



2016 Nevada Statewide Transportation Improvement Program

Introduction

The Statewide Transportation Improvement Program (STIP) is a four year, fiscally constrained, planning and programming document created within federal guidance from Code of Federal Regulation, complies with current federal legislation, state and local laws. With guidance from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) information to forecast funding anticipated for the four year STIP period is used by State and local staff to create a prioritized list of project by year. Contingency funds may be listed in the STIP and are used for possible cost overruns.

The Statewide Transportation Improvement Program (STIP) is a list of all projects by phase, in Nevada proposed for Federal funding that are:

- scheduled to begin in the four federal fiscal years (FFY) 2016 – 2019;
- consistent with the goals and strategies of the Statewide Transportation Plan (STP);
- consistent with the Metropolitan Planning Organization Regional Transportation Plan (MPO).

In addition, non-federally funded transportation projects that are *regionally significant* are listed in the STIP regardless of funding source. Regionally significant is defined as a project that is on a facility which serves regional transportation needs, such as a facility that provides access from outside of the region, service to major activity centers, service to major planned developments and to transportation terminals. Such projects would normally be included in the modeling of a metropolitan area's transportation network, including as a minimum, all principal arterial highways and all fixed guide way transit facilities that offer a significant alternative to regional highway travel.

The STIP is required to be updated a minimum of every four years; however, the State may elect to update the Program more frequently. Historically, NDOT has produced a STIP on an annual or bi-annual basis in order to ensure continued fiscal constraint and conformity to federal air quality regulation.

Guidance in the development of the STIP is provided through Title 23 (Highways) and Title 49 (transit) of the United States Code (U.S.C.).

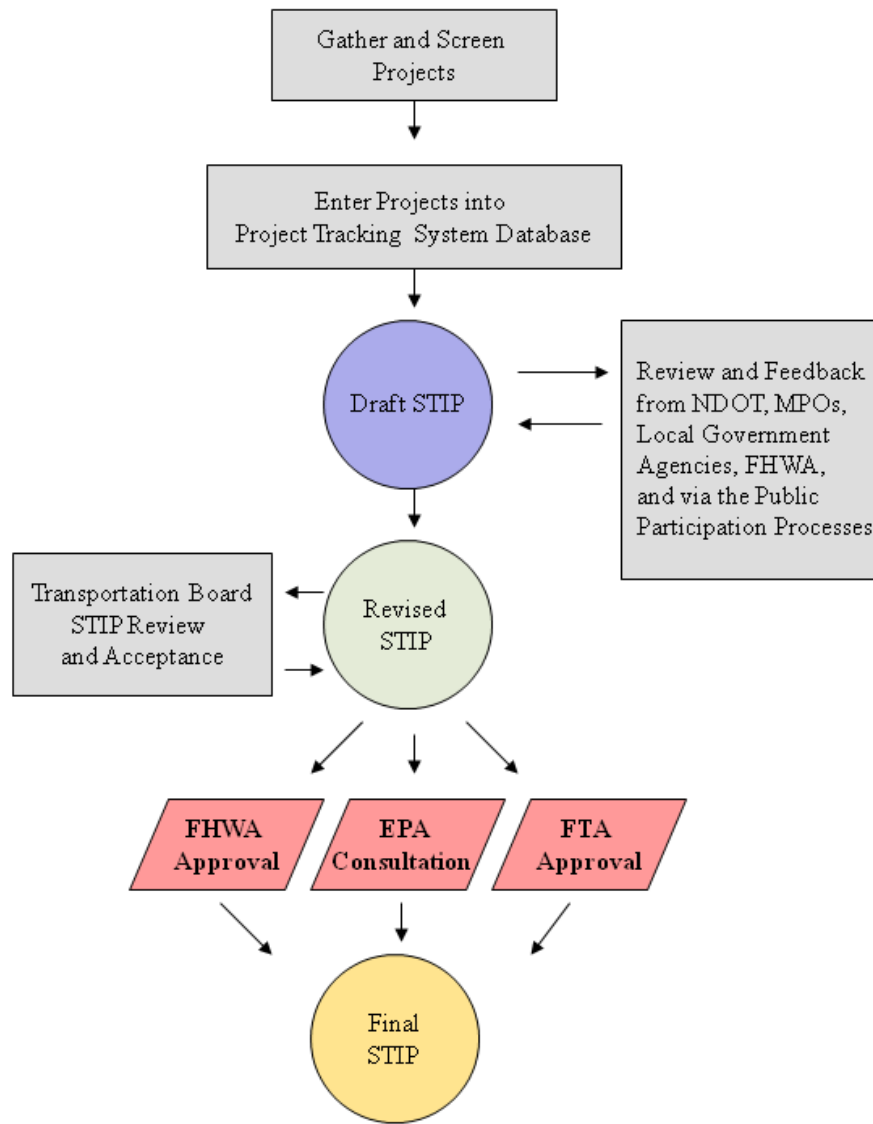
- U.S.C. Title 23 – Highways: <http://www.fhwa.dot.gov/legsregs/title23.pdf>
- U.S.C. Title 49 – Transit: http://uscode.house.gov/download/title_49.shtml

STIP Development

NDOT is required to identify the agencies responsible for carrying out the projects in the STIP. Through an agreement between NDOT and the Federal Highway Administration (FHWA), the *Federal-Aid Project Stewardship Plan* allows NDOT to delegate project implementation to other governmental agencies.

Development of the STIP is completed in cooperation with Nevada's Metropolitan Planning Organizations (MPOs) and local government agencies. The STIP begins as a compilation of regional Transportation Improvement Programs which are developed and adopted annually by the State's MPOs in accordance with U.S.C. Title 23. It includes rural areas where NDOT is responsible for programming federally funded projects. All information is compiled into a comprehensive list of all federally funded and regionally significant transportation projects.

STIP Development Process



Schedule

January- Workshops with counties, MPOs **April/May** - 1st draft made available for review

June/July - Tours to county commissioners **August** - Draft out for public comment

Sept/Oct - Final to the Board for acceptance **Oct/Nov** - Approval by FHWA, FTA and EPA

Metropolitan Planning Organizations (MPOs)

MPOs are designated for urbanized areas with a population greater than 50,000 by an agreement between the Governor and local government units. In cooperation with the State and public transit operators, MPOs develop transportation plans and programs for the urbanized areas of Nevada. These plans provide for the development, integration, management and operation of transportation systems and facilities that function as an intermodal transportation system for all roadway users in the metropolitan area. These services and transportation projects are an integral part of a statewide intermodal transportation system. There are four MPO's in the State of Nevada:

- **The Regional Transportation Commission of Southern Nevada (RTCSNV)** – Administers metropolitan planning activities throughout Clark County.
 - <http://www.rtcnv.com/>
- **The Regional Transportation Commission Washoe County (RTCWA)** – Administers metropolitan planning activities throughout Washoe County.
 - <http://www.rtcwashoe.com/>
- **The Carson Area Metropolitan Planning Organization (CAMPO)** – Administers metropolitan planning activities in Carson City and portions of Douglas and Lyon Counties.
 - <http://www.carsonareampo.com>
- **The Tahoe Metropolitan Planning Organization (TMPO)** – Created through Congressional Action and administers activities in the Lake Tahoe Region.
 - <http://www.tahoempo.org/>

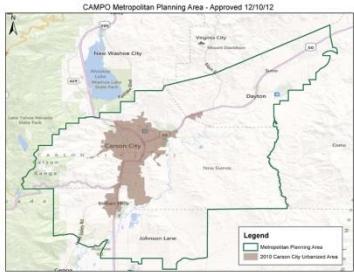
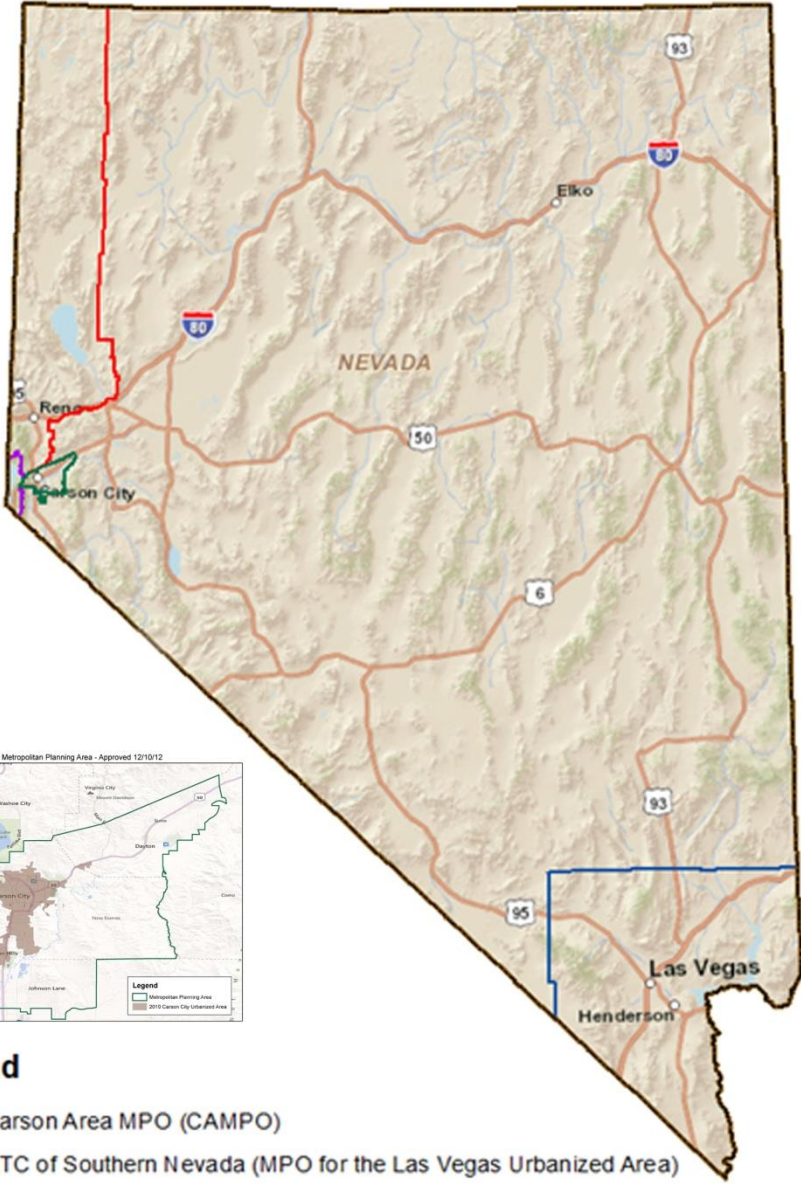
Each MPO is required to develop a Regional Transportation Improvement Program (RTIP) that is consistent with their Regional Transportation Plan (RTP), a twenty-year long range transportation plan. Much like the State of Nevada STIP the MPO RTIP must be updated every four years or more frequently at the MPOs discretion. The RTIP is developed in partnership with Local Public Agencies (LPAs) and with the State of Nevada to create a list of programs and projects that is fiscally constrained and prioritized by phase and year within the MPO boundary.

By federal regulation the MPO must update the RTP every five years if there is an attainment and maintenance area for air quality within that MPO. This applies to the RTCSNV and the RTCWA. The RTP must be updated every four years for MPOs that do not have an attainment and maintenance area for air quality. This applies to CAMPO and TMPO. Each MPO will follow their locally adopted public participation plan during the development of the RTP and RTIP.

After approval by the MPOs governing board the State approval of the RTP and RTIP is done by the Governor of Nevada or his designee (the Director of NDOT). Once approved the projects of the RTIP are incorporated without change into the STIP.

The effect of transportation projects on a regions air quality must be taken into account during the development and approval of the RTIPs and RTPs. To meet the Environmental Protection Agency (EPA) standards for air quality projects are determined to be in “attainment”. Projects that do not meet the standard are determined to be in “non-attainment”. Before a project in a non-attainment area can be included in the STIP, it must be found to be in conformance with the State Implementation Plan (SIP). A SIP is an enforceable plan developed at the state level that explains how the state will comply with air quality standards in accordance with the Clean Air Act.

Nevada MPO Boundaries



Legend

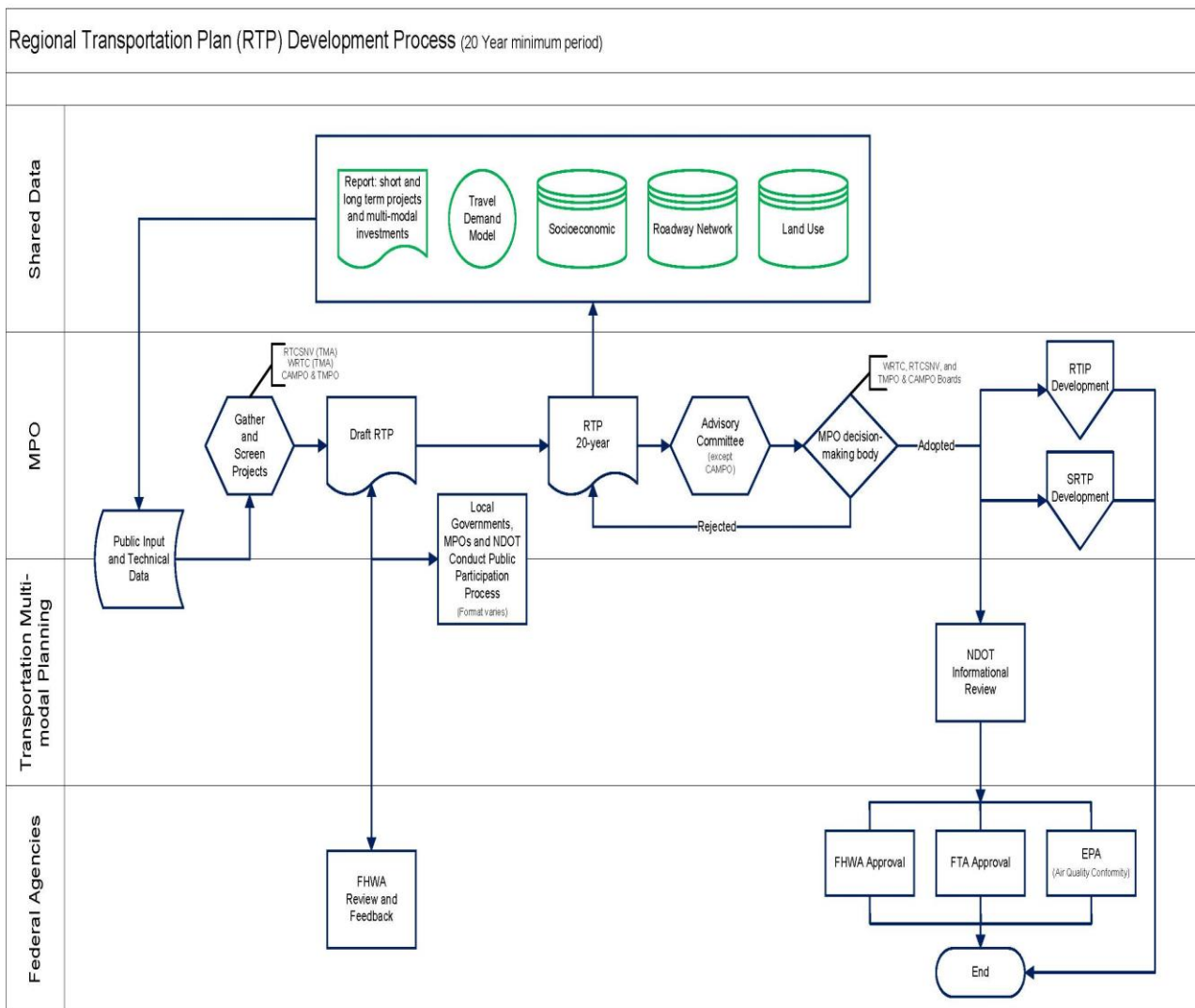
- Carson Area MPO (CAMPO)
- RTC of Southern Nevada (MPO for the Las Vegas Urbanized Area)
- Tahoe MPO (TMPO)
- RTC of Washoe County (MPO for the Reno Urbanized Area)



Regional Transportation Plan

The Regional Transportation Plan (RTP) is a comprehensive, long range, twenty-year plan that is the central component of the planning process. It is based upon joint cooperation between the MPO, NDOT and representatives from local governments. Products from this effort include a report documenting short and long term projects and multi-modal investments that will support the area's transportation goals and objectives.

The RTP development process utilizes available public input and technical data, and is reviewed by advisory committees, local agencies, community representatives and public participation. When the RTP is complete the MPO governing body must adopt it before submission to the FHWA, FTA and the (EPA) for an air quality conformity determination (if within a non-attainment or maintenance area).

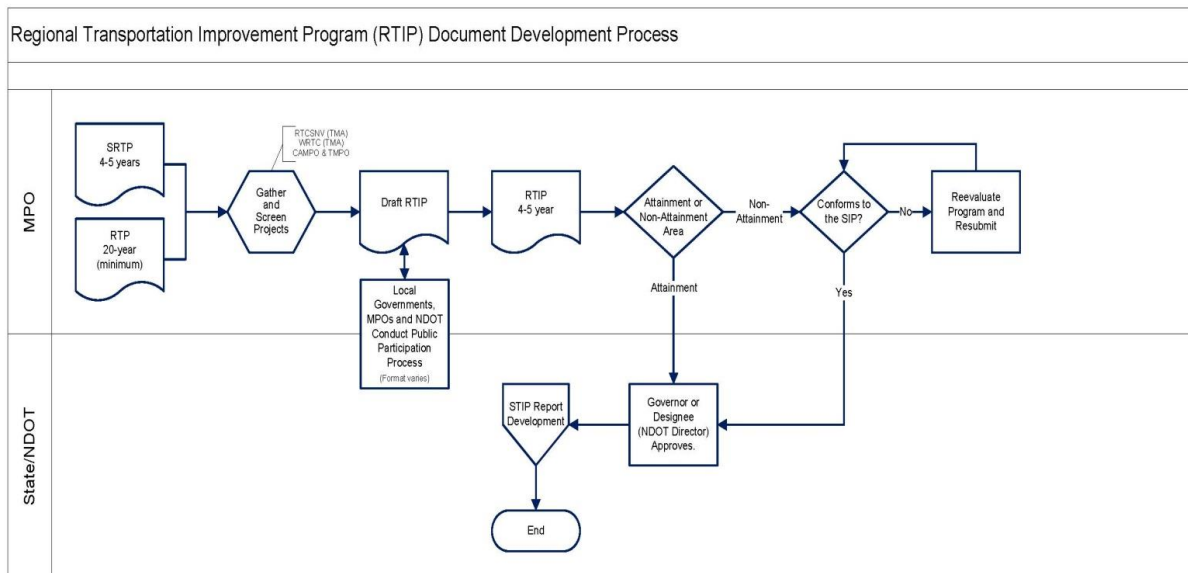


Regional Transportation Improvement Program

The Regional Transportation Improvement Program (RTIP) is a four year plan of highway, transit and regionally significant projects that are anticipated to receive funding or action during the course of the next four federal fiscal years.

The project priority in each RTIP is reviewed and amended annually during off years when no new RTIP adoption is submitted. The highway prioritization analysis considers current, future use and the cost-effectiveness of various types of capital improvements, arterial widening, and new construction projects. Locally funded street and highway projects are determined by the local governments and are included in the RTIP when funding is considered secure and the project is of regional significance. Public transportation projects developed as part of the Short Range Transit Plan (SRTIP) are also incorporated in the RTIP.

The RTIP is developed in coordination with NDOT and local agencies within the MPO. Upon completion of a draft, public comment period and board governing board approval the RTIP is then submitted to NDOT for review and approval. Once NDOT has approved the RTIP it is then incorporated, without change, into the Statewide Transportation Improvement Program (STIP). FHWA will review and approve the air quality conformity of the RTIP upon incorporation into the STIP.



Transportation Management Areas (TMA's)

The Secretary of the U.S. Department of Transportation designates Transportation Management Areas (TMAs) as all urbanized areas with a population of more than 200,000. The RTC of Southern Nevada and RTC of Washoe County are designated TMAs by population. In addition to meeting all the federal requirements for an urbanized area and an MPO, TMAs are also responsible for:

- developing congestion management systems;
- sub-allocated federal funds for areas with populations >200,000;
- Regional Transportation Improvement Program (RTIP) project selection (excluding the National Highway System);
- Subject to a joint federal certification review of the planning process at least every three years.

All transportation plans and programs within the TMA must be based on a continuing and comprehensive planning process carried by the MPO in cooperation with transit operators and the State.

More information on TMA designation can be found at:

<https://www.federalregister.gov/articles/2012/07/18/2012-17514/designation-of-transportation-management-areas>

Statewide Long Range Transportation Plan

Nevada's Statewide Long-Range Transportation Plan is a policy document that is intended to provide direction and strategies for the Nevada Department of Transportation (NDOT) over the next 20-years. This Plan was prepared by NDOT with the assistance of many individuals and organizations. It is a multimodal plan that explores the issues affecting aviation, bicycles, pedestrians, transit, cars, trucks, and trains and the linkage between these modes.

Under the United States Code, Title 23 Section 135 each state is required to develop a statewide transportation plan that provides for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the State and an integral part of an intermodal transportation system for the United States. The process for developing the plan shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed.

Following are excerpts from the Code of Federal Regulations for "*Development and content of the long-range statewide transportation plan*" (CFR 450.214):

- Cover a minimum 20-year forecast;
- Provide for the development and implementation of the multimodal transportation system and consider elements and connections between public transportation, non-motorized modes, rail, commercial motor vehicle, waterway and aviation facilities;
- Ensure the preservation and most efficient use of the existing transportation system;
- Reference or summarize applicable studies and any statements of policies, goals, and objectives on issues that are relevant to the development of the long-range statewide transportation plan;
- Should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects contained in the Strategic Highway Safety Plan;
- Should include a security element that incorporates or summarizes the priorities, goals, countermeasures, or projects set forth in other transit safety and security planning programs, as appropriate;
- Be developed in consultation with affected non-metropolitan officials;
- Be developed in consultation with the Tribal governments;
- Include a discussion of potential environmental mitigation;
- Be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies;
- May include a financial plan.

In addition to Federal Law, NDOT has State Laws that guide the Planning Division in the development of this plan. The following is a summary of Nevada Revised Statutes (NRS)

408.233, for transportation planning at NDOT:

- Be consistent with the social, economic and environmental goals of the State;
- Designed to meet the present and future needs of the State and local areas of the State for adequate, safe and efficient transportation facilities and services;
- Coordinated with local plans for balanced transportation facilities and services;
- Establish planning techniques and processes for all modes of transportation.

The RFP for the development of the new NDOT 20 year performance based Long Range Transportation Plan (LRTP) is in progress to develop a list of projects for intergration into the new software and system. For more information about NDOT's Statewide Long Range Transportation Plan please contact Tim Mueller, 888-7351 tmueller@dot.state.nv.us or visit:

[http://www.nevadadot.com/uploadedFiles/NDOT/About NDOT/NDOT Divisions/Planning/NevPlan StatewideTransPlan.pdf](http://www.nevadadot.com/uploadedFiles/NDOT/About%20NDOT/NDOT%20Divisions/Planning/NevPlan%20StatewideTransPlan.pdf)

STIP Development Process

POLICY

1. Each implementing agency shall be responsible for prioritizing the funds under the control of that agency. Eligible MPOs shall be permitted to prioritize Surface Transportation Program (STP) local funds, Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, and Transportation Alternative Program (TAP) funds allocated by NDOT to their respective area(s).
2. The maximum amount of flexibility shall be maintained to permit the implementing agencies to address the transportation needs within their respective areas of responsibility.
3. Public participation in the development of the STIP will be actively sought. Additionally, NDOT will consult with local officials and tribal officials as part of the development process.

PROCESS (targeted timelines)

1. In November, the Director notifies each MPO of the anticipated funds available for prioritization to their area for the following federal fiscal year, via transportation workshops.
2. Transportation Workshops occur in November and December
3. By January 1, each implementing agency identifies their projects and provides them to NDOT and each MPO.
4. By March 1, NDOT and each MPO, with the assistance of any implementing agency that desires to participate, prioritizes all the capacity increasing projects, assigns fund categories to each project, and resolves any priority issues.
5. By March 31, the MPO completes the air quality conformity analysis for all projects to be implemented in their area over the four year period of the STIP/RTIP.
6. By April 30, each MPO and NDOT agrees to a draft list of projects.
7. By May 31, regionally significant projects are due to NDOT. County tours begin.
8. By June 30, non-regionally significant projects are due to NDOT.
9. By July 1, NDOT completes the consultation tours that discuss the STIP and Work Program (WP), and the MPOs complete their respective public participation process. County tours conclude end of July.

10. By August, each MPO approves their respective portions of the STIP/RTIP. Each MPO then submits the approved RTIP to NDOT for approval and to FHWA for concurrence in air quality determination. STIP Amendments and Modifications no longer accepted for previous year.
11. Draft STIP document released for 30 day public comment period.
12. By October 30, the NDOT's Board of Directors approves the NDOT portion of the STIP and accepts the MPOs RTIP found in the STIP.

STIP Amendment/Administrative Amendment/Staff Modification

During the course of the year, actions to change the STIP may be required to show changes in funding categories, to move projects between funding years in the STIP/RTIP, and to make adjustments to projects listed in the STIP/RTIP. While the MPO's have their own processes in amending and modifying their RTIP's, NDOT follows the Amendment, Administrative Amendment and Staff Modification Processes. The S/TIP Process for making changes to the STIP is listed below.

With development of the eSTIP the Administrative Modification and Amendment process has changed and we have modified the current process to include a Staff Modification as well as the rules for the Amendment and Modification process. The MPO's now have the capability to enter and track their own projects. When an Amendment is requested to the RTIP the MPO will enter the change into the eSTIP system. When all components of the project are updated, the changes will be submitted to NDOT staff for review and approval by the NDOT Director. An automatic email is sent to NDOT notifying an action has been opened.

This gives the locals, other staff at the MPO and NDOT an opportunity to add other project changes to this action, this helps with the reduction of actions needing to occur during the year. Projects are reviewed and accepted by the MPO before they are approved and submitted to NDOT, or before they are released for public comment. Upon approval from the MPO Governing Board the action is submitted electronically to NDOT staff for review and if all rules are met, staff will submit the action to the Director at NDOT for approval. Upon Director approval the action is submitted electronically to FHWA or FTA for final approval and incorporation to the STIP.

Throughout the process automatic emails are generated and sent notifying when an action needs review or approval at the appropriate levels. Once the change is approved an automatic email is sent to a predetermined list of contacts notifying them the change has been approved. This can process occurs in a matter of days instead of weeks with the previous paper process. This is all done electronically by a push of a button by all parties and there will be no more letters going back and forth except with an Adoption.

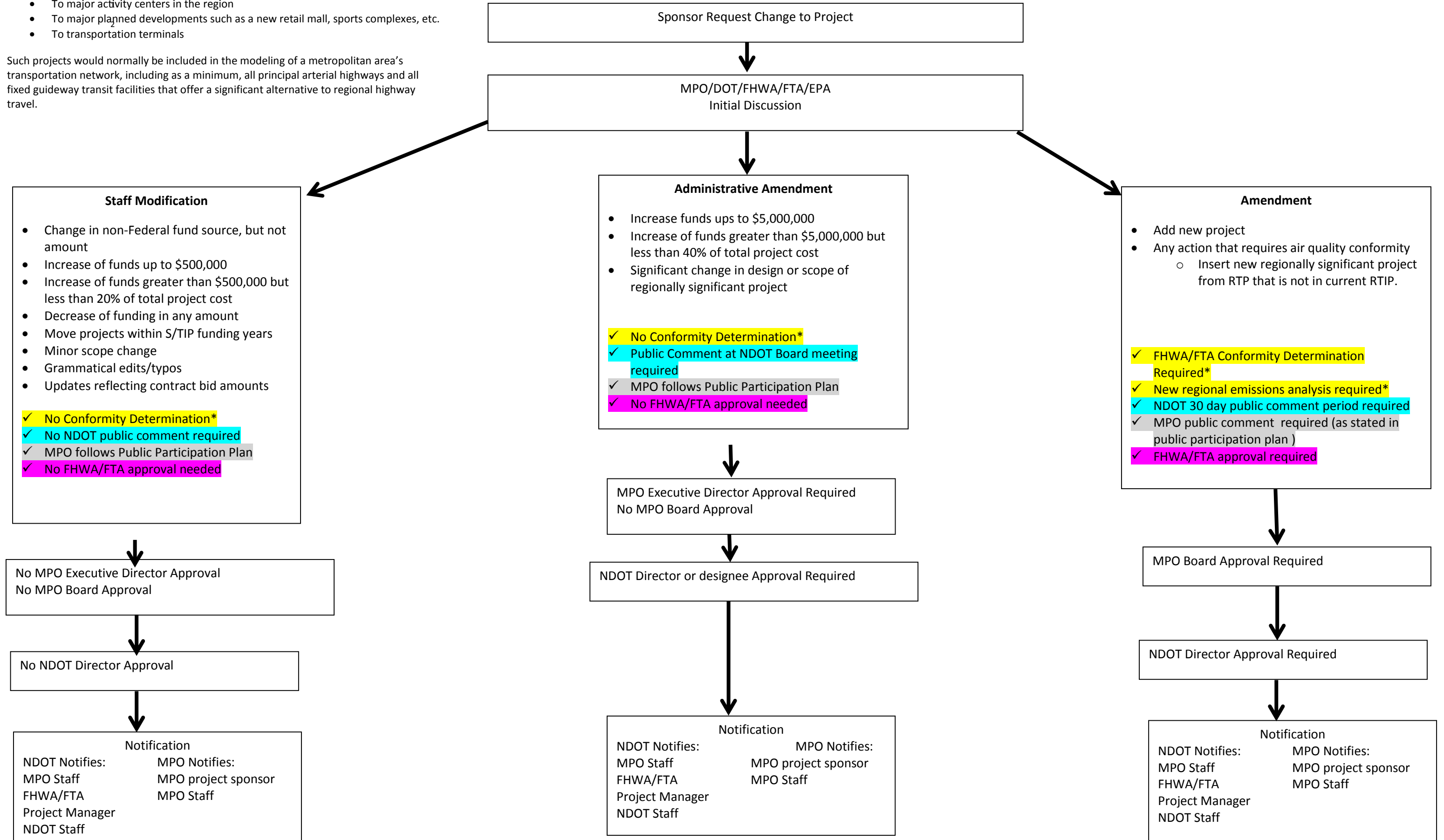
The Administrative Amendment and Staff Modification process a similar approval process but there is no FHWA/FTA approval needed. They are notified through an automatic email of the change(s).

Regionally significant means a project that is on a facility which serves regional transportation needs, such as a facility that provides access:

- From outside of the region
- To major activity centers in the region
- To major planned developments such as a new retail mall, sports complexes, etc.
- To transportation terminals

Such projects would normally be included in the modeling of a metropolitan area's transportation network, including as a minimum, all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.

S/TIP Modification Process



*Applies only to RTCSNV and RTCWA

Funding Programs

Funding for the State of Nevada's transportation systems is derived from a variety of revenue sources, including federal, state, and local resources. Revenues are collected through fuel taxes, vehicle privilege taxes, licenses, registrations, and motor carrier fees.

Federal Funding Legislation

The *Moving Ahead for Progress in the 21st Century Act* (MAP-21) is a funding and authorization bill to govern U.S. federal surface transportation spending. It was passed into law on July 6, 2012 and is the first long-term highway authorization enacted since 2005. MAP-21 funds surface transportation programs for fiscal years (FY) 2013 and 2014 and makes significant changes to transportation policy. With no new Authorization Bill at the end of Map-21 a Continuing Resolution was passed on May 29, 2015. There is current legislation being considered in congress to adopt a new Authorization Bill.



Federal Highway Funding Programs under MAP-21

MAP-21 consolidates the highway program structure by providing a total apportionment for each State and then divides that State amount among individual apportioned programs. As a result, most set-asides, small formula programs and discretionary programs—including Recreational Trails, Safe Routes to School, Bridge programs, and Scenic Byways—are eliminated as separate programs; however, most types of projects funded under these programs will be eligible under other programs. With the oversight of the Federal Highways Administration (FHWA), virtually all federal funding will now flow to Nevada under five formula programs. All of these programs require at least a 5% match which can be funded using funds other than federal funds:

Federal Fiscal Year 2016 Estimated Federal Allocation Totals

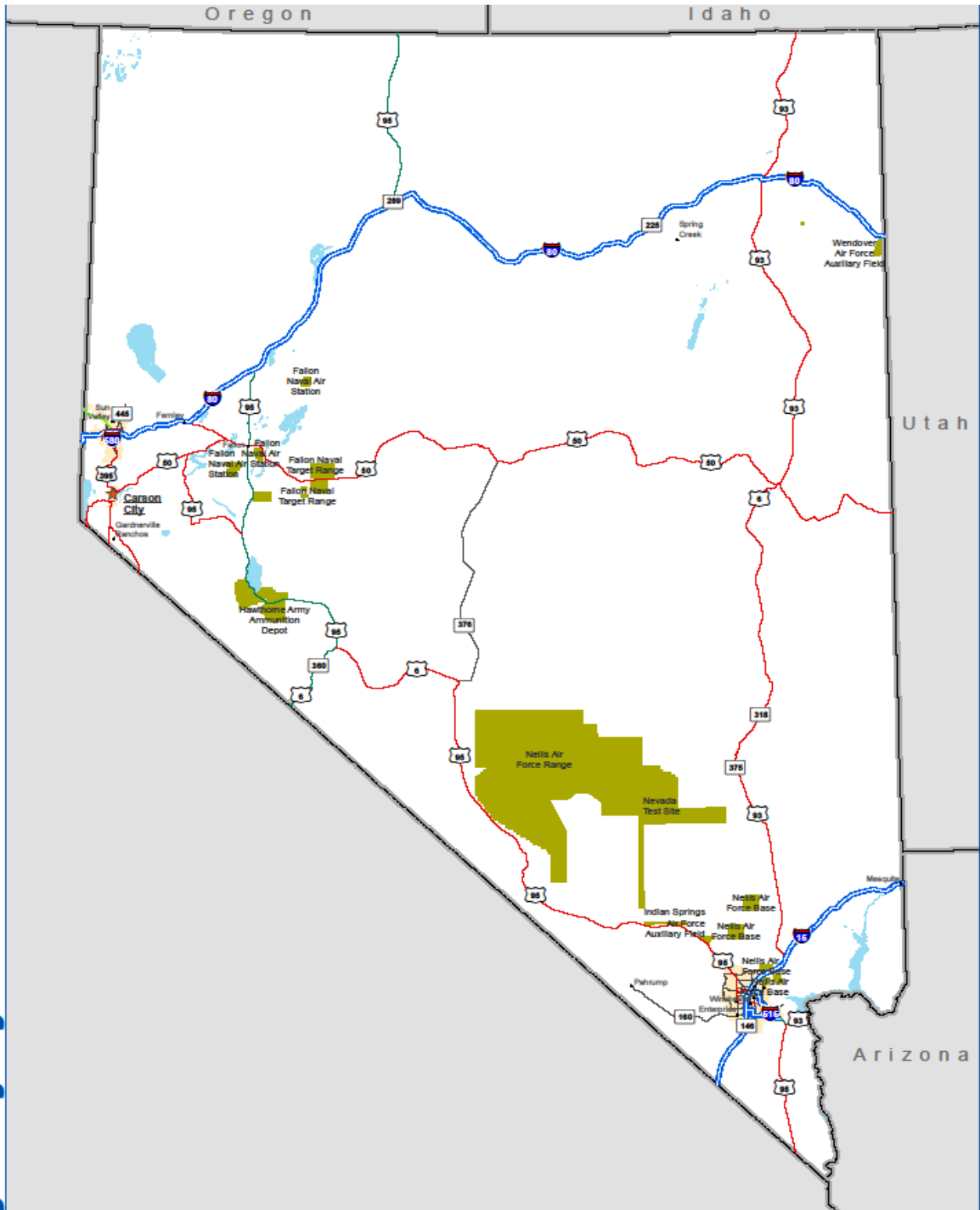
- **National Highway Performance Program (NHPP) = \$183 million**
- **Surface Transportation Program (STP) = \$86 million**
This includes all sub-allocations
- **Highway Safety Improvement Program (HSIP) = \$21 million**
- **Congestion Mitigation and Air Quality Improvement Program (CMAQ) = \$32 million**
- **Transportation Alternatives Program (TAP) = \$4.8 million**

➤ **National Highway Performance Program (NHPP)**

Under MAP-21, the National Highway System (NHS) has been expanded to include an additional 390 miles of rural and urban roads in Nevada, which were Principal Arterials, for a designated total of 2,549 miles of NHS. It includes the Interstate System, all principal arterials (as of October 1, 2012) and highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, and the network of highways important to U.S. strategic defense (STRAHNET) and its connectors to major military installations.

The NHPP is authorized at an average of \$183 million per year for Nevada to support the condition and performance of the NHS, for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in an asset management plan of a State for the NHS. As of April 2013, initial steps towards development of a statewide Asset Management Plan for Nevada are currently underway. See National Highway System map on the next page.

National Highway System: Nevada



U.S. Department of Transportation
Federal Highway Administration

Eisenhower Interstate System	Census Urbanized Areas	Airport	Multipurpose Passenger Facility
Other NHS Routes	Department of Defense	Intercity Bus Terminal	Port Terminal
Non-Interstate STRAHNET Route	Water	Ferry Terminal	Truck/Rail Facility
Major STRAHNET Connector		Truck/Pipeline Terminal	AMTRAK Station
Intermodal Connector			Public Transit Station
Intermodal/STRAHNET Connector			
Unbuilt NHS Routes			
MAP-21 Principal Arterials			

Miles

Kilometers

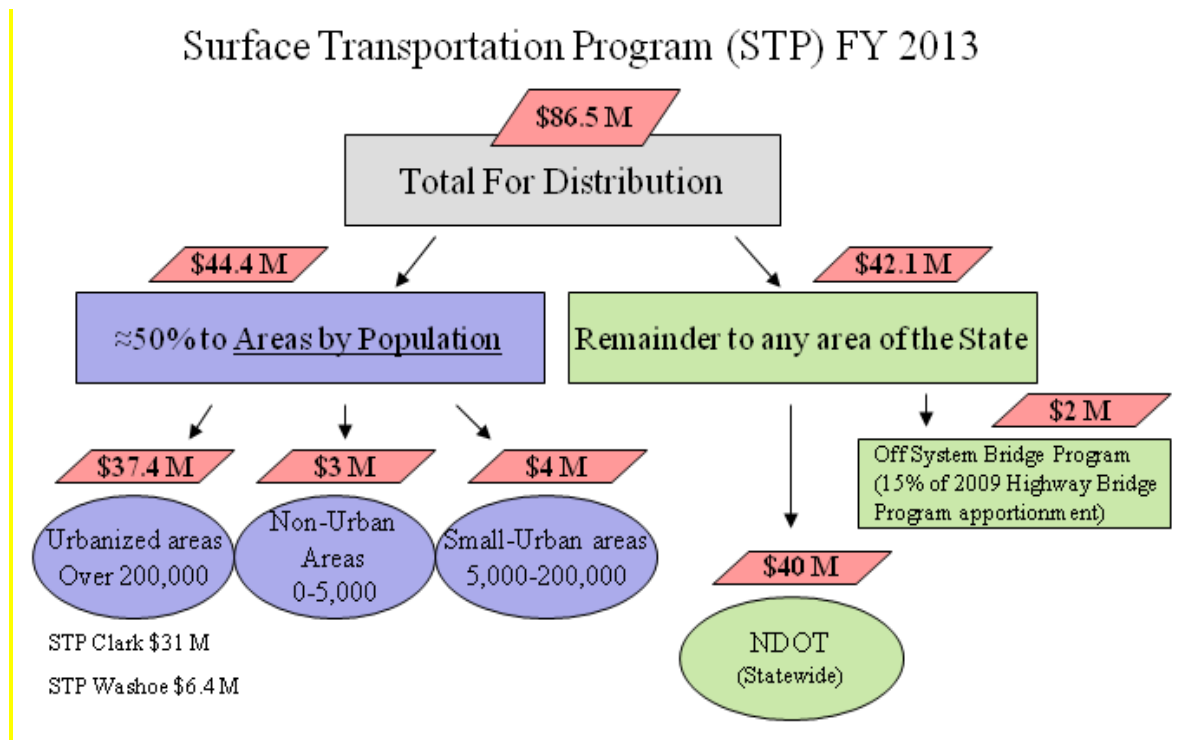
FHWA Effective October 1, 2012

Surface Transportation Program (STP)

MAP-21 continues the STP funding, providing an annual average of \$86 million for Nevada in flexible funding that may be used by the State and its localities for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge project on any public road, facilities for non-motorized transportation, transit capital projects and public bus terminals and facilities.

Most current STP eligibilities are continued, with some additions and clarifications.

Fifty percent of a State's STP funds are to be distributed to areas based on population (sub-allocated), with the remainder to be used in any area of the State. Also, a portion of STP funds (equal to 15 percent of the State's FY 2009 Highway Bridge Program apportionment) is to be set-aside for bridges not on Federal-aid highways (off-system bridges).



➤ Highway Safety Improvement Program (HSIP)

Safety throughout all transportation programs remains NDOT's number one priority. MAP-21 continues the Safety Program, with an average annual funding of \$21 million for Nevada.



The HSIP emphasizes a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. The foundation for this approach is a safety data system, which each State is required to have to identify key safety problems, establish their relative severity, and then adopt strategic and performance-based goals to maximize safety. Every State is required to develop a Strategic Highway Safety Plan (SHSP) that lays out strategies to address these key safety

problems. MAP-21 ensures ongoing progress toward achieving safety targets by requiring regular plan updates and defining a clear linkage between behavioral (NHTSA funded) State safety programs and the SHSP.

More information on Nevada's SHSP and the 2011-2015 Nevada SHSP document, can be found here: http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Safety_Engineering/Nevada_Strategic_Highway_Safety_Plan.aspx

The Nevada SHSP remains a statewide coordinated plan developed in cooperation with a broad range of multidisciplinary stakeholders.

Safety Performance

- States will set targets for the number of serious injuries and fatalities and the number per vehicle mile of travel. If a State fails to make progress toward its safety targets, it will have to devote a certain portion of its formula obligation limitation to the safety program and submit an annual implementation plan on how the State will make progress to meet performance targets.
- Although MAP-21 eliminates the requirement for every State to set aside funds for High Risk Rural Roads, a State is required to obligate funds for this purpose if the fatality rate on such roads increases. As a result of this requirement, for fiscal year 2015, Nevada must set aside approximately \$1.5M to high risk rural roads.
- The Secretary is required to carry out a study of High Risk Rural Road "best practices."
- States are required to incorporate strategies focused on older drivers and pedestrians if fatalities and injuries per capita for those groups increase.

➤ **Congestion Mitigation and Air Quality Improvement Program (CMAQ) [1113]**

The CMAQ program, continued in MAP-21 at an average annual funding level of \$31 million for Nevada, provides a flexible funding source to the State and its local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas).

The CMAQ program also has new performance-based features. The Secretary will establish measures for States to use to assess traffic congestion and on-road mobile source emissions. Each Metropolitan Planning Organization (MPO) with a transportation management area of more than one million in population representing a nonattainment or maintenance area, such as the RTC of Southern Nevada (Las Vegas area), is required to develop and update biennially a performance plan to achieve air quality and congestion reduction targets. CMAQ outcomes assessment study for the program is also required and is conducted by FHWA.

➤ **Transportation Alternatives Program (TAP)**

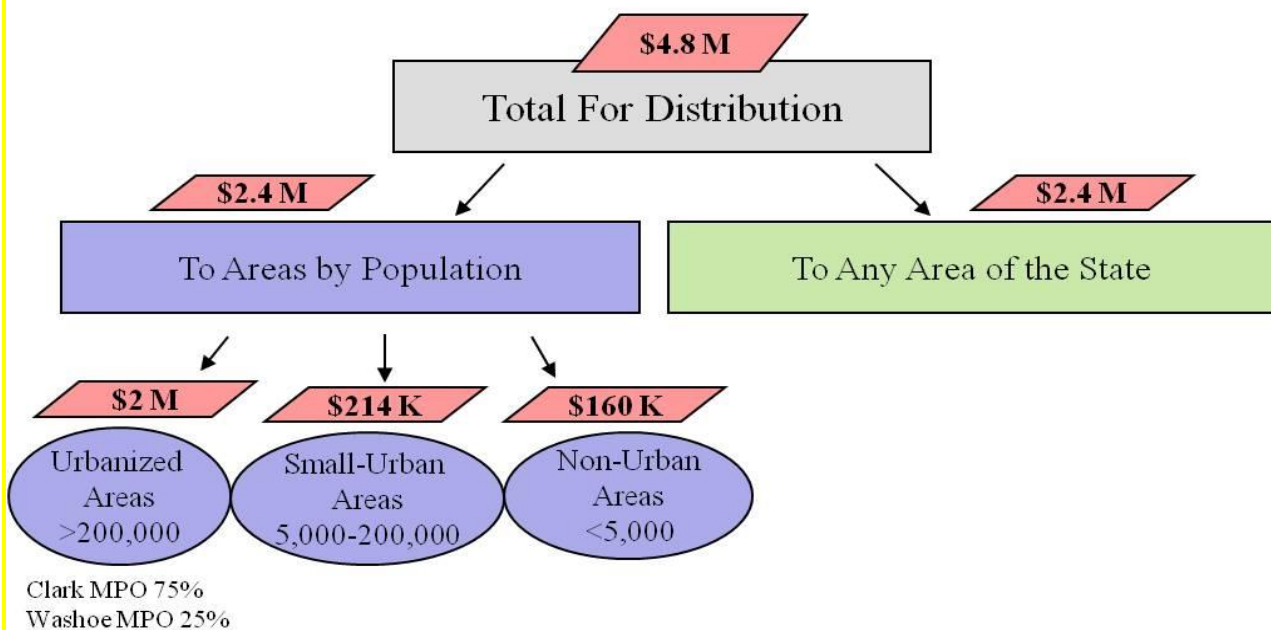
MAP-21 establishes a new program to provide for a variety of alternative transportation projects that were previously eligible activities under separately funded programs. Nevada has elected to spend a certain portion of the funding on Recreational Trails.

Eligible activities include:

- Transportation alternatives (new definition incorporates many transportation enhancement activities)
- Recreational trails program (program remains unchanged)
- Safe routes to schools program
- Planning, designing, or constructing roadways within the right-of-way of former Interstate routes or other divided highways.



Transportation Alternatives Program (TAP) FY 2013 – 2014



Fifty percent of TA funds are distributed to areas based on population (sub-allocated), similar to the STP, with the other half of TAP monies available to any area of the state, based on the above flow chart. (Numbers in graphic are representative of funding appropriations excluding carry forwards)

Federal Transit Funding Programs

The Federal Transit Administration (FTA) through MAP-21 provides transportation funding for urban, small urban and rural public/specialized transportation. Funding is available for capital purchases (buses, vans) and operating expenses to provide services for employment, medical appointments, nutrition, education, and shopping. NDOT administers approximately \$7 - \$8 million dollars in federal funds annually. Over one million rides are given each year through rural and small urban (under 50,000 in population) transit programs administered by NDOT. It is important to note that for urbanized areas over 200,000, MPO's administer their own FTA funds and describe this process in their RTIP's. The internet links are provided in the MPO section.



The following FTA funding categories are administered by NDOT:

- 49 USC 5339 [**Bus and Bus Facility Formula Grants**] – This program provides funding to replace, rehabilitate, and purchase buses and related equipment as well as construct bus-related facilities. This includes the acquisition of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transport centers, intermodal terminals, park-and-ride stations, passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, and shop and garage equipment. Eligible sub-recipients include public agencies or private nonprofit organizations engaged in fixed-route public transportation. Funding is discretionary and is allocated to the States on a national basis.
- 49 USC 5310 [**Enhanced Mobility of Seniors and Individuals with Disabilities Program**] – Provides formula funding to States and Designated Recipients of large urbanized areas (with populations of 200,000 or more) to improve mobility for seniors and individuals with disabilities. This program provides funds to: 1) serve the special needs of transit-dependent populations beyond traditional public transportation service, where public transportation is insufficient, inappropriate, or unavailable; 2) projects that exceed the requirements of the Americans with Disabilities Act (ADA); 3) projects that improve access to fixed route service and decrease reliance on complementary paratransit; 4) projects that are alternatives to public transportation. Eligible sub-recipients are private non-profit organizations, governmental authorities where no non-profit organizations are available to provide service and governmental authorities approved to coordinate services.
- 49 USC 5311 [**Rural Areas Program**] – Provides formula funding to States and Indian Tribes for the purpose of supporting public transportation in areas with population of less than 50,000. Funding may be used for capital, operating, planning, job access and reverse commute projects and State administration expenses. Eligible sub-recipients include State and local governmental authorities, Indian Tribes, private nonprofit organizations, and private operators of public transportation services, including intercity bus companies. All projects must benefit residents in non-urbanized areas of the state. These funds cannot be used in the urbanized areas.

Federal Aviation Administration Funding

The Federal Aviation Administration (FAA) funds airside airport improvements that include runways and taxiways and all associated aviation support infrastructure through the National Plan of



Integrated Airport System (NPIAS). Airports that are not eligible for federal funding are funded through county, airport authority or local monies. FAA's responsibilities include the administration of federal funding for eligible airport improvement projects. Airside projects

typically are not included in the State STIP; Landside airports projects like access roads and the highway infrastructure that supports the airport are usually included in the STIP. Federal airport improvements and new construction funding is provided through the Airport Improvement Program (AIP). The AIP provides federal funding for Nevada's aviation facilities on a matching ratio of ninety-five percent (93.75%) federal and five percent (6.25%) non-federal monies.

Aviation projects eligible for federal funding include land acquisition, runway/taxiway and apron construction, fire and crash rescue equipment, and installation of lighting and navigation landing lights and other items list in the Airport Improvement Program (AIP) Order # 5100.38C Section 1 of Project Eligibility. NDOT receives funding for development of statewide and regional airport system plans. Funding applications are submitted directly to FAA for funding anticipated projects. The FAA then prioritizes the available funding for Nevada airports by category of funding and awards funds for selected projects. Not all projects are selected each year. The offer for funding is made by the FAA and subsequent agreements for funding are between the FAA and the Airport.

The FY 2015 Legislative session created a fund for aviation as a trust fund in the State Treasury. The Director of the Department of Transportation shall administer the fund. These funds will be utilized as match funds for federal programs and any other programs relating to airports or for planning, establishment, development, construction, enlargement improvement or maintenance of any airport, landing area or navigation facility owned or controlled by the city, county or local government. The maximum amount of funds available is \$100,000 per year for FY 2016 and FY 2017.

Federal Railroad Administration Funding

The Federal Railroad Administration (FRA) was created by the Department of Transportation Act of 1966 (49 U.S.C. 103, Section 3(e) (1)). The purpose of the FRA is to: distribute and enforce rail safety regulations; administer railroad assistance programs; conduct research and development in support



of improved railroad safety and national rail transportation policy; provide for the rehabilitation of Northeast Corridor rail passenger service; and consolidate government support of rail transportation activities.

The 1996 Southern Pacific (SP) and Union Pacific (UP) railroad merger created a Nevada network of rail lines that generally parallel I-80 in the north and I-15 in the south. These lines are operated and maintained by the UP. Since most freight

originates at the ports of Oakland and Long Beach in California and is transported to the mid-western section of the country, Nevada is considered a “bridge” state with the trains passing through to their final destination. As Pacific Rim trade has dramatically increased causing congestion and capacity issues, rail freight is both a national and state issue in Nevada. NDOT has participated in projects such as the Reno trench that alleviates at grade crossings increasing the safety and flow of trains across the state. In the past, NDOT using Federal Railroad Administration funds and match provided by the shippers, counties and the railroads has assisted in the building of intermodal facilities, and the rehabilitation of rail lines.

The Passenger Rail Investment and Improvement Act of 2008 (PRIIA) reauthorized the National Railroad Passenger Corporation, better known as Amtrak, and authorized several grant programs focused on intercity passenger rail, including Amtrak’s long-distance routes and the Northeast Corridor (NEC), state-sponsored corridors throughout the nation, and the development of high-speed rail corridors. In 2010 NDOT was awarded \$640,000 for the preparation of a State Rail Plan that is compliant with the Passenger Rail Investment and Improvement Act of 2008 and Federal Railroad Administration requirements.

Today, the FRA is one of ten agencies within the U.S. Department of Transportation concerned with intermodal transportation. It operates through seven divisions under the offices of the Administrator and Deputy Administrator.

Other Federal Funding Sources

TIGER Grants

This appropriation is similar, but not identical to the appropriation for the “TIGER” program authorized and implemented pursuant to the American Recovery and Reinvestment Act of 2009 (the “Recovery Act”). Because of the similarity in program structure, DOT will continue to refer to the program as “TIGER Discretionary Grants.” As with previous rounds of TIGER, funds for the FY 2013 TIGER program are to be awarded on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area or a region.

The Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grant program, provides a unique opportunity for the U.S. Department of Transportation to invest in road, rail, transit and port projects that promise to achieve critical national objectives.

TIGER's highly competitive process, galvanized by tremendous applicant interest, allowed DOT to fund 51 innovative capital projects in TIGER I, and an additional 42 capital projects in TIGER II. TIGER II also featured a new Planning Grant category and 33 planning projects were also funded through TIGER II. In the FY 2011 round of TIGER Grants, DOT awarded 46 capital projects in 33 states and Puerto Rico. The FY 2012 round of TIGER Grants, DOT awarded 47 capital projects in 34 states and the District of Columbia. Each project is multi-modal, multi-jurisdictional or otherwise challenging to fund through existing programs. The TIGER program enables DOT to use a rigorous process to select projects with exceptional benefits, explore ways to deliver projects faster and save on construction costs, and make investments in our Nation's infrastructure that make communities more livable and sustainable.

Federal Lands Highways

Federal Lands Transportation Program

The Federal Lands Transportation Program (FLTP) was established in 23 U.S.C. 203 to improve multi-modal access within national parks, forests, wildlife refuges, Bureau of Land Management (BLM) lands, and U.S. Army Corps of Engineers facilities. Funds for these programs go directly from FHWA to Federal Land Management Agencies and are listed in the STIP.

The FLTP complements the Federal Lands Access Program. Where the Access Program provides funds for State and local roads that access the Federal estate, the FLTP focuses on the transportation infrastructure owned and maintained by Federal lands management agencies.

The use of the FLTP funds does not affect the overall responsibility for construction, maintenance, and operations of the facilities. That responsibility continues to lie with the owner of the facility.

As implementation of the FLTP under MAP-21 progresses, more information will be added to the Federal Highway Administration MAP-21 website.

Federal Lands Access Program

The Federal Lands Access Program (Access Program) was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

The program is designed to provide flexibility for a wide range of transportation projects in the 50 States, the District of Columbia, and Puerto Rico.

The Access Program is funded by contract authority from the Highway Trust Fund. Funds are subject to the overall Federal-aid obligation limitation. Funds will be allocated among the States using a new statutory formula based on road mileage, number of bridges, land area, and visitation.

The Program Decisions Committee (PDC) composed of representative from FHWA, a representative from NDOT, and a representative from Nevada's Nevada Associations of Counties (NACO) will make program decisions with Access funds. As implementation of the Access Program under MAP-21 progresses, more information will be added to the Federal Highway Administration MAP-21 website.

Non-Federal Funding Sources

State Funding Sources

In 1911, the State Legislature appropriated the first funding for road construction for the State of Nevada. In 1917, the Legislature enacted the State Highway Law that created the Department of Highways and made Nevada eligible for federal-aid funding for road construction. The Nevada Legislature first enacted a gasoline tax in 1923. The tax rate was 2 cents per gallon, with the first \$60,000, plus administrative costs, going to the state. The balance of these revenues went to the counties and was based upon the number of vehicles in each county licensed by the state. Today, the statewide tax on gasoline is 24.805 cents per gallon, with 17.65 cents going to the State Highway Fund, a mandatory 6.35 cents to the cities and counties, 0.75 cents to the State Petroleum Clean-up Trust Fund, and 0.055 cents to inspection fees for imported gasoline. Additionally, any county (NRS 373.030) may levy an optional gas tax of up to 9 cents per gallon and all counties can index for inflation under various subsections of Nevada law (NRS 373.065, 373.066, 373.0663, 373.0665, 373.0667). Clark County and Washoe County have indexed State, Federal, and local taxes for inflation and they receive the indexing revenue.

Nevada does not typically finance its state highway program from General Fund revenue. These programs are financed almost exclusively from dedicated highway user revenue funds. Federal funds are available only for reimbursement of expenditures on approved projects. Federal aid is not available for routine maintenance, administrative costs, or other non-project related costs.

Article 9, Section 5 of the Nevada constitution provides: “The proceeds from the imposition of any license or registration fee or any other charges with respect to the operation of any motor vehicle upon any public highway in the state and the proceeds from the imposition of any excise tax on gasoline or other motor vehicle fuel, shall, except cost of administration, be used exclusively for the construction, maintenance, and repair of the public highways of this state.” Highway user revenues are deposited and maintained in the State Highway Fund.

Note: Due to a combination of technological and economic factors, gas tax revenues have been declining, which has resulted in the balance of the Nevada Highway Fund to be at a 20-year low. Realizing that this trend will likely persist, NDOT has been investigating alternative ways of raising revenue for roads. Currently, NDOT is in the midst of a multi-year study to assess the feasibility of replacing the existing fuel tax with a tax based on the number of miles a car travels rather than the amount of gas it consumes. This is referred to as a Vehicle Miles Traveled (VMT) fee.

Local Funding Sources

The RTC of Southern Nevada, Washoe RTC and CAMPO have local funding sources to draw from. These funds support their Regionally Significant Non-Federally funded program such as preservation on their existing infrastructure. They are also used to support their widenings, interchange and new road project on their system as well as support for the State system projects.

The RTC of Southern Nevada has benefited from legislation which suspended the “sunset” clause attached to part of the sales tax increase authorized under Question 10. This allowed the RTC to issue a bond for \$350 million in 2009 and this helped keep transportation infrastructure projects going on during the recession.

The RTC OF Southern Nevada plans on a continuation of present revenue sources, but not to presume upon future actions of either the voters or the legislature regarding possible new sources of revenue.

The Washoe RTC has been successful in two initiatives that made additional local funding available to the RTC in 2003 with the approval of Washoe County ballot question WC-2, a 1/8% sales tax was added to implement road and transit projects and fuel tax indexing was implemented based on the Consumer Price Index (CPI). In 2008 with the approval of Washoe County ballot question RTC-5 froze the CPI indexing and implemented new indexing provisions calculated on the Producer Price Index (PPI). This has allowed many of their major projects to be accelerated.

Within CAMPO Carson City did enact the five cent optional gas tax provision which has funded local projects as well as the Carson Freeway. Additionally projects are also funded with a sales tax in the Carson City area. Douglas and Lyon Counties also financially support the CAMPO planning effort.

Private Funding Sources

Leveraging state and federal funds plays a major role in bridging the gap between Nevada’s transportation needs and available funding. NDOT works to attract participation from private sponsors, local sources, and in-kind right-of-way donations. By encouraging additional investments

from private funding sources, we accelerate transportation improvements and may even encourage new transportation improvements otherwise left unfunded.

Note: FHWA requires that local developers provide a letter of intent or other instrument to confirm funding for all projects programmed within the first two years of the RTIP/STIP.

Cash Flow Projections

A good financial planning process allows decision-makers to see the extent the state will be able to address or meet its goals. It should be noted that the STIP is based on the obligation of federal funds, not on cash flow. Cash flow projections are based on the state fiscal year in which cash outlays are actually made. As an example, the entire amount of a \$100 million construction project is obligated at one time, as reflected in the STIP, whereas cash expenditures and reimbursements for the project typically occur over many years.

Since federal funding for transportation is a reimbursable program, NDOT must maintain adequate resources for its expenditures. Therefore, NDOT monitors the state's Highway Fund cash balance and strives to maintain a sufficient minimum balance in the fund to ensure all obligations can be met. The minimum Highway Fund balance is based upon the estimated amount needed to cover an average month of non-capital expenditures and an average one and one-half months of capital expenditures. Currently, a sufficient highway fund minimum balance is deemed to be approximately \$90 million. However, as the level of outstanding construction contracts and other obligations increases or decreases, the minimum required balance of available cash will fluctuate accordingly. In the event of a cash flow shortfall, NDOT can take corrective action such as delaying bid openings, moving lower priority projects to succeeding years, and deferring other expenses.

Advance Construction

Advance construction (AC) allows states to begin a project even in the absence of sufficient Federal-aid obligation authority to cover the Federal share of project costs. It is codified in Title 23, Section 115. Advance construction eliminates the need to set aside full obligation authority before starting projects. As a result, a state can undertake a greater number of concurrent projects than would otherwise be possible. In addition, advance construction helps facilitate construction of large projects, while maintaining obligation authority for smaller ones. At some future date when the state does have sufficient obligation authority, it may convert an advance-constructed project to a Federal-aid project by obligating the permissible share of its Federal-aid funds and receiving subsequent reimbursements. Advance construction allows a state to conserve obligation authority and maintain flexibility in its transportation funding program.

There is no obligation or guarantee on either side. If Federal funds are not available, the state will not be able to convert the project to a Federal-aid project. In some cases, the state may choose not to convert the project, if state funds are sufficient.

Partial conversion of advance construction (PCAC) is a somewhat different approach in which the state converts, obligates, and receives reimbursement for only a portion of the Federal share of project costs. This removes any requirement to wait until the full amount of obligation authority is

available. The state can therefore convert an advance-constructed project to a Federal-aid project in stages, based on cash flow requirements and availability of obligation authority, rather than all at once on a single future date. This flexibility enables a state to begin some projects earlier, delivering the benefits to the public sooner. PCAC is used in conjunction with GARVEE bonds when Federal funds are obligated for debt service payments over a period of time.

Increased advance construction flexibility was provided in Section 308 of the NHS Act (1995). FHWA can approve construction for reimbursement after the final year of an authorization period, provided the project is on the state's transportation improvement program (STIP).

Process

An AC project application may only be approved if it is included in a state's transportation improvement program (23 U.S.C. 115(c)). The AC approval process includes the following steps:

1. State identifies project(s) and requests AC designation.
2. FHWA Division Office ensures state meets financial preconditions for AC.
3. FHWA reviews and approves AC designation for project. Project agreement executed.
4. State constructs project following Federal-aid requirements.
5. State requests conversion to Federal-aid project full or partial and project agreement is modified.
6. FHWA obligates Federal-aid funds per modified project agreement.
7. State requests reimbursement for costs incurred full or partial as needed.
8. FHWA reimburses Federal-aid share of costs of state.

NDOT Transportation Programs

In addition to programs based on federal funding sources which are tracked in the STIP, NDOT also administers other transportation programs based on project type or carried over from prior transportation authorization acts. It is important to note that MPO's and other local jurisdictions also administer various transportation programs, which are not included in this list. The transportation programs described below utilize federal and state funds and are administered by NDOT.

- **Aviation Planning**
- **Bicycle & Pedestrian Program**
- **Bridge Program**
- **Federal Lands Highway Programs**
- **Local Public Agency Program**
- **Rail Freight**
- **Research**
- **Safety Program**
- **Transit Program**
- **Transportation Alternatives Program**
- **State Highway Preservation Program**
- **3R Program**

➤ **Aviation Planning**

The Aviation Planning Section at NDOT is responsible for helping ensure that Nevada's general aviation public-use airports meet applicable safety requirements and provide services to their communities and the flying public. Through annual safety inspections and education programs, the NDOT Aviation team facilitates the establishment of a viable, balanced and integrated system of

aviation facilities. Our aviation team produces airport directories and aeronautical maps as well as assistance with management analysis, safety inspections, identifying funding sources, wind socks, and airport planning. This section is also responsible for the development and regular updates of the Nevada Aviation System Plan.

For more information, contact Matthew Furedy, khaukohl@dot.state.nv.us (775) 888-7353

➤ **Bicycle & Pedestrian Program**

The Bicycle and Pedestrian Program at NDOT oversees the planning and development of bicycle and pedestrian facilities statewide, ensuring the traveling public has choices when determining their transportation needs. The program works with state and local entities to ensure compliance with design standards and guidelines and provides information on the safe interaction of bicyclists, pedestrians and motor vehicles. The program develops the Statewide Bicycle Plan, Bicycle Touring Map, and coordinates the States Bicycle and Pedestrian Advisory Board. The program works with national groups such as the Alliance for Bicycling and Walking, as well as local bicycling and walking groups to provide information, collaboration and resources (such as an annual Bicycle and Pedestrian Summit). The Nevada Safe Routes to School Program also collaborates and coordinates with the Nevada Commission on Tourism promote Nevada as a cycle-tourism and trek-tourism destination.

For more information, contact Bill Story, wstory@dot.state.nv.us (775) 888-RIDE (7433)

➤ **Bridge Program**

With the elimination of bridge specific funding under MAP-21, NDOT intends to fund bridge rehabilitation, replacement and preservation activities at approximately \$10,000,000 per year. Eligible bridge activities may be funded through the MAP-21 NHPP and STP categories, as applicable. The criteria previously used to prioritize and evaluate possible projects will continue to be key factors in project development. Although MAP-21 provides opportunities for more flexibility, previous evaluation and prioritization practices have been critical in allowing NDOT and our local partners to maintain one of the nation's highest ranking bridge infrastructure systems.

Prior, to MAP-21, the Highway Bridge Program (HBP) provided funding to replace or rehabilitate substandard bridges owned by public agencies. Bridges that are privately owned, carry railroads, or are predominately for pedestrian/bicycle use are not eligible. A bridge is defined as a structure that carries vehicular traffic and has a span (length) of greater than 20-feet or more measured along the centerline of the road. A series of pipes or culverts can also be considered a bridge if the length is greater than 20-feet.



The primary focus of NDOT's Bridge Program will continue to be replacement and rehabilitation of deficient bridges. Approximately 80% of NDOT's annual Bridge Program funds will be used for replacement and rehabilitation projects. The remaining 20% will be used to administer the Bridge Program. Administrative activities include conducting federally mandated condition assessment inspections, compiling federally mandated inventory data, developing and operating a Bridge Management System, calculating load ratings, and completing hydraulic evaluations for existing bridges.

Per MAP-21 STP category requirements, \$2.1 million of \$10 million total for NDOT's Bridge Program must be spent on bridges that are "off" the federal-aid system. A road's functional classification is used to define "on" or "off" the federal-aid system. Roads "on" the federal-aid system include roadways such as interstate, urban collector, and rural minor arterial while off-system roads include rural minor collector, and urban and rural local roads,

MAP-21 eligible project costs are funded at 95% federal and 5% State or local agency matching costs. Project costs eligible for funds include preliminary engineering, right of way, construction engineering, and actual construction costs.

Priority for funding projects under the NDOT Bridge Program will continue to consider a bridge's Sufficiency Rating. The Sufficiency Rating is a numerical assessment of a bridge's serviceability and is based on condition assessment inspection and inventory data. Its value varies from 0 to 100, with 100 representing no deficiencies. Under the HBP, a bridge was eligible for replacement when its Sufficiency Rating was less than 50 and was eligible for rehabilitation when its Sufficiency Rating was less than 80. In addition to meeting the Sufficiency Rating requirement, a bridge had to be classified as either Structurally Deficient or Functionally Obsolete. A bridge is considered Structurally Deficient when key elements reach an established level of deterioration. A bridge is considered Functionally Obsolete when it no longer adequately serves the road it carries, in conformance with a currently established standard. MAP-21 allows the States latitude in prioritizing projects, as the specific eligibility requirements are no longer applicable; however, NDOT will continue to evaluate these thresholds and other relevant factors when prioritizing projects. Under MAP-21, the classification of Functionally Obsolete is no longer used.

Replacement projects include constructing a new bridge in the same general highway corridor that the existing bridge serves. The bridge does not have to be built at the same location as the old bridge, but the old bridge must be removed. A nominal amount of approach work, sufficient to connect the new facility to the existing roadway or to return the roadway profile to an attainable touchdown point is also eligible.

Rehabilitation projects generally include widening, seismic retrofitting, scour mitigation, strengthening, and/or reconstruction of deteriorated elements. A rehabilitation project is intended to improve the sufficiency rating and address elements resulting in the Structurally Deficient classification and any other safety issues which are considered when prioritizing the project.

Each agency can request funding for eligible bridges using NDOT's "Project Initiation Form." A priority will be established for all bridges statewide based on the Sufficiency Rating, criticality of the structure and nature of the deficiency/problem. The lower the Sufficiency Rating, the higher the

priority. Funding levels are not sufficient to replace and rehabilitate all eligible bridges; in general, funds are allocated to accomplish rehabilitation and replacement of critically important structures.

NDOT will administer the design and construction of most Bridge Program projects. However, certain agencies can administer their own projects under the Local Public Agency Program. NDOT's standards, policies, and procedures must be used for projects on the federal-aid system, while local agency standards may be used for projects off the federal-aid system. For more information contact Troy Martin, Assistant Chief Structures Engineer – Design at (775)888-7380.

➤ **Federal Lands Highway Programs (FLHP)**

The Federal Lands Highways program (FLHP) provides for transportation planning, research, engineering, and construction of highways, roads, and parkways and transit facilities that provide access to or within public lands and Indian reservations. For general information, contact Jason Van Havel, (775) 888-7120. For information on the individual programs, go to <http://flh.fhwa.dot.gov/programs/transportation.htm> or contact the program manager:

Park Road and Parkways
Rick West (702) 963-3730

Forest Highways
Tim Mueller (775) 888-7122

Refuge Roads
Bob Gansauer (702) 963-3722

Indian Reservation Roads
Robert Sparrow (202) 366-9483

Discretionary Funding
Coy Peacock (775) 888-7124

➤ **Local Public Agency Program**

The Local Public Agency Program (LPA, formerly known as the Stewardship Program) is a method for a local public agency to complete an approved, federally funded project on a reimbursement basis, with NDOT oversight. In order to qualify, the local public agency must have secured funding for the project, the project must be partially funded with Federal-Aid funds, and the local agency must be responsible for the design, advertising, awarding, and administering the construction of the project.

For more information, contact Kristena Shigenaga, kshigenaga@dot.state.nv.us (775) 888-7490

➤ **Rail Freight**

Railroads are an essential component of our interstate and intrastate transportation system. The Rail/Freight section at the NDOT administers and oversees federal funding, publishes statewide rail maps, and produces the statewide goods movement study.

For more information, contact: Bill Thompson, bthompson@dot.state.nv.us (775) 888-7354

➤ **Research**

The NDOT Research Section can provide information, literature searches, research opportunities, and coordinate information sharing. Information and literature are available through the NDOT Research Library. Research opportunities and coordination can help counties to solve transportation problems. While deadlines for research projects are established (February), ideas for research can be submitted at any time.

For more information, contact Ken Chambers, kchambers@dot.state.nv.us (775) 888-7220

➤ Safety Program

MAP-21 continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state owned public roads and roads on tribal lands. The HSIP requires the responsible state agency, NDOT, to regularly evaluate and update their Strategic Highway Safety Plan (SHSP) to define clear linkages between behavioral State safety programs and the SHSP, in addition to documenting progress towards safety goals.



NDOT is required to develop an evaluation process to review results and use the information to set priorities for highway safety improvements. States with SHSPs have additional flexibility to use their HSIP funds for behavioral and other safety projects if they meet rail grade crossing and infrastructure safety needs as defined in their SHSPs.

The procedures for the selection and development of construction projects funded through the HSIP are defined in the Nevada Department of Transportation's *Safety Procedural Manual*. The procedures contained in the manual establish a comprehensive HSIP, which conforms to Federal Highway Administration policy. The HSIP consists of three components: planning, implementation, and evaluation. The planning component consists of: a process for collecting and maintaining records on crashes, traffic and highway data; a process for analyzing highway locations and features to determine hazardous conditions; a process for conducting engineering studies of hazardous locations in order to develop highway safety improvements; a process for establishing priorities for implementing safety improvements; a methodology for classifying federal, state and local projects; a process for programming and implementing highway safety improvement projects; an evaluation of cost and safety benefits derived from safety analysis to mitigate or eliminate roadway hazards; an evaluation of crashes before and after the implementation of a safety improvement; and a methodology of determining the overall effectiveness of the prescribed safety improvement.

Each year the Department utilizes a percentage of the Federal Safety Program funding to upgrade and maintain the statewide crash database, develop and implement safety management systems, develop strategic safety plans, evaluate safety engineering software and receive training in new and effective methods of traffic safety engineering. Allocation of funds to these types of activities are determined by management based on the need to meet the overall goals of the Safety Improvement Program.

Systemic projects, such as centerline rumble strips, roundabouts, safety edge, horizontal curve high friction surface treatments, pedestrian crossing updates, are some of the mitigations identified by the FHWA as nine proven countermeasures selected to address safety issues proactively. A system-based approach acknowledges crashes alone are not always sufficient to determine what countermeasures to implement, particularly on low volume local and rural roadways where crash densities are lower, and in many urban areas particularly those where there are conflicts between vehicles and vulnerable road users (pedestrians, bicyclists, and motorcyclists). These proactive mitigations applied to roadways that may or may not be identified as high crash locations, when

applied throughout the system, will in the long term demonstrate a reduction in the severity and number of crashes.

For more information, contact Ken Mammen, kmammen@dot.state.nv.us (775) 888-7335

➤ **Transit Programs**

Many Nevada residents depend on transit services. Buses in rural Nevada provide more than 1 million rides and travel over 5 million miles per year. To help in the creation and continuation of these services, NDOT administers the following Federal Transit Administration (FTA) Grants on an annual basis: Enhanced Mobility for seniors and Individuals with Disabilities (5310), Rural and Small Urban (5311), Bus and Bus Facilities Formula Grant (5339).

For more information, contact Michelle Gardner, mgardner@dot.state.nv.us (775) 888-7312

➤ **Transportation Alternatives Program**

The Nevada Transportation Alternatives Program (TAP) provides funds for projects that improve non-motorized mobility, historic preservation, scenic accessibility, Safe Routes to School programs, and environmental/vegetation management. The Nevada Recreational Trails program is a part of federal TAP funding however it is being administered through Nevada State Parks (<http://parks.nv.gov/trails/>). While NDOT encourages the inclusion of TAP projects into existing planned transportation projects, TAP projects may also be pursued on a “stand alone” basis. TAP funded infrastructure projects must be legally accessible to the general public and safety is an important consideration in the development of projects.

NDOT’s TAP projects may be sponsored by local governments, school districts, private schools, and tribal governments. Entities located within the boundaries of Metropolitan Planning Organization/Areas (MPOs) are not eligible for this funding through this process. If you are unsure if you are located within the MPO boundary, please contact the NDOT Planning Office.

TAP is not a grant program. It is a reimbursement program, with funds being reimbursed following the expenditure of funds for the completion of a project or a phase of a project. Applicants are urged to submit their applications as early as possible so they can be reviewed for completeness. Information regarding the TAP application process is available on the NDOT website at: http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Alternatives_Program.aspx

There are three broad categories of project types: 1) *community improvement activities*, 2) *non-motorized transportation*, and 3) *Safe Routes to School*.

Community Improvement Activities

- Construction of scenic overlooks, vehicle turnouts and viewing areas
- Traffic calming improvements to improve safety of non-motorized users
- Inventory, control, or removal of outdoor advertising
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways
- Historic preservation and rehabilitation of historic transportation facilities
- Archaeological planning and research

- Vegetation management
- Archaeological activities
- Environmental mitigation activities



Non-Motorized Transportation Facilities

The Nevada TAP allows for the construction, planning, and design of both on-road and off-road infrastructure-related projects and systems that will provide safe routes for non-drivers. This includes walking and bicycling facilities for children, older adults, and individuals with disabilities, which allow them to access their daily needs. Projects that will increase localized quality of life and mobility, enhance the connectivity of the non-motorized network, and reduce dependence on the automobile will receive a higher priority scoring.

Safe Routes to School Programs

The Nevada TAP encourages projects that substantially improve the ability of kindergarten through 8th grade students to walk and bicycle to school. These could include traffic diversions, secure bike/skateboard parking, walking/bicycling encouragement programs, traffic enforcement, education programs related to bicycling and walking as it relates to traffic, safety, health or the environment, public awareness campaigns, safe routes training for government officials and school district personnel, law enforcement overtime, teacher overtime and costs for substitute teachers to enable training of personnel, and Regional Safe Routes to School Coordinators.

For questions or more information on Nevada's TAP program please contact Coy Peacock, cpeacock@dot.state.nv.us (775) 888-7124.

State Highway Preservation Program

NDOT maintains 5,389 miles of highways. Although the state maintained roadway network consists of only 20% of the roads in Nevada, the network is overwhelmingly important as these highways carry fifty-four percent (54%) of Nevada's automobile traffic and eighty percent (80%) of the heavy trucks.



Today's cost to replace the pavement surface is estimated at approximately \$20 billion plus another \$2 billion to replace the 1,116 bridge infrastructures; therefore, the state's investment in highways is substantial. NDOT's goal is to continue to maintain Nevada's Interstate highway and Non-interstate Principal Arterial roads at a high level of service by the construction of proactive thin asphalt overlays as funding allows and major rehabilitation of inferior pavement segments as necessary; continue to preserve the Minor Arterial, Major Collector and Minor Collector roads at an adequate to good level of service by the construction of proactive thin asphalt overlays as funding allows and major rehabilitation of inferior pavement segments as necessary; to further develop economically sound methods to improve low volume roads and maintain them at a minimal, but acceptable, level of serviceability by applying preventive and corrective maintenance treatments and repairs; and to continue coordinating and integrating routine pavement maintenance activities with planned overlay and reconstruction work.

NDOT is responsible for protecting highway assets and preserving existing highways. NDOT uses the "Network Level Project Prioritization" chapter of the "NDOT Pavement Management System Overview" manual to prioritize its preservation projects. Within the goals of NDOT's action plan, individual projects are prioritized based on pavement age, traffic volume, axle loads, and pavement conditions. From this analysis, an action list comprised of proposed projects is formulated based on the financial consequences of not doing the project and then given to the 3R team (reconstruction, rehabilitation, and resurfacing). Further assessment data is collected from field surveys in conjunction with the District Engineers.

Nevada's 2013 State Highway Preservation Plan can be found at:

[http://www.nevadadot.com/About NDOT/NDOT Divisions/Planning/Performance Analysis/State Highway Preservation Report.aspx](http://www.nevadadot.com/About%20NDOT/NDOT%20Divisions/Planning/Performance%20Analysis/State%20Highway%20Preservation%20Report.aspx)

➤ **3R Program**

The purpose of the 3R Program is to maintain a reasonably high level of serviceability on the roads, while optimizing available funds and minimizing risks to the traveling public. The 3R Program is designated for resurfacing, restoring and rehabilitation any route or portion thereof on the National Highway System. The NDOT's Materials Division evaluates and prioritizes proposed 3R projects using the same process described under State Highway Preservation.

With the expansion of the National Highway System under MAP-21 there are additional opportunities to fund 3R projects with federal funding. These projects are required to be shown in the STIP.

For more information, contact Anita Bush, abush@dot.state.nv.us (775) 888-7856