



UNIFIED PLANNING WORK PROGRAM

FY 2020 and 2021

Amendment 2



REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

**UNIFIED PLANNING WORK PROGRAM
FISCAL YEARS 2020-2021
AMENDMENT TWO**

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Approved by the Regional Transportation Commission of Southern Nevada on February 13, 2020

Approved by Federal Highway Administration & Federal Transit Administration on April 6, 2020.

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February 13, 2020

Kristina Swallow, P.E., ENV SP, F.ASCE,
Director
Nevada Department of Transportation
1263 S. Stewart Street
Carson City, NV 89712

Attention: Kevin Verre

Dear Kevin,

RE: Amendment Two to the Unified Planning Work Program for Fiscal Years 2020-2021

The amended Unified Planning Work Program (UPWP) for Fiscal Years 2020-2021 was approved by the Regional Transportation Commission of Southern Nevada on February 13, 2020.

An electronic copy of Amendment Two to the UPWP for Fiscal Years 2020-2021 is included in this transmittal for your review and approval.

Once notification of State and Federal approval is received, the amended UPWP document will be distributed to all interested parties.

Please feel free to contact me at (702) 676-1715 if you have any questions or comments. Thank you for your consideration.

Sincerely,

CRAIG RABORN
DIRECTOR, METROPOLITAN PLANNING ORGANIZATION

Attachment



STEVE SISOLAK
Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

KRISTINA L. SWALLOW, P.E., *Director*

In Reply Refer to:

April 2, 2020

Susan E. Klekar, Division Administrator
Federal Highway Administration
705 North Plaza Street, Suite 220
Carson City, NV 89701-4015

RE: Regional Transportation Commission of Southern Nevada - AMENDMENT 1 and AMENDMENT 2 TO THE FEDERAL FISCAL YEAR(s) 2020 and 2021 UNIFIED PLANNING WORK PROGRAM

Attention: Enos Han, FHWA - NV Planning and Research Manager

Dear Ms. Klekar:

The Regional Transportation Commission of Southern Nevada (RTCSNV) has requested approval of Amendment 1 and 2 to the FFY 2020 and 2021 Unified Planning Work Program (UPWP). The FFY 2020 and 2021 RTCSNV UPWP was adopted on May 23, 2019 and approved by Federal Highway Administration on June 3, 2019.

Amendment 1 was submitted on December 12, 2019, and it was recommended that NDOT not process this amendment until Amendment 2 is submitted which was on February 25, 2020.

Amendment 1 to the FFY 2020 and 2021 UPWP was approved at the RTC Southern Nevada Board meeting on December 12, 2019. The purpose of the RTCSNV requested amendment 1 is to incorporate funding distributions, revise and reconcile funding, as described in the amended FY 2020 and 2021 RTCSNV UPWP, page 22-26.

Amendment 1 will increase their FFY 2020 UPWP from \$5,634,500 to \$5,719,201 and reduce FFY 2021 UPWP from \$4,132,500 to \$3,912,500.

Amendment 2 to the FFY 2020 and 2021 UPWP was approved at the RTC Southern Nevada Board meeting on February 13, 2020. The purpose of the RTCSNV requested amendment 2 is to revise and incorporate funding distributions, add 2 additional tasks, Task 501: Regional Policy Plan administration; Task 601: Regional Planning and Research and 2 subtasks, as described in the amended FY 2020 and 2021 RTCSNV UPWP, page 22-26.

Amendment 2 will increase their FFY 2020 UPWP from \$5,719,201 to \$6,197,524 and increase FFY 2021 UPWP from \$3,912,500 to \$4,519,930.

NDOT has reviewed the request and finds that an amendment is necessary, based upon the guidance NDOT provided to the Regional Transportation Commission on December 12, 2018.

2. Amendments are revisions that:
 - a. Change the approved FHWA and FTA budget; or
 - b. Change the scope of the FHWA and FTA work task(s); or
 - c. Add or delete a work task (s).

The request provided to NDOT is consistent with 23 USC 134,135, 505 or 49 USC 5303-5305, 5313(b) and the provisions of 23 CFR Parts 420 and 450.

The Nevada Department of Transportation recommends that FHWA approve Amendment I and II as presented and approved by the RTCSNV Board of Directors. Attached to this letter is a summary of proposed changes to the existing FFY 2020 and 2021 UPWP.

If there are any concerns or questions about this requested amendment, please contact Melissa Chandler (775) 888-7170.

Sincerely,

DocuSigned by:

Mark Costa

Multi-modal Program Development Chief, Planning

Attachments:

RTCSNV FHWA approved 2020/2021 UPWP
RTCSNV Amendment 1
RTCSNV Amendment 2
RTCSNV memo request Amendment 1 and 2

E-Copy: w/Attachment:

Enos Han, FHWA – NV
Greg Novak, FHWA - NV
Alex Smith, FTA – Region 9
Darin Allan, FTA – Region 9
Karina O'Connor, USEPA
Rush Wickes, RTCSNV
Sondra Rosenberg, NDOT
Kevin Verre, NDOT
Lewis Lem, NDOT



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

Nevada Division

705 N. Plaza Street, Suite 220
Carson City, NV 89701
Phone 775-687-1204
Fax 775-687-3803

April 6, 2020

Mark Costa
Multi-modal Program Development Chief, Planning
1263 South Stewart Street
Carson City, Nevada 89712

Re: Amendment 1 and 2 to the Fiscal Year 2020 / 2021 Unified Planning Work Program (UPWP)

Dear Mr. Costa:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) has reviewed amendments 1 and 2 to the Regional Transportation Commission of Southern Nevada (RTC SNV) Fiscal Year 2020 / 2021 Unified Planning Work Program (UPWP) that was recommended for approval by your April 2, 2020 letter. The purpose of the amendment 1 is to incorporate funding distributions as well as revise and reconcile funding. Amendment 1 will increase FY 2020 UPWP funds to \$5,719,201, and reduce FY 2021 UPWP funds to \$3,912,500. The RTC Southern Nevada Board approved this amendment on December 12, 2019. The purpose of amendment 2 is to incorporate funding distributions and add 2 additional tasks and 2 subtasks. Amendment 2 will increase FFY 2020 funds from \$5,719,201 to \$6,197,524 and increase FY 2021 UPWP funds from \$3,912,500 to \$4,519,930. The RTC Southern Nevada Board approved this amendment on February 13, 2020.

In accordance with the Memorandum of Understanding between the Federal Highway Administration, Nevada Division and the Federal Transit Administration, Region IX, FHWA has consulted with FTA regarding the amendment, and FHWA's single signature constitutes FHWA and FTA's joint approval.

If you have any questions or require additional information please contact Alex Smith of FTA at 415-734-9472 or Enos Han of FHWA 775-687-5331.

Sincerely,

Enos Han
Planning Program Manager

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**Fiscal Years 2020 and 2021 Unified Planning Work Program – Amendment Two
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PREFACE

The Fiscal Years 2020-2021 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, 2019 and ending June 30, 2021 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 2020-2021 UPWP.

The UPWP for Fiscal Years 2020-2021 was prepared in April, 2019; adopted by the Board of the Regional Transportation Commission of Southern Nevada in May, 2019; and approved by the Federal Highway Administration and Federal Transit Administration in June, 2019. Amendment One to the Fiscal Years 2020-2021 UPWP was adopted by the Board on December 12, 2019.

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 2020 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 2020-2021 UPWP covers the two-year period from July 1, 2019 through June 30, 2021.

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 2020-2021 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 – 2017 to 2037", which are prepared by the Nevada State Demographer¹.

The state demographer projected a 2021 population of 2,369,947 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:

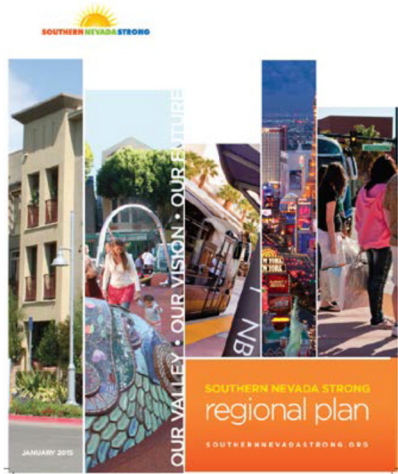
- The City of Las Vegas (pop 644,113)
- City of Henderson (pop 310,244)
- The City of North Las Vegas (pop 248,701)

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 951,066. Communities outside the Las Vegas Valley urban area include the cities of Boulder City (population 15,887), which adjoins the Las Vegas Valley to the southeast; and the City of Mesquite (population 22,557), 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 10,017. 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 communities 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.

Development of the Southern Nevada Strong Regional Plan was led by the City of Henderson and the implementation phase is being led by the RTC. 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 studies 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 FY19 UPWP these projects include:

- 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:

- Larry Brown (Chair) - Clark County
- Debra March (Vice Chair) – City of Henderson
- Carolyn Goodman – City of Las Vegas
- James Gibson – 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 Bill 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;
- 202-9035-20 On Board Mobility Plan;
- 301-9120-20 Complete Streets Implementation Study.
- 301-9225-20 Bruce Street Green and Complete Street
- 301-9230-20 City of North Las Vegas Citywide Pedestrian and Bicycle Plan
- 301-9235-20 Pedestrian Comfort Study and Demonstration Projects

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 2019 UPWP Major Accomplishments

The planning department helped complete the Resort Corridor Feasibility study, a detailed analysis of transit options to better connect McCarran International Airport, the Strip and downtown Las Vegas. The findings of this will be incorporated into OnBoard, the community's future mobility plan.

OnBoard is an effort with our local agency partners which involved planning exercises and gathered public feedback via community conversations and presentations, including a vision and values survey that collected 22,000 responses and touched more than 80,000 people.

The planning department engaged with agency partners to reimagine Boulder Highway to analyze and propose potential improvements to a corridor that experiences 10 percent of pedestrian fatalities in the entire state of Nevada. Feedback from the public was gathered through listening tours and surveys with the study to be finalized in mid-2019.

RTC convened a regional smart communities group with local municipalities, public agencies and private companies to implement a cohesive vision to build a smart community in Southern Nevada. We gathered more than 200 community and business stakeholders at a transit oriented development symposium featuring former U.S. Secretary of Transportation Anthony Foxx.

We led a local contingent of elected officials and community and business leaders on a field trip to Salt Lake City, Utah to tour its light rail system and learn how transit-oriented development helped its economic and regional development.

Northeast Valley Transportation Network Study

The Northeast region of the Las Vegas Valley is comprised of large warehouse and industrial park facilities and is projected to have a significant number of additional warehouse and industrial park facilities in the near future. In addition to the warehouse and industrial park facilities, Nellis Air Force Base (AFB) is projected to have a large growth in the number of employees traveling to and from the AFB on a daily basis.

Therefore, the Northeast Valley Transportation Network Study was developed by the Regional Transportation Commission (RTC) of Southern Nevada to evaluate the current conditions of the transportation network and model what the network will look like when the planned developments are completed. The purpose of the study was to prepare for the large growth anticipated in the northeast portion of the Las Vegas Valley by recommending steps to mitigate traffic congestion, as well as look at alternative modes of transportation to help move people.

The future traffic projections for the study area were continually analyzed and discussed with the Technical Advisory Committee (TAC) to determine the future traffic needs. Additionally, developers and the RTC's Regional Transportation Model were utilized to analyze the study area and high growth potential areas including Nellis AFB (tremendous growth potential), Speedway Industrial (distribution potential), and Apex Industrial (light manufacturing potential).

The projected volumes were analyzed to determine the existing and future needs through improvements in the intersection configurations, improvements in the arterials within the study area, and the optimization of signals (or need for signals) at the 23 analyzed intersections.

Boulder Highway Multimodal Transportation Investment Study –

The Regional Transportation Commission of Southern Nevada (RTC) has been working with residents, business owners and community leaders to reimagine the transportation possibilities the 15 mile segment of Boulder Highway between Wagonwheel Drive and Charleston Boulevard.

When originally constructed in 1931, the area around Boulder Highway was largely rural. However, today, within a half-mile of Boulder Highway, there are: 18,918 Houses, Apartments & Condos, 977 Commercial Lots, 10,000 Daily Transit Riders, 36,000 Average Daily Vehicles.

The increase in growth has resulted in an increase in vehicular, bicycle and pedestrian traffic and one-tenth of all pedestrian deaths in the state of Nevada have occurred on Boulder Highway.

The study focused on overall right-of-way management and allocation based on the needs of all users. Special consideration has been given to technology solutions specifically suited to the corridor. The study has identified overall transportation system and safety improvements including but not limited to: Intelligent Transportation Systems (ITS) applications; access management; transit improvements; pedestrian and bicycle facility improvements; the number of potential travel lanes; intersection modifications and potential for signal timing coordination; along with cost estimates.

The study also has evaluated the impact on traffic operations along Boulder Highway resulting from possible major developments on adjoining land.

Pedestrian Comfort Study –

The Pedestrian Comfort Study and Demonstration Project is identifying innovative strategies to address the challenges of the pedestrian environment in the Las Vegas Valley. The study is assessing public perceptions of pedestrian safety and comfort through a bilingual survey and focus groups as well as reviewing previous studies.

Case studies have been documented to show successful, innovative approaches to improving the pedestrian experience. The consultant will design, implement, and evaluate temporary, low-cost demonstration projects to understand their potential success.

A toolbox of treatments to increase comfort and safety has been identified as well as strategies to encourage people to walk. The study is progressing towards the creation of a final report documenting innovative strategies, field tested demonstration projects at six sites throughout the Las Vegas Valley, case studies, and design concepts all tailored to the local environment and supported by local jurisdictions and implementing agencies.

RTCSNV Regional Transportation Plan Amendment, January, 2019.

This amendment added projects requested by the Nevada Department of Transportation listed below. The RTC has determined that the addition of these projects to the RTP do not adversely impact air quality.

- New project: US-95 Ramps (northwest)
- New project: I-515 Auxiliary Lanes and SR-159 Charleston Boulevard Improvements
- New project: I-515/ US-95 Reduce and Restripe Lanes
- New project: I-15 Tropicana Interchange
- New project: I-11/I-215/I-515/SR-564 Henderson Bowl
- Remove project: I-15 Hacienda HOV Ramp

The amendment also extended funding for the Clark County School District's Safe Routes to School (SRTS) program through fiscal year 2020.

4: Fiscal Years 2020-2021 UPWP Development Approach

The UPWP is developed in consultation with state and local entities according to federal guidelines. The UPWP budget for SFY 2020-2021 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 key objective of this UPWP will be the development and adoption of a new Regional Transportation Plan, which must be adopted by February 2021. This upcoming RTP will guide the development of Southern Nevada's transportation system through the year 2050. The RTP will include 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 2020-2021 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 2020-2021 funding

The funding expected to be available for the SFY 2020-2021 UPWP is based on three elements:

First, the amount expected to be expended through the end of June, 2019 and hence the balance of the funds that will be carried forward to FY 2020.

Second, the CPG funding for FFY 2020 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:

Table 5-1: FY 2020 Projections

Federal FY 2020 Distribution (federal amounts)	
UPWP Funds Available for Federal FY 2019	\$ 6,052,892
Expenditure thru December 31, 2018	\$ 1,170,818
Anticipated Expenditure Thru June 30, 2019	\$ 2,646,737
Balance from Previous Year	\$ 3,422,760
UPWP Funds Available for Federal FY 2020	\$ 3,136,749
Total UPWP Funds Available	\$ 6,559,509
Local Match	\$ 345,237
Total	\$ 6,904,746

Federal FY 2021 Distribution (projections)	
UPWP Funds Projected As Being Available for Federal FY 2020	\$ 6,559,509
Projected Expenditure thru December 31, 2019	To Be Determined
Anticipated Expenditure Thru June 30, 2020	To Be Determined
Balance Projected, June 30, 2020	\$ 707,224
Expected UPWP Funds Available for Federal FY 2021	\$ 3,136,749
Total UPWP Funds Available	\$ 3,843,973
Local Match	\$ 202,314
Total	\$ 4,046,288

Funding Availability

The period covered by the SFY 2020-2021 UPWP corresponds with the RTC and State Fiscal Year (SFY) spanning two fiscal state fiscal years starting July 1, 2019 and ending June 30, 2021. 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.

Fiscal Years 2020 and 2021 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 five 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 2020-2021 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.

In Amendment Two of the Fiscal Year 2020-2021 Unified Planning Work Program, there were funding adjustments involving 18 different existing or new studies. These adjustments are not due to errors having been made in the original document, but rather reflect changes due to emerging planning issues, and the rescheduling or reallocating of funds designated for UPWP projects.

A summary of the changes included in the FY 2020-2021 UPWP Amendment Two are as follows:

1. UPWP 101-1500-20 - General Outreach

Adds language specifically allowing the RTC to conduct representative surveys (recurring or special) to gather public opinions and attitudes about general transportation-related issues. Surveys related to individual projects or tasks are not included in this sub-task. In this UPWP amendment funding is increased in FY2020 by \$60,000 to support anticipated survey in spring 2020.

2. UPWP 101-2310-20 – Planning Administration

This will add a total of \$210,000 to the budget for this task for the purpose of providing for consultant contracts related to professional planning services.

3. UPWP 201-9215-20- Land Use and Transportation Scenario Planning

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. For Fiscal Year 2020 - \$77,500 has been allocated to this study, for Fiscal Year 2021 - \$147,500 has been allocated to this study.

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.

4. UPWP 101-3600-20 – Miscellaneous

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. This task item also includes participation costs for pooled funds research studies and similar joint research efforts with other planning or transportation agencies.

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, and timekeeping software to track RTC staff hours and UPWP tasks.

5. UPWP 301-9235-20 – Pedestrian Comfort Study & Demonstration Project

Includes listing this completed study in the UPWP document. Consultant work was completed in Fiscal Year 2019, but RTC staff time in the amount of \$1,481 was needed in Fiscal Year 2020 to close out the project. The budget for the project is set at \$1,481 for Fiscal Year 2020.

6. UPWP 301-9240-20 – River Mountain Loop Trail Access Improvements

Includes listing this completed study in the UPWP document. Consultant work was completed in Fiscal Year 2019, but RTC staff time in the amount of \$1,572 was needed in Fiscal Year 2020 to close out the project. The budget for the project is set at \$1,572 for Fiscal Year 2020.

7. Task 501 - Regional Policy Plan Administration

This new task group 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. This task group will use \$93,893 in staff time in Fiscal Year 2020 and \$201,695 in staff time in Fiscal Year 2021.

8. UPWP 501-1000-20: Regional Plan Core Administration

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. This study will use \$13,910 in RTC staff time in Fiscal Year 2020; \$27,820 in RTC staff time in Fiscal Year 2021.

9. UPWP 501-1010-20: Regional Plan Updates

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.

This study will use \$34,775 in RTC staff time in Fiscal Year 2020; \$69,550 in RTC staff time in Fiscal Year 2021.

10. UPWP 501-1050-20: Indicator Tracking and Mapping

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.

This study will use \$17,388 in RTC staff time in Fiscal Year 2020; \$34,775 in RTC staff time in Fiscal Year 2021.

11. UPWP 501-1100-20: Community Planning Academy

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. This study will use \$6,955 in RTC staff time in Fiscal Year 2020; \$20,865 in RTC staff time in Fiscal Year 2021.

12. UPWP 501-1150-20: Outreach and Communications

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.

This study will use \$17,388 in RTC staff time in Fiscal Year 2020; \$34,775 in RTC staff time in Fiscal Year 2021.

13. UPWP 501-1160-20: Annual Southern Nevada Strong Implementation Report

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 indicators 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.

This study will use \$3,478 in RTC staff time in Fiscal Year 2020; \$13,910 in RTC staff time in Fiscal Year 2021.

14. 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. These projects are budgeted for \$173,875 in Fiscal Year 2020 and \$118,235 in Fiscal Year 2021.

15. UPWP 601-1010-20 - Future Housing Inventory and Needs Analysis

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.

This study will use \$52,163 in RTC staff time in Fiscal Year 2020; \$69,950 in RTC staff time in Fiscal Year 2021.

16. UPWP 601-1020-20 – Extreme Heat Events Coordinated Response Study -

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.

This study will use \$69,550 in RTC staff time in Fiscal Year 2020; \$13,910 in RTC staff time in Fiscal Year 2021.

17. UPWP 601-1030-20 – Inventory of Regional Sustainability Planning Tools and Techniques -

There has been substantial discussion about the need for sustainability planning in Southern Nevada. Prior to this full undertaking, the MPO staff will perform a quick review of how other large regions address sustainability. Learning from other MPOs, there appear to be two approaches: (1) each local agency completes their own plan, and then a regional agency pulls them together into some type of consolidated plan; or (2) the regional agency and local agencies all work together to simultaneously produce regional goals, and local and regional sustainability plans.

Through research and interviews, the MPO staff will create a report that identifies specific practices and methodologies of sustainability planning to share with the public agencies within Southern Nevada. This work will be used to plan and develop a future sustainability plan following the recommendation from local agencies.

This study will use \$17,388 in RTC staff time in Fiscal Year 2020; \$0 in RTC staff time in Fiscal Year 2021.

18. UPWP 601-1040-20 – Tree Canopy Social Equity Impacts Research Project -

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.

This study will use \$34,775 in RTC staff time in Fiscal Year 2020; \$34,775 in RTC staff time in Fiscal Year 2021.

Table 5-2
Funding via Consolidated Planning Grant (PL) and Local Match –
Fiscal Years 2020 and 2021 UPWP Amendment 1 vs 2

	UPWP Task Funding in FY 2020 UPWP Amendment One	UPWP Task Funding in FY 2020 UPWP Amendment Two	UPWP Task Funding in FY 2021 Amendment One	UPWP Task Funding in FY 2021 Amendment Two
Task 101 - Planning Administration	\$1,005,000	\$1,135,000	\$1,005,000	\$1,145,000
Task 201 - Data Collection	\$1,340,000	\$1,417,500	\$ 810,000	\$ 957,500
Task 202 - Long Range Transportation Planning	\$ 534,923	\$ 534,923	\$ 455,000	\$ 455,000
Task 301 - Multimodal Transportation Studies	\$2,839,278	\$2,842,331	\$1,642,500	\$1,642,500
Task 302 - Intelligent Transportation System Studies	\$ 0	\$ 0	\$ 0	\$ 0
Task 501 – Regional Policy Plan Administration	\$ 0	\$ 93,894	\$ 0	\$ 201,695
Task 601 – Regional Planning and Research	\$ 0	\$ 173,876	\$ 0	\$ 118,235
Total	\$5,719,201	\$6,197,524	\$3,912,500	\$4,519,930
Net Change – FY 2020-2021 UPWP Amendment One to FY 2020-2021 Amendment Two				\$1,085,753

Table 5-3 - Projects with Cost Changes in Fiscal Year 2020 UPWP Amendment 2

UPWP Task #	UPWP Task Name	Unified Planning Work Program Amendment One, Project List for FY 2020		Unified Planning Work Program Amendment Two, Project List for FY 2020		Unified Planning Work Program Amendment One, Project List for FY 2021		Unified Planning Work Program Amendment Two, Project List for FY 2021	
		Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time
101-1500-20	General Outreach	\$75,000	\$5,000	\$135,000	\$5,000	\$75,000	\$5,000	\$75,000	\$5,000
101-2310-20	Planning Administration	\$0	\$500,000	\$70,000	\$500,000	\$0	\$500,000	\$140,000	\$500,000
201-9215-20	Land Use and Transportation Scenario	\$0	\$0	\$70,000	\$7,500	\$0	\$0	\$140,000	\$7,500
301-9235-20	Pedestrian Comfort Study and Demonstration Project	\$0	\$0	\$0	\$1,481	\$0	\$0	\$0	\$0
301-9240-20	River Mountain Loop Trail Access Improvements	\$0	\$0	\$0	\$1,572	\$0	\$0	\$0	\$0
501-1000-20	Regional Plan Core Administration	\$0	\$0	\$0	\$13,910	\$0	\$0	\$0	\$27,820
501-1010-20	Regional Plan Updates	\$0	\$0	\$0	\$34,775	\$0	\$0	\$0	\$69,550
501-1050-20	Indicator Tracking and Mapping	\$0	\$0	\$0	\$17,388	\$0	\$0	\$0	\$34,775
501-1100-20	Community Planning Academy	\$0	\$0	\$0	\$6,955	\$0	\$0	\$0	\$20,865

		Unified Planning Work Program Amendment One, Project List for FY 2020		Unified Planning Work Program Amendment Two, Project List for FY 2020		Unified Planning Work Program Amendment One, Project List for FY 2021		Unified Planning Work Program Amendment Two, Project List for FY 2021	
UPWP Task #	UPWP Task Name	Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time	Professional Services Contract	UPWP Staff Time
501-1150-20	Outreach and Communications	\$0	\$0	\$0	\$17,388	\$0	\$0	\$0	\$34,775
501-1160-20	Annual Southern Nevada Strong Implementation Report	\$0	\$0	\$0	\$3,478	\$0	\$0	\$0	\$13,910
601-1010-20	Future Housing Inventory and Needs Analysis	\$0	\$0	\$0	\$52,163	\$0	\$0	\$0	\$69,550
601-1020-20	Extreme Heat Events Coordinated Response Study	\$0	\$0	\$0	\$69,550	\$0	\$0	\$0	\$13,910
601-1030-20	Inventory of Regional Sustainability Planning Tools and Techniques	\$0	\$0	\$0	\$17,388	\$0	\$0	\$0	\$0
601-1040-20	Tree Canopy Social Equity Impacts Research Project	\$0	\$0	\$0	\$34,775	\$0	\$0	\$0	\$34,775
	Category Totals	\$ 75,000	\$ 505,000	\$ 275,000	\$ 783,323	\$75,000	\$ 505,000	\$ 355,000	\$ 832,430

Table 5-4: Fiscal Year 2020-2021 Unified Planning Work Program Amendment 2 Budget -

UPWP Task	Task Name	SFY 2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated External Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
Task 101	Planning Administration, Coordination and Outreach													
101-1500-20	General Outreach	\$0	\$135,000	\$5,000	\$140,000	\$133,000	\$7,000	\$0	\$75,000	\$5,000	\$80,000	\$76,000	\$4,000	\$0
101-2300-20	Stakeholder Coordination	\$0	\$0	\$75,000	\$75,000	\$71,250	\$3,750	\$0	\$0	\$75,000	\$75,000	\$71,250	\$3,750	\$0
101-2310-20	Planning Administration	\$0	\$70,000	\$500,000	\$570,000	\$541,500	\$28,500	\$0	\$140,000	\$500,000	\$640,000	\$608,000	\$32,000	\$0
101-3100-20	Unified Planning Work Program	\$0	\$0	\$40,000	\$40,000	\$38,000	\$2,000	\$0	\$0	\$40,000	\$40,000	\$38,000	\$2,000	\$0
101-3200-20	Transportation Improvement Program	\$0	\$0	\$65,000	\$65,000	\$61,750	\$3,250	\$0	\$0	\$65,000	\$65,000	\$61,750	\$3,250	\$0
101-3500-20	Environmental Justice/Title VI/Ladders of Opportunity	\$0	\$0	\$10,000	\$10,000	\$9,500	\$500	\$0	\$0	\$10,000	\$10,000	\$9,500	\$500	\$0
101-3600-20	Misc. (INRIX, ArcGIS, Transcad)	\$0	\$0	\$75,000	\$75,000	\$71,250	\$3,750	\$0	\$0	\$75,000	\$75,000	\$71,250	\$3,750	\$0
101-9200-20	Southern Nevada Strong Transportation Implementation	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0
101-9205-20	Transit Oriented Development	\$0	\$0	\$110,000	\$110,000	\$104,500	\$5,500	\$0	\$0	\$110,000	\$110,000	\$104,500	\$5,500	\$0
	Task 101 Total	\$0	\$205,000	\$930,000	\$1,135,000	\$1,078,250	\$56,750	\$0	\$215,000	\$930,000	\$1,145,000	\$1,087,750	\$57,250	\$0

Task 201		Data Collection												
UPWP Task	Task Name	SFY 2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated External Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
201-2116-20	Travel Demand Model	\$0	\$0	\$420,000	\$420,000	\$399,000	\$21,000	\$0	\$0	\$420,000	\$420,000	\$399,000	\$21,000	\$0
201-2206-20	Annual Population Forecast	\$0	\$12,000	\$3,000	\$15,000	\$14,250	\$750	\$0	\$12,000	\$3,000	\$15,000	\$14,250	\$750	\$0
201-2230-20	Travel Demand Model Enhancements & Validation	\$0	\$150,000	\$0	\$150,000	\$142,500	\$7,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-3980-20	Regional Bicycle and Pedestrian Counts– Phase III	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000	\$95,000	\$5,000	\$0
201-4000-20	Transportation Networking Company Data Analysis Methodology	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$30,000	\$230,000	\$218,500	\$11,500	\$0
201-4005-20	Freight Modeling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-4010-20	Visitor Population Synthesizer - Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-4015-20	Technical Support for RTP/TIP and Conformity Determination	\$0	\$150,000	\$10,000	\$160,000	\$152,000	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-4020-20	Visitor & Freight Model Components Update	\$0	\$300,000	\$30,000	\$330,000	\$313,500	\$16,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
201-9215-20	Land Use and Transportation Scenario Planning	\$0	\$70,000	\$7,500	\$77,500	\$73,625	\$3,875	\$0	\$140,000	\$7,500	147,500	\$140,125	\$7,375	\$0

UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated External Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
201-9220-20	GIS Analysis & Visualization	\$0	\$0	\$25,000	\$25,000	\$23,750	\$1,250	\$0	\$0	\$25,000	\$25,000	\$23,750	\$1,250	\$0
201-9225-20	Integrating Exploratory Modeling and Simulation Modeling into Regional Transportation Planning	\$0	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0	\$0	\$20,000	\$20,000	\$19,000	\$1,000	\$0
201-9230-20	Southern Nevada Freight Plan Update	\$0	\$200,000	\$20,000	\$220,000	\$209,000	\$11,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 201 Total		\$0	\$882,000	\$535,500	\$1,417,500	\$1,346,625	\$70,875	\$0	\$452,000	\$505,500	\$957,500	\$909,625	\$47,875	\$0
Task 202	Long Range Transportation Planning													
202-3325-20	Performance Based Planning	\$0	\$0	\$100,000	\$100,000	\$95,000	\$5,000	\$0	\$0	\$100,000	\$100,000	\$95,000	\$5,000	\$0
202-3710-20	Bicycle and Pedestrian Planning	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0	\$0	\$50,000	\$50,000	\$47,500	\$2,500	\$0
202-3715-20	Transportation Safety Planning	\$0	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0	\$0	\$30,000	\$30,000	\$28,500	\$1,500	\$0
202-9005-20	Regional Transportation Plan & Visioning	\$0	\$135,000	\$15,000	\$150,000	\$142,500	\$7,500	\$0	\$185,000	\$15,000	\$200,000	\$190,000	\$10,000	\$0
202-9035-20	On Board Mobility Plan	\$0	\$0	\$100,000	\$100,000	\$95,000	\$5,000	\$0	\$0	\$75,000	\$75,000	\$71,250	\$3,750	\$0
202-9040-20	Coordinated Human Service Transportation Plan Development	\$0	\$89,923	\$15,000	\$104,923	\$99,677	\$5,246	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 202 Total		\$0	\$224,923	\$310,000	\$534,923	\$508,177	\$26,746	\$0	\$185,000	\$270,000	\$455,000	\$432,250	\$22,750	\$0

Task 301	Multimodal Transportation Studies													
UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
301-3905-20	High Speed Rail Station Connection to Downtown Las Vegas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$7,500	\$207,500	\$197,125	\$10,375	\$0
301-3910-20	Regional Commuter Center Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000	\$71,250	\$3,750	\$0
301-3915-20	Northwest Las Vegas Traffic Study	\$0	\$200,000	\$7,500	\$207,500	\$197,125	\$10,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3920-20	Cycle Track Feasibility and Route Identification Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$7,500	\$107,500	\$102,125	\$5,375	\$0
301-3925-20	Henderson Sustainable Mobility Plan	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$7,500	\$307,500	\$292,125	\$15,375	\$0
301-3930-20	Transit Center Study	\$0	\$300,000	\$7,500	\$307,500	\$292,125	\$15,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3935-20	Traffic Signal Communication System Gap Analysis	\$0	\$200,000	\$7,500	\$207,500	\$197,125	\$10,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3940-20	City of North Las Vegas Comprehensive Master Transportation Study	\$0	\$250,000	\$7,500	\$257,500	\$244,625	\$12,875	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3945-20	Connecting Neighborhoods Lake Mead Boulevard Corridor Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$7,500	\$157,000	\$149,625	\$7,875	\$0
301-3950-20	Livable Centers Study - Project 3	\$0	\$250,000	\$5,000	\$255,000	\$242,250	\$12,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3960-20	Maryland Parkway Corridor Transit Oriented Development Plan – City of Las Vegas *+	\$0	\$200,000	\$0	\$200,000	\$0	\$50,000	\$150,000	\$200,000	\$0	\$200,000	\$0	\$50,000	\$150,000

UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
301-3960-20	Maryland Parkway Corridor Transit Oriented Development Plan – City of Las Vegas *+	\$0	\$200,000	\$0	\$200,000	\$0	\$50,000	\$150,000	\$200,000	\$0	\$200,000	\$0	\$50,000	\$150,000
301-3965-20	Maryland Parkway Corridor Transit Oriented Development Plan - Clark County	\$250,000	\$0	\$10,000	\$260,000	\$247,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3970-20	Applied Behavioral Economics - Research Study	\$125,000	\$0	\$15,000	\$140,000	\$133,000	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3975-20	Applied Behavioral Economics – Testing and Implementation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$15,000	\$215,000	\$204,250	\$10,750	\$0
301-3980-20	Regional Bicycle and Pedestrian Plan Update	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$10,000	\$110,000	\$104,500	\$5,500	\$0
301-3985-20	Regional Walkability Plan	\$0	\$250,000	\$10,000	\$260,000	\$247,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-3990-20	Regional Transportation System Health Impact Assessment Standards and Cost Benefit Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$7,500	\$207,500	\$197,125	\$10,375	\$0
301-3995-20	Livable Centers Study – Project 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$5,000	\$255,000	\$242,250	\$12,750	\$0

UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
301-9115-20	Planning and Infrastructure Needs for Emerging Transportation Technologies	\$0	\$150,000	\$30,000	\$180,000	\$171,000	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9125-20	Boulder Highway Multimodal Study **	\$20,000	\$0	\$0	\$20,000	\$9,500	\$500	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0
301-9225-20	Bruce Street Green and Complete Street	\$53,156	\$0	\$1,000	\$54,156	\$51,448	\$2,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9230-20	Citywide Pedestrian and Bicycle Plan	\$3,007	\$0	\$1,000	\$4,007	\$3,807	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9235-20	Pedestrian Comfort Study & Demonstration Project	\$0	\$0	\$1,481	\$1,481	\$1,407	\$74	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9240-20	River Mountain Loop Trail Access Improvements	\$0	\$0	\$1,572	\$1,572	\$1,493	\$79	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9245-20	School Trip Generation and Siting Study	\$60,000	\$0	\$2,500	\$62,500	\$59,375	\$3,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9250-20	Livable Centers Study – Project 1	\$10,000	\$0	\$0	\$10,000	\$9,500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9270-20	Livable Centers Study – Project 2	\$235,000	\$0	\$15,000	\$250,000	\$237,500	\$12,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9275-20	Stadium District Transportation Plan	\$148,615	\$0	\$10,000	\$158,615	\$150,684	\$7,931	\$0	\$0	\$0	\$0	\$0	\$0	\$0
301-9285-20	Transit Oriented Development Implementation Study	\$0	\$200,000	\$5,000	\$205,000	\$194,750	\$10,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 301 Total		\$904,778	\$1,800,000	\$137,553	\$2,842,331	\$2,690,714	\$141,617	\$10,000	\$1,575,000	\$67,500	\$1,642,500	\$1,560,375	\$82,125	\$0

Task 302 Intelligent Transportation System Planning														
UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant	SFY 2020 Local Match	SFY 2020 Anticipated Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
	No Studies for FY 2020-FY 2021 In This Category	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 302 Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Task 501 Regional Policy Plan Administration														
501-1000-20	Regional Plan Core Administration	\$0	\$0	\$13,910	\$13,910	\$2,782	\$11,128	\$0	\$0	\$27,820	\$27,820	\$5,564	\$22,256	\$0
501-1010-20	Regional Plan Updates	\$0	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0	\$0	\$69,550	\$69,550	\$34,775	\$34,775	\$0
501-1050-20	Indicator Tracking and Mapping	\$0	\$0	\$17,388	\$17,388	\$8,694	\$8,694	\$0	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0
501-1100-20	Community Planning Academy	\$0	\$0	\$6,955	\$6,955	\$6,607	\$348	\$0	\$0	\$20,865	\$20,865	\$19,822	\$1,043	\$0
501-1150-20	Outreach and Communications	\$0	\$0	\$17,388	\$17,388	\$0	\$17,388	\$0	\$0	\$34,775	\$34,775	\$0	\$34,775	\$0
501-1160-20	Annual Southern Nevada Strong Implementation Report	\$0	\$0	\$3,478	\$3,478	\$696	\$2,782	\$0	\$0	\$13,910	\$13,910	\$2,782	\$11,128	\$0
Task 501 Total		\$0	\$0	\$93,894	\$93,894	\$36,166	\$57,728	\$0	\$0	\$201,695	\$201,695	\$80,330	\$121,365	\$0

Task 601 -		Regional Planning and Research												
UPWP Task	Task Name	SFY2019 Professional Services Contracts (carryover)	SFY 2020 Professional Services Contracts	SFY 2020 RTC Staff Costs	SFY 2020 Total Professional Services and RTC Staff Costs	SFY 2020 Consolidated Planning Grant (95%)	SFY 2020 Local Match (5%)	SFY 2020 Anticipated Funding Grants	SFY 2021 Professional Services Contracts	SFY 2021 RTC Staff Costs	SFY 2021 Total Professional Services and RTC Staff Costs	SFY 2021 Consolidated Planning Grant (95%)	SFY 2021 Local Match (5%)	SFY 2021 Anticipated External Funding Grants
601-1010-20	Future Housing Inventory and Needs Analysis	\$0	\$0	\$52,163	\$52,163	\$49,555	\$2,608	\$0	\$0	\$69,550	\$69,550	\$66,072	\$3,478	\$0
601-1020-20	Extreme Heat Events Coordinated Response Study	\$0	\$0	\$69,550	\$69,550	\$66,072	\$3,478	\$0	\$0	\$13,910	\$13,910	\$13,215	\$695	\$0
601-1030-20	Inventory of Regional Sustainability Planning Tools and Techniques	\$0	\$0	\$17,388	\$17,388	\$16,519	\$869	\$0	\$0	\$0	\$0	\$0	\$0	\$0
601-1040-2	Tree Canopy Social Equity Impacts Research Project	\$0	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0	\$0	\$34,775	\$34,775	\$17,388	\$17,388	\$0
Task 601 Total		\$0	\$0	\$173,876	\$173,876	\$149,533	\$24,343	\$0	\$0	\$118,235	\$118,235	\$96,674	\$21,561	\$0
TOTAL FOR UPWP AMENDMENT 2		\$904,778	\$3,111,923	\$2,180,823	\$6,197,524	\$5,809,465	\$378,059	\$10,000	\$2,427,000	\$2,092,930	\$4,519,930	\$4,167,004	\$352,926	\$0
		** - Boulder Highway Multimodal Study will be funded for \$10,000 from SFY 2020 PL Money and matching amount for \$10,000 from State Planning and Research (SPR) funds.												
		*+ - 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.												

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, 2020-2021 Budget

The following costs are included under Task 101:

	FY 2020	FY 2021
RTC Staff Costs	\$ 930,000	\$ 930,000
Professional Services Costs	\$ 205,000	\$ 215,000
Combined Costs	\$ 1,135,000	\$ 1,145,000
The source of funds for Task 101 is		
Consolidated Planning Grant	\$ 1,078,250	\$ 1,087,750
Local Funds	\$ 56,750	\$ 57,250

Sub-Task 101-1500-20 - 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), the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP) projects and studies, and 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, 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 101-1500-20	FY 2020	FY 2021
Total Project Cost	\$ 140,000	\$ 80,000
Professional Services Contract	\$ 135,000	\$ 75,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 5,000	\$ 5,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 133,000	\$ 76,000
Local Match (5%)	\$ 7,000	\$ 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 101-2300-20 -
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 101-2300-20	FY 2020	FY 2021
Total Project Cost	\$ 75,000	\$ 75,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 75,000	\$ 75,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 71,250	\$ 71,250
Local Match (5%)	\$ 3,750	\$ 3,750

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 101-2310-20 - 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 2020 and 2021 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 101-2310-20	FY 2020	FY 2021
Total Project Cost	\$ 570,000	\$ 640,000
Professional Services Contract	\$ 70,000	\$ 140,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 500,000	\$ 500,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 541,500	\$ 608,000
Local Match (5%)	\$ 28,500	\$ 32,000

Schedule and Deliverables: Planning Administration is an ongoing activity.

**Sub-Task 101-3100-20 -
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 101-3100-20	FY 2020	FY 2021
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:

- The development of the Fiscal Years 2020 and 2021 UPWP and amendments/modifications to the Fiscal Year 2019 UPWP.
- The Fiscal Years 2020 and 2021 UPWP will be completed by May, 2019 while amendments and work related to the UPWP are on-going.

Sub-Task 101-3200-20 - Transportation Improvement Program

Purpose: Activities included under this Sub-Task include administration and maintenance of the current FY 2017-2020 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 2017-20 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 101-3200-20	FY 2020	FY 2021
Total Project Cost	\$ 65,000	\$ 65,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 65,000	\$ 65,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 61,750	\$ 61,750
Local Match (5%)	\$ 3,250	\$ 3,250

Schedule and Deliverables:

- Process amendments & administrative modifications to the FY 2017-20 TIP
- Fiscal Year 2017-20 TIP update.
- The TIP is an on-going activity.

**Sub-Task 101-3500-20 -
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 101-3500-20	FY 2020	FY 2021
Total Project Cost	\$ 10,000	\$ 10,000
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 10,000	\$ 10,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 9,500	\$ 9,500
Local Match (5%)	\$ 500	\$ 500

Schedule and Deliverables:

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

**Sub-Task 101-3600-20 -
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. This task item also includes participation costs for pooled funds research studies and similar joint research efforts with other planning or transportation agencies.

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, and timekeeping software to track RTC staff hours and UPWP tasks.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 101-3600-20	FY 2020	FY 2021
Total Project Cost	\$ 75,000	\$ 75,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 75,000	\$ 75,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 71,250	\$ 71,250
Local Match (5%)	\$ 3,750	\$ 3,750

Schedule and Deliverables:

- Miscellaneous supports on-going activities.

Sub-Task 101-9200-20 - 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 101-9200-20	FY 2020	FY 2021
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 101-9205-20 -
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 strategies 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 101-9205-20	FY 2020	FY 2021
Total Project Cost	\$ 110,000	\$ 110,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 110,000	\$ 110,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 104,500	\$ 104,500
Local Match (5%)	\$ 5,500	\$ 5,500

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

201-3980, Regional Bicycle and Pedestrian Counts, Phase III

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 2020 and 2021 Budget
The following costs are included under Task 201:

	FY 2020	FY 2021
Total for Task 201	\$ 1,417,500	\$ 957,500
Professional Services Contract	\$ 882,000	\$ 452,000
Professional Services Contract Carryover	\$ 0	To Be Determined
RTC Staff Costs	\$ 535,000	\$ 505,500
The source of funds for Task 201 is:		
Consolidated Planning Grant (95%)	\$ 1,346,625	\$ 909,625
Local Match (5%)	\$ 70,875	\$ 47,875

Sub-Task 201-2116-20 - 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 using4 'MOVES'.
- Report detailing modeling results.
- Modeling work is an on-going activity.

Budget:

Sub-Task 201-2116-20	FY 2020	FY 2021
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, 2020

**Sub-Task 201-2206-20 -
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 201-2206-20	FY 2020	FY 2021
Total Project Cost	\$ 15,000	\$ 15,000
Professional Services Contract	\$ 12,000	\$ 12,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 3,000	\$ 3,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 14,250	\$ 14,250
Local Match (5%)	\$ 750	\$ 750

Schedule and Deliverables:

- Population Forecasts: Long-Term Projections for Clark County, Nevada.
- Completion Date: June, 2021

Sub-Task 201-2230-20
Travel Demand Model Enhancements and Validation Work Program-
(Subtask: Conformity Modeling and Process Support Service)

Purpose:

To be in compliance with interim guidance on conformity requirements released on April 23 2018 by the United States Department of Transportation (USDOT), Federal Highway Administration and Federal Transit Administration concerning 82 metropolitan areas (including the Las Vegas Region) with regards to ozone budgets. The U.S. Court of Appeals for the D.C. Circuit recently issued a decision *in South Coast Air Quality Management District v. EPA*, (No. 15-1115), which struck down portions of the 2008 Ozone National Ambient Air Quality Standards State Implementation Plan procedures

According to the Interim Guidance, RTC of Southern Nevada's new regional transportation plan (RTP), transportation improvement program (TIP) and TIP updates and amendments include projects that are not exempt from transportation conformity and may not proceed until transportation conformity with the 1997 ozone NAAQS is determined. The difficult situation is that the RTC of Southern Nevada does not have adequate ozone budget to meet the conformity standard. RTC is working with the agencies responsible for developing emission budgets, the United States Environmental Protection Agency (EPA) and the USDOT for budget and emission modeling issues.

Now it is uncertain what the final guidance on this matter will be from the USDOT. While the EPA, USDOT and the Association of Metropolitan Planning Organizations (AMPO) are waiting for the Court decision regarding to rehearing the case. It is anticipated some professional service support on having adequate ozone budgets, emission modeling and conformity process will be needed once the final guidance is out and we need to move our RTP/TIP amendment in a quick manner.

Previous Work:

Conformity Determination modeling and work in house to support all RTP/TIP updates and amendments in the past ten years.

Methodology:

Environmental professional service support on adequate ozone budgets, emission model, conformity process and final documentation of the conformity determination.

Participating Agencies:

RTC of Southern Nevada

Budget:

Sub-Task 201-2230-20	FY 2020	FY 2021
Total Project Cost	\$ 150,000	\$ 0
SFY 2020 Professional Services Contract	\$ 150,000	\$ 0
RTC Staff Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 142,500	\$ 0
Local Match (5%)	\$ 7,500	\$ 0

Schedule and Deliverables:

Completion by December 31, 2020.

201-3980-20 – Regional Bicycle and Pedestrian Counts, Phase III

Purpose: The purpose of this sub-task is to conduct bicycle and pedestrian counts to be able to identify existing demand and determine specific tangible benefits of proposed improvements when applying for project funding. The data collected in this study will help quantify bicycle and pedestrian demand trends over time.

Previous Studies: The original count program collected data at 24 locations, additionally the Southern Nevada Health District (SNHD) has collected trail usage data and prepared reports for five discrete trail sections. Data was collected using infrared sensors and validated with manual counts.

Methodology: Collect bicycle and pedestrian counts at the same 24 count locations from the original study – and add new data collection locations. Counts will be performed during the scheduled K-12 school year. All counts at each location will be performed for 12 continuous hours (7:00 am – 7:00 pm) during one weekday (Tuesday – Thursday) and one Saturday.

Specific tasks to be performed by a consultant team and managed by RTC staff include:

- Collecting counts using either of the following methods:
 - o Manual counts; or
 - o Video technology.
- Ensuring collection methodology and data gathered is consistent with the original count program and National Bicycle and Pedestrian Documentation Project (NBPD) methodologies;
- Identifying preferred count locations for new sites. Consideration for new sites should include:
 - o Existing and proposed bicycle/pedestrian facilities (including off-street multiuse paths);
 - o Transit access; and
 - o Stakeholder recommendations, including the SNHD, the Clark County School District, the Regional Open Space and Trails Work Group, and the Pedestrian Safety Task Force.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada (Lead Agency)
- Local jurisdictions

Budget:

Sub-Task 201-3980-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 100,000
SFY 2020 Professional Services Contract	\$ 0	\$ 100,000
SFY 2020 RTC Staff Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 95,000
Local Match (5%)	\$ 0	\$ 5,000
Total SFY 2020 Project Budget	\$ 0	\$ 100,000

Schedule and Deliverables:

Data and analysis to be provided to the RTC should include:

- Data sheets in Excel format
- Develop and apply sidewalk factors as they relate to the percentage of bicyclists riding on the sidewalk
- Analyze and segregate bicycle volume variations by the type of bicycle facility present on the roadway
- A summary report that includes methodology, maps, and trends
- Completion Date: June 2021

**Sub-Task 201-4000-20 -
Transportation Networking Company Data Analysis Methodology**

Purpose: This study would consist of hiring a consultant to obtain data on transportation network companies (TNC) such as Uber and Lyft. This data would consist of travel patterns and volumes of trips. The purpose of this effort would be to measure the percentage of vehicle passenger trips borne by transportation network companies. Knowing this information will allow for incorporation of transportation network companies as an element in the RTC traffic model, whereas it is not presently supported.

Previous Studies: None

Methodology:

This study would consist of hiring a consultant to obtain data on transportation network companies (TNC) such as Uber and Lyft. Ideally this project may obtain data combining all TNC data instead of data from single operating company. The data would consist of travel patterns and volumes of trips of all TNCs. This study would measure the percentage of vehicle passenger trips borne by transportation network companies. Knowing this information will allow for incorporation of transportation network companies as an element in the RTC traffic model, whereas it is not presently supported. Detailed methodology and tasks are to be determined and will be included in the Request For Proposals (RFP).

Participating Agencies:

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

Budget:

Sub-Task 201-4000-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$230,000
SFY 2020 Professional Services Contract	\$ 0	\$200,000
SFY 2020 RTC Staff Costs	\$ 0	\$ 30,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 218,500
Local Match (5%)	\$ 0	\$ 11,500

Schedule and Deliverables:

Start: July, 2020

End: June, 2021

Duration: Approximately 1 year

**Sub-Task 201-4015-20 -
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 201-4015-20	FY 2020	FY 2021
Total Project Cost	\$160,000	\$ 0
SFY 2020 Professional Services Contract	\$150,000	\$ 0
SFY 2020 RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$152,000	\$ 0
Local Match (5%)	\$ 8,000	\$ 0
Total SFY 2020 Project Budget	\$160,000	\$ 0

Schedule and Deliverables:

Start: July, 2019
End: June, 2021
Duration: Approximately 2 year

Sub-Task 201-4020-20 Visitor & Freight Model Components Update

Purpose:

The RTC will be updating two of the components of the Travel Demand Model - the visitor model and the freight model. This study will combine the efforts of two prior UPWP studies – the Visitor Population Synthesizer and Freight Model update.

1. Develop a visitor population synthesizer model to improve and enhance the visitor model component in the RTC Travel Demand Model. Visitor model component in RTCSNV's travel demand model will be re-examined in this project. The update will incorporate RTCSNV's newly developed population synthesizer to synthesize visitor groups as households. The project will also include visitor trip generation, distribution, and mode choice sub component updates using RTC's 2014 visitor survey.
2. The Freight model component will be reviewed in this project. It will result in the update of the existing truck model.
3. Re-Calibration of the model will be performed due to the changes made.

Previous Studies:

RTC 2014 Travel Demand Model
2014 Las Vegas Visitor Survey
RTCSNV ABM Pilot Project – Development population Synthesizer
RTC 2014 Travel Demand Model
Southern Nevada Regional Goods Movement Master Plan
Las Vegas Regional Freight Data Collection Study

Methodology:

This is the second phase of the synthesizer development focusing on visitor population to Las Vegas. The first phase was a development of a population synthesizer, which was completed during FY 2018. The existing visitor model in the RTC Travel Demand Model and 2014 Las Vegas Visitor Survey data will be evaluated by this project. The developed Visitor Synthesizer model will be implemented into the Regional Travel Demand Model the model calibration will be conducted.

The freight model component in RTCSNV's travel demand model will be updated in this project. The update will utilize either the Freight Analysis Framework 4 (FAF4) or other freight movement database such as Streetlight data to create a freight model. Truck trip generation rates by industry will be reviewed and updated. The model will be integrated to RTCSNV's travel demand model. The model will include long-haul truck and commodity movements, single unit truck mid-range commodity movements, and commercial vehicle (short distance trips).

Detailed methodology and tasks are to be determined and included in the Request for Proposals (RFP).

Participating Agencies:

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

Budget:

Sub-Task 201-4020-20	FY 2020	FY 2021
Total Project Cost	\$ 330,000	\$ 0
Professional Services Contract	\$ 300,000	\$ 0
RTC Staff Time	\$ 30,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 313,500	\$ 0
Local Match (5%)	\$ 16,500	\$ 0

Schedule and Deliverables:

Start: January, 2020

End: January, 2022

Duration: Approximately 2 years

**Sub-Task 201-9215-20-
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 201-9215-20	FY 2020	FY 2021
Total Project Cost	\$ 77,500	\$ 147,500
Professional Services Contract	\$ 70,000	\$ 140,000
RTC Staff Time	\$ 7,500	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 73,625	\$ 140,125
Local Match (5%)	\$ 3,875	\$ 7,375

Sub-Task 201-9220-20- 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 201-9220-20	FY 2020	FY 2021
Total Project Cost	\$ 25,000	\$ 25,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 25,000	\$ 25,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 23,750	\$ 23,750
Local Match (5%)	\$ 1,250	\$ 1,250

Schedule and Deliverables:

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

**Sub-Task 201-9225-20-
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 201-9225-20	FY 2020	FY 2021
Total Project Cost	\$ 270,000	\$ 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	\$ 200,000	\$ 0
Local Funding	\$ 50,000	\$ 0
FHWA / State Research Funds	\$ 19,000	\$ 19,000
Local PL Match	\$ 1,000	\$ 1,000
Total SFY 2020-2021 Project Budget	\$ 270,000	\$ 20,000

Schedule and Deliverables:

Anticipated Start Date: August, 2018

Anticipated End Date: August, 2020

Sub-Task 201-9230-20 - 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 201-9230-20	FY 2020	FY 2021
Total Project Cost	\$ 220,000	\$ 0
Professional Services Contract	\$ 200,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 20,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 209,000	\$ 0
Local Match	\$ 11,000	\$ 0

Schedule and Deliverables:

Anticipated Start Date: January, 2020

Anticipated End Date: January, 2021

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 Services Transportation Plan Development

Task 202, 2020 Budget

The following costs are included under Task 202:

	FY 2020	FY 2021
Total Cost of Task 202	\$ 534,923	\$ 455,000
Professional Services Contracts	\$ 224,923	\$ 185,000
SFY 2018 Professional Services Contracts Carried Over	\$ 0	\$ 0
RTC Staff Costs	\$ 310,000	\$ 270,000
The sources of funds for Task 202 are:		
Consolidated Planning Grant (95%)	\$ 508,177	\$ 432,250
Local Funds (5% match)	\$ 26,746	\$ 22,750

Sub-Task 202-3325-20 - 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:

- 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 202-3325-20	FY 2020	FY 2021
Total Project Cost	\$ 100,000	\$ 100,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 100,000	\$ 100,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 95,000	\$ 95,000
Local Match (5%)	\$ 5,000	\$ 5,000

Schedule and Deliverables:

- 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.
- Performance Based Planning is an on-going task.

Sub-Task 202-3710-20
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 202-3710-20	FY 2020	FY 2021
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 202-3715-20
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 202-3715-20	FY 2020	FY 2021
Total Project Cost	\$ 30,000	\$ 30,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 30,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 28,500	\$ 28,500
Local Match (5%)	\$ 1,500	\$ 1,500

Schedule and Deliverables:

- Interim report on task elements
- Final Transportation Safety Plan
- Final Bicycle and Pedestrian Safety Action Plan, completion date: June 2018

Sub-Task 202-9005-20 - 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 Access2040 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:

- Access2040, Regional Transportation Plan for Southern Nevada 2017-2040 (2017)
- 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 Access2040 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 202-9005-20	FY 2020	FY 2021
Total Project Cost	\$ 150,000	\$ 200,000
Professional Services Contract	\$ 135,000	\$ 185,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 15,000	\$ 15,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 142,500	\$ 190,000
Local Match (5%)	\$ 7,500	\$ 10,000

Sub-Task 202-9035-20 – 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 202-9035-20	FY 2020	FY 2021
Total Project Cost	\$ 100,000	\$ 75,000
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 100,000	\$ 75,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 95,000	\$ 71,250
Local Match (5%)	\$ 5,000	\$ 3,750

Schedule and Deliverables:

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

End Date: June 2020

**Subtask 202-9040-20 –
Coordinated Human Services Transportation Plan Development**

Purpose:

The Coordinated Plan is a federal requirement under the Fixing America’s Surface Transportation (FAST) Act. The Coordinated Plan identifies transportation gaps faced by transportation-disadvantaged populations, establishes priorities for funding decisions, and focuses on a broad range of mobility services to improve coordination among public transit agencies and human services transportation providers.

Previous Work:

- Coordinated Public Transit – Human Services Transportation Plan (2008)

Methodology:

- Assess the regional demographics for Clark County to identify where elderly persons, individuals with disabilities and low income individuals are located.
- Assess the existing public transit (e.g. RTC, RTC Paratransit, Silver Rider Transit Service, and Silver STAR) and private transit service providers (e.g. Las Vegas Monorail, Taxi, TNC) for their ability to serve these populations.
- Identify existing barriers to providing human service transportation.
- Develop vision statement and goals for delivering human services transportation.
- Identify and prioritize potential programs to address gaps and needs.
- Discuss relevant grant programs for supporting human services transportation.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 202-9040-20	FY 2020	FY 2021
Total Project Cost	\$ 104,923	\$ 0
Professional Services Contract	\$ 89,923	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 15,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 99,677	\$ 0
Local Match	\$ 5,246	\$ 0

Schedule and Deliverables:

Begin Date: July, 2019
End Date: June, 2020
Duration: 12 months

Task 301: Multi-Modal 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, High Speed Rail Station Connection to Downtown Las Vegas (City of Las Vegas)
- 301-3910, Regional Commuter Center Study (City of Henderson)
- 301-3915, Northwest Las Vegas Traffic Study (City of Las Vegas)
- 301-3920, Cycle Track Feasibility and Route Identification Study (City of Las Vegas)
- 301-3925, Henderson Sustainable Mobility Plan (City of Henderson)
- 301-3930, 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
- 301-3945, Connecting Neighborhoods Lake Mead Boulevard Corridor Study (City of North Las Vegas)
- 301-3950, Livable Centers Study - Project 3 (RTCSNV)
- 301-3960, Maryland Parkway Transit Oriented Development – Las Vegas (RTCSNV)
- 301-3965, Maryland Parkway Transit Oriented Development – Clark County (RTCSNV)
- 301-3970, Applied Behavioral Economics – Research Study (RTCSNV)
- 301-3975, Applied Behavioral Economics – Testing and Implementation (RTCSNV)
- 301-3980, Regional and Bicycle and Pedestrian Plan Update (RTCSNV)
- 301-3985, Regional Walkability Plan (RTCSNV)
- 301-3990, Regional Transportation System Health Impact Assessment Standards and Cost Benefit Analysis (RTCSNV)
- 301-3995, Livable Centers Study - Project 4 (RTCSNV)

301-9115, Planning and Infrastructure Needs for Emerging Transportation Technologies (RTCSNV)
301-9125, Boulder Highway Multimodal Transportation Investment Study (RTCSNV)
301-9225, Bruce Street Green and Complete Street Study (City of Las Vegas)
301-9230, Citywide Pedestrian and Bicycle Plan (City of North Las Vegas)
301-9245, School Trip Generation and Siting Study (RTCSNV)
301-9250, Livable Centers Study – Project 1 (RTCSNV)
301-9270, Livable Centers Study – Project 2 (RTCSNV)
301-9275, Stadium District Transportation Plan – (Clark County Comprehensive Planning)
301-9285, Transit Oriented Development Implementation Study (RTCSNV)

Task 301, 2020 Budget

The following costs are included under Task 301:

	FY 2020	FY 2021
Task Costs	\$ 2,842,331	\$ 1,642,500
Work Carried Over from SFY 2019	\$ 904,778	N/A
Work Carried Over from SFY 2020	N/A	To Be Determined
Professional Services Contracts	\$ 1,800,000	\$ 1,575,000
RTC Staff Costs	\$ 137,553	\$ 67,500
The sources of funds for Task 301 are:		
Consolidated Planning Grant (95%)	\$ 2,690,714	\$ 1,560,375
Local Funds (5% match)	\$ 141,617	\$ 82,125
Grant Funding	\$ 10,000	

Sub-Task 301-3905-20 – High Speed Rail Station Connection to Downtown Las Vegas

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. Information from the report indicated the company would like to start construction in 2019 and finish in early 2022.

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 Las Vegas high speed train station to the Downtown area (including the Medical District). 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 Downtown area and the LV Rail Station.
- 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:

- City of Las Vegas, Clark County, Las Vegas Convention and Visitors Authority

Budget:

Sub-Task 301-3905-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 207,500
Professional Services Contract	\$ 0	\$ 200,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 197,125
Local Match (5%)	\$ 0	\$ 10,375

Expected Products:

Draft and final report;

Presentations to the RTC Board and local jurisdictions.

Schedule:

Start Date: July, 2020

End Date: June, 2021

Expected Duration: 12 months

**Sub-Task 301-3910-20 –
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 301-3910-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 75,000
Professional Services Contract	\$ 0	\$ 75,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 71,250
Local Match (5%)	\$ 0	\$ 3,750

Expected Products:

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.

Schedule:

Start Date: July, 2020

End Date: June, 2021

**Sub-Task 301-3915-20 –
Northwest Las Vegas Traffic Study**

Purpose:

The Northwest Las Vegas traffic signal network in the area bounded by Buffalo to the east and Centennial to the south has grown at an astounding rate. 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.

The results of this study would give the City the ability to:

- Prioritize arterial corridors for which to produce coordinated traffic signal timing plans
- Identify corridor improvements to be added to the five-year CIP

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:

- Data collection (origin-destination information, traffic counts, and travel time runs)
- Analysis (origin-destination, future traffic projections, and traffic signal timing).

Participating Agencies:

- City of Las Vegas

Budget:

Sub-Task 301-3915-20	FY 2020	FY 2021
Total Project Cost	\$ 207,500	\$ 0
Professional Services Contract	\$ 200,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 7,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 197,125	\$ 0
Local Match (5%)	\$ 10,375	\$ 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, 2019

End Date: July, 2020

(12 months)

Sub-Task 301-3920-20 – Cycle Track Feasibility and Route Identification Study

Purpose:

Cycle tracks are common in Europe and have been implemented in New York City, Chicago, Portland, San Francisco, Indianapolis, Austin and Memphis.

A cycle track is physically separated from motor traffic and distinct from the sidewalk. By separating cyclists from motor traffic, these facilities can offer a higher level of security than regular bike lanes and are attractive to bicyclists of all levels and ages. Cycle tracks improve bicyclists comfort and safety, reduces risk of collisions, reduces occurrences of dooring by parked vehicles, and prevents illegal parking within the bike lane.

The City of Las Vegas' objective with this study is to increase the number of commuter bike riders, and installing cycle tracks has been shown to increase riders by over 170% in similar markets. If this project is chosen, the City of Las Vegas could implement the very first cycle track in Nevada.

Previous Work:

- Regional Bicycle & Pedestrian Plan for Southern Nevada – May 2017
- City of Las Vegas Mobility Master Plan - May 2016
- Regional Bicycle Network Gap Analysis – January 2014

Methodology:

- Creation of a study working group to determine important goals and objectives.
- Collection of data on existing and proposed bicycle routes and roadways within the Central Las Vegas area.
- Review of existing bicycle plans, studies and best practices for cycle track facilities.
- Creation and ranking of a list of corridors that should be examined for further analysis.
- Conducting public outreach meetings to receive support on potential corridors.
- Identification of any potential connections within these preferred corridors.
- Recommendations for specific improvements that would best serve these facilities.
- Creation of cost estimates and identification of possible funding sources for both the development and maintenance of identified facilities.
- Development of draft and final reports.
- Presentations of the findings to the City Council, County Commission, and RTC Boards.

Participating Agencies:

- City of Las Vegas

Budget:

Sub-Task 301-3920-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 107,500
Professional Services Contract	\$ 0	\$ 100,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 102,125
Local Match (5%)	\$ 0	\$ 5,375

Expected Products:

Draft and final report;
Presentations to the Las Vegas City Council and the RTC Board.

Schedule:

Start Date: July, 2020
End Date: June, 2021
(Estimated duration: 12 months)

Sub-Task 301-3925-20 – 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
- 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 301-3925-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 307,500
Professional Services Contract	\$ 0	\$ 300,000
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 292,125
Local Match (5%)	\$ 0	\$ 15,375

Expected Products:

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

Schedule and Deliverables:

Start Date: July, 2019

End Date: June, 2021

(Estimated time 18 months)

**Sub-Task 301-3930-20 –
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 301-3930-20	FY 2020	FY 2021
Total Project Cost	\$ 307,500	\$ 0
Professional Services Contract	\$ 300,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 7,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 292,125	\$ 0
Local Match (5%)	\$ 15,375	\$ 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, 2019

End Date: May, 2021

Project Timeline: 18 months

Sub-Task 301-3935-20 – 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 301-3935-20	FY 2020	FY 2021
Total Project Cost	\$ 207,500	\$ 0
SFY 2020 Professional Services Contract	\$ 200,000	\$ 0
SFY 2019 Professional Services Contract Carryover	\$ 0	\$ 0
SFY 2020 RTC Staff Costs	\$ 7,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 197,125	\$ 0
Local Match (5%)	\$ 10,375	\$ 0

Expected Products:

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.

Schedule and Deliverables:

Start Date: August, 2019
End Date: August, 2020
Project Duration: 12 months

Sub-Task 301-3940-20 – 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 301-3940-20	FY 2020	FY 2021
Total Project Cost	\$ 257,500	\$ 0
Professional Services Contract	\$ 250,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 7,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 244,625	\$ 0
Local Match (5%)	\$ 12,875	\$ 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, 2019
End Date: February, 2021
Time Frame: 18 months

Sub-Task 301-3945-20 – Connecting Neighborhoods Lake Mead Boulevard Corridor Study

Purpose:

As Downtown North Las Vegas continues to redevelop, it is important that a comprehensive study of Lake Mead Boulevard be completed to ensure adequate improvements are made for safe pedestrian, bicycle, automobile and transit travel. Lake Mead Boulevard, from Pecos Road to interstate 15, connects neighborhoods to employment centers, retail centers, new community/civic areas and interstate highway.

The City has several complete street infrastructure projects underway linking various neighborhoods to Lake Mead Boulevard via minor corridors. This study would identify what improvements are needed along Lake Mead to extend multi-modal transportation within this area.

Previous Work:

- CNLV – Complete Streets Policy
- CNLV – Comprehensive Trails and Bikeways Master Plan
- CNLV – Complete Streets Corridor Ranking Study
- CNLV – Major Downtown Corridor Study
- SNRPC – Southern Nevada Strong Regional Policy Plan
- RTC – Regional Schools Multimodal Transportation Access Study
- RTC – Regional Bicycle Gap Analysis
- RTC – Regional Bicycle and Pedestrian Counts
- RTC – Regional Bicycle and Pedestrian Plan for Southern Nevada

Methodology:

- Describe the methodology.
- Review existing information, planned projects, maps and relevant studies
Identify employment, commercial, recreational and civic destinations along and connecting to Downtown North Las Vegas
- Evaluate current conditions of the pedestrian and bicycle environment
- Identify existing and future roadway traffic volumes and projected growth trends along the corridor and at all major intersections
- Research existing data and studies that quantify pedestrian and bicycle volumes on the corridor.
- Conduct pedestrian and bicycle counts on the corridor if the data does not exist
- Research existing data and studies that quantify transit use along the corridor
- Inventory potential pedestrian/bicycle oriented land uses along the corridor
- Prioritize locations in need of pedestrian and bicycle infrastructure in accordance with safety and mobility benefits to be achieved by implementation.
- Develop critical roadway alternatives including travel lane configurations, speed limit analysis, intersections and mid-block designs, and other feasible strategies
- Evaluate advantages and disadvantages to each roadway alternative
- Draft report, recommendations and presentations
- Develop cost estimates for design, right-of-way and construction of identified improvements

- Identify possible funding sources to supplement existing local and federal funds for implementation of recommended Complete Streets improvements.
- Create a stakeholder outreach program
- Final report and presentation(s)

Participating Agencies:

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

Budget:

Sub-Task 301-3945-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 157,500
SFY 2020 Professional Services Contract	\$ 0	\$ 150,000
SFY 2019 Professional Services Contract Carryover	\$ 0	\$ 0
SFY 2020 RTC Staff Costs	\$ 0	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 149,625
Local Match (5%)	\$ 0	\$ 7,875

Expected Products:

- Draft report, near and long term recommendations
- Presentations to City Council, RTC Boards and Committees
- Final report defining and evaluating alternatives, improvement cost estimates, description of right-of-way needs, recommendations, identification of funding mechanisms for implementation, cost of long term maintenance of Complete Street improvements

Schedule and Deliverables:

Start Date: July, 2019

End Date: July, 2020

Expected Duration: 12 months

Sub-Task 301-3950-20 – Livable Centers Study - Project 3 -

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 301-3950-20	FY 2020	FY 2021
Total Project Cost	\$255,000	\$ 0
Professional Services Contract	\$250,000	\$ 0
RTC Staff Costs	\$5,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$242,250	\$ 0
Local Match (5%)	\$12,750	\$ 0

Schedule and Deliverables:

- Community and Stakeholder Engagement Plan (09/2020)
- Existing Conditions & Needs Assessment (12/2020)
- Vision, Objectives and strategies (01/2021)
- Draft Study (03/2021)
- Design guidelines (03/2021)
- Implementation of Study (05/2021)
- Performance Measures and tracking outcomes (05/2021)
- Livable Centers Program for FY20 is expected to be completed by 09/30/2021

Sub-Task 301-3960-20 – 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 301-3960-20	FY 2020	FY 2021
Total Project Cost	\$ 200,000	\$ 200,000
Professional Services Contract	\$ 200,000	\$ 200,000
Funding Sources		
Consolidate Planning Grant (0%)	\$ 0	\$ 0
FTA Planning Grant	\$ 150,000	\$ 150,000
Local Match	\$ 50,000	\$ 50,000
Local Match 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 06/2021

Schedule:

Start Date: Sometime, 2019

End Date: June, 2021

Expected Duration: 2 years

Sub-Task 301-3965-20 – 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 301-3965-20	FY 2020	FY 2021
Total Project Cost	\$ 260,000	\$ 0
FY 2019 Carryover	\$ 260,000	N/A
FY 2020 Carryover	N/A	To Be Determined
Professional Services Contract	\$ 250,000	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 247,000	\$ 0
Local Match (30%)	\$ 13,000	\$ 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: Sometime, 2019

End Date: June, 2021

Expected Duration: 2 years

Sub-Task 301-3970-20- Applied Behavioral Economics - Research Study

Purpose:

This study is related to and compliments the On Board Mobility Plan, and the overall Regional Transportation Plan (RTP) developed every four years by the RTC. As the initial On Board project has conducted public outreach and engagement, stakeholder coordination, and research and analysis specific to Southern Nevada, the RTC has determined that the highest value and regional need would be better met with the development of a regional mobility plan that includes a High Capacity Transit (HCT) plan, enhancements to traditional fixed-route bus service, long-term strategies for providing transit service, strategies to address disruptions from emerging transportation technologies, and descriptions of the array of benefits from transit.

Many of the identified goals and outcomes that both On Board and the RTP aim to achieve are reductions in automobile congestion. This means that desired regional growth will rely to a significant degree on demand management as well as the combination of investing in transportation choices and coordinated land use planning.

Managing transportation demand involves changing transportation behavior which is a process that is often more complex than simply presenting alternatives. Behavior insights from psychology help understand the mechanisms that generate intent, break habits and create conditions conducive to long-term change. Applying these in Southern Nevada could help provide a more cost-effective and targeted strategy for RTC's role in leading and supporting demand management initiatives.

This study will review theories related to transportation demand, test techniques and develop behavioral insights guidance for Southern Nevada. The resulting insights guidance would be produced as a non-technical reference to assist the RTC and regional partners to design more targeted and effective demand management interventions.

Methodology:

- Task 1: Research Agenda – Scan current RTC programs, and other programs in Southern Nevada, and consider the performance measure goals the region is trying to achieve.
- Task 2: Targeted Literature Review – Review and recommend behavioral theories relevant to transportation decision making in Southern Nevada and produce a summary of practical applications for demand management.
- Task 3: Identify a short list of trial concepts that are both based on evidence and feasible to test and include trial budgets and work plans.
- Task 4: Consult – host a review meeting or workshop with RTC and invited stakeholders to discuss the findings, applications, guidance needs and challenges to implementing behavioral insights for demand management.
- Task 5: Report – The final report should contain two primary sections:
 - A technical report outlining the application and benefits of behavioral insights techniques for RTCs own marketing activities, and;
 - A non-technical guide on techniques to improve the targeting and effectiveness of demand management messaging using the behavioral science research.

- Task 6: The project requires a mix of skills to translate complex behavioral science research and theory, through proof-of-concept testing into non-technical advice. It is imperative that the study provides expertise across all aspects of the work described above.

Participating Agencies:

The project is anticipated to be completed concurrently with the On Board Mobility Plan and receive review and input from that study’s Technical Advisory Group. This group is composed of local agency representatives and regional stakeholders.

Budget:

Sub Task 301-3970-20	FY 2020	FY 2021
Total Project Cost	\$140,000	\$ 0
SFY 2019 Professional Services Contract Carryover	\$125,000	\$ 0
RTC Staff Costs	\$15,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$133,000	\$ 0
Local Match (5%)	\$ 7,000	\$ 0

Schedule and Deliverables:

The study will provide both technical and non-technical final reports as deliverables. The study is anticipated to take approximately 12 months to complete.

It is anticipated that this initial study will be followed by a second effort to test specific interventions. That study is envisioned to design small-scale tests of the recommendations to stimulate transit ridership goals in a target group. That study will undertake the designed experiment in the field, collate and report back findings and any recommended refinements

Sub-Task 301-3975-20- Applied Behavioral Economics – Testing and Implementation

This study will follow up on Sub-Task 301-3970-20, Applied Behavioral Economics – Research Study, which will examine possible strategies to manage transportation demand through changing transportation behavior. The study will take concepts proposed by the research study and test them in the field, in a manner that is controlled by a trial budget and work plan.

Changing travel demand is a process that is often more complex than simply presenting alternatives. Behavior insights from psychology help understand the mechanisms that generate intent, break habits and create conditions conducive to long-term change. Applying these in Southern Nevada could help provide a more cost-effective and targeted strategy for RTC's role in leading and supporting demand management initiatives.

Managing transportation demand is a key component towards achieving the identified goals and outcomes concerning reducing automobile congestion for the region as described in the On Board Mobility Plan and the Regional Transportation Plan (RTP). Desired regional growth will need to rely to a significant degree on demand management as well as the combination of investing in transportation choices and coordinated land use planning. Applying these in Southern Nevada could help provide a more cost-effective and targeted strategy for RTC's role in leading and supporting demand management initiatives.

This study will test a list of trial concepts proposed by the preceding research study for encouraging changes in transportation behavior.

Methodology:

1. the consultant will develop a series of behavioral touch points that influence transportation decision making and contribute to the overall objective. For instance, if a goal was to increase ridership on the RTC system, what steps could be taken to expand demand for transit service as well as supply, not only in terms of new capacity, but other elements such as transit stop design, amenities and frequency.

2. The consultant should design a series of interventions to address demand specific to touch points. To encourage a behavior, the consultant should seek to make it EAST - Easy, **A**tttractive, **S**ocial and **T**imely. "Easy" refers to the identification and reduction of friction points to reduce the "hassle factor" of a behavior, thus increasing uptake. "Attractive" refers to capturing one's attention to help hone their attention on something in a busy world. "Social" refers to the leveraging the direct and indirect social pressure and norms that drive so much of our behavior. "Timely" considers the importance of the timing of an ask in determining the response.

The study would seek to examine approaches to nudge people to:

- Trying It Again - (if they are low frequency users).
- Making It a Habit - (if they are mid frequency users).
- Using it Well - (if they are high frequency users).

3. The study should identify opportunities and scenarios for nudging low frequency users at the most opportune time (such as tourists arriving to the city, or for residents moving to a new home or new job). Different forms of approaches should be tested with control groups.

4. The consultant should measure whether providing nudges to the different categories of potential riders effects changes in their subsequent travel decision making.

This study will review theories related to transportation demand, test techniques and develop behavioral insights guidance for Southern Nevada. The resulting insights guidance would be produced as a non-technical reference to assist the RTC and regional partners to design more targeted and effective demand management interventions.

5. Findings from the study should be delivered to the RTC and other interested stakeholders as presentations as well as in a final report.

Budget:

Sub Task 301-3975-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$215,000
Professional Services Contract	\$ 0	\$200,000
RTC Staff Costs	\$ 0	\$ 15,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$204,250
Local Match (5%)	\$ 0	\$ 10,750

Schedule and Deliverables:

Start Date: August, 2020

End Date: June, 2021

Sub-Task 301-3980-20 - Regional Bicycle and Pedestrian Plan Update

Purpose:

The 2017 Regional Bicycle and Pedestrian Plan provides a framework for improving the bicycle and pedestrian environment throughout the urbanized area of Southern Nevada. The actions and investments identified in the plan are envisioned to enhance safety for all roadway users and encourage more people to ride bicycles. The plan update will include: 1) strategic implementation planning and project prioritization, 2) revised bicycle and pedestrian network maps based on completed facilities, 3) identification of cycle track corridors and development of cycle track pilot conceptual plan(s), and 4) an evaluation of health impacts.

Previous Work:

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

Methodology:

- Form a Technical Advisory Committee and determine planning and community engagement process.
- Revise the plan maps and GIS data to reflect completed bicycle and pedestrian facilities, facilities that will not be implemented, facilities planned through new studies (i.e. North Las Vegas Citywide Pedestrian and Bicycle Plan), and new priorities.
- Analyze crash corridors and intersections based on recent data and prepare map.
- Revise the transit corridors map as needed per the Transit Mobility Study and identify bicycle facility gaps and needs.
- Identify potential roadway or other alignments that could include to include cycle tracks. Investigate links between proposed cycle tracks and bicycle and transit facilities. Prepare conceptual exhibits for pilot cycle track facilities.
- Evaluate the health impact of the existing bicycle facility network vs. planned improvements.
- Identify successes and challenges in plan implementation; develop new strategies to address challenges as needed.
- Develop a 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

Budget:

Subtask 301-3980-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 110,000
Professional Service Contract	\$ 0	\$ 100,000
RTC Staff Costs	\$ 0	\$ 10,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 104,500
Local Match (5%)	\$ 0	\$ 5,500

Schedule:

The Regional Bicycle and Pedestrian Plan update will be completed by June 2021.

Sub-Task 301-3985-20 - 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 301-3985-20	FY 2020	FY 2021
Total Project Cost	\$ 260,000	\$ 0
Professional Service 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:

The project will be initiated in December 2019 with adoption of a final plan by June 2021.

Sub-Task 301-3990-20

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 301-3990-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$ 207,500
Professional Service Contract	\$ 0	\$ 200,000
RTC Staff Costs	\$ 0	\$ 7,500
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$ 197,125
Local Match (5%)	\$ 0	\$ 10,375

Schedule:

The project will be completed in parallel with the upcoming Regional Transportation Plan update, with kickoff by January 15, 2021 and approval of the final report by December 15, 2021.

Sub-Task 301-3995-20 - Livable Centers Study - Project 4

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 301-3995-20	FY 2020	FY 2021
Total Project Cost	\$ 0	\$255,000
Professional Services Contract	\$ 0	\$250,000
RTC Staff Costs	\$ 0	\$5,000
Funding Sources		
Consolidated Planning Grant (95%)	\$ 0	\$242,250
Local Match (5%)	\$ 0	\$12,750

Schedule and Deliverables for FY21

- Community and Stakeholder Engagement Plan (09/2021)
- Existing Conditions & Needs Assessment (12/2021)
- Vision, Objectives and strategies (01/2022)
- Draft Study (03/2022)
- Design guidelines (03/2022)
- Implementation of Study (05/2022)
- Performance Measures and tracking outcomes (05/2022)
- Livable Centers Program for FY 2020 is expected to be completed by 09/30/2022

Sub-Task 301-9115-20 - 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 301-9115-20	FY 2020	FY 2021
Total Project Cost	\$ 180,000	\$ 0
Professional Services Contract	\$ 150,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 30,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 171,000	\$ 0
Local Match (5%)	\$ 9,000	\$ 0

Schedule and Deliverables:

Start Date: July, 2020

End Date: June, 2021.

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- 301-9125-20 – Boulder Highway Multimodal Transportation Investment Study

Objective:

Identify and analyze potential improvements to Boulder Highway between Wagonwheel Dr. and Charleston Blvd. The study should focus on overall right-of-way management and allocation based on the needs of all users. Special consideration should be given to technology solutions specifically suited to the corridor. The study should identify overall transportation system and safety improvements including but not limited to: Intelligent Transportation Systems (ITS) applications; access management; transit improvements; pedestrian and bicycle facility improvements; the number of potential travel lanes; intersection modifications and potential for signal timing coordination; along with cost estimates. The study should also evaluate the impact on traffic operations along Boulder Highway resulting from possible major developments on adjoining land.

Task 1: Project Management

1.1 Invoicing and Progress Reports - Prepare the monthly progress reports, invoices, and billing.

1.2 Coordination - An initial meeting with RTC and participating area agencies will be organized to establish study goals and objectives. Coordination with the RTC project manager and staff will be ongoing throughout the project.

Task 2: Existing Conditions Analysis

2.1 Review existing studies that are relevant to the Boulder Highway Corridor Study and incorporate into the corridor study. Examples include the Southern Nevada Strong Plan, the RTC Regional Transportation Plan and any other plans and studies.

2.2 Collect peak hour AM and PM turning movement data and bicycle and pedestrian counts on major intersections along the study corridor. Collect 24 hour traffic counts on weekdays. Collect signal timing/phasing data, travel time and delay data. Collect pedestrian counts on the selected time and locations in the study area.

2.3 Collect information about zoning, current land use, important origins and destinations, and planned land use. Coordinate with any major land use developments that have the potential to impact travel demand or traffic operations in the study corridor.

2.4 The consultant will analyze, adjust, and run the provided RTC TransCad travel demand model to perform the following tasks. RTC has developed projections for the horizon years 2020, 2030, and 2035 based on the projects identified in the 2013-2035 Regional Transportation Plan.

2.5 Develop a no-build travel demand scenario to identify bottlenecks, highway/roadway capacity constraints, and limitations of existing transit system.

2.6 Analyze and adjust the RTC travel demand model horizon years to reflect the development identified in the collected studies and plans. Make any adjustments to the travel demand model network and code the growth according to the schedule identified in the plans and studies.

2.7 Analyze RTC travel model projections to review any deficiencies in the roadway network for the 2020, 2030 and 2035 horizon years already developed by the RTC.

2.8 Collect and analyze origin and destination patterns by spot survey in the corridor.

2.9 Analyze corridor performance based on the data collected. Prepare Multi-Modal Level of Service (MMLOS) analysis for different modes of transportation.

Develop existing and 2035 traffic volumes along the corridor and at major intersections.

2.10 Develop and perform micro-simulation utilizing dynamic traffic assignment for the corridor in developing alternatives

2.11 Conduct travel time and delay study and analyze freight movement and document vehicle classification.

2.12 Analyze Boulder highway as an emergency alternative route to I-515.

2.13 Identify existing right of way and roadway geometrics and analyze driveway access, driveway turning radius, number of driveways, driveway corner clearance, raised driveways, flood control facilities and underground utilities.

2.14 Safety Analysis – Collect most recent 5-year crash statistics to identify potential safety issues. Identify crash locations and the nature of the crash.

2.15 Inventory of transit, pedestrian/bicycle facilities:

- Document location and condition of bus stops, sidewalks, crosswalks and bicycle facilities.
- Document sidewalk and intersection lighting
- Identify levels of pedestrian, transit and parking use:
- Analysis of transit boarding data
- Use of any prior research
- Supplement by spot surveys of selected locations
- Identify and document ADA accessibility improvements

2.16 Conduct an intersection lighting analysis to determine the optimal lighting conditions, especially at intersections with pedestrian activity.

Task 3: Public, Stakeholder and Agency Involvement

3.1 Facilitate monthly Technical Advisory Committee (TAC) meetings that will be held during the 18 month planning study to review study issues and results. The membership of the TAC is to be defined in cooperation with RTC.

3.2 Develop a public participation plan to facilitate and maximize public information gathering across multiple formats. This may include open-house meetings, go to-them meetings, and online surveys.

3.3 Hold up to five stakeholder meetings with local business or elected officials/community groups.

3.4 Facilitate up to two day-long planning workshops to collaborate with local residents, businesses, and property owners as well as local government staff regarding planning and design issues in the corridor.

Task 4: Develop and Evaluate Alternatives

4.1 Transit Improvements – Develop and evaluate short and long term transit improvements.

4.2 Pedestrian and Bicycle Improvements – Develop and evaluate improvements to pedestrian and bicycle facilities, including sidewalks, bicycle lanes, and streetscape improvements

4.3 Freight movement, parking and Access Management Improvements – Develop and evaluate alternatives to reduce vehicle conflicts, improve traffic flow, and adequately meet the needs for access and parking of local businesses.

4.4 Roadway and Traffic Improvements - Develop and evaluate short and long term roadway and intersection improvements in the context of complete streets and other state of the art traffic safety and calming improvements, including flood control facilities and utility improvements.

4.5 Technology Improvements – Develop and evaluate intelligent transportation system improvements to improve the communication, detection, and response of the transportation network to the users along the corridor (e.g. v-to-x communication, smart city infrastructure).

Task 5: Development of recommended Improvement strategies:

5.1 Develop early action items and short term design and technology improvement recommendations to meet the multimodal demand of the corridor.

5.2 Develop long term improvement recommendations to meet the multimodal demand of the corridor.

5.3 Recommendations should be developed in the context of community and by accommodating all users.

5.4 Recommendations should be developed in the context of complete streets concepts in accordance to the NDOT Complete Streets Policy and RTC's guideline.

5.5 Identify any other best practice design concepts and strategies to the TAC which can be utilized in developing policies and recommendations.

5.6 Develop footprints and conceptual cross sections showing recommendations. At least two alternatives should be developed for the corridor.

5.7 Develop detailed concepts of alternatives with cross sections.

5.8 Develop rendering of the concepts showing entire corridor. The proposed conceptual/sections should be consistent throughout the corridor.

Task 6: Prepare policies and implementation plan to meet the demand and identify the schedule of recommended improvements

6.1 Develop policies to implement the recommendations.

6.2 Identify the steps and agencies to implement recommendations and policies.

6.3 Identify funding sources and develop cost estimates.

6.4 Develop a time-phased implementation plan based on the pace of anticipated development and travel demand growth.

Task 7: Report Preparation

7.1 Existing Conditions/Definition of Alternatives Report – Prepare a report to document existing conditions, needs, and the preliminary alternatives to be considered in the evaluation.

7.2 Draft Report - Prepare draft report including graphics and illustrations of alternatives. The report will include conceptual design level plan for roadway improvements, concept layouts, cost estimates, right of way needs, plan view, and cross sections.

Task 8: Deliverables

8.1 Meeting materials and displays for public, stakeholder, and TAC meetings.

8.2 Prepare a draft final report which documents study findings, activities, and present study results. Distribute the draft report in PDF format to TAC members and provide one electronic and one hard copy to the RTC and NDOT for distribution.

8.3 Develop an executive summary both in English and Spanish as part of the final draft report

8.4 Revise the draft report based on the input from the study Technical Advisory Committee and RTC.

8.5 Prepare final report and distribute it to TAC members in PDF format and provide a bound copy and one original unbound paper copy. Provide an electronic copy in the PDF format and a copy in a commonly used editable format as agreed with RTC.

8.6 Make maximum of three (4) study presentations to the Regional Transportation Commission, Executive Advisory Committee, NDOT Transportation Board and any other committees.

Budget:

	FY 2020	FY 2021
Professional Services Contract	\$ 20,000	\$ 0
RTC Staff Costs SFY 2020	\$ 0	\$ 0
Funding Sources for PL Funds		
State Planning & Research Funds carried over from SFY 2019 to SFY 2020	\$ 10,000	\$ 0
PL Funds carried over from SFY 2019 to SFY 2020	\$ 10,000	\$ 0
PL Funding	\$ 9,500	
Local Funding	\$ 500	
Total SFY 2020-2021 Funding	\$ 20,000	\$ 0

Schedule:

Study completion by June, 2020

**Sub-Task 301-9225-20 -
Bruce Street Green and Complete Street -
Charleston Boulevard to North Las Vegas Boulevard**

Purpose:

The objective of the study is to determine the feasibility of a Complete Street on Bruce Street between North Las Vegas Boulevard and Charleston Boulevard. The addition of bike lanes and pedestrian improvements will connect Downtown North Las Vegas with the Cashman Center, Downtown Las Vegas, the Spencer Greenway Transportation Trail, and south to UNLV. The study should build on the conceptual designs developed with the EPA Making a Visible Difference in Communities Bruce Street study, develop feasible connections to key areas within the corridor (including transit hubs and redevelopment areas), explore public space opportunities under the US 95 freeway, and examine circulation and pedestrian safety improvements at the intersections of the three CCSD schools along the corridor.

Previous Work:

- 2017 - Spencer Greenway and UNLV Bike Plan (RTC);
- 2017 - Regional Bicycle and Pedestrian Plan for Southern Nevada (RTC)
- 2016 - Bruce Street - Making a Visible Difference in Communities (Environmental Protection Agency and RTC)
- 2015 - Spencer Greenway Feasibility Study (National Parks Service/RTC)
- 2015 - City of Las Vegas Downtown Master Plan
- 2014 - Rafael Rivera Walkable Community Plan (City of Las Vegas)
- City of North Las Vegas – Complete Streets Policy
- City of North Las Vegas – Complete Streets Corridor Ranking Study
- City of North Las Vegas – Master Plan of Streets and Highways
- City of North Las Vegas – North 5th Street Transit Supportive Concept Plan
- Southern Nevada Regional Planning Coalition – Southern Nevada Strong Regional Policy Plan
- Clark County School District / RTC – Safe Routes to School Walk Audits
- RTC – Northeast Valley Transportation Network Study (underway)
- RTC – Truck Arterial Route Study (underway)
- 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:

- Based on prior studies and existing conditions, develop alignment alternatives for a multi-modal complete street along the Bruce Street Corridor. It is expected that the areas already analyzed by the EPA Bruce Street study will further refined.
- Develop alternatives showing connections to the Spencer Greenway Trail, US 95 Trail, Cashman Center and Downtown North Las Vegas.
- Develop strategies for interagency coordination, developing and funding public/green spaces under the US 95 Freeway

- Where applicable, develop recommendations for pedestrian and auto circulation enhancements at locations adjacent to CCSD facilities.
- Develop a draft and final report with short and long term recommendations for the corridor. The report should also describe the definition and evaluation of alternatives, preliminary cost estimates, description of right-of-way needs, recommendations, description of recommended project concept and financing mechanisms, and cost estimates for implementation and operating support.
- Explore connections to transit stops at Charleston, Fremont, Lake Mead and other high traffic areas.

Participating Agencies:

- City of Las Vegas (lead agency), City of North Las Vegas, Clark County School District, Nevada Department of Transportation, Regional Transportation Commission of Southern Nevada;

Budget:

Sub-Task 301-9225-20	FY 2020	FY 2021
Total Project Cost	\$ 54,156	\$ 0
Professional Services Contract Carryover	\$ 53,156	\$ 0
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 1,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 51,448	\$ 0
Local Match (5%)	\$ 2,708	\$ 0

Schedule and Deliverables:

Develop a draft and final report with short and long term recommendations, including any applicable presentations. Ideally, the report would serve as a template design for other Complete and Green streets. Report topics and recommendations should address the elements identified as "Task Elements."

Start Date: May, 2018.

End Date: June, 2020.

Sub-Task 301-9230-20 – Citywide Pedestrian and Bicycle Plan

Purpose:

The objective of the Citywide Pedestrian & Bicycle Plan (CPB) is to design a comprehensive network of active transportation routes and establish corresponding design criteria, guidelines, goals, objectives, and policies. This study will be focused on the City of North Las Vegas.

Previous Work:

- City of North Las Vegas – Complete Streets Policy
- City of North Las Vegas – Comprehensive Trails and Bikeways Master Plan
- City of North Las Vegas – Complete Streets Corridor Ranking Study
- City of North Las Vegas – Northern Beltway Trail Alignment and Connectivity Study
- City of North Las Vegas – Major Downtown Corridor Study
- Southern Nevada Regional Planning Coalition – Regional Open Space Plan
- Southern Nevada Regional Planning Coalition – Southern Nevada Strong Regional Policy Plan
- Southern Nevada Health District– Trail Usage Data from Neon to Nature Way-finding Program
- CCSD – Safe Routes to School Walk Audits
- RTCSNV – Regional Schools Multimodal Transportation Access Study
- RTCSNV – Decatur Boulevard Transit Study
- RTCSNV – Regional Bicycle Gap Analysis
- RTCSNV – Regional Bicycle and Pedestrian Counts
- RTCSNV – Regional Bicycle and Pedestrian Plan for Southern Nevada (2017)

Methodology:

- Review existing information, planned projects, maps and relevant studies
- Review and update design criteria, goals and policies included in the City’s Comprehensive Trails and Bikeways Master Plan (2011)
- Identify employment, commercial, recreational and civic destinations within the City and within southern Nevada
- Develop methodology for facility selection and route prioritization
- Develop a new Active Transportation Map with existing facilities and planned facilities
- Develop information and materials for the City of North Las Vegas website regarding the existing and planned bicycle, trail and sidewalk system including a map and graphics.
- Develop a Citywide Pedestrian and Bicycle safety and awareness outreach program.
- Create a stakeholder outreach program.
- Final report and presentation(s)

Participating Agencies:

- City of North Las Vegas (lead agency), Clark County, Regional Transportation Commission of Southern Nevada, Clark County School District, Southern Nevada Health District, Outside Las Vegas Foundation, Nevada Department of Transportation

Budget:

Sub-Task 301-9230-20	FY 2020	FY 2021
Total Project Cost	\$ 4,007	\$ 0
Professional Services Contract Carryover	\$ 3,007	\$ 0
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 1,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 3,807	\$ 0
Local Match (5%)	\$ 200	\$ 0

Schedule and Deliverables:

Develop and release a citywide Pedestrian & Bicycle Plan for the City of North Las Vegas by May, 2020.

Sub-Task 301-9235-20 - Pedestrian Comfort Study and Demonstration Project

Purpose:

There are many challenges faced by pedestrians attempting to navigate roadways, cross at intersections, or access the transit system. Existing Vegas Valley area studies can provide insight into why people walk, what factors influence walking behavior, and what it will take to get more people out there walking. Innovative strategies implemented elsewhere in the US and abroad can provide examples of how to encourage and make it more comfortable for people to walk for utilitarian trips such as trips to work, school, the grocery store, the gym, or a friend's house.

A consultant will be hired to work with the RTC staff and identify best practices, incorporate findings from existing studies, document case studies, implement temporary demonstration projects, gather feedback from the public and focus groups, and develop a toolbox of strategies to improve the pedestrian experience in the Las Vegas Valley.

The Pedestrian Comfort Study and Demonstration Project will identify innovative strategies to address the challenges of the pedestrian environment in the Las Vegas Valley. The study will assess public perceptions of pedestrian safety and comfort through a bilingual survey and focus groups as well as a review of previous studies. Case studies will be documented to show successful, innovative approaches to improving the pedestrian experience. The consultant will design, implement, and evaluate temporary, low-cost demonstration projects to understand their potential success. A toolbox of treatments to increase comfort and safety will be identified as well as strategies to encourage people to walk. The study will result in the creation of a final report documenting innovative strategies, field tested demonstration projects, case studies, and design concepts all tailored to the local environment and supported by local jurisdictions and implementing agencies.

Previous Work:

- Regional Bicycle and Pedestrian Plan (2017);
- City of Henderson ADA Transition Plan;
- School Walk Audits;
- Regional Pedestrian Infrastructure Inventory and Analysis (2014)

Methodology:

- Identification of issues,
- Development of countermeasures

Participating Agencies:

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

Budget:

The work in this study was completed by the consultant at the very end of FY 2019 and in FY 2020, some RTC staff time was expended in quarter 1 to close out the project. The amount budgeted, \$1,481 zeroes out the budget for this project.

Sub-Task 301-9235-20	FY 2020	FY 2021
Total Project Cost	\$ 1,481	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 1,481	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 1,407	\$ 0
Local Match (5%)	\$ 74	\$ 0

Schedule and Deliverables:

A comprehensive list of treatments used to enhance the pedestrian environment.

Start Date: December, 2017

End Date: June, 2020

**Sub-Task 301-9240-20 -
River Mountain Loop Trail Access Improvements**

Purpose:

This study will identify the routes (both on-street and off-street), design features, amenities, project costs, and phasing that will improve access, connectivity, and safety for pedestrian and non-motorized vehicle circulation to and from the new Nevada State Railroad Museum in Boulder City, Nevada.

Previous Work:

- The State Public Works Board contracted with LGA to prepare architectural plans for the new museum building structure.
- Boulder City, with the support of RTC, contracted with the CA Group, Inc. to prepare complete street plans for Boulder City Pkwy from Gingerwood St. to Buchanan Blvd.

Methodology:

- Create working group of stakeholders,
- Conduct outreach events,
- Develop alternatives,
- Prepare recommendations,
- Identify possible construction funding sources.

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Boulder City,
- State Public Works

Budget:

The work in this study was completed by the consultant at the very end of FY 2019 and in FY 2020, some RTC staff time was expended in quarter 1 to close out the project. The amount budgeted, \$1,572 zeroes out the budget for this project

Sub-Task 301-9240-20	FY 2020	FY 2021
Total Project Cost	\$ 1,572	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
Professional Services Contract	\$ 0	\$ 0
RTC Staff Costs	\$ 1,572	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 1,493	\$ 0
Local Match (5%)	\$ 79	\$ 0

Schedule and Deliverables:

Draft and Final Reports will be prepared regarding access improvements to and from the River Mountain Loop trail into Boulder City. Presentations will be made to the RTC Board and the City Council of Boulder City on how the study integrates with existing and planned transportation facilities.

Start Date: November, 2017

End Date: June, 2020

**Sub-Task 301-9245-20 –
School Trip Generation and Siting Study**

Purpose:

Commonly used trip generation rates do not appear to accurately reflect the traffic impacts of local public, private and charter schools. For instance, charter schools do not draw from surrounding neighborhoods in the manner that public schools do, as a result there is a much higher rate of students arriving and departing by car. Research is needed to better understand the amount of traffic actually generated by local schools and the impact on the surrounding infrastructure. This research will be utilized to create effective development standards to more adequately handle the siting, queuing, parking, and street traffic.

Previous Work:

- Regional Schools Multimodal Transportation Access Study (2015);
- Various studies conducted nationally regarding current school trip generation rates

Methodology:

- Data collection,
- Analysis,
- Final Report

Participating Agencies:

Regional Transportation Commission of Southern Nevada, City of Henderson, Clark County, City of Las Vegas, City of North Las Vegas

Budget:

Sub-Task 301-9245-20	FY 2020	FY 2021
Total Project Cost	\$ 62,500	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 60,000	\$ 0
RTC Staff Costs	\$ 2,500	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 59,375	\$ 0
Local Match (5%)	\$ 3,125	\$ 0

Schedule and Deliverables:

The main deliverable will be a report of locally-developed school-focused trip generation, queuing and parking rates (similar to the Resort/Hotel and Casino rates generated and used locally).

Start date: November, 2017

End date: June, 2020

Sub-Task 301-9250-20 – Livable Centers Study – Project 1

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.

The community selected for the initial pilot program is the Deer Springs neighborhood in the City of North Las Vegas. The City of North Las Vegas will work as the local partner on the study.

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 FY20 Livable Centers Study - Phase I 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

Sub-Task 301-9250-20	FY 2020	FY 2021
Total Project Cost	\$ 10,000	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 10,000	\$ 0
RTC Staff Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 9,500	\$ 0
Local Match (5%)	\$ 500	\$ 0

Participating Agencies:

- Regional Transportation Commission of Southern Nevada,
- City of North Las Vegas

Schedule and 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. This phase of the study will take place in the Deep Springs community of the City of North Las Vegas.

Start Date: August, 2017

End Date: June, 2020

Sub-Task 301-9270-20 - Livable Centers Study – Project 2

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 301-9270-20	FY 2020	FY 2021
Total Project Cost	\$ 250,000	\$ 0
SFY 2020 Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 235,000	\$ 0
SFY 2020 RTC Staff Costs	\$ 15,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 237,500	\$ 0
Local Match (5%)	\$ 12,500	\$ 0

Schedule and 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.

Start Date: July, 2019

End Date: June, 2020

Sub-Task 301-9275-20 - 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 301-9275-20	FY 2020	FY 2021
Total Project Cost	\$ 158,615	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 148,615	\$ 0
RTC Staff Costs	\$ 10,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 150,684	\$ 0
Local Match (5%)	\$ 7,931	\$ 0

Schedule and 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.

Start: February, 2019

End: June, 2020

**Sub-Task 301-9285-20 –
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),

Budget:

Sub-Task 301-9285-20	FY 2020	FY 2021
Total Project Cost	\$ 205,000	\$ 0
Professional Services Contract	\$ 200,000	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 5,000	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 194,750	\$ 0
Local Match (5%)	\$ 10,250	\$ 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, 2020

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 2020-2021 Budget

The following costs are included under Task 302:

	FY 2020	FY 2021
Task 302 Cost	\$ 0	\$ 0
Professional Services Contract	\$ 0	\$ 0
Professional Services Contract Carryover	\$ 0	\$ 0
RTC Staff Costs	\$ 0	\$ 0
The Source for funds for Task 302 are:		
Consolidated Planning Grant	\$ 0	\$ 0
Local Funds (5% match)	\$ 0	\$ 0

No studies in Task 302 have been identified for the FY 2020- FY 2021 Unified Planning Work Program.

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:

- 501-1000-20: Regional Plan Core Administration
- 501-1010-20: Regional Plan Updates
- 501-1050-20: Indicator Tracking and Mapping
- 501-1100-20: Community Planning Academy
- 501-1150-20: Outreach and Communications
- 501-1160-20: Annual Southern Nevada Strong Implementation Report

Task 501, FY 2020-2021 Budget

The following costs are included in Task 501:

	FY 2020	FY 2021
Total Cost	\$ 93,894	\$ 201,695
RTC Staff Costs	\$ 93,894	\$ 201,695
Professional Services Costs	\$ 0	\$ 0
The source of funds for Task 501 is		
Consolidated Planning Grant	\$ 36,166	\$ 80,330
Local Funds	\$ 57,728	\$ 121,365

Sub-Task 501-1000-20: 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 501-1000-20	FY 2020	FY 2021
Total Project Cost	\$ 13,910	\$ 27,820
RTC Staff Costs	\$ 13,910	\$ 27,820
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (20%)	\$ 2,782	\$ 5,564
Local Funds (80%)	\$ 11,128	\$ 22,256

Schedule and Deliverables:

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

Sub-Task 501-1010-20: 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 501-1010-20	FY 2020	FY 2021
Total Project Cost	\$ 34,775	\$ 69,550
RTC Staff Costs	\$ 34,775	\$ 69,550
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 17,388	\$ 34,775
Local Funds (50%)	\$ 17,388	\$ 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 501-1050-20: 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 501-1050-20	FY 2020	FY 2021
Total Project Cost	\$ 17,388	\$ 34,775
RTC Staff Costs	\$ 17,388	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (50%)	\$ 8,694	\$ 17,388
Local Funds (50%)	\$ 8,694	\$ 17,388

Schedule and Deliverables:

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

**Sub-Task 501-1100-20:
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 501-1100-20	FY 2020	FY 2021
Total Project Cost	\$ 6,955	\$ 20,865
RTC Staff Costs	\$ 6,955	\$ 20,865
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 6,607	\$ 19,822
Local Funds (5%)	\$ 348	\$ 1,043

Schedule and Deliverables:

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

Sub-Task 501-1150-20:
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

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 501-1150-20	FY 2020	FY 2021
Total Project Cost	\$ 17,388	\$ 34,775
RTC Staff Costs	\$ 17,388	\$ 34,775
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (0%)	\$ 0	\$ 0
Local Funds (100%)	\$ 17,388	\$ 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 501-1160-20:
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 indicators 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)

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 501-1160-20	FY 2020	FY 2021
Total Project Cost	\$ 3,478	\$ 13,910
RTC Staff Costs	\$ 3,478	\$ 13,910
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (20%)	\$ 696	\$ 2,782
Local Funds (80%)	\$ 2,782	\$ 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:

- 601-1010-20: Future Housing Inventory and Needs Analysis
- 601-1020-20: Extreme Heat Events Coordinated Response Study
- 601-1030-20: Inventory of Regional Sustainability Planning Tools and Techniques
- 601-1040-20: Tree Canopy Social Equity Impacts Research Project

Task 601, 2020-2021 Budget

The following costs are included in Task 601:

	FY 2020	FY 2021
RTC Staff Costs	\$ 173,876	\$ 118,235
Professional Services Costs	\$ 173,876	\$ 118,235
Combined Costs	\$ 0	\$ 0
The source of funds for Task 601 is		
Consolidated Planning Grant	\$ 149,533	\$ 96,674
Local Funds	\$ 24,343	\$ 21,561

**Sub-Task 601-1010-20:
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 601-1010-20	FY 2020	FY 2021
Total Project Cost	\$ 52,163	\$ 69,550
RTC Staff Costs	\$ 52,163	\$ 69,550
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 49,555	\$ 66,072
Local Funds (5%)	\$ 2,608	\$ 3,478

Schedule and Deliverables:

- 9-12 months; start Jan-Feb 2020

**Sub-Task 601-1020-20:
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 601-1020-20	FY 2020	FY 2021
Total Project Cost	\$ 69,550	\$13,910
RTC Staff Costs	\$ 69,550	\$13,910
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 66,072	\$ 13,215
Local Funds (5%)	\$ 3,478	\$ 695

Schedule and Deliverables:

- 3-6 months; target completion before summer 2020

**Sub-Task 601-1030-20:
Inventory of Regional Sustainability Planning Tools and Techniques**

Purpose:

There has been substantial discussion about the need for sustainability planning in Southern Nevada. Prior to this full undertaking, the MPO staff will perform a quick review of how other large regions address sustainability. Learning from other MPOs, there appear to be two approaches: (1) each local agency completes their own plan, and then a regional agency pulls them together into some type of consolidated plan; or (2) the regional agency and local agencies all work together to simultaneously produce regional goals, and local and regional sustainability plans.

Through research and interviews, the MPO staff will create a report that identifies specific practices and methodologies of sustainability planning to share with the public agencies within Southern Nevada. This work will be used to plan and develop a future sustainability plan following the recommendation from local agencies.

Previous Work:

Methodology:

- Identifying existing sustainability plans at agency and community level
- Preparing report about scale, scope, outreach, methods, and other relevant processes
- Present findings to RTC working groups to obtain recommendation on future work program

Participating Agencies:

- Regional Transportation Commission of Southern Nevada

Budget:

Sub-Task 601-1030-20	FY 2020	FY 2021
Total Project Cost	\$ 17,387	\$ 0
RTC Staff Costs	\$ 17,387	\$ 0
Professional Services Costs	\$ 0	\$ 0
Funding Sources		
Consolidated Planning Grant (95%)	\$ 16,519	\$ 0
Local Funds (5%)	\$ 869	\$ 0

Schedule and Deliverables:

- 2-4 months; starting early 2020

**Sub-Task 601-1040-20:
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 601-1040-20	FY 2020	FY 2021
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

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 (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 20-25 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 20-25 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 20-25 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 20-25 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 RTCNV 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 2020-2021 Unified Planning Work Program Amendment Two document.