25,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 213,750	\$ 0
Local Match (5%)	\$ 11,250	\$ 0

Schedule:

Start Date: July, 2021

End Date: June, 2022

Expected Duration: 12 months

Sub-Task 301-3985-22 Regional Walkability Plan

Purpose:

As described in Southern Nevada Strong, the region has “poor (pedestrian) connectivity, high pedestrian fatalities, and a lower Walk Score than other Intermountain West metro areas”. Single-use development patterns, wide roadways with high-speed traffic, and modest pedestrian facilities have contributed to challenging conditions for people walking or using wheelchairs. The Regional Walkability Plan will identify the infrastructure, land use and urban form, programs, and policies needed to encourage walking in Southern Nevada.

Previous Work:

- Las Vegas Downtown Pedestrian Circulation Study (2008)
- Las Vegas Boulevard North Land Use, Transit & Pedestrian Study (2009)
- Pedestrian Safety Action Plan Final Report and Implementation Plan (2009)
- Henderson Downtown Pedestrian Circulation Study (2013)
- Regional Pedestrian Infrastructure Inventory and Analysis (2014)
- Regional Bicycle and Pedestrian Counts Study (2015)
- Regional Bicycle and Pedestrian Counts, Phase 2 (2017)
- RTC Transportation Investment Business Plan – Pedestrian Improvements (2017)
- RTC Regional Bicycle and Pedestrian Plan (2017)
- School Walk Audits (2017)
- Safe Routes to School Strategy (2017)
- RTC/NDOT Pedestrian Crash Data (ongoing)
- RTC Pedestrian Comfort Study (in progress)
- North Las Vegas Citywide Pedestrian & Bicycle Plan (in progress)
- Transit Mobility Study (in progress)

Methodology:

Work Plan Development

- Determine the plan scope and geographic area; identify pedestrian corridors and high need areas/zones that will be focus of the study.
 - Develop the planning and community engagement process, including creative branding that may be used to promote walking following the study.
- #### Existing Conditions
- Review and evaluate existing plans, studies, crash data, demographics data, policies, and programs. Prepare base maps related to existing conditions, which may include pedestrian crashes, walk mode share, pedestrian activity nodes, and demographics/equity.
 - Based on existing studies and stakeholder input, summarize opportunities and challenges related to infrastructure, land use and urban design, comfort and interest.
 - Evaluate existing GIS and/or LIDAR data for existing sidewalks, trails, sidewalk and trail gaps, amenities, obstacles (i.e. utility poles, safety hazards) and crossings. Where critical data gaps exist, complete an inventory or field work as needed.

- Compare existing conditions with planned pedestrian facilities identified in local and regional plans (i.e. Regional Bicycle and Pedestrian Plan). Confirm status in collaboration with local agencies.
- Assess pedestrian needs surrounding existing and future transit lines for improved “first and last-mile” connections.
- Prepare a preliminary existing facilities and gap analysis map, which includes existing infrastructure, key destinations and pedestrian activity centers, and pedestrian network gaps.
- Vision, Goals & Strategies
- Build agreement on a regional walkability vision and goals.
- Evaluate the existing pedestrian infrastructure, urban design, and level of comfort in relationship to the region’s walkability vision; identify infrastructure, urban design, program, and policy gaps.
- Develop recommended strategies related to potential projects, policies and programs, and priority focus areas.
- Identify opportunities to apply techniques identified in the RTC Pedestrian Comfort Toolbox. Develop any additional proposed streetscape concepts.
- Identify and map the new vision, which may include a high-comfort, primary pedestrian network and activity nodes.
- Implementation & Demonstration Project
- Prepare an implementation plan that documents specific projects/actions, roles, timelines, planning level cost estimates, and potential funding sources.
- Address roles, budgets, and funding sources related to operations and maintenance as needed.
- Identify key performance indicators and roles for tracking progress.
- Complete a pilot installation or demonstration project to kick-start implementation and celebrate plan completion.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (lead),
- Southern Nevada Health District,
- UNLV,
- Clark County,
- City of Las Vegas,
- City of North Las Vegas,
- Boulder City

Budget:

Subtask 301-3985-22	FY 2022	FY 2023
Total Project Cost	\$ 190,000	\$ 0
Professional Service Contract	\$ 180,000	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 180,500	\$ 0
Local Match (5%)	\$ 9,500	\$ 0

Schedule and Deliverables:

Start Date: December, 2019

End Date: June, 2022

Duration: 3 years

Deliverable: Final Report

Sub-Task 301-3990-22

Regional Transportation System – Health Impact Assessment Standards and Cost Benefit Analysis

Purpose:

With chronic disease and obesity on the rise across the United States, national attention is being focused on how the built environment affects community health. The link between health and land use policies, transportation plans and systems, and general planning policies is well documented. Yet, the majority of planning organizations, transportation authorities, and elected bodies across the United States do not currently consider the community health impacts of planning decisions and policies within their respective regions.

As public health organizations express a growing concern over the health impacts of the built environment, it has become necessary to understand how the economic costs and benefits of health are important to the overall economic costs and benefits of transportation projects and planning policies. This is typically understood through the use of Health Impact Assessments (HIAs) at either the regional or project-specific level. The purpose of the Regional RTC HIA Standards & Cost-Benefit Analysis is to develop a broad standard for conducting HIAs on RTC planning activities and transportation projects, and to conduct a regional HIA on the existing costs and benefits of the Regional Transportation Plan (RTP).

Previous Work:

- Southern Nevada Health District Community Obesity Survey (2010)
- Southern Nevada Community Health Assessment and Improvement Plan (2016)
- Southern Nevada Strong, Regional Plan (2015)
- Access 2040, Regional Transportation Plan (RTC Regional Transportation Plan (2017)

Methodology:

- Identify key stakeholders, convene planning team, and determine planning and community engagement process.
- Complete a literature review, evaluate previous local health-related research and studies, and conduct stakeholder interviews and focus groups.
- Develop health impact assessment research questions, health determinants, and scope for conducting HIAs.
- Prepare regional transportation health impact assessment standard methodology and interactive tool.
- Evaluate health costs related to existing transportation infrastructure and develop a cost-benefit analysis tool for use in future transportation project and plan decision-making.

Participating Agencies:

Regional Transportation Commission of Southern Nevada (lead), Southern Nevada Health District, UNLV

Budget:

Subtask 301-3990-22	FY 2022	FY 2023
Total Project Cost	\$ 150,000	\$ 0
Professional Service Contract	\$ 140,000	\$ 0
Professional Services Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 142,500	\$ 0
Local Match (5%)	\$ 7,500	\$ 0

Schedule:

Start Date: October, 2020

End Date: June, 2022

Duration: 20 months

Sub-Task 301-9115-23

Planning and Infrastructure Needs for Emerging Transportation Technologies

Purpose:

Substantial and rapid technology advances are happening in the transportation field, including autonomous vehicles, connected vehicle technologies, commercial drones (unmanned aerial vehicles), transportation network companies, and increasing market adoption of electric vehicles. These developments have the potential to trigger significant changes in transportation safety, costs, resource consumption, mobility, and other important areas. But any benefits can only be achieved if the transportation system can effectively accommodate and leverage these emerging technologies. This study will examine current, anticipated, and potential trends relating to various new and developing transportation technologies to identify challenges and opportunities related to the RTC's transportation infrastructure planning over near-, mid-, and long-term horizons.

Previous Work:

- Traffic Signal Timing Strategies in Las Vegas;
- Regional Transportation Plan

Methodology:

Review current and recent research and literature on development and projections for adoption of relevant emerging transportation technologies, including autonomous vehicles, drones, connected vehicles, shared vehicle ownership models, and transportation network companies.

- Identify and summarize recent examples of MPO or city planning activities that have addressed emerging transportation technologies. Identify policies adopted by other agencies related to emerging transportation technologies.
- Summarize current state of knowledge or practice related to transportation infrastructure needs or characteristics necessary to accommodate emerging transportation technologies.
- Develop potential timelines showing likely or potential levels of adoption of different emerging vehicle technologies and potential impacts on relevant planning-related outcomes and measures of transportation system performance.
- Develop policy and planning alternatives appropriate for current and future levels of adoption of different emerging vehicle technologies.
- Identify any relevant fiscal impacts from emerging vehicle technologies and different levels of policy and planning-related responses at the regional or local level.
- Convene a stakeholder advisory committee comprised of representatives from local jurisdictions and other stakeholders. Solicit feedback from the stakeholder committee at key milestones.
- Present to RTC and local jurisdictions at key milestones, as needed.
- Prepare a draft final report and present to the stakeholder committee for feedback and direction. Revise report as needed.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Henderson, City of Las Vegas, City of North Las Vegas, City of Boulder City, City of Mesquite, Nevada Department of Transportation, University of Nevada Las Vegas

Budget:

Sub-Task 301-9115-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 205,000
Professional Services Contract	\$ 0	\$ 180,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 25,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 194,750
Local Match (5%)	\$ 0	\$ 10,250

Schedule and Deliverables:

Start Date: July, 2022

End Date: June, 2023

Duration: one year

Deliverables: The final deliverable will be a report analyzing trends in emerging transportation technologies and challenges and opportunities related to the RTC's transportation infrastructure planning over the near-, mid-, and long-term horizons.

Sub-Task 301-9270-22 Livable Centers Study - Project Two

Purpose:

The overall goal of the Livable Centers Study is to foster multimodal access and connectivity, a mix of uses, a diversity of housing options, and a sense of place. The study's conceptual framework and resulting catalyst projects should encourage walkability, connections within and between the nodes of community activity, and built environment strategies that support a strong and diverse economy.

The Livable Centers Study should create a plan for the area that analyzes the safety and quality of the public realm, identifies existing as well as potential future pedestrian generators, and provides design solutions for an enhanced, attractive, connected and safe pedestrian environment.

All recommendations should be based on strengthening the area's existing best characteristics while providing real strategies and a road map for implementing improvements over time. Recommendations should include actions for the local jurisdiction to take, including potential changes to zoning and/or city codes and ordinances. Recommended projects and/or strategies should include potential funding mechanisms such as public-private partnerships and investment opportunities. An implementation plan should consider the benefits and consequences of each recommendation, and identify proposed implementation timing and funding opportunities.

Previous Work:

- Southern Nevada Strong, Regional Transportation Plan - Access 2040
- Regional Bicycle and Pedestrian Plan,
- RTC Complete Streets Study,
- RTC Complete Streets Design Guidelines for Livable Communities.

Methodology:

- Issue a call for projects to local jurisdictions,
- Select FY19 Livable Centers Study Phase II partner,
- Develop scope and issue RFP for consultant team,
- Select consultant team,
- Anticipated project tasks:
 - Task 1-- project management
 - Task 2 – needs assessment
 - Task 3 – develop conceptual plan
 - Task 4 – designs for proposed recommendations
 - Task 5 – implementation plan for proposed recommendations
 - Task 6 – stakeholder engagement
 - Task 7 – final report

Participating Agencies:

- Regional Transportation Commission of Southern Nevada,
- Local stakeholders to be determined

Budget:

Sub-Task 301-9270-22	FY 2022	FY 2023
Total Project Cost	\$ 260,000	\$ 0
Professional Services Contract	\$ 15,000	\$ 0
Professional Services Contract Carryover	\$ 235,000	\$ 0
SFY 2020 RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 247,000	\$ 0
Local Match (5%)	\$ 13,000	\$ 0

Schedule and Deliverables:

Start Date: July, 2019

End Date: June, 2022

Duration: 3 years

Deliverables: The final deliverable is a Livable Centers Study plan document with proposed infrastructure improvements and redevelopment opportunities, as well as documented public support developed through outreach during the planning process.

Sub-Task 301-9275-22

Stadium District Transportation Plan

Purpose:

The goal of this project is to create a transportation plan for an area of approximately 2.5 square miles around an approved 65,000 seat NFL Stadium being constructed in Clark County. The area is bounded by Harmon Avenue on the north, the Union Pacific Railroad on the west, Clark County 215 freeway on the south, and Las Vegas Boulevard South on the east, the area consists of warehouse and industrial development, a regional shopping center (Town Square), and a golf course (Bali Hai Golf Club).

This study will coincide with the Clark County Stadium District Land Use Plan that is being developed to craft a vision and land use recommendations for the area. This study will seek to:

- a) Create multimodal travel choices;
- b) Enhance the quality of life;
- c) Improve environmental quality;
- d) Promote a strong vibrant economy; and
- e) Improve public health.

Previous Work:

- Regional Bicycle and Pedestrian Plan for Southern Nevada
- Southern Nevada Strong – Regional Plan
- Modeling and Analysis of Walkability in Suburban Neighborhoods in Las Vegas
- Regional Transportation Plan – 2017 to 2040
- Regional Schools Multimodal Transportation Access Study
- Regional Bicycle Network Gap Analysis
- Transportation Investment Business Plan
- Las Vegas NFL Stadium Sites – Traffic Assessment
- Southern Nevada High Occupancy Vehicle Plan

Methodology:

- Development of public survey on transportation in area.
- Conduct stakeholder advisory meetings and public open houses.
- Conduct key stakeholder interviews.
- Review of existing studies.
- Field investigation tour of existing conditions.
- Base mapping and gap analysis.
- Existing network analysis.
- Draft plan development and final report presentation.

Participating Agencies:

- Clark County Department of Comprehensive Planning;
- Clark County Department of Public Works;
- Clark County Department of Aviation;
- Regional Transportation Commission of Southern Nevada (RTC);
- Nevada Department of Transportation (NDOT);
- Union Pacific Railroad (UPRR)
- Las Vegas Raiders organization

Budget:

Sub-Task 301-9275-22	FY 2022	FY 2023
Total Project Cost	\$ 85,000	\$ 0
Professional Services Contract	\$ 75,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 80,750	\$ 0
Local Match (5%)	\$ 4,250	\$ 0

Schedule and Deliverables:

Start: February, 2019

End: June, 2022

Duration: 30 months

Deliverables: The project consultant will summarize the major findings defining the condition of existing bicycle, pedestrian and transit facilities within the study area. They will also produce a listing of proposed improvements to the existing transportation network to improve transit, pedestrian, and bicycle mobility in the stadium district. These should reference the design guidelines for bicycle and pedestrian facilities as listed in the 2017 RTC Regional and Bicycle Pedestrian Plan.

Sub-Task 301-9285-22
Transit Oriented Development Implementation Study

Purpose:

The Southern Nevada Transit Oriented Development Implementation Study will be a component of implementing the On-Board Transit Plan. The objective is to create financing, design and housing, employment standards for up to four Transit Oriented Development (TOD) priority site locations along the approved high-capacity transit (HCT) corridors. The RTC will work with each jurisdiction in planning and designing one of their priority transit-oriented developments on an identified/approved HCT corridor.

Previous Work:

- Southern Nevada Strong (SNS) Regional Plan,
- On Board Transit Plan,
- RTC Regional Transit Plan,
- RTC-Boulder Highway Multimodal Transportation Investment Study,
- LVGEA - CEDS, Henderson Strong, City of Las Vegas Mobility Master Plan,
- Maryland Parkway Environmental Assessment

Methodology:

- Establish and manage a TOD Stakeholder group, composed of jurisdiction staff from RTC and local member agencies. The Stakeholders will meet regularly to provide input and discuss technical work products.
- Each jurisdiction will have “TOD staff workshop” to refine and scenario plan the jurisdiction’s TOD site location.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (RTC),
- City of Las Vegas
- City of Henderson
- City of North Las Vegas
- Boulder City

Budget:

Sub-Task 301-9285-22	FY 2022	FY 2023
Total Project Cost	\$ 275,000	\$ 0
Professional Services Contract	\$ 250,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 25,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 261,250	\$ 0
Local Match (5%)	\$ 13,750	\$ 0

Schedule and Deliverables:

Final deliverable will consist of a final report that will be presented to the Planning Commission, City Council of each city and also to the Clark County Commission.

Start Date: August, 2017

End Date: June, 2021

Sub-Task 301-9290-22

Southern Nevada HOPE Grant Study

Purpose:

The RTC received a \$125,000 planning grant from the FTA's Helping Obtain Prosperity for Everyone (HOPE) Program, which seeks to improve transportation in areas of persistent poverty. The RTC will use the grant funds to study micro-transit and other mobility solutions that will result in improved access to jobs, healthcare, healthy food, and essential services for low-income populations. While fixed-route transit is available, the cost of and time spent traveling between the urban core and jobs in outlying areas may be burdensome. Additionally, a challenging pedestrian environment makes accessing transit stops difficult, especially for people using mobility devices or transporting children in strollers.

The study will focus on potential micro-transit services to serve neighborhoods with persistent poverty. Micro-transit is a privately or publicly operated, app-based transit service that typically uses multi-passenger/pooled shuttles or vans and provides trips on demand. App-based scheduling may also be complemented by a call center in order to serve riders without internet and smart phone access. Additionally, the service can have set pick-up and drop-off locations or provide a door-to-door service.

Previous Work:

- Access 2040 – Regional Transportation Plan (2017)
- Southern Nevada Strong – Regional Plan (2015)
- RTC On Board Mobility Plan (2020)
- RTC Coordinated Transportation Plan (2020)

Methodology:

In partnership with local non-profits and government agencies, this project will complete a study of potential micro-transit routes that target low-income areas currently under served by fixed-route transit, and address inequalities in access to healthy food, workplaces, and community services. Services may include new micro-transit, modifications to existing senior service routes, and could potentially replace, modify or supplement underperforming fixed route services.

Participating Agencies:

Participating agencies include: Regional Transportation Commission of Southern Nevada (RTC), City of Las Vegas, Clark County, City of North Las Vegas, City of Henderson, Southern Nevada Transit Coalition, Three Square, Helping Hands of the Las Vegas Valley, US Vets, Southern Nevada Transit Coalition, MLK Senior Center, Southern Nevada Regional Housing Authority, Southern Nevada Health District, Governor's Food Security Council, University of Nevada Cooperative Extension - Southern Nevada Food Policy Council and State of Nevada Health Department.

Budget:

Sub-Task 301-9290-22	FY 2022	FY 2023
Total Project Cost	\$ 86,111	\$ 0
Professional Services Contract	\$ 61,111	\$ 0
Staff Time	\$ 25,000	\$ 0
Funding Sources (Grant)		
Federal Transit Administration – Hope Grant	\$125,000	\$ 0
Funding Sources (CPG/Local)		
Consolidated Planning Grant (95%)	\$ 81,805	\$ 0
Local Match (5%)	\$ 4,306	\$ 0
Local Match for the Grant will be paid for by the RTC local tax		

Schedule and Deliverables:

The RTC will evaluate existing and planned services and identify gaps, conduct additional analysis to identify needs and gaps in healthy food access, analyze potential demand for new services, while considering impacts to the rest of the RTC network and minimizing any potential negative impacts.

The study will identify alternatives considering fleet requirements and sources, contracting with a micro-transit provider(s), including wheelchair-accessible vehicles; defined service areas and point-to-point service(s) that transports residents in a food desert to a grocery store; sustaining/expanding grocery delivery programs; scheduling platform and expected wait and walk times; proposed route modifications to RTC fixed-route, senior transportation, and other services; and criteria for describing and evaluating alternatives, which may include cost-effectiveness, equity, trips per day, and other performance measures.

The RTC will determine implementation actions including roles, resources needed, potential funding sources, and timelines. The implementation should address all operational needs including: booking methods/technology, data sharing requirements, staffing needs. Performance targets will be collaboratively determined and deliverables for the project will include a Micro-transit Route Study with Executive Summary (bilingual and Section 508 compliant), community engagement summary and materials (e.g. slide decks, webpage content) and presentations to RTC committees.

Start Date: Spring, 2021

End Date: June 30, 2022

Expected Duration: 1 year

301-9295-23

Regional Bicycle and Pedestrian Plan Update

Purpose:

The Regional Bicycle and Pedestrian Plan provides a framework for improving the bicycle and pedestrian environment throughout the Las Vegas Valley and Boulder City. The actions and investments identified in the plan are envisioned to enhance safety for all roadway users and encourage more people to bike, walk, and roll. The 5-year plan update will include:

1) revised bicycle and pedestrian network maps based on the inventory and Regional Walkability Plan, 2) identification of cycle track corridors and development of cycle track pilot conceptual plan(s), and 3) an updated, prioritized implementation plan with specific actions, roles, potential resources, and timelines. Additionally, the plan update will expand the study area to include the City of Mesquite.

Previous Work:

- RTC Regional Bicycle and Pedestrian Plan (2017)
- RTC/NDOT Pedestrian Crash Data (ongoing)
- RTC Pedestrian Comfort Study (2019)
- North Las Vegas Citywide Pedestrian & Bicycle Plan (2020)
- Regional Walkability Plan (in progress)

Methodology:

- Scope the plan update in collaboration with a Technical Advisory Committee; determine implementation status, barriers, and obtain input on the planning and community engagement process.
- Revise the plan maps and GIS data to include the City of Mesquite and the following elements for all geographic areas: completed bicycle and pedestrian facilities, facilities planned through new studies (i.e. North Las Vegas Citywide Pedestrian and Bicycle Plan), and locations of cycle tracks and pedestrian boulevards.
- Analyze crash corridors and intersections based on recent data and prepare map.
- Update transit corridors maps per the On-Board Mobility Plan and Silver Rider plans. Identify bicycle facility gaps and needs for improved first and last mile access.
- Develop design concepts and solutions to maintenance challenges for cycle tracks.
- Update the prioritized list of bicycle and pedestrian facility projects. Convene meetings with agency staff to explore integration into existing plans, including Capital Improvement Plans.
- Revisit programs and policies, determine implementation status, and revise as needed.
- Prepare and build regional agreement on a 5-year implementation plan that includes priority actions (projects, programs or policies), roles, timelines, planning-level cost estimates, and funding sources.
- Establish key priority indicators (KPIs), roles, and methods for tracking progress. Gather baseline data for KPIs.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (lead)
- Southern Nevada Health District,
- UNLV,
- Clark County,
- City of Las Vegas,
- City of North Las Vegas,
- Boulder City,
- City of Mesquite

Budget:

Subtask 301-9295-23	FY 2022	FY 2023
Total Project Cost	\$ 0	\$ 275,000
Professional Service Contract	\$ 0	\$ 250,000
RTC Staff Costs	\$ 0	\$ 25,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 261,250
Local Match (5%)	\$ 0	\$ 13,750

Schedule:

This study will begin following the completion of the Regional Bicycle and Sidewalk Inventory.

Start Date: July, 2022

End Date: June, 2023

Duration: 12 months

301-9300-22

“Perfect Storm” Special Events Management Study

Purpose:

- Develop a traffic management plan for the Resort Corridor (RC) to service the range of demand from scenarios of every mode of travel to mitigate predicted impacts to the transportation system and ensure safety and security.
- Refer to other Counties/cities who have previously hosted national special events - refer to FHWA guidance;
- Identify and engage stakeholders;
- Align recommendations from stakeholders and develop master list of special events and public works projects along major roadways inside the Resort Corridor;
- Analyze overlap of special events and construction to develop forecast event-generated traffic and parking demand and EMS routes; including an increasing range of traffic demand and threshold traffic scenarios, up to and including a fully saturated special event weekend where every major venue has an event and are overlapping (Perfect Storm Special Event Scenario) to include an assessment of resort corridor employee commuter demand movements. Analysis of system capacity and operating needs.

Previous Work:

- RTC Transportation Investment Business Plan;
- FHWA National Special Security Events: Transportation Planning for Special Events.
- Nevada Traffic Incident Management Coalition;
- Southern Nevada Traffic Management Center - Waycare Platform case study.

Task Elements:

Engaging all necessary stakeholders and identifying SME participants; Collecting stakeholder data master list of special events in a year (including NFL events); collecting county and utility CIP project schedules; traffic and parking demand analysis and forecast modeling; assessment and recommendations.

Expected Products:

Report identifying the Traffic Management Plan that includes:

- Group movement for shared ride into/out of RC. Optimal location and utilization of park and ride lots; possible dedicated lane use for high occupancy vehicles and contra flow lanes;
- Recommendations for advanced ITS deployment;
- actual deployment of artificial intelligence / IoT methods during past planned special events to capture, process and predict future behaviors.
- Listing and interactive map with layers of special events, projects, by date range to illustrate demand on the transportation system and RC properties for parking.
- Conclusions and Recommendations.

Proposing Agency:

Clark County Department of Public Works

Participating Agencies:

- Las Vegas Convention and Visitor Authority;
- Nevada Department of Transportation;
- City of Las Vegas,
- Las Vegas Metropolitan Police Department;
- Nevada Highway Patrol;
- State Taxicab Authority;
- Stadium Authority;
- Resort Corridor Major Properties;
- Fremont Street Experience.

Budget:

Sub-Task 301-9300-22	FY 2022	FY 2023
Total Project Cost	\$ 257,500	\$ 0
Professional Services Contract	\$ 250,000	\$ 0
Staff Time	\$ 7,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 244,625	\$ 0
Local Match	\$ 12,875	\$ 0

Schedule:

Start Date: July, 2021

End Date: July, 2022

Duration: 12 months

Task 302, Intelligent Transportation Systems Planning

The Regional Transportation Commission, through the Freeway and Arterial System of Transportation (FAST) unit has played a major role in the development of ITS systems in the Southern Nevada region. The MPO has provided support to these activities by funding capital investments in the RTP and TIPs.

Further development of the FAST system is also supported by the inclusion of ITS-related planning activities in the UPWP.

Activities comprise an investigation of how best to update signal timing strategies to respond to changing patterns of traffic.

This activity requires extensive professional support from outside consultancies. The costs of professional services contracts are included under Task 302.

Task 302 includes the RTC Staff Costs associated with the procurement of professional services contracts and their administrative and financial oversight.

Specific Sub-Tasks are:

302-9265-20 - Transportation Data Governance Pilot Study

Task 302, Fiscal Years 2022-2023 Budget

The following costs are included under Task 302:

	FY 2022	FY 2023
Task 302 Cost	\$ 100,000	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 100,000	\$ 0
The Sources for funds for Task 302 are:		
Consolidated Planning Grant	\$ 95,000	\$ 0
Local Funds (5% match)	\$ 5,000	\$ 0

302-2500-22

Transportation Systems Management and Operations (TSMO) Business Case Development

Purpose:

The purpose of the Transportation Systems Management and Operations (TSMO) Business Case project is to determine the desirability and benefit to the region for the RTC of Southern Nevada to pursue a Transportation Systems Management and Operations plan for regional adoption and potential integration into the NDOT TSMO plan.

Project Scope:

- Educate RTC and member agency staff on the benefits of TSMO for improving the performance of the freeway and arterial networks across jurisdictional boundaries and service deliver modes/responsibilities (Emergency Services, Transit Operations, Work Zone Management, Special Event Coordination, Congestion Management, etc.).
- Inventory and catalog existing programs and projects underway at the RTC and member agencies that could be incorporated as elements of the TSMO plan.
- Educate RTC and member Agency staff on existing TSMO initiatives at peer agencies to illustrate concrete examples of regional improvements to management and operational practices including the integration of new technologies.
- Review and summarize the NDOT TSMO plan and identify potential points of connection with an RTC TSMO Plan that will improve management and operational practices at the local level.
- Estimate the benefits and costs associated with pursuing a regional TSMO plan.
- Provide a recommendation on the readiness and desirability of the RTC and member agencies to pursue a TSMO plan.

Previous Studies:

No previous work done by the RTC although NDOT is currently implementing its TSMO Plan. Their experience in establishing a business case for TSMO should be beneficial in determining the desirability for the RTC to pursue a regional plan with the member agencies.

Methodology:

- Submit a project implementation plan
- Establish the key project stakeholders with input from the RTC and member agencies
- Inventory and catalog programs underway by the RTC and member agencies that could be incorporated into a TSMO plan
- Host a kick off meeting with consultant and stakeholders to establish project objectives, approach, and to hear feedback on potential benefits and challenges of a TSMO plan
- Host meetings with appropriate stakeholders to advance the project objectives
- Submit invoices with detailed documentation on services delivered for the payment period
- Submit technical memoranda, presentations, and briefings to executive management as necessary to support the projects objectives
- Submit a final report summarizing the projects findings and providing the RTC with a recommendation on the appropriateness of pursuing a regional TSMO plan

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Nevada Department of Transportation
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- Unincorporated Clark County

Budget:

Sub-Task 302-2500-22	FY 2022	FY 2023
Total Project Cost	\$ 100,000	\$ 0
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 100,000	\$ 0
Consolidated Planning Grant (95%)	\$ 95,000	\$ 0
Local Match (5%)	\$ 5,000	\$ 0

Schedule and Deliverables:

- Project implementation plan
- Inventory of current programs
- List of stakeholders
- Meeting minutes
- Invoices
- Technical memoranda, presentations, and briefing documents
- Final Report

Task 501: Regional Policy Plan Administration

The following work activities will be conducted by the Regional Transportation Commission of Southern Nevada, as the region’s designated Metropolitan Planning Organization, to administer the Southern Nevada Strong Regional Plan. In completing these activities, the MPO will follow established best practices for conducting a continuous, cooperative, and comprehensive planning process, and – to the maximum extent possible – conform to the metropolitan transportation planning procedures described in 23 CFR 450 (“Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning”).

Task 501 and relevant sub-tasks define the Core Administration functions for the Southern Nevada Strong Regional Plan, which the Regional Transportation Commission (RTC) agreed to assume upon adoption of the Plan in 2015. Administration consists of planning, coordinating, and either managing or encouraging the implementation of the Regional Plan. Because implementation of the Regional Plan – or conforming to it – is voluntary, administering the plan without authority to implement most (non-transportation) parts requires focusing efforts on supporting local governments and stakeholders as they implement the Regional Plan. The goals of administering the Regional Plan on behalf of the Southern Nevada Regional Planning Coalition are two-fold:

First, perform the regional plan-related tasks identified in Nevada Revised Statutes to help advance the legislative intent of regional planning identified in NRS 277.02521; and

Second, perform the “Building Capacity for Implementation” tasks identified in the SNS Regional Plan Implementation Matrix for the RTC to lead.

Specific Sub-Tasks are:

- 501-1000-22: Regional Plan Core Administration
- 501-1010-22: Regional Plan Updates
- 501-1050-22: Indicator Tracking and Mapping
- 501-1100-22: Community Planning Academy
- 501-1150-22: Outreach and Communications
- 501-1160-22: Annual Southern Nevada Strong Implementation Report

Task 501, FY 2022-2023 Budget

The following costs are included in Task 501:

Task 501, FY 2022-2023 Budget	FY 2022	FY 2023
Total Cost	\$ 250,380	\$ 215,605
RTC Staff Costs	\$ 250,380	\$ 215,605
Professional Services Costs	\$ 0	\$ 0
The source of funds for Task 501 is		
Consolidated Planning Grant	\$ 98,413	\$ 81,026
Local Match	\$ 151,967	\$ 134,579

Sub-Task 501-1000-22
Regional Plan Core Administration

Purpose:

As designated by the SNRPC in accordance with NRS 277.02528(4) to administer the Regional Policy Plan, the RTC MPO team will perform the NRS-identified tasks specifically related to the Regional Plan. These primarily include performing plan conformity review in accordance with NRS 277.02577, but may include other activities necessary to administer the Plan.

Previous Work:

- Regional Planning team has been tasked with administration since 2015

Methodology:

- Develop a framework for collaborative, consistent, and clear conformity review
- Work with the City of Las Vegas to conduct collaborative conformity review throughout the development of its Master Plan
- Collaborate with Clark County to establish the conformity review process for its upcoming comprehensive plan update
- Conduct conformity review for any plans or plan elements that local partners develop during the year

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County School District, Southern Nevada Regional Planning Coalition

Budget:

Sub-Task 501-1000-22	FY 2022	FY 2023
Total Project Cost	\$ 69,550	\$ 69,550
RTC Staff Costs	\$ 69,550	\$ 69,550
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (20%)	\$ 13,910	\$ 13,910
Local Funds (80%)	\$ 55,640	\$ 55,640

Schedule and Deliverables:

- Conformity review memo upon Master/Comprehensive plan adoption
- Ongoing activity

Sub-Task 501-1010-22
Regional Plan Updates

Purpose:

As needed, the RTC MPO will develop and propose to the SNRPC potential updates of the SNS Regional Plan, in accordance with NRS 277.02528.

Previous Work:

Methodology:

- Complete current efforts to update the Opportunity Sites strategies of each Site: Downtown North Las Vegas, Las Vegas Medical District, Maryland Parkway, and Boulder Highway at Broadbent/Gibson
- Review the SNS Vision Map to assess whether new developments/plans including On Board and Access2040, Henderson Strong, the CLV Master Plan update, the upcoming Clark County Master Plan update, as well as ground-truthing actual developments since 2014, indicate necessary revisions

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County School District, Southern Nevada Regional Planning Coalition

Budget:

Sub-Task 501-1010-22	FY 2022	FY 2023
Total Project Cost	\$ 69,550	\$ 69,550
RTC Staff Costs	\$ 69,550	\$ 69,550
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 34,775	\$ 34,775
Local Funds (50%)	\$ 34,775	\$ 34,775

Schedule and Deliverables:

- Downtown North Las Vegas Opportunity Site Review complete in FY 2020
- Las Vegas Medical District, Maryland Parkway, and Boulder Highway at Broadbent/Gibson Opportunity Site Review complete in FY 2021
- Vision map proposal presented to SNRPC in August 2020

Sub-Task 501-1050-22 Indicator Tracking and Mapping

Purpose:

As the RTC has done from the start of its SNS Regional Plan administration activities, the MPO team will track key indicators relating to elements of the SNS plan. Tracking includes updating up to 30 regional indicators that provide overarching metrics for progress on the goals within the Regional Plan including educational attainment, housing costs, median income, volunteer rates, and health insurance coverage rates. Indicators have also been translated into narrative analysis on the digital platform “Live Stories” found on the SNS website.

For several years, the MPO team has created multiple mapping resources to assist partners to understand spatial relations of demographics and/or the regional metrics. In FY 2020, the team will begin developing a new map resource that will develop values to capture the complex, inter-dependent relationship between transportation infrastructure, land use planning, and economic activity.

Previous Work:

- Annual report (2017, 2018)
- Development of Live Stories (2019)
- Project Analysis Tool (2016)
- Equity Map (updated 2019)
- Community Engagement Map (2018)

Methodology:

- Update current SNS Indicators Dashboard
- Collaborate with the Brookings Institute to develop a Southern Nevada version of the Economic Value Atlas

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County School District, Southern Nevada Regional Planning Coalition
- Southern Nevada Health District, University of Nevada Las Vegas, Las Vegas Global Economic Alliance, Brookings DC, Nevada Department of Transportation, Urban Lands Institute, Southern Nevada Water Authority

Budget:

Sub-Task 501-1050-22	FY 2022	FY 2023
Total Project Cost	\$ 27,820	\$ 27,820
RTC Staff Costs	\$ 27,820	\$ 27,820
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 13,910	\$ 13,910
Local Funds (50%)	\$ 13,910	\$ 13,910

Schedule and Deliverables:

- Indicator update annual ongoing activity
- Published indicator dashboard Jan 2021
- Value atlas initiation in FY20, ongoing through FY21

**Sub-Task 501-1100-22
Community Planning Academy**

Purpose:

The MPO team will work with local jurisdictions and the Nevada APA chapter on developing a community planning academy. In alternating years, the focus would shift between an academy focused on explaining planning issues to the general public, and one focused on providing briefing and trainings for local appointed board members.

The long-term goal for the academy is to increase the local understanding of planning issues and process.

Previous Work:

Methodology:

- Research existing programs held throughout the country
- Contextualize content for Southern Nevada and current issues
- Host academy weekly across 6 weeks with expert speakers

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite Nevada American Planning Association

Budget:

Sub-Task 501-1100-22	FY 2022	FY 2023
Total Project Cost	\$ 34,775	\$ 34,775
RTC Staff Costs	\$ 34,775	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 33,036	\$ 33,036
Local Funds (5%)	\$ 1,739	\$ 1,739

Schedule and Deliverables:

- Ongoing
- Academy will be held annually in late spring or early summer

Sub-Task 501-1150-22
Outreach and Communications

Purpose:

The MPO team will perform outreach and communications-related elements in the “Building Capacity for Implementation” portion of the Southern Nevada Strong Regional Plan Implementation Matrix. Specific ongoing activities include production of the SNS quarterly newsletter, maintenance of the regional planning contacts list, providing social media content, etc.

Included this task will also be continued coordination and participation with regional coalitions and work groups related to goals within the regional plan. Stakeholder outreach and coordination allows the MPO Team to identify current issues and regional progress.

Previous Work:

- Quarterly newsletter published 2016, 2017, 2018, 2019, 2020

Methodology:

- Support partnership with local agencies and key stakeholders to identify progress and local issues
- Participation in meetings, workshops, coalitions that carry out work related to the regional plan goals
- Draft, finalize and publish quarterly newsletters
- Amplify and share news related to progress on the regional plan via social media
- Additional communications related activities are performed by the MPO, RTC Government Affairs, Media and Marketing, and Executive Management

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite

Budget:

Sub-Task 501-1150-22	FY 2022	FY 2023
Total Project Cost	\$ 34,775	\$ 34,775
RTC Staff Costs	\$ 34,775	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (0%)	\$ 0	\$ 0
Local Funds (100%)	\$ 34,775	\$ 34,775

Schedule and Deliverables:

- Ongoing
- Efforts focused on quarterly production of SNS newsletter to be published in January, April, July, and October annually

Sub-Task 501-1160-22
Annual Southern Nevada Strong Implementation Report

Purpose:

On an annual basis, staff at the RTC, the agency responsible for administration of the Regional Plan, create a summary of implementation progress to show the cumulative progress the region makes on each strategy. This report would be released concurrently with the annual update of the indicator dashboard.

While the primary stakeholder involved in regional plan coordination tends to be agency staff within the planning department, regional implementation encompasses every department within local government as well as state government, nonprofit organizations, and private business. A full and comprehensive review of strategy progress relies on staff responsiveness and assistance on research.

Previous Work:

- Annual report (2017, 2018, 2019, 2020)

Methodology:

- Distribution of implementation strategies by “lead responsible agency” for stakeholder review
- MPO staff review of all strategies
- Follow-up inquiries distributed to all partners, connect with additional partners and communications teams
- Continue to inquire of progress
- Draft annual report for review

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Clark County School District, Southern Nevada Regional Planning Coalition
- Southern Nevada Health District, University of Nevada Las Vegas, Las Vegas Global Economic Alliance, Nevada Department of Transportation, Urban Lands Institute, Southern Nevada Water Authority

Budget:

Sub-Task 501-1160-22	FY 2022	FY 2023
Total Project Cost	\$ 13,910	\$ 13,910
RTC Staff Costs	\$ 13,910	\$ 13,910
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (20%)	\$ 2,782	\$ 2,782
Local Funds (80%)	\$ 11,128	\$ 11,128

Schedule and Deliverables:

- Completed annually by December, published in January

Task 601: Regional Planning and Research

Based on stakeholder request and input, the MPO Regional planning staff identified the following projects to support and promote progress of the regional plan.

Following years of staff assistance on tracking and communications, the team will now work to provide technical assistance in research and planning so that individual agencies and local governments can carry out their tasked strategies within the regional plan. To best support the forward movement and progress of these strategies, the MPO team will provide specific research and analysis that can inform implementation.

Progress on all regional plan strategies are voluntary and based on current needs, available resources, and motivation on the part of those responsible for each strategy.

Specific Sub-Tasks are:

- 601-1010-22: Future Housing Inventory and Needs Analysis
- 601-1020-22: Extreme Heat Events Coordinated Response Study
- 601-1040-22: Tree Canopy Social Equity Impacts Research Project
- 601-1050-22: Improving Equity in Citizen Engagement Study

Task 601, FY 2022-2023 Budget

The following costs are included in Task 601:

	FY 2022	FY 2023
RTC Staff Costs	\$ 156,488	\$ 156,488
Professional Services Costs	\$ 0	\$ 0
Combined Costs	\$ 156,488	\$ 156,488
The source of funds for Task 601 is		
Consolidated Planning Grant	\$ 133,014	\$ 133,014
Local Funds	\$ 23,473	\$ 23,473

Sub-Task 601-1010-22
Future Housing Inventory and Needs Analysis

Purpose:

This study will apply established methodology to examine current demographic trends and projections to estimate current housing needs and future trends in housing for the region, then compare current zoning and land use plans to assess the provision of housing. The resulting analysis may identify surpluses and gaps across the region.

Previous Work:

Methodology:

- Compile existing residential zoning information including area and average density
- Analyze population forecast for demographic shifts
- Research trends in housing demand based on demographic
- Publish findings to inform local policy

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Southern Nevada Regional Planning Coalition

Budget:

Sub-Task 601-1010-22	FY 2022	FY 2023
Total Project Cost	\$ 52,163	\$ 52,163
RTC Staff Costs	\$ 52,163	\$ 52,163
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 49,555	\$ 49,555
Local Funds (5%)	\$ 2,608	\$ 2,608

Schedule and Deliverables:

Start: July, 2021
 End: June, 2022
 Duration: 1 year

Deliverable: Final report

Sub-Task 601-1020-22
Extreme Heat Events Coordinated Response Study

Purpose:

Southern Nevada has been identified as one of the fastest warming regions in the country, and recent research has indicated a substantial risk of heat-related deaths from an increasing number and duration of extreme heat events in the region.

In conversations with a variety of stakeholders, RTC has learned that - although many local agencies have responses in place for extreme heat events - there is no consolidated assessment of vulnerability risk, no current inventory of related resources, and little coordination of responses and services.

This study will look at the emergency response system and analyze its ability to respond to extreme heat incidents and other concerns.

Previous Work:

Methodology:

- Identify existing services, systems, and resources
- Identify all the gaps, needs, and risks

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Southern Nevada Regional Planning Coalition
- Southern Nevada Health District, NV Energy, Southern Nevada Water Authority

Budget:

Sub-Task 601-1020-22	FY 2022	FY 2023
Total Project Cost	\$ 34,775	\$ 34,775
RTC Staff Costs	\$ 34,775	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 33,036	\$ 33,036
Local Funds (5%)	\$ 1,739	\$ 1,739

Schedule and Deliverables:

Start: July, 2021
 End: June, 2023
 Duration: 2 years

Deliverable: Final report analyzing the existing system, services and resources as well as gaps, needs and risks.

Sub-Task 601-1040-22
Tree Canopy Social Equity Impacts Research Project

Purpose:

The MPO team will work with the Southern Nevada Water Authority (SNWA) on their planned assessment of the regional tree canopy. Specifically, SNWA would study the actual coverage, types of canopy, future heat impacts, etc., while the RTC would handle examination of the social equity aspects of the region’s tree canopy, and identify examples and resources to respond to inequity issues related to the tree canopy.

Previous Work:

Methodology:

- Following the tree canopy study, staff will analyze spatial distribution in combination with demographic and economic indicators
- Study will identify specific vulnerable neighborhoods or potential risk areas that could be targets for intervention or future investment

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency), Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, Southern Nevada Regional Planning Coalition
- Southern Nevada Water Authority

Budget:

Sub-Task 601-1040-22	FY 2022	FY 2023
Total Project Cost	\$ 34,775	\$ 34,775
RTC Staff Costs	\$ 34,775	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 17,388	\$ 17,388
Local Funds (50%)	\$ 17,388	\$ 17,388

Schedule and Deliverables:

- TBD, based on SNWA timeline
- Final report to include maps and risk factors

Sub-task 601-1050-22 Improving Equity in Citizen Engagement Study

Purpose/Outcomes:

The year 2020 was unprecedented in many ways. The public health and economic crisis, brought on by COVID-19, revealed that inequality and disparities in the Southern Nevada community still exist. Additionally, protests and civil unrest across the nation by black Americans and other people of color brought new awareness to the historic injustices and discrimination that minority communities continue to experience. Many of these injustices have been perpetuated throughout history by the transportation and planning professions. It is clear that minority and underserved populations need more access to planning processes to ensure that plans and projects better reflect their transportation and community planning needs.

The goal of this project is to advance equity policies and practices for citizen engagement activities within the MPO. It's important for the MPO to recognize their role and that past and present practices limit equity for certain communities and populations (e.g. minority populations, people with disabilities, etc.). Even well-intentioned actions have had (and still do have) negative consequences. In an American Planning Association briefing on equity, equity is described as the "just and fair inclusion into a society in which all can participate, prosper, and reach their full potential." In order to fully provide for equity in the MPO's planning practices, the MPO must integrate "planning with" instead of "planning for" strategies into its practices and policies.

Ultimately, this project will see the MPO develop recommendations that will improve the MPO's equity practices for community engagement, outreach, and planning. By working with stakeholders and residents in minority and underserved communities, focusing on the people and places where needs are the greatest, the MPO will learn about the unique engagement preferences and needs of these communities. This knowledge will lead to new policies and strategies for ensuring that residents in these communities have full and equal access to the opportunities, power, and resources that inform the MPO's plans and projects, such as the Regional Transportation Plan (RTP), Public Participation Plan, Title VI Report, Language Assistance Plan, household travel survey, and other project specific surveys and activities. Ultimately, improving equity and inclusion in the MPO's engagement processes will lead to better outcomes for addressing inequities in the Southern Nevada region related to mobility, education and economic opportunity, health, housing, and income.

Previous Work:

- RTC On Board Mobility Plan (2020)
- RTC Coordinated Public Transit-Human Services Transportation Plan (2020)
- SNS Community Engagement toolkit (updated 2020)
- RTC MPO and Transit Public Participation Plan (2019)
- RTC Policies and Procedures (updated 2019)
- RTC Title VI Report Update for Metropolitan Transportation Planning in Southern Nevada (May 2019)
- RTC Language Assistance Plan (May 2019)
- RTP - Metroquest vision survey (2016-2017)
- Southern Nevada Strong Regional Policy Plan (2015)

Methodology:

- Define target populations and conduct stakeholder interviews with community leaders to learn about the pros and cons of the MPO's current engagement, outreach, and communications strategies.
- Conduct oral histories in targeted communities to understand how the MPO can be more inclusive during our planning processes.
- Create a strategic plan for integrating equity and social justice into planning work, focusing on projects that are on the immediate horizon for the MPO.
- Develop an implementation plan, including integration of recommendations into existing RTC documents and tools (e.g. RTC Policies and Procedures, MPO core documents, Southern Nevada Strong Community Engagement Toolkit), including roles, timelines, and resources needed (e.g. skills, staffing, funding).
- Explore forming a citizen's advisory community where minority and underserved residents can provide additional perspectives on MPO project-specific plans and projects.
- Begin building relationships between the MPO, minority, and underserved communities and develop strategies for continuing these relationships long-term.
- Develop a consolidated MPO database, including new contacts representing minority and underserved communities, for transportation and regional planning projects and to support long-term tracking of participation and communications.
- Integrate new systems and strategies into recommendations for more consistent and inclusive engagement, including methods for closing the feedback loop.
- Identify potential mechanisms for providing compensation for participation of traditionally unpaid volunteers in MPO committees, focus groups, or other input forums.
- Reflect on lessons learned from past year of virtual engagement and public meetings and incorporate more virtual strategies for improved civic participation that reflect the diversity of Southern Nevada, including Limited English Proficiency (LEP) populations, people of all ages and abilities, and individuals without access to smart phones and/or internet. (i.e. What populations benefitted and who struggled to adapt to these new platforms? What platforms are most accessible for use by people of all abilities? What analog tools should complement online engagement and meetings?)
- Identify potential Public Participation Plan performance measures to further goals for equitable, inclusive outreach in RTC and MPO engagement practices.

Participating Agencies:

- RTC of Southern Nevada
- Stakeholders and community leaders who represent minority and underserved communities (e.g. Urban Chamber of Commerce, Tribal leaders, Mi Familia Vota, Nevada Minority Health and Equity Coalition, etc.)

Budget:

Sub-Task 601-1050-22	FY 2022	FY 2023
Total Project Cost	\$ 34,775	\$ 34,775
RTC Staff Costs	\$ 34,775	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 33,036	\$ 33,036
Local Funds (50%)	\$ 1,739	\$ 1,739

Schedule:

Start: July, 2022

End: June, 2023

Duration: 2 years

Appendix 1 - Southern Nevada Regional Planning Prospectus

The purpose of this Prospectus is to outline the roles and responsibilities of the Nevada Department of Transportation (NDOT) and the Regional Transportation Commission of Southern Nevada (RTCSNV), as required by 23 CFR Section 450.314. The Prospectus was first incorporated into the Unified Planning Work Program (UPWP) in Fiscal Year 2014.

I. General Roles & Responsibilities

RTCSNV will perform the transportation planning process for the Southern Nevada Metropolitan Planning Area (the region) and develop procedures to coordinate transportation planning activities in accordance with applicable federal regulations and guidance. The region is defined as the County of Clark in the State of Nevada and includes the incorporated cities of Boulder City, Henderson, Las Vegas, Mesquite, and North Las Vegas as well as unincorporated areas of the County.

The transportation process will, at a minimum, consist of:

- A. Development of an annual Unified Planning Work Program (UPWP) that lists and describes all transportation planning studies and tasks to be completed during the year.
- B. Development and update of a long-range, multimodal metropolitan transportation plan, known as the Regional Transportation Plan (RTP).
- C. Development and maintenance of a short-range regional transportation improvement program (TIP).
- D. Financial planning to ensure plans and programs are fiscally constrained within anticipated funding levels.
- E. Development of planning studies and system performance monitoring, including highway corridor and intersection studies, transit system studies, application of advanced computer techniques, and transportation data collection and archiving.
- F. Public outreach to the community throughout the transportation planning process, including the electronic dissemination of reports and supporting information on the RTCSNV website, and consideration of public comments. Public outreach activities should take into account the needs of persons with limited proficiency in English.
- G. Ensuring low income or minority populations, including the elderly and persons with disabilities, are not significantly or disproportionately impacted.
- H. Development and implementation of a Congestion Management Process (CMP) as appropriate.
- I. Ensuring plans, projects, and programs are consistent with, and conform to, air quality goals for reducing transportation-related emissions and attaining National Ambient Air Quality Standards.

II. The Regional Transportation Plan (RTP)

The RTP will be prepared and compiled through a cooperative process between federal agencies, the Nevada Department of Transportation, RTCSNV (including RTCSNV in its capacity as the provider of public transportation), the Clark County Department of Air Quality (acting under delegated authority as the Air Agency for Southern Nevada), and the local city and county governments in the region.

Responsibilities of the Regional Transportation Commission

- A. The RTCSNV will be responsible for preparing and developing the Regional Transportation Plan (a 20-25 year time frame). The RTP will be converted into a format that will allow it to be downloaded from the internet.
- B. The RTCSNV may develop an executive summary report for the region that includes the key issues facing the area and identifies high priority programs and projects.
- C. The RTCSNV will provide opportunities for the public and other interested parties to provide input during the development of the Regional Transportation Plan, in accordance with the Public Participation Plan. The draft of each update to the RTP will be made available for public and agency review and comment. Prior to taking formal action on the Plan or Plan update, the RTCSNV Board will be informed of the extent and nature of comments received and the response to such comments.
- D. The RTCSNV will develop and keep up-to-date a list of those roadways and transit facilities deemed to be 'regionally significant' in accordance 23 CFR 450.322.
- E. The RTCSNV will, in cooperation with NDOT, develop estimates of future inflation to be used to convert project costs and revenues to a 'year of expenditure' basis.
- F. The RTCSNV will coordinate with the Clark County Department of Air Quality to assess air quality impacts and conduct the regional emissions assessment of the RTP.
- G. The RTCSNV, acting as the transit agency for the region, will ensure the RTP includes information on local bus capital projects that are consistent with the transit capital program. The RTP will also identify future bus needs and services, including new routes, service expansion, vehicle needs, and operating financial needs.

Responsibilities of the Nevada Department of Transportation

- H. The Nevada Department of Transportation (NDOT) will provide the following information and data in support of developing the RTP:
 - 1. An estimate of federal funds expected to be available over the 20 to 25-year time frame of the plan for highway and transit programs. This estimate of funds will be provided at a time mutually agreed upon by the RTCSNV and NDOT so that the fiscal limits of the RTP can be determined before project prioritization begins.

2. A list of projects in Southern Nevada, developed in cooperation with the RTCSNV, to be undertaken by NDOT over the 20 to 25-year time frame of the Plan using federal program funds reserved in the State of Nevada for use anywhere in the state. The state's regionally significant project list will be provided at a time mutually agreed upon by the RTCSNV and NDOT so that air quality conformity analysis can be performed at the appropriate time in the course of RTP development.

3. A list of projects in Southern Nevada for which funds have been earmarked or otherwise designated in federal transportation legislation.

4. An estimate of state funds expected to be expended on transportation projects in the region over the 20 to 25-year time frame of the Plan. In the interests of public information and to assist the RTCSNV in demonstrating the fiscal feasibility of the Plan, NDOT will also provide information as to how these expenditures relate to the state transportation revenues available after allowing for the cost of maintenance, operations, debt service, administration, and other draws on these fund sources.

5. Traffic count data and other performance indicators for state roads in the region.

I. For those federal program funds intended to be distributed between various entities or regions within the state, NDOT will either provide the basis for the allocation between areas as defined by law, or will work cooperatively with the RTCSNV and other jurisdictions to establish mutually agreed formulae for the allocation between areas of such funds for forecasting and financial planning purposes.

NDOT will provide information on projects to be undertaken in Southern Nevada using transit or other federal program funds allocated to non-urbanized areas of the state, and will consult with the RTCSNV for selecting such projects.

III. Transportation Improvement Program (TIP)

The TIP will be prepared and compiled through a cooperative process between federal agencies, NDOT, the RTCSNV (including the RTCSNV in its capacity as the provider of public transportation), and the local city and county governments in the region.

Responsibilities of the Regional Transportation Commission

A. The RTCSNV will be responsible for preparing and developing the Transportation Improvement Program (4-year time frame with a fifth illustrative year) for the region. The TIP will be converted into a format that will allow it to be downloaded from the internet. The RTCSNV will maintain the TIP by tracking changes to projects (schedule, scope, and cost) made through the amendment and administrative action processes.

B. The RTCSNV, in consultation with NDOT and local city and county governments, shall develop the list of locally-sponsored transportation projects to be included in the TIP.

1. In the case of the Congestion Mitigation and Air Quality Program (CMAQ) (or any successor funding program of similar intent), the RTCSNV shall also consult with the Clark County Department of Air Quality in the development of the list of projects to be included in the TIP.

2. In the case of the Transportation Alternatives Program (or any successor funding program of similar intent), the RTCSNV shall also consult with all eligible project sponsors in the development of the list of

projects to be included in the TIP.

C. The RTCSNV, as the provider of public transportation services, shall develop the list of transit projects to be included in the TIP.

1. In the Southern Nevada urbanized area, the RTCSNV shall consult with not-for-profit agencies and other providers of specialized transportation and human services, in accordance with the Coordinated Public Transit-Human Services Plan.

2. For Southern Nevada non-urbanized area transit programs, the RTCSNV shall consult with NDOT and other providers of transportation services to the non-urbanized parts of the region.

D. The RTCSNV shall develop a comprehensive list of projects for all projects in the TIP. In order to illustrate the entire scope of the project to the policy board and the general public, the project list will contain detailed project descriptions, estimated total project costs at completion, and complete project schedule by phases.

E. The RTCSNV will develop an estimate of anticipated local funds to be expended on transit projects identified in the TIP. In the interests of public information and to assist in demonstrating the fiscal feasibility of the TIP, the RTCSNV will also document how these expenditures relate to the local revenues available for transit after allowing for the cost of maintenance, operations, debt service, administration and other draws on these fund sources.

F. The RTCSNV will provide information on proposed TIP amendments and administrative modifications relating to projects sponsored by the RTCSNV or local entities. Amendments and administrative modifications will include a project description that provides sufficient detail to explain the proposed changes to the RTCSNV Board, as well as a justification for the change.

Responsibilities of the Nevada Department of Transportation

G. NDOT will prepare an initial list of NDOT-sponsored projects to be included in each new TIP. This list will be based on the current TIP and an assessment of which projects will be obligated for funding before the end of the current federal fiscal year.

H. NDOT will provide information on proposed TIP amendments and modifications relating to projects sponsored by NDOT. Amendments will include a project description that provides sufficient detail to allow the proposed changes to be explained to the RTCSNV Board, as well as a justification for the change.

I. NDOT will provide a list of projects to be undertaken on Native American tribal lands under the Indian Reservation Roads (IRR) program within the Southern Nevada region.

J. NDOT will provide a list of projects to be undertaken under the Federal Lands Highways program within the Southern Nevada region.

K. NDOT will provide a list of projects obligated during the federal fiscal year at the end of each program year. The annual list of obligated projects should include both highway and transit projects and should identify the fund source and the amount obligated in accordance with 23 CFR 450.332.

L. NDOT will provide annually, for each federal fund source, the revenues available (including both unobligated funds carried forward from prior years and the amount appropriated during the fiscal year), the total amount obligated, any other deductions and the balance of funds remaining at the end of the fiscal year.

IV. Statewide Transportation Improvement Program (STIP)

A. NDOT will develop a four - year STIP including projects in each MPO and the rural regions of the state, and will be responsible for securing the approval of the STIP by the United States Department of Transportation.

B. The TIP, as developed by the RTCSNV, will be incorporated into the STIP without change, directly or by reference.

C. NDOT, in consultation with the RTCSNV and the other MPOs in the state, shall develop procedures for the modification and amendment of the STIP. NDOT shall be responsible for notifying the RTCSNV of the effective date of modifications and the approval date of amendments.

V. Public Transportation Planning

A. The RTCSNV, acting as the transit agency for the region, will ensure the RTP and TIP include all transit projects (both capital and operating) that are funded by federal program funds.

B. The RTCSNV will consult with NDOT to ensure that both the RTP and TIP include information on transit projects in the non-urbanized parts of the region that are funded by federal program funds.

C. The RTCSNV will include in the RTP information on the transit system and will outline the objectives of the RTCSNV in respect to the various types and modes of public transportation in the region.

D. As part of its outreach activities, the RTCSNV will provide opportunities for other providers of public transportation, not-for-profits, and providers of specialized transportation services to be involved in the development of the RTP and TIP. The RTCSNV will also provide these firms and agencies with advice, information, and consultation on transportation programs within the region.

VI. Air Quality Planning

A. The preparation of a new or revised RTP will be coordinated with the State Air Quality Implementation Plan (SIP) and transportation demand management and transportation system management (TDM/TSM) measures.

B. In accordance with the Clean Air Act and U.S. EPA conformity regulations (40 CFR, Part 51), the RTCSNV, acting as the regional MPO, makes air quality conformity determination on any new or revised

RTP prior to Plan approval. Any such new or revised RTP is also provided to the FHWA and the FTA with a request that these federal agencies approve the conformity finding.

VII. Public Participation Program

A. The RTCSNV will develop and maintain a Public Participation Plan that sets out the procedures to include the public and interested parties in the development of the Regional Transportation Plan, Transportation Improvement Program, and other elements of the regional planning process, to seek public input and comment, and to inform decision-makers of the extent and nature of comments received and response to such comments.

B. The RTCSNV will annually review and evaluate its public participation program.

C. The RTCSNV will maintain a list of interested organizations and individuals who will receive notices of MPO plans, programs, and projects.

D. The RTCSNV will work to ensure that low-income, minority, and transit dependent areas are afforded an adequate opportunity to participate in the transportation planning process, receive a fair share of the transportation improvement benefits, and do not endure a disproportionate transportation burden.

E. The RTCSNV will maintain its website to provide clear and concise information on the regional transportation planning process and provide an opportunity for downloading reports and documents. This will include developing project and study summaries, converting reports into PDF or text format, and maintaining a list of available documents. The website will provide links to other associated organizations and agencies.

VIII. Fiscal/Financial Planning

A. NDOT will provide the RTCSNV with up-to-date fiscal and financial information and projections on the statewide and regional transportation improvement programs to the extent practicable.

B. This will include anticipated federal funding resources by federal aid category by year for the four years covered by the TIP, and by five-year intervals for the 20 to 25-year time frame of the RTP for inclusion in the TIP and RTP financial charts.

C. For each federal program for which funds are sub-allocated to Southern Nevada, NDOT will provide an annual statement identifying:

1. Unobligated funds brought forward from the previous year;
2. Funds appropriated during the year;
3. Fund obligated during the year and any adjustments thereto;
4. Unobligated fund balance.

D. For each federal transit program for which funds are allocated to the Las Vegas Urbanized Area, the RTCSNV will provide an annual statement identifying:

1. Unobligated funds brought forward from the previous year;

2. Funds appropriated during the year;
3. Funds obligated during the year and any adjustments thereto;
4. Unobligated fund balance.

E. NDOT will notify the RTCSNV when the anticipated cost of a project, regardless of funding category, has changed in accordance with the agreed upon TIP/STIP amendment and administrative action process.

IX. Performance Measurement and the Management of Congestion

A. In developing the RTP and TIP, RTCSNV will incorporate the national goals, measures, and standards of system performance established under the provisions of MAP-21 and the FAST Act.

B. RTCSNV will coordinate with NDOT in the establishment of multimodal transportation system performance targets for the region. These will reflect national goals and standards as applied to the circumstances and priorities of the region.

C. RTCSNV will cooperate with NDOT to collect data and conduct system performance monitoring. RTCSNV will report on progress toward meeting system performance targets as part of the biennial development of major TIP updates, and will assist NDOT as needed in meeting state reporting requirements under MAP-21 and the FAST Act.

D. To address the national goal of reducing congestion, RTCSNV will gather and analyze data to define the extent and duration of congestion in the region, to identify the causes of congestion, and to identify congestion management strategies.

E. As part of the Congestion Management Process (CMP), the RTCSNV will develop implementation activities in coordination with NDOT to address congestion and other performance issues, and will include priority projects in the RTP and TIP.

X. Intelligent Transportation Systems (ITS) Program

A. The Freeway and Arterial System of Transportation (FAST), a department of the RTCSNV, coordinates the planning, development, and operation of the Southern Nevada ITS program in cooperation with NDOT and local agencies.

B. NDOT will maintain the statewide ITS architecture and will work with FAST to ensure consistency with the Regional ITS Architecture for the Southern Nevada Metropolitan Planning Area.

C. NDOT, in cooperation with FAST, is responsible for identifying freeway ITS capital projects and operating strategies for inclusion in the RTP and TIP.

D. Local agencies, in cooperation with FAST, are responsible for identifying arterial roadway ITS capital projects and operating strategies for inclusion in the RTP and TIP.

Amendments to this Prospectus

This Statement defining the Southern Nevada Regional Transportation Planning Process may be amended from time to time to coincide with development of the annual UPWP approval as jointly deemed necessary or in the best interests of all parties, including federal transportation agencies.

Effective Date

This Statement will be effective after it has been endorsed by the RTCSNV as part of the Fiscal Year 2014 UPWP, and as soon as that UPWP has been approved by NDOT and the relevant federal transportation agencies.

No Limitation on Statutory Authority

Nothing contained in this Statement is intended to or shall limit the authority or responsibilities assigned to signatory organizations under Nevada law, federal law, local ordinance, or interlocal agreement.

This is the end of the Fiscal Years 2022-2023 Unified Planning Work Program Document