APPENDIX 5
FINANCIAL ANALYSIS

Background

Starting with the Intermodal Surface Transportation Equity Act of 1991, it has been a consistent requirement of federal law and regulation that the projects included in the Regional Transportation Plan (RTP) be consistent with the financial resources that can reasonably be expected to be available over the plan period. This Appendix to the RTP outlines the projections of costs and financial resources that have been made in relation to future transportation investments, and demonstrates that the cost of projects included in the plan is indeed consistent with anticipated revenues over the 20-year plan period from 2009 to 2030.

Three important facts about the Las Vegas area greatly influence this assessment of financial consistency. First, the rapid and sustained growth in the area is driven by market forces that, to a significant extent, act independently of the adequacy of local infrastructure. As a generalization, the market has expected the transportation system to be developed and maintained in a way that responds to whatever demand may arise. There is a growing recognition that, while this may have been true in the past, the market will have to pay more heed to infrastructure needs. However, present mechanisms for planning and funding of the transportation infrastructure rest almost entirely on the expectation that public agencies at both state and local levels will retain responsibility for ensuring that future transportation systems will be adequate to meet demand.

Market-driven growth, by definition, reflects the needs of the real estate development market. In the Las Vegas area, that market is large, fast growing, dynamic and ever-changing. This creates a need for flexibility in the planning and implementation of transportation investments – a flexibility that in many ways runs counter to the federal mandate for 20-year plans based on fiscal constraint.

In putting forward the RTP, the RTC recognizes this need for flexibility. The RTP aims to address current issues associated with present and projected patterns of development, while at the same time providing a framework for responding to emerging issues.

Second, the area has a very limited network of freeways in relation to population and traffic. This puts a very heavy burden on the arterial and local street system to accommodate present and future needs. Moreover, only a small number of these arterial and local roads are under the responsibility of the Nevada Department of Transportation (NDOT), so much of that burden falls on the local transportation agencies.

In this context, the RTC has a triple role to play. It is the Metropolitan Planning Organization, responsible for developing the RTP and the Transportation Improvement Program (TIP) and, in so doing, to secure the fullest amount of federal funding for area transportation projects. As the regional provider of public transportation services, the RTC has a direct role to play in meeting transportation needs. Under local statute, the RTC is also responsible for the disbursement of public funds raised within Clark County for transportation purposes. It is projected that these local sources will cover over 20 percent of the all the funding needed for projects in the RTP.

The third fact influencing the assessment of fiscal constraint is related to the importance of locally-maintained roads in meeting transportation needs. Under the Federal Planning Regulations, the RTP and TIP are required to demonstrate fiscal constraint with regard to what are termed "regionally significant" projects. These are projects which are on the Interstate and U.S. Highway systems, on other roads that are designated as "Principal Arterials" in the Functional Classification of roadways defined by NDOT, or which otherwise use federal funding.

However, very substantial local investment is needed to improve and expand the remainder of the local road system. These investments have to be accounted for in the overall determination of fiscal constraint. Together with the RTP projects, these comprise the overall Transportation Capital Program for the region. All projects expected to be implemented over the period to 2030 are listed in Appendix 1 to the RTP. The costs of all these projects are included in the Fund Source Balance Sheet set out in Table 5-3 below.

The next section outlines the costs of the projects included in the RTP. Subsequent sections consider the various funding sources that are expected to be available to implement these projects.

Regional Transportation Plan Costs

The transportation projects scheduled for funding under the RTP for 2009-2030 are summarized in Chapter 4 of the RTP and listed in more detail in Appendix 1 to the RTP. The cost of the projects included in the RTP amount to $13.3 billion over the period from 2009 to 2030, broken down as follows:

Regionally Significant highway projects: $11.3 billion (85%)

Intelligent Transportation Systems projects and operational improvements: $390 million (2.9 %)

Transit projects: $1.5 billion (12%)

Alternate mode projects and environmental projects: $120 million (0.9 %)

Regionally Significant Projects

A Regionally Significant Project is on a facility that meets regional transportation needs, including all principal arterials, freeways, most transportation terminals, and all fixed guideway transit projects that offer an alternative to regional highway travel.

Projects that meet regional transportation needs include connections between the region and other areas, access to and from existing and planned major activity centers, and access to and from transportation terminals. Transportation terminals include major ports, airports, intermodal freight facilities, and transit terminals. The principal arterial – interstate system includes the Interstate and U.S. highways systems, freeways, expressways and other roads classified as "Principal Arterials" in the Roadway Functional Classification for the area as defined by NDOT and approved by the Federal Highway Administration.

Regionally Significant Projects exclude projects that are defined as "exempt" under the air quality regulations – that is, they are deemed to have negligible impact on air quality, either beneficial or otherwise. All regionally significant projects are included in the Plan, whether or not they are federally funded.

Other Projects included in the Regional Transportation Plan

Under federal regulation, all other projects that are to be funded wholly or in part using federal funds, or which otherwise require federal action, must be included in the RTP. The RTP must also include Transportation Control Measures that have been specified in an approved State Implementation Plan (SIP) for air quality. These are transportation measures that are determined to have a significant benefit in terms of improving air quality; transportation plans and programs must ensure that adequate funding is provided to ensure their implementation in accordance with the SIP.

Local, Non-Regionally Significant, Projects

The projects included in the RTP cover, as they are required to do, all the investments planned on the major transportation facilities in the region between 2009 and 2030. As noted, a substantial additional investment will be required to improve and expand the remainder of the road system to keep pace with the anticipated growth of population and economic activity. This investment will all come from local funding sources. The RTC, in cooperation with the local entities, has developed a long-term program for projects for roadways included in the regional Master Plan of Streets and Highways (Master Plan). The Master Plan includes all of the streets in the Roadway Functional Classification for the area, as well as many other existing and planned local roads. The RTC program of projects on the local road system is included in the full listing of projects expected to be implemented over period between 2009 and 2030 set out in Appendix 1. The estimated additional cost of this local program for projects on the Master Plan is $2.4 billion.

Program costs and revenues

Combining the projects in the RTP with the local program of projects on the Master Plan, the total cost of the transportation capital program over the period between 2009 and 2030 amounts to some $15.6 billion.

The following sections describe the various funding sources assumed to be available to support these transportation investments in the Las Vegas metropolitan area over the Plan period:

RTC and local funding

Federal funding allocated to Southern Nevada

Federal funding administered by NDOT

Other NDOT programs

In addition to the capital program, significant resources will be devoted to the operations and maintenance of the system. As discussed in the concluding section, these costs are allowed for in the projections of funding available to support the capital investment program. All cost and revenue projections in the RTP are made in Year-of-Expenditure Dollars. This change from previous RTC practice was mandated by SAFETEA-LU. The effect is to substantially increase the apparent cost of long-term projects when compared with the costs in earlier plans and programs.

RTC and other Local Funding Sources

These are funds generated at the local level in Clark County. The RTC is charged with overseeing the disbursement of many of the funds raised from local taxes for transportation. This is done through a variety of inter-local agreements and prioritization procedures.

The local funds come from four broad sources.

- Various taxes for transportation purposes authorized by the passage of a voter initiative in 1991,
- Various additional taxes for transportation purposes authorized by the passage of a voter initiative in 2002,
- Other public revenues used for transportation purposes by local entities and
- Expenditures by developers and other local private sector interests.

RTC Funds

Revenues raised under the two voter initiatives are largely administered by the RTC. Confusingly, both the 1991 and 2002 initiatives appeared on the ballot as Question 10. In this document, the term "Question 10" (or Q10) refers only to the measures passed in 2002; those passed in the earlier initiative are referred to by program or fund name.

There are six elements to the 1991 funding source package, summarized in Table 5-1.

Table 5-1: 1991 Revenue Source, Uses and Recipients

Revenue Source	Adopted Uses	Recipient
Motor Vehicle Fuel Tax	Street and arterial highway improvements	RTC
Room Tax	Improvements in resort corridors	Generating entity
Development Tax	Construction of the Las Vegas Beltway	Clark County
Motor Vehicle Privilege Tax	Construction of the Las Vegas Beltway	Clark County
Jet Aviation Fuel Tax	Airport Connector	Clark County
Sales and Use Tax	Public transit system	RTC

The 2002 initiative was designed to augment the local funds that come from the 1991 funding package. The 2002 Question 10 package included the sources detailed on Table 5-2.

Table 5-2: Question 10 2002 Revenue Sources and Changes

Revenue Source	Changes
Motor Vehicle Fuel Tax	No change
Development Tax	Increase the rate levied to support transportation infrastructure, specifically the upgrading of the Las Vegas Beltway to full freeway standard improvements in resort corridors
Jet Aviation Fuel Tax	Increase the rate levied to support transportation improvements related to the region's airports administered by the Clark County Department of Aviation, including McCarran International Airport
Capital Projects Tax Levy	Redirection of part of the existing levy to support transportation infrastructure improvements
Sales and Use Tax	Increase the rate of tax and apply the additional revenues generated to highway, intermodal as well as transit expenditures. The revenues from the 1991 initiative remain solely dedicated to public transit.

An important aspect of the Question 10 package of measures was that the sales tax funds in particular are allocated to a wider range of programs and activities. These include:

- A new High-Speed Lane Miles Program;
- Supplemental funding for the Clark County Beltway program;
- Operations of the regional trails system;
- Operations of the FAST traffic arterial management system (FAST is jointly funded by RTC and NDOT with the latter primarily funding the operations of the freeway management system);
- Operations of the Clark County Department of Air Quality and Environmental Management, and
- Various intermodal programs to support on-street bicycle facilities, ITS activities, traffic signal improvements and provision of bus turnouts.

The Development Taxes to support the Beltway program are raised by Clark County. Until recently they were administered by the RTC and supplemented by funding raised under Question 10. In early 2008, the inter-local agreements between RTC and Clark County were revised to give the latter exclusive control over the Development Tax and the beltway program, while Sales and Use Tax funds administered by RTC would no longer be used to fund the beltway.

The funds raise under the Gas Tax and Question 10 are supplemented by funding contributed by local entities and also by contributions from property developers

Other Public Revenues Used for Transportation Purposes

These include General Fund revenues that may be applied to transportation needs, set-asides from the State gas tax and any other sources of public funding that the entities may choose to use.

In general, such funds are applied to maintenance activities, rather than to the capital program. In a few instances, entities have put forward projects for inclusion in the RTP. The RTC is satisfied that any such costs included in the plan are reasonable and do not compromise the maintenance responsibilities of the entity concerned.

Expenditures by Developers and Other Local Private Sector Interests

Because of the demands of rapid growth, developers often contribute to the costs of projects in order to expedite construction that will serve specific developments. This makes it possible for the local entities to expand considerably the capital program within the limits of available public funding. While a lot of developer funding is applied to local roads, the developers also have made, and continue to make, a significant contribution to improvement projects on roads that are part of the Master Plan of Streets and Highways. The RTC therefore considers it reasonable to accept entity projections of developer participation in funding of projects included in the overall investment program.

In the case of projects included in the first two years of the RTP, the RTC, in accordance with federal guidelines, will only recognize private funding sources if the entity involved can assure that there are adequate commitments that this funding will be provided. Based on past experience and knowledge of the relationship between land use development and roadway projects, RTC anticipates that nearly $1.6 billion in developer funding may be committed to roadway projects over the RTP period. Some $170 million of this is expected to be spent on regionally significant projects identified In the RTP. In addition, the Plan includes $450 million to be raised by the Las Vegas Monorail Corporation for the proposed extension of the Monorail to McCarran Airport. In total, these private funding sources are expected to contribute about 12 percent of the total cost of the transportation capital program.

RTC Funding Source Projections

The RTC has adopted a conservative approach to projecting revenues, given current uncertainty about future levels of funding for transportation. RTC has developed a series of funding models that cover the gas tax and Question 10 revenues. These are summarized in the fund source balance sheets. Revenues take account of regional growth. Expenditures include the overheads and financing costs as well as capital.

Revenues from the gas tax have been rising more slowly than the growth in travel and this trend is likely to intensify as high prices and concerns about global warming lead to more widespread use of alternative fuels and more fuel efficient vehicles. As a result, Gas Tax revenues are expected to grow much more slowly than the rate of inflation, from around $70 million a year now to over $90 million a year in 2030.

Sales taxes, the main element of the “Question 10” revenues, tend to be more stable than the gas tax, although suffering from a slow-down at the time of writing this plan (summer 2008). However, even at more “normal” rates of growth, revenues tend to grow more slowly than the inflation of project costs, so a given tax rate supports a smaller program as time goes on.

Any increase in either gas or sales tax would require approval by the State Legislature and a vote of the people. The current economic slow down makes this a difficult time to be discussing a tax increase. RTC does consider it reasonable to assume that the voters will at some point agree to suspend the "sunset" clause attached to part of the sales tax increase authorized under Question 10. This will help offset the effects of construction and land prices that have decreased the number of projects that were expected to be built at the time Question 10 was presented to the voters. With this assumption, the various "Question 10" revenues for the streets and highway program are expected to grow from $65 million a year now to over $120 million a year in 2030.

The Sales and Use Tax also yields about $130 million annually to support the transit system. An additional $50 million is raised from transit fares. Under Nevada law, proceeds from gasoline taxes may not be used to support transit operations or to fund transit capital improvements. It is intended that fares should grow in line with inflation, and total revenues for transit are expected to grow to over $400 million annually by 2030 As can be seen from the fund source balance sheets, most of these revenues will go to the operation of the system. The total amount of RTC funding available for transit capital investments is projected to be about $500 million over the RTP period.

Federal Funding for Transportation Projects in Southern Nevada

These are funds made available to Southern Nevada under Federal legislation. They come under a number of programs and fund sources, each of which applies to certain specific areas or types of project. In addition, this section outlines the various earmarks for specific projects that are included in SAFTEA-LU. In general, these funds are expected to grow at an average of 2% annually, which is below past trends but is considered reasonable in light of uncertainty about transportation funding at the federal level.

Surface Transportation Program, Urban Element

Of the total Surface Transportation Program (STP) funds allocated to the State, 30 percent is allocated to urbanized areas of the state with a population of 200,000 or more. STP-Urban funding can be used for the full range of activities eligible under the general STP program. These funds are subject to the provision that they may not be used to build new capacity projects for single occupant vehicles, unless the projects come from the adopted Congestion Management System for the area. The STP-Urban program also provides the flexibility to transfer funds to transit projects administered under FTA programs.

Currently, approximately $21 million is allocated each year under the STP-Urban program for use in the Las Vegas Urbanized Area. This is expected to amount to nearly $6o0 million over the RTP Plan period. These funds are available for distribution according to local priorities as determined by the RTC in cooperation with NDOT and local entities.

Congestion Management and Air Quality Mitigation Program

The Congestion Management and Air Quality Mitigation Program (CMAQ) is available for projects that are within designated air quality non-attainment areas, and which can be demonstrated to reduce motor vehicle emissions in a cost-effective manner. In Clark County, the Ozone Non-Attainment Area covers about 80 percent of the county, with a smaller area centered on the Las Vegas Valley being also in non-attainment for CO and PM10. However, projects selected for CMAQ funding in the RTP must be evaluated and prioritized according to their cost-effectiveness in reducing emissions. CMAQ funding cannot be used for projects that result in new capacity for single occupant vehicles. The CMAQ program also provides the flexibility to transfer funds to transit projects administered under Federal Transit Administration programs, subject to same project evaluation and prioritization process. Such funds may be used to provide operating subsidy to support, for a limited time, experimental or innovative public transit programs.

Currently, approximately $15 million is allocated each year under the CMAQ program for use in the Las Vegas Non-Attainment Area. It is assumed that CMAQ, or a similar program, will be continued after 2009 and could yield about $480 million over the RTP period. However, the RTP allocates long-term CMAQ funding to general categories of projects, to allow flexibility in the evaluation and prioritization process.

Earmarked Funding

SAFTEA-LU, like preceding legislation, included a number of earmarks for specific projects. Typically, these funds are supplementary to other funding identified for these projects.

In 2008, over $150 million in SAFTEA-LU earmarked funding is available for designated projects in Southern Nevada., with an additional $14 million from earmarks under other appropriations. Earmarked funds only extend thru 2009 and no assumptions are made regarding project-specific earmarks after that time.

Federal funding for Transit - Urbanized Area Formula Program (S.5307)

This is a general program that provides grants to be used for a wide variety of capital expenditures related to the development and maintenance of the public transportation system in the Las Vegas Urbanized Area. Funding allocations are determined by a formula which considers such factors as the population living in the area and the existing level of transit service. In major urban areas such as Las Vegas, federal funding may not be used to provide support for on-going operations costs or administrative overheads, except for experimental or innovative services which may be supported for a limited time. Typically, transit agencies give priority in the use of these funds to the replacement and expansion of the public transit fleet.

Approximately $25 million is allocated each year under the Urbanized Area Formula Program for use in the Las Vegas Urbanized Area, amounting to about $690 million over the RTP period. The RTC is required to certify that at least 1 percent of these funds are allocated to “enhancement” activities and a similar amount to safety and security projects.

Federal funding for Transit - Bus and Bus-Related Discretionary Program (S.5309)

The Bus and Bus-Related Discretionary Program supplements the formula funding to support larger capital investments such as intermodal terminals and maintenance facilities. This is a discretionary program, under which the projects to be funded are nominally determined by the FTA, but in practice are defined in annual appropriations legislation.

By 2008, only some $3 million of the SAFETEA-LU funding remains unobligated, and the RTP assumes only limited future allocations for a few major projects in the out-years of the plan.

Federal Funding administered by NDOT on a State-Wide Basis

These are funds made available to the State of Nevada under federal legislation. Within the state, these funds are assigned to projects based on state-wide criteria developed by the NDOT, in consultation with local agencies and MPOs.

Projections of funding under these sources have been made by the NDOT. In most cases, it is assumed that established programs will be continued at similar funding levels after 2009.

National Highway System

The National Highway System (NHS) is composed of a network of major roadways that are of national importance, serving major population centers, international border crossings, intermodal facilities and major travel destinations. It includes the interstate system and other principal arterial roads. NHS funds are intended primarily to support investment on these major roadways. In dollar terms, the NHS funding is a major category of federal funding for transportation under SAFETEA-LU and preceding legislation. Currently, approximately $63 million is allocated each year under the NHS program for use in Nevada.

In recent years, NDOT has advanced many important roadway projects using bond funding, and the implementation of several major projects in the plan will likewise be accelerated by the use of bond funding. Repayment on these bonds will form a major element of expenditure for the State for much of the RTP period. Since many of the projects funded by Bonds were eligible for NHS funding, NDOT is applying most of the available NHS funding to bond repayments. Allowing for contingencies and the needs of projects elsewhere in the State, this means that only about $250 million is expected to be available from this fund source for projects in Southern Nevada over the 22-year RTP period.

Interstate Maintenance Program

The Interstate Maintenance Program is intended, as the name implies, for the ongoing maintenance, rehabilitation and reconstruction of the Interstate Highway system. These funds are available for distribution according to state-wide maintenance and reconstruction priorities as determined by the NDOT. The RTP does not define specific Interstate Maintenance projects and these funds are not included in the various summaries of program costs in this document.

Surface Transportation Program, State-Wide Element

The Surface Transportation Program funds (STP) are intended for a wide range of purposes. The fund is highly flexible and can be used for new construction, maintenance, transit, ridesharing/employer trip reduction, centralized traffic control systems, and traffic management programs. The STP funding is subdivided into several sub categories: State-wide, Enhancement and Urban. The STP Urban Element is discussed with other Southern Nevada funding in the preceding section.

Some 37.5% of the STP funds are allocated to the state-wide element and currently about $19 million is allocated each year for use in the state of Nevada. These funds are available for distribution according to state-wide priorities as determined by NDOT.

As with the NHS program, many of the projects that have been, or are planned to be, funded by bonds are eligible for STP State-wide funding, and NDOT is applying almost all of the available STP-Statewide funds to bond re[payments. Allowing for contingencies and the needs of projects elsewhere in the State, this means that less than $100 million is expected to be available from this fund source for projects in Southern Nevada over the 22-year RTP period.

Enhancements

Of the total STP funds allocated to the State, 10 percent is set aside for Enhancement projects. Enhancement projects include:

- Provisions for bicycle/pedestrian facilities;
- Safety and educational activities for bicyclists and pedestrians;
- Acquisition of scenic easements and scenic or historic sites;
- Scenic or historic highway programs (including tourist and welcome center facilities);
- Landscaping and other scenic beautification, historic preservation;
- Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals);
- Preservation of abandoned railroad facilities (including the conversion of and use thereof for pedestrians and bicyclists);
- Control and removal of outdoor advertising;
- Archaeological planning and research;
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle cased wildlife mortality while maintaining habitat connectivity and
- Establishment of transportation museums.

Enhancement funds are available for distribution according to priorities as determined by an advisory body, the Statewide Transportation Technical Advisory Committee (STTAC), the members off which represent a wide range of transportation interests in the state. Projects in the Southern Nevada are initially identified by the RTC and the local entities on a bi-annual cycle, and are included in the STIP under jointly agreed procedures. For this reason, projects are not identified in the RTP although the 2009 list is included in the TIP for information.

Safety Programs

Of the total STP funds allocated to the State, 10 percent is set aside for Safety Projects. Safety funding can be used for projects such as hazard elimination and protection of rail crossings. Safety funds are available for distribution according to priorities as determined by the NDOT in conjunction with local entities and MPOs. The RTP does not define specific Safety Program projects and these funds are not included in the various summaries of program costs in this document.

Bridge Replacement and Rehabilitation Program

This program is intended to assist in the maintenance, rehabilitation and reconstruction of bridges on public roads. It includes provisions for seismic retrofit. Bridge Program funds are available for distribution according to state-wide maintenance and reconstruction priorities as determined by the NDOT. The RTP does not define specific Bridge Program projects and these funds are not included in the various summaries of program costs in this document.

Federal and Public Lands Highways Programs

The Federal Lands Highways and Public Lands Highways Programs are part of a group of programs intended to support the development of a coordinated program of transportation facilities serving federal lands. They are both discretionary programs, so funds are allocated to specific projects by the Federal Highway Administration.

Because so much of the land in Southern Nevada is in federal ownership, a number of major facilities are potentially eligible for funding under these programs. A total of $60 million is currently identified for designated Federal and Public Lands Highways projects in Southern Nevada. No assumptions are made regarding long-term funding under these programs.

Federal Transit Administration Programs

Most of the Federal Transit Administration (FTA) funding available for the Las Vegas area comes through the various urban transit programs discussed earlier. However, the FTA also has a number of programs to support the development of transit services in small communities and rural areas.

The Non-Urbanized Area formula program provides grant funding for capital, administrative and operating assistance to a wide range of public, nonprofit and private operators to support the development of public transportation services outside the urbanized areas of the State.

Current and planned expenditures under the Non-Urbanized Area formula program are confined to operating support for the Southern Nevada Transit Coalition and various not-for-profit providers of specialized services outside the Las Vegas Urbanized Area. The activities that have been prioritized and allocated by NDOT for the period 2009-2012 are included in the RTP for information.

The “Section 5310” Program provides grant funding for purchase of equipment for services providing specialized services for the elderly and persons with disabilities. The relatively small amount of funding available to Nevada under this program is distributed according to state-wide needs. Most services for the elderly and persons with disabilities in the Las Vegas area are provided by the RTC and funded through other programs.

State Funding for Projects in Southern Nevada

These are funds generated at the state level and administered by the NDOT under the Nevada Revised Statutes (NRS). Typically, the State of Nevada does not finance its State highway program from General Fund revenue. The State highway programs are financed almost exclusively from dedicated highway user revenues, in addition to the federal funding sources outlined above. Federal funds are to be used only for reimbursement of expenditures on approved projects and are not available for routine maintenance, administration, or other non-project related costs. These costs therefore fall on the state-generated highway user funds.

State Gas Tax

A major source of dedicated highway user revenues is the State gasoline tax, currently levied at 24.75¢ per gallon. Of this, 17.65¢ goes to the State Highway Fund, 6.35¢ to cities and counties and 0.75¢ to the State Petroleum Clean-up Trust Fund. Counties may levy an additional tax of up to 9¢ per gallon. The NRS stipulates that, except for administration, the proceeds of gas taxes levied in the state must be used exclusively for the construction, maintenance and repair of public highways in the State. Highway user revenues are deposited in the State Highway Fund.

Currently, the State Highway Fund receives about $600 million a year from local resources, excluding federal funding and bond proceeds. Of this about one-third comes from the gas tax, over 40 percent from other motor vehicle fees and taxes and 25 percent from miscellaneous revenue sources. State Highway Fund expenditures go the operation of the Department of Motor Vehicles and the Department of Public Safety (which includes the Nevada State Highway Patrol) and to the operating costs of NDOT (including routine maintenance). The remainder is split between debt service on bond issues, bond repayments and the State-funded portion of the capital program.

As noted, revenues from federal programs such as the NHS and Statewide STP are used to cover a significant portion of the repayments of capital on the bonds. However, federal funds may not be used for debt service and related costs, so these have to come out of the gas tax, as well as any capital repayments not covered by federal funds. In total, bond repayments and debt service consume most of the funds projected to be available from this source for much of the RTP period. Potentially, the completion of bond repayments in the years after 2020 will release additional funding for the capital program, but NDOT believes it is prudent to leave most of the gas tax revenues unscheduled at this time to provide flexibility to meet future needs.

Gas / Diesel Tax Indexing

At its June 21, 2005, meeting, the State Transportation Board of Directors created a Blue Ribbon Task Force to study future transportation projects in Nevada. The Task Force was directed to review the need for future NDOT projects, including impacts to congestion relief, review the state highway system serviceability, safety, and the quality of life and economy of Nevada, review project costs and revenue projections and evaluate funding options. One recommended option for increasing revenue for transportation projects included imposing indexing on statewide gas and diesel tax which would increase proportionally with the cost of living index or inflation. Most Nevada counties currently have authority to index the county mandatory and county optional gas tax (NRS 373.065). Washoe County has imposed indexing on their county gas tax (mandatory and optional) to inflation. The Gas Tax Indexing scenario is expected to generate over $300 million for transportation projects between the years 2014 and 2030.

State Bond Revenues

Strictly, bond funding is not a revenue source, since bonds have to be repaid from other revenues. However, bond funding is a valuable tool for enabling needs to be met earlier than would otherwise be the case. NDOT has made extensive use of bond funding in recent years to expedite the highway improvement program in Nevada. NDOT has over one billion Dollars in existing bonding authority to fund highway projects over the years from 2000 to 2008. Bonds are sold only as funding is needed for the construction of each phase of a project.

All existing bonding capacity is committed and no projects can be scheduled for bond funding until at least some of the existing debt has been repaid. As noted, the existing bond issues will be repaid primarily from the federal NHS and STP (Statewide) programs, with debt service costs being covered mainly by the state gas tax.

NDOT anticipates it will have enough coverage to bond for some additional projects starting after 2020, with a much larger bond capacity for projects in the final years of the RTP period. In total, about $1.6 billion in bond-funded projects are included in the RTP.

Additional State Revenues – AB.595

During the 2007 Nevada Legislative Session, Assembly Bill 595 was unanimously passed giving the Nevada Department of Transportation (NDOT) approximately $1.2 billion dollars of bonding authority to be spent on transportation projects. The bill provides for a one-time lump sum payment to the Department of Transportation of $300 million dollars from the Las Vegas Visitor's and Convention Authority (LVCVA). In addition to the lump sum payment, three cents of Clark and Washoe Counties Ad Valorem property tax as well as a statewide rental car tax will be transferred to the State Highway Trust Fund. Beginning in 2009, the Ad Valorem tax is phased in by approximately $5 million dollars per year for five years and then levels off to growth and generates in excess of $800 million dollars during the first twenty year timeframe. The Rental Car Tax began in 2008 and generates in excess of $100 million dollars during the twenty year timeframe. The revenue from the Ad Valorem and Rental Car Tax will be used as income to issue bonds to accelerate certain projects, and the Fund Source Balance Sheet summarizes the funding model used to project bond revenues and debt service. In total, the bonding capacity under AB.595 is expected to support about $1.4 billion in projects between now and 2030.

Additional State Revenues – Augmented Government Services Tax

Even with AB.595, NDOT revenues fall short of what is needed. Nevada has a history of raising revenue at both the State and local level to address highway transportation needs. The economy of the State is growing rapidly and much of that growth is critically dependant on maintaining an adequate transportation system.

Another viable option established by the Blue Ribbon Task Force for generating revenues for transportation projects was a change of the depreciation schedule of the Government Service Tax (GST) for automobile registration. Under the current registration schedule, owners of a brand new vehicle with a Manufacture Suggested Retail Price (MSRP) of $15,000.00 would pay $210.00 dollars GST when first registering the car but only $6.00 after the car reached ten years of age or older. With the Bump 20 scenario the scheduled depreciation of the GST would be less over time. For the same vehicle with the same MSRP under the Bump 20 scenario, owners would still pay $210.00 when first registering the vehicle but pay $26.00 when the car reached eleven years of age or older. The Bump 20 scenario could provide the state with over $4 billion revenue for projects between the years 2014 to 2030.

If approved by Nevada's legislative body in 2013, the Bump 20 scenario would be enacted by the State. The 2008 Interim Legislative Committee on Transportation has requested information on the Governmental Services Tax and on the Gas/Diesel tax indexing. The Interim Committee is looking at possible bill draft requests for submittal to the 2009 Nevada State Legislature.

Cost Estimates

All costs, funds and revenues in the RTP are expressed in terms of year-of-expenditure (YoE) Dollars.

Costs and revenues are adjusted for price inflation. RTC and NDOT, in cooperation with the federal agencies, have used the Western States Consumer Price Index of projected inflation of 3.4 percent a year as the basis for the forecasts in the RTP.

Project capital costs are provided by the project sponsors.

As noted, the Las Vegas area has experienced sustained growth over many years. This has resulting in a large on-going program of transportation investments and detailed knowledge about the local factors that have a significant effect on the cost of capital projects. In addition, Value Engineering reviews are undertaken for major projects, to ensure that they reflect current state-of-the-practice regarding cost-effective design and construction management procedures.

In the case of street and highway projects that are to be funded with local gas and sales taxes through the RTC's Capital Improvement Program, the costs are based on locally determined land acquisition and construction costs, in accordance with standard engineering practice and the Policies and Procedures of the RTC. RTC member agencies maintain extensive inventories of bid prices to support construction costing.

For projects to be implemented within the first few years, costs reflect factors that include:

- Planned roadway width and right-of way requirements
- Roadway design
- Storm drains and flood control features
- Bridges and other structures
- Design and construction management

For longer-term projects, entities typically use the average of recent costs for similar projects, modified by any known major design features that are specific to the project.

The Nevada Department of Transportation estimates costs for projects that take into account local trends in land and construction costs, and conform to Federal guidelines and State requirements. Consideration is given to location, right-of-way acquisition, drainage issues, facility type, bridges and other structures, and construction engineering. An allowance is also made for contingencies.

The RTC uses recent experience and trends in manufacturing costs to estimate future costs for transit vehicle procurement, and follows similar procedures to other local entities in developing costs for fixed guideway and other capital projects.

Operations and Maintenance Costs

The RTC, NDOT and the local entities recognize the critical need to protect the investment that has been made in our transportation infrastructure and thus they fund a substantial amount for annual system maintenance and preservation work.

The funds for system maintenance come from three main sources.

For the Interstate system, approximately $30 million a year is expected to be available under the Federal Interstate Maintenance program.

NDOT also allocates a portion of State gas tax funds for routine maintenance of the State highway system.

The local entities receive a direct disbursement of State gas tax funds that is used for maintenance as well as for minor roadway projects.

In many areas a major concern is the age of the Interstate system, which, combined with high traffic volumes, leads to an expectation of very high maintenance and rehabilitation costs in the coming years. Southern Nevada does not escape from these concerns, but a large part of the freeway system will be reconstructed over the plan period as part of scheduled improvements. The age and maintenance needs of the various sections of the system are major factors in the prioritization of improvement projects scheduled in the RTP.

Most of the capital program – particularly the regionally significant projects scheduled in the RTP – is funded by sources dedicated to capital expenditures. The independent funding sources which cover maintenance needs are adequate to ensure the continued functioning of the system over the plan period.

Fund Source Balance Sheets

The financial plan for the entire transportation capital program from 2009 to 2030, including both Regionally Significant and Non-Regionally Significant Projects, is summarized in the following Table 5-3. This table comprises a set of Fund Source Balance Sheets that include projected expenditures, fund sources and balances

The resulting balances show that the costs of the overall program are consistent with the resources that can reasonably be expected to be available over that period.

The corresponding lists of projects are shown in Appendix 1 to the RTP.

Table 5-3: Transportation Capital Program Fund Source Balance Sheets

	FY 2009-2012 TIP	FY 2013-2020	FY 2021-2030	Scheduled in RTP
Federal Funds allocated to the State of Nevada				
National Highway System (NHS)				
Scheduled in RTP	$21,700,000	$52,500,000	$166,000,000	$240,200,000
Surface Transportation Program - Statewide (STP-NV)				
Scheduled in RTP	$7,900,000	$0	$90,000,000	$97,900,000
Surface Transportation Program Enhancements (STP-E)				
Scheduled in RTP	$3,605,750	$0	$0	$3,605,750
Federal Highway Program Funds allocated to Southern Nevada				
Includes funds allocated to the Las Vegas Metropolitan Planning Area, to Urbanized Areas in Clark County, to the Las Vegas Non-Attainment Area, or earmarked for projects in Southern Nevada.				
Surface Transportation Program - Urban (STP-Clark County)				
Balance Forward	$0	$737,818	$14,191,126	$0
Anticipated allocation	**$84,709,000**	**$182,166,308**	**$272,292,036**	**$539,167,344**
Contingency	$7,920,800	$0	$0	$7,920,800
Available for programming	**$76,788,200**	**$182,904,126**	**$286,483,162**	**$531,246,544**
Scheduled in RTP	**$76,050,382**	**$168,713,000**	**$284,005,700**	**$528,769,082**
Balance available	$737,818	$14,191,126	$2,477,462	$2,477,462
Congestion Mitigation and Air Quality Program (CMAQ)				
Balance Forward	$7,500,000	$507,800	$9,733,641	$7,500,000
Anticipated allocation	**$62,737,000**	**$135,696,741**	**$202,831,918**	**$401,265,659**
Contingency	$8,650,000	$0	$0	$8,650,000
Available for programming	**$61,587,000**	**$136,204,541**	**$212,565,559**	**$400,115,659**
Scheduled in RTP	**$61,079,200**	**$126,470,900**	**$117,800,100**	**$305,350,200**
Balance available	$507,800	$9,733,641	$94,765,459	$94,765,459
Federal Highway Discretionary Program Funds allocated to projects in Southern Nevada				
Public, Federal and Forest Lands Highways Programs				
Scheduled in RTP	$75,131,000	$0	$0	$75,131,000
Other FHWA Discretionary Programs				
Scheduled in RTP	$2,331,300	$0	$0	$2,331,300
Federal Funds earmarked for highway and transit projects in Southern Nevada				
Scheduled highway projects	$143,461,847	$0	$0	$143,461,847
Scheduled transit projects	$1,500,000	$0	$0	$1,500,000
Scheduled in RTP	**$144,961,847**	**$0**	**$0**	**$144,961,847**
Federal Transit Administration Funds allocated to Southern Nevada				
S.5307 Urbanized Area Formula Program				
Balance Forward	$0	$388,811	$339,946	$0
Anticipated allocation	**$103,443,508**	$233,171,135	$348,531,206	$685,145,849
Transfers in	$3,182,400	$0	$0	$3,182,400
Contingency	$0	$0	$0	$0
Available for programming	**$106,625,908**	**$233,559,946**	**$348,871,152**	**$688,328,249**
Enhancement projects	$1,872,000	$2,480,000	$3,520,000	$7,872,000
Security-related projects	$1,200,000	$2,480,000	$3,520,000	$7,200,000
General formula projects	$103,165,097	$228,260,000	$339,805,600	$671,230,697
Scheduled in RTP	**$106,237,097**	**$233,220,000**	**$346,845,600**	**$686,302,697**
Balance available	$388,811	$339,946	$2,025,552	$2,025,552

Fund Source Balance Sheet (Contd)	FY 2009-2012 TIP	FY 2013-2020	FY 2021-2030	Scheduled in RTP
S.5309 Bus and Bus-Related Discretionary Program				
Balance Forward	$8,453,613	$0	$0	$8,453,613
Anticipated allocation	**$0**	**$10,000,000**	$8,000,000	$18,000,000
Available for programming	**$8,453,613**	**$10,000,000**	**$8,000,000**	**$26,453,613**
Scheduled in RTP	**$8,453,613**	**$10,000,000**	**$8,000,000**	**$26,453,613**
Balance	$0	$0	$0	$0
S.5309 New Starts Program				
Scheduled in RTP	$992,000	$0	$0	$992,000
S.5316, S.5317 Job Access and Reverse Commute and New Freedom Programs				
Balance Forward	$0	$0	$0	$0
S.5316 anticipated allocation	**$3,209,575**	$0	$0	$3,209,575
S.5317 anticipated allocation	**$2,070,894**	$0	$0	$2,070,894
Available for programming	**$5,280,469**	**$0**	**$0**	**$5,280,469**
S.5316	$3,209,575	$0	$0	$3,209,575
S.5317	$2,070,894	$0	$0	$2,070,894
Scheduled in RTP	**$5,280,469**	**$0**	**$0**	**$5,280,469**
Balance available	$0	$0	$0	$0
Federal Transit Program Funds allocated to the State of Nevada				
S.5311 Small Urban and Rural Public Transportation Program				
Scheduled in RTP	$6,380,800	$0	$0	$6,380,800
Federal Railroad Administration Funds				
FRA Funding				
Scheduled in RTP	$3,000,000	$0	$0	$3,000,000
State Funds allocated to projects in Clark County				
Bonded Funds				
Scheduled in RTP	**$10,000,000**	**$230,000,000**	**$1,390,400,000**	**$1,630,400,000**
NDOT State Gas Tax				
Scheduled in RTP	**$58,500,000**	**$0**	**$425,000,000**	**$483,500,000**
AB 595 Funds				
Balance Forward	$3,600,000	$40,166,134	$19,038,702	$3,600,000
Car rental tax supplement	$15,322,783	$35,582,808	$55,598,348	$106,503,938
Ad Valorem Property Tax	$70,067,351	$264,941,760	$515,596,362	$850,605,474
Program revenues	**$85,390,134**	**$300,524,568**	**$571,194,710**	**$957,109,412**
Bond Proceeds	$134,000,000	$411,000,000	$399,000,000	$944,000,000
LVCVA Bond Proceeds	$272,000,000	$0	$0	$272,000,000
Financing Proceeds	**$406,000,000**	**$411,000,000**	**$399,000,000**	**$1,216,000,000**
Total for Capital Program	**$494,990,134**	**$751,690,702**	**$989,233,412**	**$2,176,709,412**
Financing Costs	$11,324,000	$237,652,000	$517,598,000	$766,574,000
Available for programming	**$483,666,134**	**$514,038,702**	**$471,635,412**	**$1,410,135,412**
Scheduled in RTP	**$443,500,000**	**$495,000,000**	**$470,000,000**	**$1,408,500,000**
Balance	$40,166,134	$19,038,702	$1,635,412	$1,635,412
Nevada State General Fund				
Scheduled in RTP	**$16,000,000**	**$0**	**$0**	**$16,000,000**
Nevada Government Services Tax				
Balance Forward	$0	$0	$1,313,087,111	$0
Revenues (assumed increment)	**$0**	**$1,393,087,111**	**$2,833,549,827**	**$4,226,636,938**
Scheduled in RTP	**$0**	**$80,000,000**	**$4,009,943,400**	$4,089,943,400
Balance	$0	$1,313,087,111	$136,693,538	$136,693,538

Fund Source Balance Sheet (Contd)	FY 2009-2012 TIP	FY 2013-2020	FY 2021-2030	Scheduled in RTP
RTC Funds				
RTC Gas Tax Program				
Balance Forward	$30,252,634	$8,030,761	$35,174,849	$30,252,634
Fuel Tax Revenues	$292,167,244	$621,595,948	$880,047,929	$1,793,811,121
Other revenues	$31,470,249	$51,608,347	$17,364,063	$100,442,659
Program revenues	**$323,637,493**	**$673,204,295**	**$897,411,992**	**$1,894,253,780**
Financing Proceeds	$375,520,000	$347,505,000	$305,540,000	$1,028,565,000
Total for Capital Program	**$699,157,493**	**$1,020,709,295**	**$1,202,951,992**	**$2,922,818,780**
Financing Costs	$337,325,366	$609,829,636	$708,847,351	$1,656,002,353
Program overheads	$83,833,206	$208,435,571	$370,827,400	$663,096,177
Available for programming	**$308,251,555**	**$210,474,849**	**$158,452,091**	**$633,972,885**
Scheduled in RTP	**$87,078,000**	**$28,000,000**	**$24,413,000**	**$139,491,000**
Other non-regionally significant projects	$213,142,794	$147,300,000	$118,087,000	$478,529,794
Balance	$8,030,761	$35,174,849	$15,952,091	$15,952,091
Q.10 High Speed Lane Mile Program				
Balance Forward	$15,385,626	$18,797,813	$85,161,336	$15,385,626
Sales Tax Revenues	$182,510,728	$436,616,562	$356,519,875	$975,647,165
Extended Sales Tax Revenues			$356,519,875	$356,519,875
Other revenues	$89,905,029	$217,325,634	$359,999,071	$667,229,733
Revenues	**$272,415,757**	**$653,942,196**	**$1,073,038,821**	**$1,999,396,774**
Financing Proceeds	$434,711,328	$489,539,559	$247,098,000	$1,171,348,886
Total for Capital Program	**$707,127,085**	**$1,143,481,754**	**$1,320,136,821**	**$3,170,745,660**
Financing Costs	$237,452,901	$364,473,684	$555,192,546	$1,157,119,132
Operating costs of Q.10 Programs	$61,671,976	$175,178,578	$272,136,118	$508,986,672
Available for programming	**$423,387,834**	**$622,627,304**	**$577,969,493**	**$1,520,025,483**
Scheduled in RTP	**$293,679,130**	**$334,793,093**	**$306,098,000**	**$934,570,223**
Other non-regionally significant projects	$110,910,891	$202,672,876	$161,000,000	$474,583,767
Transfers out			$50,090,010	$50,090,010
Balance	$18,797,813	$85,161,336	$60,781,483	$60,781,483
RTC Transit Program				
Balance Forward	$99,645,146	$3,182,870	$90,768,691	$99,645,146
Sales Tax Revenues	$559,908,263	$1,463,946,903	$2,386,430,745	$4,410,285,912
Bus and Rapid Transit farebox revenues	$262,235,942	$732,254,236	$1,287,891,773	$2,282,381,951
Paratransit recvenues	$3,250,000	$7,700,000	$11,875,000	$22,825,000
Other revenues	$21,197,360	$79,558,873	$135,482,930	$236,239,163
Revenues	**$846,591,566**	**$2,283,460,013**	**$3,821,680,447**	**$6,951,732,026**
Financing Proceeds	$0	$0	$0	$0
Total for Transit System	**$946,236,712**	**$2,286,642,883**	**$3,912,449,138**	**$7,051,377,172**
Bus system operations	$407,228,959	$964,686,427	$1,575,432,152	$2,947,347,538
Paratransit system operations	$128,920,291	$337,077,469	$627,979,087	$1,093,976,846
Fuel	$125,508,810	$306,147,074	$575,583,689	$1,007,239,573
Other operating costs	$73,119,144	$174,921,385	$285,664,613	$533,705,142
Administrative overhead	$118,316,751	$344,046,837	$703,035,517	$1,165,399,104
Transit system costs	**$853,093,955**	**$2,126,879,192**	**$3,767,695,057**	**$6,747,668,204**
Financing Costs	$0	$0	$0	$0
Available for capital program	**$93,142,757**	**$159,763,691**	**$144,754,081**	**$303,708,968**
Scheduled in RTP	**$89,959,887**	**$68,995,000**	**$101,661,400**	**$260,616,287**
Balance	$3,182,870	$90,768,691	$43,092,681	$43,092,681
Other local funds				
Clark County Beltway Program				
Scheduled in RTP	**$1,156,873,000**	**$0**	**$0**	**$1,156,873,000**
Other local public funds				
Clark County Department of Avaiation	$46,000,000	$358,000,000	$0	$404,000,000
Other local funds	$21,919,055	$0	$9,000,000	$30,919,055
Scheduled in RTP	**$67,919,055**	**$358,000,000**	**$9,000,000**	**$434,919,055**
Private development funds				
Las Vegas Monorail Corp funding				
Las Vegas Monorail Corp	$350,000,000	$0	$0	$350,000,000
TIFIA loan proceeds (for LVMC)	$100,000,000	$0	$0	$100,000,000
Scheduled in RTP	**$450,000,000**	**$0**	**$0**	**$450,000,000**
Other private development funds				
Scheduled in RTP	**$92,500,000**	**$78,553,700**	**$0**	**$171,053,700**
Grand Total - all fund sources scheduled in RTP	**$3,289,112,530**	**$2,264,245,693**	**$7,749,167,200**	**$13,302,525,423**

Summary of Transportation Capital Program

The following is a summary of the projects included in the Transportation Capital Program for the period 2009 to 2030, together with a summary of the funding sources identified in Table 5-3.

Table 5-4: Transportation Capital Program Summary

Summaries by fund source	FY 2009-2012 TIP	FY 2013-2020	FY 2021-2030	Scheduled in RTP
FHWA Highway Programs	$330,180,279	$221,213,000	$540,005,700	$1,091,398,979
CMAQ Program	$61,079,200	$126,470,900	$117,800,100	$305,350,200
FTA Transit Programs	$231,843,979	$243,220,000	$354,845,600	$829,909,579
Federal Programs	**$623,103,458**	**$590,903,900**	**$1,012,651,400**	**$2,226,658,758**
State Bonding against Federal Highway Programs	$10,000,000	$230,000,000	$1,390,400,000	$1,630,400,000
Other State funding	$518,000,000	$575,000,000	$4,904,943,400	$5,997,943,400
State Highway Programs	**$528,000,000**	**$805,000,000**	**$6,295,343,400**	**$7,628,343,400**
RTC Street & Highway Programs	$380,757,130	$362,793,093	$330,511,000	$1,074,061,223
RTC Transit Programs	$89,959,887	$68,995,000	$101,661,400	$260,616,287
RTC funds	**$470,717,017**	**$431,788,093**	**$432,172,400**	**$1,334,677,510**
Clark County Beltway Program	$1,156,873,000	$0	$0	$1,156,873,000
Other local public funds	$67,919,055	$358,000,000	$9,000,000	$434,919,055
Private funding	$442,500,000	$78,553,700	$0	$521,053,700
Local funds	**$1,667,292,055**	**$436,553,700**	**$9,000,000**	**$2,112,845,755**
Total scheduled in TIP and RTP	**$3,289,112,530**	**$2,264,245,693**	**$7,749,167,200**	**$13,302,525,423**
Funding for non-federal, non-regionally significant projects				
RTC Street & Highway Programs	$324,053,685	$282,914,709	$87,841,000	$694,809,394
Local public funds	$83,800,000	$82,500,000	$20,000,000	$186,300,000
Private funding	$453,521,800	$537,043,747	$398,781,000	$1,389,346,547
Total	**$861,375,485**	**$902,458,456**	**$506,622,000**	**$2,270,455,941**
Transportation Capital Program Total	**$4,150,488,015**	**$3,166,704,149**	**$8,255,789,200**	**$15,572,981,364**

Proportion of funding for the Transportation Capital Program:

FHWA Highway Programs.......9%

FTA Transit Programs.......5%

State Bonding against Federal Highway Programs.......10%

Other State funding.......39%

RTC Street & Highway Programs......11%

RTC Transit Programs.......2%

Clark County and other local public funds.......11%

Private funding.......12%