STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

JIM GIBBONS
Governor

SUSAN MARTINOVICH, P.E., *Director*

In Reply Refer to:

April 24, 2009

Susan Klekar, Division Administrator
Federal Highway Administration
705 North Plaza Street, Suite 220
Carson City Nevada 89701-0602

US 95 NW
Project Management Plan
Initial Financial Plan

Dear Ms. Klekar: Susan

Enclosed is the Project Management Plan for US 95 NW. The Initial Financial Plan is also enclosed and can be found in Appendix A.

Please review and approve both plans at your earliest convenience. If you have any questions or comments, please call me at (775) 888-7440.

Sincerely,

Kent L. Cooper
Assistant Director, Engineering

Recommend Approval:

Amir M. Soltani, P.E.
Chief Project Management

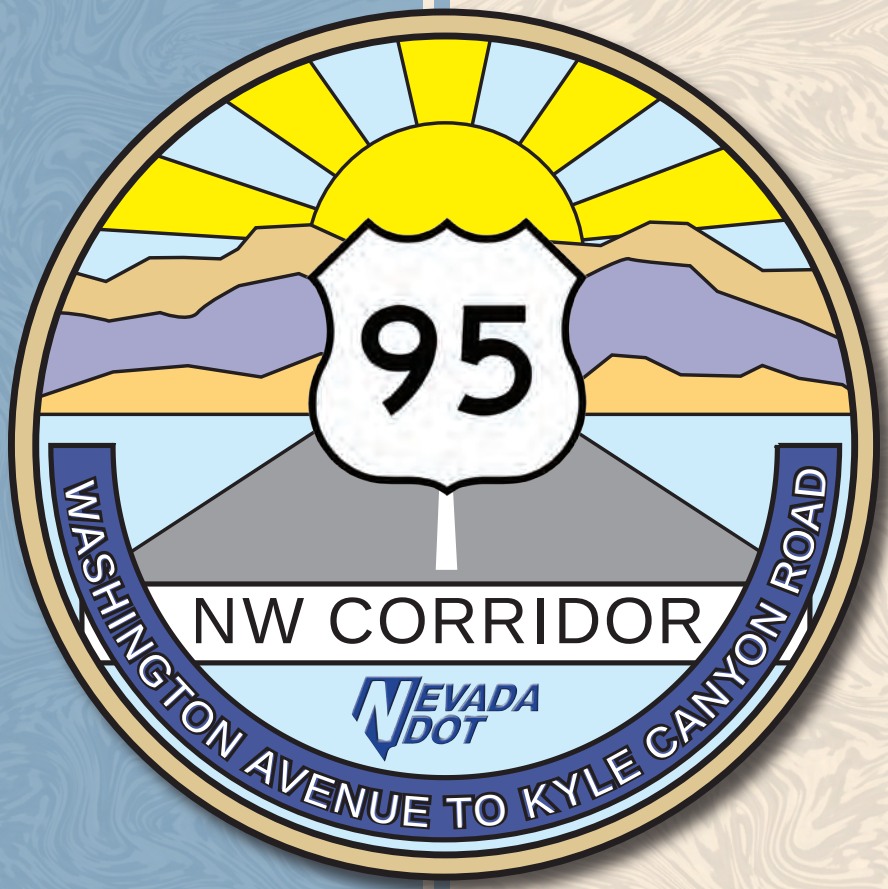
4/24/09
Date

Enclosure: US 95 NW Project Management Plan

KLC:JKF:at

cc: Jenica Finnerty, Senior Project Manager
Dennis Taylor, Chief Program Development

US-95 Northwest Corridor Project Management Plan



NEVADA DOT
PROJECT MANAGEMENT

April 2009

US-95 Northwest Corridor
Project Management Plan

Letter of Certification

The Nevada Department of Transportation (NDOT) has developed a comprehensive Project Management Plan for the US-95 Northwest Corridor Project. This plan provides detailed management processes and policies related to design, right of way and plan preparation, along with construction to complete a quality project within scope, schedule and budget.

The data, processes and policies in the Project Management Plan provide an accurate accounting of realistic estimates and commitment to ensure the design, purchase of right of way, movement of utilities and ultimate physical highway construction follows all pertaining laws and regulations and focuses on the completion of this major reconstruction project within scope, schedule and budget.

The Project Management Plan is a living document. NDOT believes it provides an accurate basis upon which to design, schedule and construct the US-95 Northwest Corridor project. NDOT will review and update the Project Management Plan on an annual basis. In order to maximize our effectiveness in managing the project and meet project goals, the Project Management Plan will be continuously evaluated and revised as the project progresses.

To the best of our knowledge and belief, the Project Management Plan as herein submitted, fairly and accurately presents our commitment to design and construct the US-95 Northwest Corridor Project. We believe the assumptions underlying the Project Management Plan are reasonable and appropriate. Furthermore, we have made available all significant information relevant to the Project Management Plan. To the best of our knowledge, the documents and records supporting the assumptions are appropriate.

Preparation of this Project Management Plan has been coordinated with both Clark County and the City of Las Vegas. NDOT will obtain signatures from both entities to receive formal endorsement of this plan by late-2009.

Respectfully Submitted:

Kent L. Cooper, Assistant Director Engineering
State of Nevada Department of Transportation

Date: 24 April, 2009

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LIST OF EXHIBITS

1.0 Project Description and Scope of Work

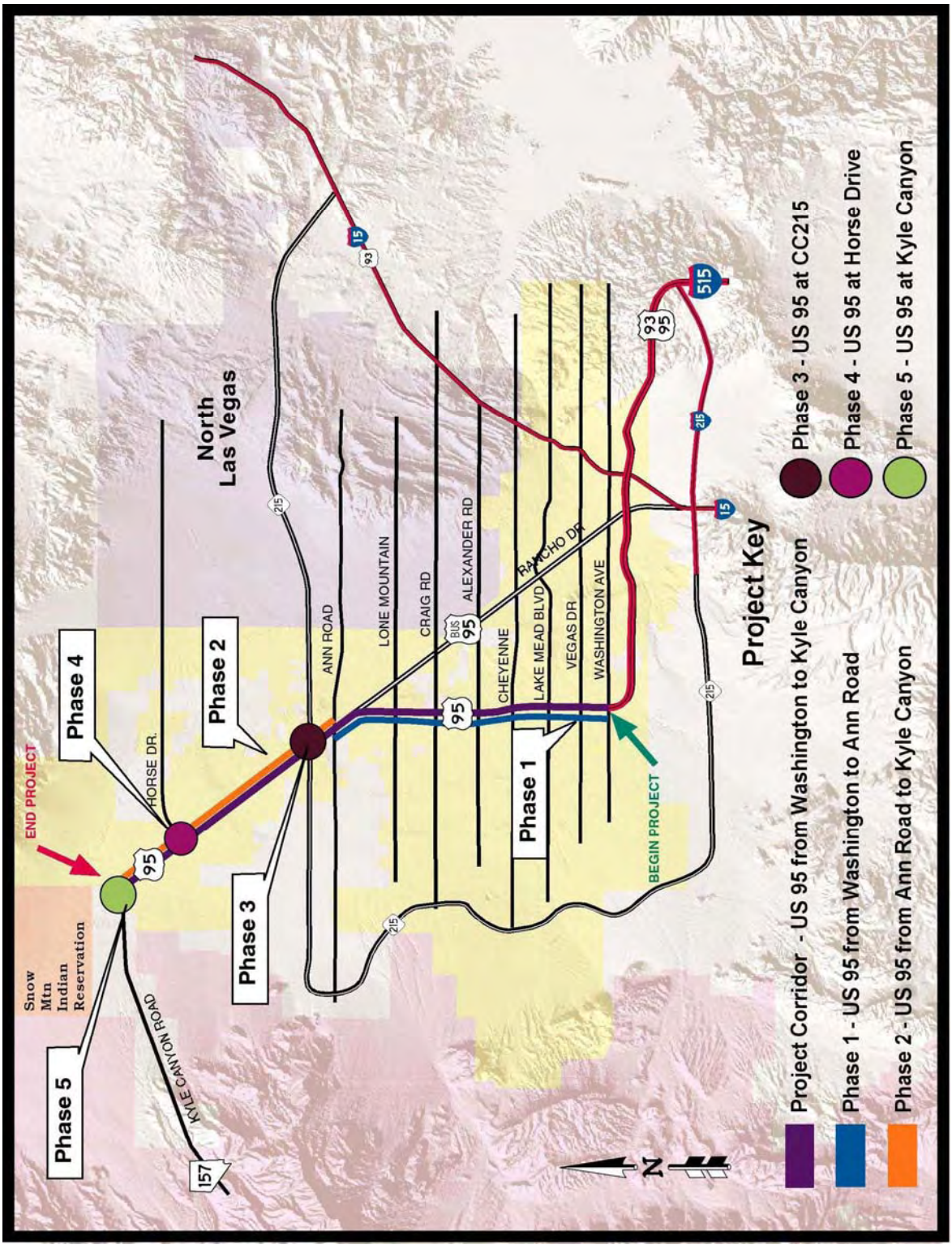
The US 95 Northwest Corridor from Washington Avenue to Kyle Canyon Road is one of the fastest growing areas in southern Nevada. The US 95 freeway facility links urbanized Las Vegas on the south to rural Clark County and the Paiute Indian Reservation. It serves heavy regional commuter demands between predominately residential areas in northwest Las Vegas and large employment centers in downtown Las Vegas and the Las Vegas resort corridor. This highway also serves as the only major transportation link between Las Vegas and the Toiyabe National Forest, commonly referred to as Mount Charleston. Mount Charleston serves a dual role as a small community and as a getaway for southern Nevadans, attracting thousands of vehicles every weekend.

According to the University of Nevada Las Vegas Center for Business and Economic Research, the population in the Las Vegas Valley is expected to increase by 72% from 2004 to 2030, bringing the total population in Las Vegas to over 2.9 million residents. Suburban residential development in northwest Las Vegas has progressed rapidly in recent years and now exists within a mile of the Kyle Canyon Road/US-95 intersection.

The project area, located within Clark County, Nevada, extends on US 95 from Washington Avenue to Kyle Canyon Road, a distance of approximately 13 miles, as shown in Exhibit 1. Within the project area, the existing divided freeway varies from 8 lanes between Washington Avenue and Craig Road, 6 lanes between Craig Road and Centennial Parkway and 4 lanes between Centennial Parkway and Kyle Canyon Road.

The proposed improvements to US 95 include widening the roadway to include one HOV lane and three general purpose lanes in each direction from Washington Avenue to Durango Drive and three general purpose lanes in each direction from Durango Drive to Kyle Canyon Road. Other project components include new service interchanges at Horse Drive and Kyle Canyon Road, the system-to-system interchange between US 95 and the Bruce Woodbury Beltway (CC-215) and improvements to the Cheyenne Avenue, Rancho Drive/Ann Road and Durango Drive interchanges. Auxiliary lanes between interchanges throughout the project limits in the northbound (NB) and southbound (SB) directions are proposed as well as ramp metering facilities with HOV bypass lanes at the entrance ramps from Washington Avenue to Durango Drive. A new park-and-ride facility in the southwest quadrant of the US 95/Durango Drive interchange is also proposed.

Exhibit 1 - Project Area Map 1



2.0 Goals and Objectives

The purpose of the project is to relieve congestion and improve the operational characteristics of the US-95 Northwest Corridor in response to continued and proposed development and the resultant traffic growth in the Las Vegas Valley. The proposed improvements to US-95 will:

- accommodate projected local traffic;
- decrease congestion;
- reduce travel times;
- improve access to areas planned for development;
- improve freeway operations;
- improve safety;
- meet stakeholder/public expectations;
- reduce vehicle emissions;
- reduce idling;
- beautify corridor; and
- improve driver comfort.

The US 95 Northwest project team's mission was to complete the project's environmental phase. A Finding of no Significant Impact (FONSI) for the Project was received from the FHWA on May 7, 2008.

3.0 Project Organizational Chart, Roles and Responsibilities

Project teams will be assigned to each phase when each phase is ready to be advanced. Each project team will develop the project management plans as well as the plans, specifications and estimates for their assigned phase.

The following identifies team members for the entire project corridor:

Internal

Division/Section	Name	Phone	E-mail
☒Agreement Services	Christi Thompson	775-888-7070	cthompson@dot.state.nv.us
☒Bridge	Mark Elicegui	775-888-7542	melicegui@dot.state.nv.us
☒Construction	Gary Selmi	775-888-7460	gselmi@dot.state.nv.us
☒District Admin	Mary Martini	702-385-6500	mmartini@dot.state.nv.us
☒Environmental	Steve Cooke	775-888-7013	scooke@dot.state.nv.us
☒Financial Management	Felicia Denney	775-888-7624	fdenney@dot.state.nv.us
☒Geotechnical	Jeff Palmer	775-888-7873	jpalmer@dot.state.nv.us
☒Hydraulics	Paul Frost	775-888-7797	pfrost@dot.state.nv.us
☒Landscape/Aesthetics	Lucy Joyce	775-888-7537	ljoyce@dot.state.nv.us

☒Location	Russ Law	775-888-7250	rlaw@dot.state.nv.us
☒Maintenance	Joe Martinez	702-385-6502	jmartinez@dot.state.nv.us
☒Materials	Parviz Noori	775-888-7520	pnoori@dot.state.nv.us
☒Operations Analysis	Reed Gibby	775-888-7192	agibby@dot.state.nv.us
☒Program Development	Dennis Taylor	775-888-7120	dtaylor@dot.state.nv.us
☒Project Management	Jenica Finnerty	775-888-7592	jfinnerty@dot.state.nv.us
☒Public Information	Meg Ragonese	775-888-7172	mragonese@dot.state.nv.us
☒Right-of-Way	Jon Bunch	775-888-7480	jbunch@dot.state.nv.us
☒Roadway Design	Casey Connor	775-888-7535	cconnor@dot.state.nv.us
☒Safety/Traffic	Fred Droes	775-888-7524	fdroes@dot.state.nv.us
☒Specifications	Ray Hurley	775-888-7586	rhurley@dot.state.nv.us
☒Traffic Information	Jeff Lerud	775-888-7565	jlerud@dot.state.nv.us
☒Utilities	Carol Lamb	702-385-6527	clamb@dot.state.nv.us

External

Division/Section	Name	Phone	Email
☒Iyad Alattar	FHWA	775-687-1206	Iyad.alattar@fhwa.dot.gov
☒Denis Cederburg	Clark County	702-455-6020	dlc@co.clark.nv.us
☒Jorge Cervantes	City of Las Vegas	702-229-6276	jcervantes@LasVegasNevada.gov
☒Mike Hand	RTC	702-676-1612	handm@rtcsnv.com
☒Gene Neimasz	Parsons	702-789-2009	Gene.neimasz@parsons.com

Jenica Finnerty, Senior Project Manager, is NDOT's project manager for all phases, and she will be assisted by NDOT project managers to manage each project phase. The senior project manager is responsible for managing the project scope, schedule, budget and quality. The Senior PM is also responsible for upkeep of the project management plan.

NDOT project managers will be assigned to each phase when the phase is ready to be advanced. Project managers are responsible for scope, budget, schedule and quality of the phase they are assigned. They will coordinate their activities with the senior project manager. NDOT project managers will prepare and upkeep a project management plan for each phase of the project.

The following identifies high level roles and responsibilities of NDOT, local agencies and NDOT's project managers:

- Phase 1, US-95 from Washington Avenue to Ann Road, will be designed, awarded and administered by NDOT. The project will be managed by Jenica Finnerty, NDOT Senior Project Manager.

- Phase 2, US-95 from Ann Road to Kyle Canyon Road, will be designed, awarded and administered by NDOT. The project will be managed by Jenica Finnerty, NDOT Senior Project Manager.

- Phase 3, US-95 at CC-215, will be designed, awarded and administered by NDOT. The project will be managed by Cole Mortensen, NDOT Senior Project Manager and Allen Pavelka, Clark County Public Works Design Division Engineering Manager.

- Phase 4, US-95 at Horse Drive, will be designed, awarded and administered by the City of Las Vegas. The project will be managed by Jenica Finnerty, NDOT Senior Project Manager, Bill Glaser, NDOT Project Manager and Randy McConnell, City of Las Vegas Project Manager.

- Phase 5, US-95 at Kyle Canyon Road, will be designed, awarded and administered by the City of Las Vegas. The project will be managed by Jenica Finnerty, NDOT Senior Project Manager and Randy McConnell, City of Las Vegas Project Manager.

The project team will follow the NDOT Project Management Guidelines as their primarily operating guidelines which are currently under development

Decision making: the NDOT senior project manager has decision making authority over the project scope, budget and schedule. Project technical managers have decision making authority over technical issues as long as they are within the established scope, budget and schedule of the project. Team responsibilities will be defined as each phase is ready to be advanced to the next phase of development.

Team Meetings: Project teams will meet on monthly basis and more frequently as issues arise. Meeting minutes will be prepared with clear and specific action items defined and will then be distributed to the entire project team.

Team Conflict: Project teams will follow the conflict resolution process as identified in the NDOT Project Management Guidelines.

4.0 Project Phases

NDOT brought together the individual project proponents identified in the Statewide Transportation Improvement Plan [mainline US-95/NDOT, CC-215/Clark County, Park and Ride at Durango Drive (RTC), Horse Drive/City of Las Vegas and Kyle Canyon Road/City of Las Vegas] from the planning process to cooperate in the environmental process. As a result, the US-95 Northwest Corridor improvements have been subdivided into five phases for construction, consistent with the timing of the anticipated need for improvements. Each phase is operationally independent which is defined as:

> An operationally independent phase of work that can be built and function as a viable transportation facility even if the rest of the work described in the environmental document is never built. Environmental commitments associated with the phase of work to be built must be implemented as part of the project.

The project limits of these phases and the proposed improvements are as follows:

Phase 1 – Washington Avenue to Ann Road

Initially, mainline improvements were broken into 3 phases (Washington Avenue to Craig Road; Craig Road to Durango Drive and Durango Drive to Kyle Canyon Road. To relieve congestion at Ann Road earlier than initially planned, mainline US-95 widening was broken into two separate phases with Phase 1 ending at Ann Road.

Shown below are the proposed improvements for Phase 1:

- widening US-95 from 3 general purpose lanes in each direction to accommodate 1 HOV (High Occupancy Vehicle) lane and auxiliary lanes in each direction from Washington Avenue to Ann Road;
- widening the Gowan Road grade separation;
- constructing tieback walls at the grade separations;
- improving operations at Cheyenne Avenue interchange by constructing a loop ramp to accommodate the heavy westbound Cheyenne Avenue to southbound US 95 demand;
- improving operations at Durango Drive interchange by constructing a loop ramp to accommodate the heavy westbound Durango Drive to southbound US 95 demand;
- constructing sound walls in noise sensitive areas;
- perpetuating drainage, lighting, signing and Intelligent Transportation Systems (ITS) facilities;
- improving landscape and aesthetic features; and
- relocating utilities as necessary to accommodate the proposed highway improvements.

The Phase 1 improvements will be constructed within the existing US-95 right-of-way. Temporary construction easements may be needed, so an estimated cost is included in the total cost for Phase 1.

This phase is operationally independent due to the following:

- Improves access and safety and relieves congestion within the project limits with no impact to other phases;
- Construction of this phase has no Right-of-Way acquisition, utility relocation or traffic impact to other phases;
- Lane balance is maintained (general purpose and HOV) by perpetuating the number of existing lanes south of this project; and
- If no other phases are constructed, this project provides improvement without negative impacts to the roadway network.

Phase 2 – Ann Road to Kyle Canyon Road

Shown below are the proposed improvements for Phase 2:

- widening US-95 from 3 general purposes lanes in each direction to accommodate 1 HOV lane and auxiliary lanes in each direction from Ann Road to Centennial Parkway;
- widening US-95 from 2 general purpose lanes in each direction to accommodate 1 additional general purpose lane, 1 HOV lane and auxiliary lanes in each direction from Centennial Parkway to Durango Drive;
- widening US-95 from 2 general purpose lanes in each direction to accommodate 1 additional general purpose lane, and auxiliary lanes in each direction from Durango Drive to Kyle Canyon Road;
- constructing sound walls in noise sensitive areas;
- perpetuating drainage, lighting, signing and ITS facilities;
- improving landscape and aesthetic features; and
- relocating utilities as necessary to accommodate the proposed highway improvements.

The Phase 2 improvements will be constructed within the existing US-95 right-of-way. Temporary construction easements may be needed, so an estimated cost is included in the total cost for Phase 2.

This phase is operationally independent due to the following:

- Improves access and safety and relieves congestion within the project limits with no impact to other phases;
- Construction of this phase has no Right-of-Way acquisition, utility relocation or traffic impact to other phases;
- Lane balance is maintained (general purpose and HOV) by perpetuating the number of existing lanes south of this project; and
- If no other phases are constructed, this project provides improvement without negative impacts to the roadway network.

Phase 3 – US-95/CC-215 Northern Beltway Interchange

Shown below are the proposed improvements for Phase 3:

- constructing new ramps to complete a system-to-system interchange configuration;
- perpetuating drainage, lighting, signing and ITS facilities;
- improving landscape and aesthetic features; and

- relocating utilities as necessary to accommodate the proposed highway improvements.

Phase 3 improvements will be constructed within the existing US-95 and CC-215 right-of-way.

This phase is operationally independent due to the following:

- Improves access and safety and relieves congestion within the project limits with no impact to other phases;
- Allows coordination with other projects on CC-215;
- Construction of this phase has no Right-of-Way acquisition, utility relocation or traffic impact to other phases; and
- If no other phases are constructed, this project provides improvement without negative impacts to the roadway network.

Phase 4 – US-95 at Horse Drive

In response to rapid development, Horse Drive is scheduled to be the first project constructed in the corridor.

Shown below are the proposed improvements for Phase 4:

- constructing a new service interchange;
- perpetuating drainage, lighting, signing ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary to accommodate the proposed highway improvements.

Approximately 22 acres of right-of-way is required to construct this new service interchange. This land has been acquired from the Bureau of Land Management.

This phase is operationally independent due to the following:

- Improves access and safety and relieves congestion within the project limits as well as at adjacent interchanges with no impact to other phases;
- Construction of this phase has no traffic impact to other phases; and
- If no other phases are constructed, this project provides improvement without negative impacts to the roadway network.

Phase 5 – US-95 at Kyle Canyon Road

Phase 5 will require continued coordination with adjacent projects that are still in the environmental phase. These projects include Sheep Mountain Parkway, Focus Property Group's Development and the Las Vegas Paiute Tribe.

Shown below are the proposed improvements for Phase 5:

- constructing a new service interchange;
- perpetuating drainage, lighting, signing and ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary to accommodate the proposed highway improvements.

Approximately 2 acres of right-of-way is required to construct this new service interchange. This land is under the jurisdiction of the Bureau of Land Management.

This phase is operationally independent due to the following:

- Improves access and safety and relieves congestion within the project limits as well as at adjacent interchanges with no impact to other phases;
- The existing at-grade intersection will continue to function adequately;
- Construction of this phase has no traffic impact to other phases; and
- If no other phases are constructed, this project provides improvement without negative impacts to the roadway network.

5.0 Procurement and Contract Management

Parsons Transportation Group was hired to complete the NEPA process and to design the project to a 30% level.

Consultant and contractor procurement will be addressed in the project management plan of each phase. The following is high level approach for each phase of the project.

- Phase 1, US-95 from Washington Avenue to Ann Road, will be mainly designed by NDOT internal resources. Stantec was hired to complete the landscape and aesthetics design, and TBE was hired for subsurface utility exploration. At this time, construction will be administered by NDOT.

- Phase 2, US-95 from Ann Road to Kyle Canyon Road, will be mainly designed by NDOT internal resources. Consultant support may be needed for the landscape and aesthetics design as well as the Subsurface Utility Exploration. At this time, construction will be administered by NDOT.

- Phase 3, US-95 at CC-215, will be mainly designed by NDOT internal resources. Consultant support may be needed for the structural, geotechnical and landscape and aesthetics design. At this time, construction will be administered by NDOT.

- Phase 4, US-95 at Horse Drive, is being designed by VTN who was hired by the City of Las Vegas. The City of Las Vegas will seek consultant support to administer the construction of this project.

- Phase 5, US-95 at Kyle Canyon Road, is being designed by G.C. Wallace who was hired by the City of Las Vegas. The project may be awarded and administered by NDOT.

6.0 Cost Budget and Schedule

The Initial Finance Plan was approved by Kent Cooper, Assistant Director, Engineering on April 24, 2009. See Appendix A.

The total cost estimate for all components of the US-95 Northwest Corridor Project ranges from $650 to $732 million.

The following is a breakdown of the costs for each phase:

Phase 1 – Washington Avenue to Ann Road

The total cost for Phase 1 ranges from $140 to 157 million. Construction costs are inflated to Fiscal Year 2011 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 1: Preliminary Engineering $3.3 million; Utility Relocation $2 million; Construction $133.3 million; and Construction Engineering $13.9. There are no Right of Way Acquisition costs for this phase.

Phase 2 – Ann Road to Kyle Canyon Road

The total cost for Phase 2 ranges from $187 to $215 million. Construction costs are inflated to Fiscal Year 2027 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 2: Preliminary Engineering $6 million; Right of Way Acquisition $6.5 million; Utility Relocation $6.9 million; Construction $168.7 million; and Construction Engineering $17.3 million.

Phase 3 – US-95/CC-215 Northern Beltway Interchange

The total cost for Phase 3 ranges from $228 to $251 million. Construction costs are inflated to Fiscal Year 2012 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 3: Preliminary Engineering $12.6

million; Construction $205 million; and Construction Engineering $26 million. There are no Right of Way Acquisition or Utility Relocation costs for this phase.

Phase 4 – US-95 at Horse Drive

The total cost for Phase 4 ranges from $60 to $69 million. The project was advertised to bidders in November 2008, and bids were opened in December 2008. Seven (7) bids, ranging from $41 to $50.7 million, were received. Two contractors contested the bids, and the City of Las Vegas resolved the issue. The contract was awarded thereafter.

The following is a breakdown of the actual costs for Phase 4: Preliminary Engineering $3 million; Right of Way Acquisition $13 million; and Utility Relocation $0.3 million. To allow for any unknown issues which may arise during construction, a value of $50 million for Construction and $2.8 million for Construction Engineering has been estimated. The 70% value determined during the Cost Estimate Review for Construction was $58.3 million and was $2.9 million for Construction Engineering.

Phase 5 – US-95 at Kyle Canyon Road

The total cost for Phase 5 ranges from $35 to $41 million. Construction costs are inflated to Fiscal Year 2017 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 5: Preliminary Engineering $2.8 million; Right of Way Acquisition $0.2 million; Utility Relocation $0.9 million; Construction $32.1 million; and Construction Engineering $2.7 million.

Phase 1, US-95 from Washington Avenue to Ann Road, will be designed, awarded and administered by NDOT. Phase 1 is scheduled to start in FY 2011 with completion in FY 2013. It is planned for delivery by traditional design-bid-build.

Phase 2, US-95 from Ann Road to Kyle Canyon Road, will be designed, awarded and administered by NDOT. Phase 2 is scheduled to start in FY 2026 with completion in FY 2028. It is planned for delivery by traditional design-bid-build.

Phase 3, US-95 at CC-215, will be designed, awarded and administered by NDOT. Phase 3 is scheduled to start in FY 2011 with completion in FY 2014. It is planned for delivery by the traditional design-bid-build.

Phase 4, US-95 at Horse Drive, will be designed, awarded and administered by the City of Las Vegas. Phase 4 is scheduled to start in FY 2009 with completion in FY 2011. It is planned for delivery by the traditional design-bid-build.

Phase 5, US-95 at Kyle Canyon Road, will be designed by the City of Las Vegas. The project may be awarded and administered by NDOT. Phase 5 is scheduled to start in FY 2016 with completion in FY 2018. It is planned for delivery by the traditional design-bid-build.

As shown above, Phase 4 will be the first phase to be constructed; however, it is not shown as the first phase. Phases 1-3 were previously identified in the STIP, so the names were kept to avoid confusion. Mainline improvements to US 95 were previously broken into 3 phases. To address the congestion at Ann Road, the mainline improvements were re-phased into Phases 1 and 2 as defined above.

7.0 Project Reporting and Tracking Management

Project managers are responsible for the project reporting and tracking for the phase they are assigned as defined in the NDOT Project Management Guidelines. Project managers for each phase will coordinate with the senior project manager. Project managers will perform the following reporting and tracking tasks:

- Complete quarterly project summary reports (See Appendix B);
- Complete monthly status reports (See Appendix B); and
- Keep the PSAMS Dashboard updated.

7.1 Executive Summary

Project managers are responsible for the project reporting and tracking for the phase they are assigned as defined in the NDOT Project Management Guidelines.

7.2 Project Activities and Deliverables

Project managers are responsible for the project activities and deliverables for the phase they are assigned as defined in the NDOT Project Management Guidelines.

7.3 Action Items/Outstanding Issues

Opportunities are those elements of a project that can be an advantage. Challenges are those elements that may pose problems or act as a constraint. Each project phase team will identify opportunities and challenges as part of their individual project management plans.

One challenge regarding the entire project is in regards to the proposed Sheep Mountain Parkway which crosses US 95 just north of Kyle Canyon Road. The City of Las Vegas is currently conducting an environmental study for the project, and construction timing is uncertain. Due to spacing criteria, the northern ramps at the US 95 Kyle Canyon Road interchange may need to be removed.

Another challenge is the existing park and ride located at CC-215. Today, it is used by more than 500 employees of US Creech Air Force Base. The Regional Transportation Commission (RTC) of Southern Nevada coordinated with NDOT to include the proposed park and ride located at the Durango interchange in the Environmental Assessment. The plans depict a designated area for the Department of Defense employee parking; however, the park and ride will be constructed in phases. It's possible there may not be adequate parking for the DOD employees when Phase 3 begins and the existing lot is removed.

The RTC has proposed a project to construct drop ramps from the south side of the Elkhorn Road grade separation directly into the HOV lanes on US-95. This would provide direct access for their planned bus rapid transit (BRT) system as well as those who wish to carpool from their park and ride lot at Durango Drive to the median of US-95. A Re-Evaluation to the Environmental Assessment will be needed.

NDOT is currently pursuing legislation for managed (toll) lanes within the limits of this project. Extensive coordination will be needed to minimize impacts to either project. Introducing a privately funded project could shorten construction time of the entire corridor.

7.4 Project Schedule

Project managers are responsible for the project schedule for the phase they are assigned as defined in the NDOT Project Management Guidelines.

7.5 Project Cost

Project managers are responsible for the project cost for the phase they are assigned as defined in the NDOT Project Management Guidelines.

7.6 Project Quality

Project managers are responsible for the project quality for the phase they are assigned as defined in the NDOT Project Management Guidelines.

7.7 Other Status Reports

No other status reports are required at this time.

8.0 Internal and Stakeholder Communications

Each project manager will be responsible for internal and stakeholder communication for their phase of the project. While each project manager will write a communication plan for their phase, communication for the project as a whole will occur as shown below.

External Communication

WHAT	WHO	HOW	WHEN
With Stakeholders			
Identify stakeholders	Assigned Team Member	A stakeholder list will be created and updated	As needed
Conduct local agency briefings	SPM & PM	Agency briefings will be conducted as needed	As appropriate
What future work is anticipated or planned by local agencies?	Program Development Division	Obtain information from NDOT Program Development and/or check the STIP	Early during project development
With the Public			
Public Involvement (PI)	PM & PIO	A documented PI plan	As needed
Project website	PM & PIO	Maintain the project website	As appropriate
NDOT contact with public	SPM, PM & PIO	Appropriate PIO releases media info. press releases, etc.	As appropriate

Internal Communication

WHAT	WHO	HOW	WHEN
Communicate project progress to senior management	SPM & PM	Monthly status reports to PM Division Chief; update PSAMS dashboard	Monthly
Communication among all teams			
Distribute & maintain schedule	PM	Post and maintain schedule on SharePoint	Ongoing Updates
identify Team Structure	PM	Follow PM guidelines	During Initiate &

WHAT	WHO	HOW	WHEN
			Align; update as appropriate
Facilitate distribution of information on other relevant projects to all team members	SPM	Communicate with other PMs and Planning Division	As appropriate
Set guidelines			
Clarify chain of command guidelines with other agencies and contractors	PM for CSSQ; Functional Managers for Technical	Identify roles and responsibilities of project team in the PM plan	As needed
Set communication protocols	PM for CSSQ; Functional Managers for Technical	In writing and/or in email	As needed
Team member Communication			
How do project teams & resource agencies communicate?	All	Technical issues and direct with agencies via phone and email – CSSQ issues must be communicated with the PM	As appropriate
Team Meetings	Team members	Face to Face	Monthly for each phase
Team reporting	Team members	identify issues in PSAMS dashboard	Monthly
How do NDOT teams and consultant teams communicate?	All	direct communication on technical issues – CSSQ issues must be communicated with the PM	As appropriate

9.0 Project Management Controls (Scope, Costs, Schedule, Claims, etc.)

9.1 Risk Management Plan

The project team recognizes that there may be substantial risks that could affect this project. To assure project success, good financial performance, avoid

project delays, improve team performance, and enhance the quality of the project the project team will implement a Risk Management Plan. A draft copy of this can be found in Appendix C.

As part of the risk management plan, a Risk Assessment (RA) will be performed for each phase. The Risk Assessment process is a dynamic process that reviews initial cost estimates, schedule, and risk associated with these items. As part of the workshop, project risks will be identified and the potential for these risks to affect cost and schedule will be quantified. Based on these risks a project budget and overall schedule will be identified based on a 70% chance of the project meeting the schedule and budget.

The Risk Assessment for Phase 1 was completed in February 2009, and the executive summary for the report is included in Appendix D.

A Cost Estimate Review was conducted by the Federal Highway Administration in November 2008. The Cost Estimate Review validated the team's cost estimate by verifying the accuracy and reasonableness of the total cost estimate and schedule. During the Cost Estimate Review, the risks and opportunities were also developed, and the Project Team selected probability curves that best modeled the risk and opportunities. Probability ranges were developed for the cost estimate that represents the Project's current state of development. The executive summary of the Final Report can be found in Appendix F.

9.2 Scope Management Plan

The project team recognizes that changes may take place on this project that can affect schedule, financial performance, team performance, and commitments to the public for delivering the proposed improvements to the US 95 Northwest Corridor. A Change Management Plan has been developed with procedures, responsibilities, and a means of tracking changes. This Change Management Plan is in Appendix G of this document. The objectives of change management are as follows:

- To forecast and identify potential changes;
- To assess the impact of changes;
- To develop an action plan to accommodate or avert changes;
- To effectively communicate aspects of changes to stakeholders; and
- To minimize cost impacts to the project.

Budget Management Plans will be developed and managed by each specific project phase. The project manager is responsible for developing, tracking, and managing this plan for their phase. The project manager for each phase will coordinate with the senior project manager.

9.3 Scheduling Software

Microsoft Project and Microsoft Excel will be used for developing and tracking project schedules for all of the project phases.

9.4 Cost Tracking Software

For the overall project as well as each of the project phases, NDOT's internal software will be used for tracking costs.

9.5 Project Metrics

The goal of this project is to improve the US 95 Northwest corridor through realistic, effective and economically sound resolutions.

Schedule

Goal – Meet interim and final completion dates.
Measure – No delay of critical items that would extend the individual phases of the project into another construction year.

Budget and Scope Control

Goal – Deliver the entire project within $709 million and coordinate all proposed scope changes with the appropriate management level.
Measure – Allow acceptable increases not to exceed 5% of total cost estimate.

Quality

Goal – Provide a quality product that produces a long lasting, modern transportation facility.
Measure – The material incorporated into the project meets all specifications. NDOT will monitor all warranty material work.

Safety

Goal – Improve safety for the long term and minimize work zone crashes during construction.
Measure – Maintain work zone accidents below statewide averages and no fatalities in the work zone.
Goal – Problem areas related to safety are handled expeditiously.
Measure – Initiate resolution action immediately upon notification.

Public Trust and Confidence

Goal – Minimize and mitigate construction impacts to customers through construction staging and communication efforts (newsletters, timely information to the public of traffic changes, project website, etc).

Measure – NDOT, Clark County and City of Las Vegas provides communication to the public one week prior to traffic impacts.

Federal Requirements

Goal – Comply with all Federal requirements and State policies.

Measure – No documented violations.

9.6 New and Innovative Contracting Strategies

New and innovative contracting strategies will be examined and independently implemented per project phase by the project team for that phase.

9.7 Value Engineering, Value Analyses and Constructability Reviews

Value Analysis sessions will also be conducted for each phase.

Value Analysis for Phase 1 was completed in December 2007, and an executive summary for the report and approval memo is included in Appendix E.

Constructability reviews will be independent per project phase by the project team for that phase as identified by the NDOT Construction Division.

9.8 Contractor Outreach Meetings

Contractor outreach meetings may be used and will be independent per project phase by the project team for that phase.

9.9 Partnering

Partnering will be independent per project phase by the project team for that phase as identified by the NDOT Construction Division.

9.10 Change Order and Extra Work Order Procedures

Current NDOT policies and procedures will be followed to address change orders and extra work per project phase by the project team for that phase and as identified in the NDOT Construction Manual.

9.11 Claims Management Procedures

Current NDOT policies and procedures will be followed to address any claims per project phase by the project team for that phase and as identified in the NDOT Construction Manual. NDOT Technical Divisions will provide support for claims as necessary.

9.12 Other Programs

No other project management programs are required at this time.

10.0 Design Quality and Assurance/Quality Control (QA/QC)

Current NDOT policies and procedures as identified in the NDOT Road Design Guide and Project Design Development Manual will be followed for design QA/QC per project phase by the project team for that phase.

11.0 Construction Quality and Assurance/Quality Control (QA/QC)

Current NDOT policies and procedures will be followed for construction QA/QC per project phase by the project team for that phase as identified in the NDOT Construction Manual and the Standard Specifications.

12.0 Environmental Monitoring

Several mitigation measures were identified through the environmental process. The measures will be implemented as part of the project to avoid, reduce or otherwise mitigate environmental impacts associated with the project. The NDOT Environmental Services Division will be responsible for ensuring these mitigations measures are followed as identified in the NDOT Environmental Services Procedures Guide.

Those mitigation measures are shown below:

Responsible Party(ies)	Mitigation Category	Description
Contractor	Hazardous Waste and Materials	Prior to demolition, structures will be assessed for potential asbestos, for example in expansion joints, and any required abatement measures will be enforced.

Responsible Party(ies)	Mitigation Category	Description
Contractor (construction phase) NDOT Maintenance Division (maintenance phase)	Noxious Weeds	Earth-moving and hauling equipment will be washed at the contractor's storage facility prior to arriving onsite to prevent the introduction of noxious weed seeds. Disturbed areas will be landscaped and/or seeded with certified weed-free mixes. Contract documents will specify a noxious weed management plan to control noxious weeds. Noxious weed control and abatement will be implemented as part of ongoing project maintenance.
Contractor	Vegetation	In the event that cacti and yucca species are present, plant salvage will be performed by the contractor prior to construction activities. A preconstruction survey surrounding the Kyle Canyon Road interchange will be performed by a qualified biologist to identify any resources of concern. Impacts to desert tortoise will be prevented. Mitigation fees in the amount of $705 will be paid per acre of disturbance.
NDOT Design Division	Visual	Aesthetic treatments to barriers and structures within the project area will be in accordance with Nevada Department of Transportation's (NDOT) Landscape and Aesthetics Master Plan. New freeway and street lighting will employ shields to minimize light and glare impacts on adjacent residences.
Contractor	Air Quality	NDOT contract documents will specify that the contractor must implement a watering program for dust abatement to minimize air quality impacts during construction. In addition, the contractor must comply with all federal, state, and local laws, including Clark County Department of Air Quality and Environmental Management (DAQEM) regulations governing air pollution control.

Responsible Party(ies)	Mitigation Category	Description
Contractor	Noise	Sound walls will be constructed early in the project, as feasible, to mitigate construction noise (see Figures 8a through 8h). Contract documents will require the contractor to submit a noise control plan for review and approval by NDOT. Contract specifications will address hours of operation and noise-level limits. Construction specifications will require performance of proper maintenance on construction equipment and that stationary equipment be placed as far from homes as feasible.
NDOT Design Division	Drainage/Flood Control/Water Quality	Floodplain impacts will be minimized by improving the offsite drainage system in consultation with the Clark County Regional Flood Control District (CCRFCD). Offsite drainage cross culverts will be extended to accommodate roadway widening and sound wall construction while maintaining flow patterns. Erosion control measures will be incorporated for site soil stabilization and to reduce deposition of sediments in the adjacent surface waters. Measures will include the application of soil stabilizers such as landscaping, mulch, and rock slope protection. Erosion control measures will be designed to filter the storm water originating from the pavement prior to entering the offsite drainage system.
Contractor	Water Quality	If previously unidentified wells are encountered during project construction, the contractor is responsible for notifying the Nevada Department of Water Resources and for retaining a Nevada-licensed driller to properly abandon the well.

13.0 Right of Way

All right of way necessary for the project was identified in the Environmental Assessment. Current NDOT right of way policies and procedures will be followed for appraisals, acquisitions, relocation, demolitions, construction/utility easements, scheduling and reporting as identified in the NDOT Right of Way

Manual and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. NDOT Right of Way Division will certify all right of way for all phases of the project.

14.0 Safety and Security

Safety and Security will be addressed in accordance to current NDOT contract specifications and contract administration policies and procedures.

15.0 Traffic Management

All phases with significant traffic impacts will be required to submit a Traffic Management Plan (TMP) in accordance with NDOT's Work Zone Safety & Mobility Implementation Guide adopted January 1, 2008.

16.0 Project Communications (Media and Public Information)

All phases with significant traffic impacts will be required to submit a Traffic Management Plan (TMP) in accordance with NDOT's Work Zone Safety & Mobility Implementation Guide adopted January 1, 2008. The TMP contains a section for project communications with the media and other public information issues.

The media and public can view the status report for each project as described in Section 7 of this plan.

All media and public information activities will be coordinated with the NDOT Public Information Officer for Southern Nevada.

17.0 Civil Rights Program

All Civil Rights programs (DBE, EEO, etc) will be addressed in accordance to current NDOT contract specifications and contract administration policies and procedures.

18.0 Closeout Plan

All projects will be transitioned from construction to maintenance activities in accordance with current NDOT policies and procedures as identified in the NDOT Project Management Guidelines and Construction Manual.

19.0 Project Documentation

Project documentation during the design phase is the responsibility of the project manager and the design team according to current NDOT policies and procedures. Project documentation during the construction phase is the responsibility of the resident engineer and the construction team according to current NDOT policies and procedures. Following construction, a post construction review will be held to document the construction of the project to identify lessons learned.

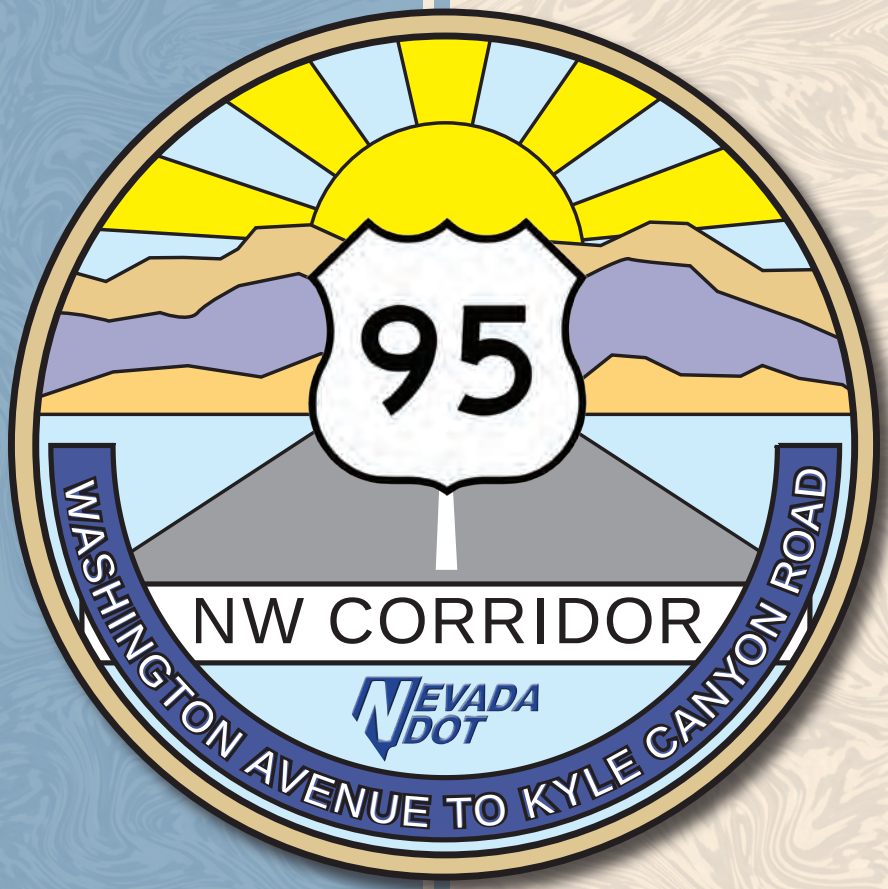
20.0 References

The project team will refer to the current editions of the following manuals:

- NDOT Project Management Guidelines
- NDOT Project Design Development Manual
- NDOT Road Design Guide
- NDOT Construction Manual
- NDOT Environmental Services Procedures Guide
- NDOT Standard Specifications
- NDOT Right of Way Manual
- Uniform Relocation Act
- FHWA/NDOT Stewardship Agreement

Appendix A – Initial Financial Plan

US-95 Northwest Corridor
Initial Financial Plan



NEVADA DOT
PROJECT MANAGEMENT

April 2009

US-95 Northwest Corridor
Initial Financial Plan

Letter of Certification

The Nevada Department of Transportation (NDOT) has developed a comprehensive Financial Plan for the US-95 Northwest Corridor Project. This plan provides detailed cost estimates to complete the project and estimates of financial resources to be utilized to fully finance the project.

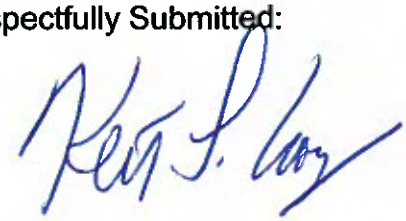
The Financial Plan provides a realistic estimate of future costs based on the engineer's estimate and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions and demographic variables, they represent realistic estimates of available monies to fully fund the project.

The Financial Plan is a living document. It provides an accurate basis upon which to schedule and fund the US-95 Northwest Corridor project. NDOT will review and update the Financial Plan on an annual basis during the month of April.

To the best of our knowledge and belief, the Financial Plan as herein submitted, fairly and accurately presents the financial position of the US-95 Northwest Corridor Project, including cash flows and expected conditions for the project's life cycle. The financial forecasts in the Financial Plan are based on our judgment of the expected project conditions and our expected course of action. We believe the assumptions underlying the Financial Plan are reasonable and appropriate. Furthermore, we have made available all significant information that we believe is relevant to the Financial Plan and, to the best of our knowledge and belief, the documents and records supporting the assumptions are appropriate.

Preparation of this Financial Plan has been coordinated with both Clark County and the City of Las Vegas. NDOT will obtain signatures from both entities to receive formal endorsement of this plan by late-2009.

Respectfully Submitted:



Kent L. Cooper, Assistant Director Engineering
State of Nevada Department of Transportation

Date: 24 April, 2009

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INTRODUCTION

The US-95 Northwest Corridor from Washington Avenue to Kyle Canyon Road is one of the fastest growing areas in southern Nevada. The US-95 freeway facility links urbanized Las Vegas on the south to rural Clark County and the Paiute Indian Reservation to the north. It serves heavy regional commuter demands between predominately residential areas in northwest Las Vegas and large employment centers in downtown Las Vegas and the Las Vegas resort corridor. This highway also serves as the only major transportation link between Las Vegas and the Toiyabe National Forest, commonly referred to as Mount Charleston. Mount Charleston serves a dual role as a small community and as a getaway for southern Nevadans, attracting thousands of vehicles every weekend.

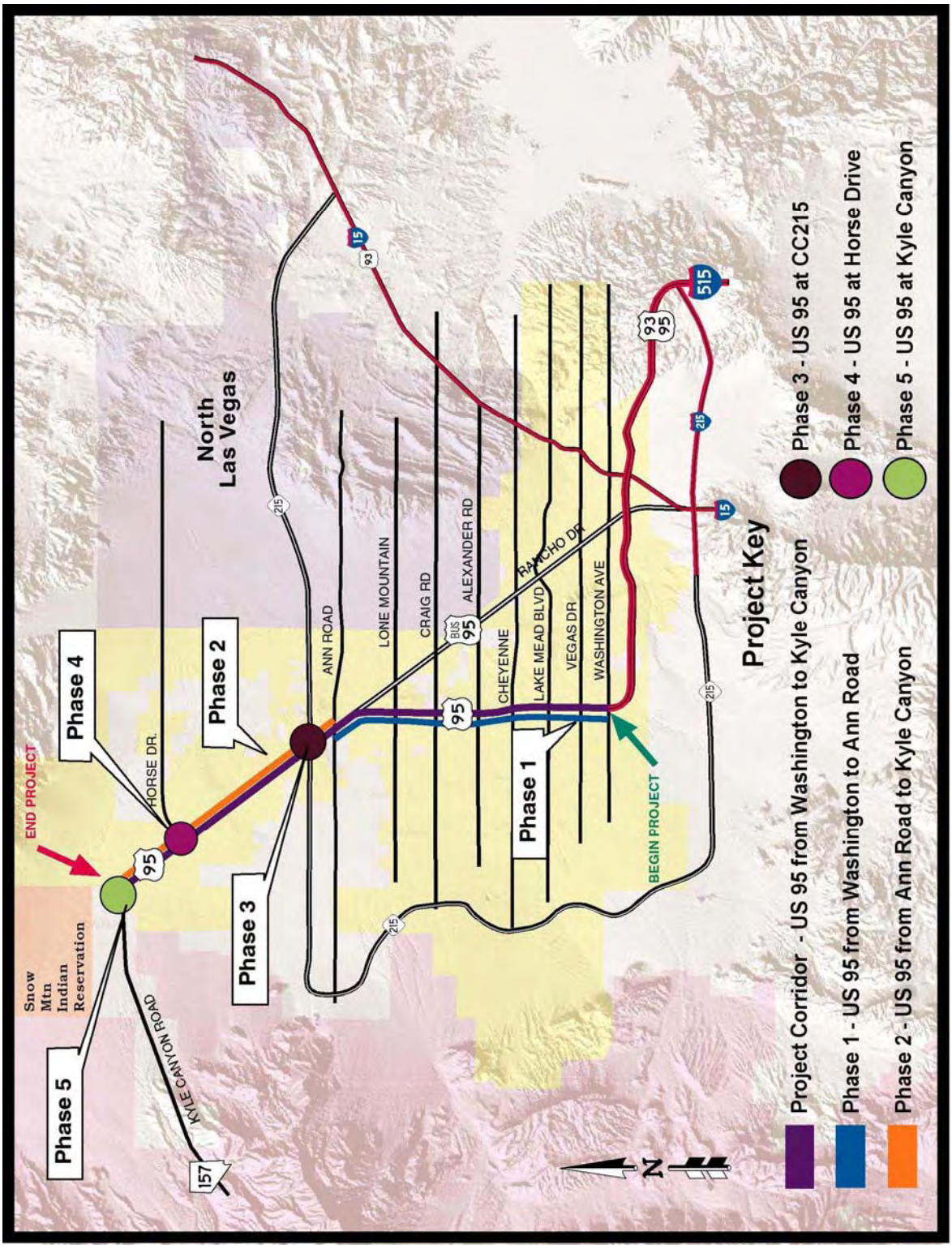
According to the University of Nevada Las Vegas Center for Business and Economic Research, the population in the Las Vegas Valley is expected to increase by 72% from 2004 to 2030, bringing the total population in Las Vegas to over 2.9 million residents. Suburban residential development in northwest Las Vegas has progressed rapidly in recent years and now exists within a mile of the Kyle Canyon Road/US-95 intersection.

The project area, located within Clark County, Nevada, extends on US-95 from Washington Avenue to Kyle Canyon Road, a distance of approximately 13 miles, as shown in Exhibit 1. Within the project area, the existing divided freeway varies from 8 lanes between Washington Avenue and Craig Road, 6 lanes between Craig Road and Centennial Parkway, and 4 lanes between Centennial Parkway and Kyle Canyon Road.

In 2006, the corridor carried approximately 135,000 vehicles per day in the southern part of the corridor decreasing to approximately 99,000 vehicles per day in the northern part of the corridor. By 2030, these volumes are predicted to increase to approximately 250,000 vehicles per day in the southern part of the corridor and to approximately 215,000 vehicles per day in the northern part of the corridor. Presently, travelers face significant congestion between the Craig Road Interchange and the Centennial Parkway Interchange on a daily basis due to heavy demand and the reduced number of lanes. If no improvements are made to US-95, the congestion will extend farther to the northwest as the valley develops over the next 10 years and beyond.

The Clark County 215 Bruce Woodbury Beltway and US-95 Interchange will provide a system to system link between two major freeway facilities in the northwest area of the Las Vegas Valley. The interchange will improve connectivity to the regional street and highway network, reduce congestion and serve the growing population of residents and businesses in the northwest Las Vegas valley. The 2030 projected traffic volumes through the interchange approaches 200,000 vehicles per day.

Exhibit 1 – Project Area Map



The Horse/US-95 Interchange will relieve congestion in the northwest part of the Las Vegas Valley due to current overloading of the existing Durango/US-95 Interchange. This area has developed quickly over the past several years and is now in need of an additional connection due to existing volumes. The Durango/US-95 Interchange currently handles over 50,000 vehicles per day with multiple movements resulting in the failure of adjacent intersections due to the lack of alternative US-95 access. The Horse/US-95 Interchange will help alleviate these intersections as well as accommodate the nearly 20,000 homes that have been approved for the future development as part of the Kyle Canyon East and West Master Plan.

Travel demand forecasts for the proposed Kyle Canyon Road/US-95 Interchange are currently being updated. Previous 2030 forecasts projected 60,000 vehicles per day on US-95 at Kyle Canyon Road and turning demands between US-95 and Kyle Canyon Road of 40,000 vehicles per day. The planned Kyle Canyon Gateway Project is programmed to consist of 16,000 residential dwelling units, 775,000 square feet of commercial space and a 1,712 acre hotel/casino development. If no improvements are made, the traffic demands associated with the development are expected to soon exceed the safe operating capacity of the corridor.

BACKGROUND

The Nevada Department of Transportation (NDOT), in cooperation with the Federal Highway Administration (FHWA), Clark County, the Regional Transportation Commission of Southern Nevada (RTC) and the City of Las Vegas initiated preliminary engineering and alternative studies to identify the freeway configuration consistent with demand in the US-95 corridor while minimizing adverse social, economic and environmental impacts. Public comment on the project was solicited through two public information meetings.

The proposed improvements to US-95 include widening the roadway to include one HOV lane and three general purpose lanes in each direction from Washington Avenue to Durango Drive and three general purpose lanes in each direction from Durango Drive to Kyle Canyon Road. Other project components include new service interchanges at Horse Drive and Kyle Canyon Road, the system-to-system interchange between US-95 and the Bruce Woodbury Beltway (CC-215) and improvements to the Cheyenne Avenue, Rancho Drive/Ann Road and Durango Drive interchanges. Auxiliary lanes between interchanges throughout the project limits in the northbound (NB) and southbound (SB) directions are proposed as well as ramp metering facilities with HOV bypass lanes at the entrance ramps from Washington Avenue to Durango Drive. A new park-and-ride facility in the southwest quadrant of the US-95/Durango Drive interchange is also proposed.

The Benefit/Cost analysis for the US-95 Northwest Corridor Project, completed in 2007, yielded a Benefit-Cost ratio of about 8 with a Net Present Value Benefit-Cost ratio of 3.6. Phase-specific Benefit-Cost analyses have not been initiated at this time but may be required as the final design for each phase progresses.

The purpose of the project is to relieve congestion and improve the operational characteristics of the US-95 Northwest Corridor in response to continued and proposed development and the resultant traffic growth in the Las Vegas Valley. The proposed improvements to US-95 will:

- accommodate projected local traffic;
- decrease congestion;
- reduce travel times;
- improve access to areas planned for development;
- improve freeway operations;
- improve safety;
- meet stakeholder/public expectations;
- reduce vehicle emissions;
- reduce idling;
- beautify the corridor; and
- improve driver comfort.

SECTION 1 - IMPLEMENTATION PLAN

PROJECT DESCRIPTION AND CONSTRUCTION SEQUENCE

The US-95 Northwest Corridor improvements have been subdivided into five phases for construction, consistent with the timing of the anticipated need for improvements. The project limits of these phases and the proposed improvements are as follows:

Phase 1 – Washington Avenue to Ann Road

- widening US-95 from 3 general purpose lanes in each direction to accommodate 1 HOV (High Occupancy Vehicle) and auxiliary lanes in each direction from Washington Avenue to Ann Road;
- widening the Gowan Road grade separation;
- constructing tieback walls at the grade separations;
- improving operations at Cheyenne Avenue interchange by constructing a loop ramp to accommodate the heavy westbound Cheyenne Avenue to southbound US-95 demand;
- improving operations at Durango Drive interchange by constructing a loop ramp to accommodate the heavy westbound Durango Drive to southbound US-95 demand;
- constructing sound walls in noise sensitive areas;

- perpetuating drainage, lighting, signing and Intelligent Transportation Systems (ITS) facilities;
- improving landscape and aesthetic features; and
- relocating utilities as necessary.

The Phase 1 improvements will be constructed within the existing US-95 right-of-way. Temporary construction easements may be needed, so an estimated cost is included in the total cost for Phase 1.

Phase 2 – Ann Road to Kyle Canyon Road

- widening US-95 from 3 general purpose lanes in each direction to accommodate 1 HOV lane and auxiliary lanes in each direction from Ann Road to Centennial Parkway;
- widening US-95 from 2 general purpose lanes in each direction to accommodate 1 additional general purpose lane, 1 HOV lane and auxiliary lanes in each direction from Centennial Parkway to Durango Drive;
- widening US-95 from 2 general purpose lanes in each direction to accommodate 1 additional general purpose lane and auxiliary lanes in each direction from Durango Drive to Kyle Canyon Road;
- constructing a new park-and-ride facility in the southwest quadrant of the US-95/Durango Drive interchange;
- constructing sound walls in noise sensitive areas;
- perpetuating drainage, lighting, signing and ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary.

The Phase 2 improvements will be constructed within the existing US-95 right-of-way. Temporary construction easements may be needed, so an estimated cost is included in the total cost for Phase 2.

Phase 3 – US-95/CC-215 Northern Beltway Interchange

- constructing new ramps to complete a system-to-system interchange configuration;
- perpetuating drainage, lighting, signing and ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary.

Phase 3 improvements will be constructed within the existing right-of-way of US-95 and CC-215.

Phase 4 – US-95 at Horse Drive

- constructing a new service interchange;
- perpetuating drainage, lighting, signing and ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary.

Approximately 22 acres of right-of-way is required to construct this new service interchange. This land has been acquired from the Bureau of Land Management.

Phase 5 – US-95 at Kyle Canyon Road

- constructing a new service interchange;
- perpetuating drainage, lighting, signing and ITS improvements;
- improving landscape and aesthetic features; and
- relocating utilities as necessary.

The Phase 5 improvements will be constructed within the existing US-95 right-of-way. Temporary construction easements may be needed, so an estimated cost is included in the total cost for Phase 5.

PROJECT SCHEDULE

Phase 1, US-95 from Washington Avenue to Ann Road, will be designed, awarded and administered by NDOT. Phase 1 is scheduled to start in FY 2011 with completion in FY 2013. It is planned for delivery by traditional design-bid-build.

Phase 2, US-95 from Ann Road to Kyle Canyon Road, will be designed, awarded and administered by NDOT. Phase 2 is scheduled to start in FY 2026 with completion in FY 2028. It is planned for delivery by traditional design-bid-build.

Phase 3, US-95 at CC-215, will be designed, awarded and administered by NDOT. Phase 3 is scheduled to start in FY 2011 with completion in FY 2014. It is planned for delivery by the traditional design-bid-build.

Phase 4, US-95 at Horse Drive, will be designed, awarded and administered by the City of Las Vegas. Phase 4 is scheduled to start in FY 2009 with completion in FY 2011. It is planned for delivery by the traditional design-bid-build.

Phase 5, US-95 at Kyle Canyon Road, will be designed by the City of Las Vegas. The project may be awarded and administered by NDOT. Phase 5 is scheduled to start in FY 2016 with completion in FY 2018. It is planned for delivery by the traditional design-bid-build.

As shown above, Phase 4 will be the first phase to be constructed; however, it is not shown as the first phase. Phases 1-3 were previously identified in the STIP, so the

names were kept to avoid confusion. Mainline improvements to US 95 were previously broken into 3 phases. To address the congestion at Ann Road, the mainline improvements were re-phased into Phases 1 and 2 as defined above.

SECTION 2 - COST ESTIMATE

COST ESTIMATE BY PHASE AND COST ELEMENT

The total cost estimate for all components of the US-95 Northwest Corridor Project ranges from $650 to $732 million. The individual costs for each phase are summarized in Exhibits 2 through 5. A Cost Estimate Review, conducted by the Federal Highway Administration in November 2008, determined the 70% cost estimate to be $635 million.

Subsequent to the November 2008 Cost Estimate Review, updates were made to the Regional Transportation Committee of Southern Nevada's 2009-2030 Clark County Regional Transportation Plan (RTP). In April 2009, a reassessment of the cost estimate review was conducted. The estimates were updated based on the new dates funding would be available as shown in the current RTP. The updated 70% value determined by the reassessment is $709 million. All projects will be programmed based on this new 70% figure; therefore, all further discussion and illustration on cost estimates and funding in this financial plan is based on that value.

Current copies of the projects as shown in the RTP can be found at the end of this financial plan.

Exhibit 2 – Project Cost Estimates (With Ranges)

	PROJECT COSTS in Millions of Dollars		
Project Phase	Low Estimate 10% Confidence	High Estimate 90% Confidence	Financed Estimate 70% Confidence
Phase 1 - Washington Avenue to Ann Road			
Preliminary Engineering	$1.8	$3.4	$3.3
Right of Way	$0.0	$0.0	$0.0
Utility Relocation	$2.0	$2.0	$2.0
Construction	$124.4	$136.3	$133.3
Construction Engineering	$11.8	$14.8	$13.9
TOTAL	$140.0	$156.5	$152.5
Phase 2 - Ann Road to Kyle Canyon Road			
Preliminary Engineering	$5.5	$6.3	$6.0
Right of Way	$6.0	$6.8	$6.5
Utility Relocation	$6.3	$7.2	$6.9
Construction	$154.4	$176.0	$168.7
Construction Engineering	$14.4	$18.5	$17.3
TOTAL	$186.6	$214.8	$205.4
Phase 3 - US-95 at CC-215			
Preliminary Engineering	$10.9	$13.3	$12.6
Right of Way	$0.0	$0.0	$0.0
Utility Relocation	$0.0	$0.0	$0.0
Construction	$194.5	$209.8	$205.0
Construction Engineering	$22.1	$28.0	$26.0
TOTAL	$227.5	$251.1	$243.6
Phase 4 - US-95 at Horse Drive*			
Preliminary Engineering	$3.0	$3.0	$3.0
Right of Way	$13.0	$13.0	$13.0
Utility Relocation	$0.3	$0.3	$0.3
Construction	$41.0	$50.0	$50.0
Construction Engineering	$2.8	$2.8	$2.8
TOTAL	$60.1	$69.1	$69.1
Phase 5 - US-95 at Kyle Canyon Road			
Preliminary Engineering	$2.6	$2.9	$2.8
Right of Way	$0.1	$0.3	$0.2
Utility Relocation	$0.9	$1.0	$0.9
Construction	$29.5	$33.4	$32.1
Construction Engineering	$2.3	$2.9	$2.7
TOTAL	$35.4	$40.5	$38.7
GRAND TOTAL	**$649.6**	**$732.0**	**$709.3**

* - Based on construction bid and actual right of way acquisition costs

The following is a breakdown of the costs for each phase. The overall range is shown as well as the amount that represents 70% of the value of the range as seen in Exhibit 2.

Phase 1 – Washington Avenue to Ann Road

The total cost for Phase 1 ranges from $140 to 157 million. Construction costs are inflated to Fiscal Year 2011 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 1: Preliminary Engineering $3.3 million; Utility Relocation $2 million; Construction $133.3 million; and Construction Engineering $13.9. There are no Right of Way Acquisition costs for this phase.

Phase 2 – Ann Road to Kyle Canyon Road

The total cost for Phase 2 ranges from $187 to $215 million. Construction costs are inflated to Fiscal Year 2027 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 2: Preliminary Engineering $6 million; Right of Way Acquisition $6.5 million; Utility Relocation $6.9 million; Construction $168.7 million; and Construction Engineering $17.3 million.

Phase 3 – US-95/CC-215 Northern Beltway Interchange

The total cost for Phase 3 ranges from $228 to $251 million. Construction costs are inflated to Fiscal Year 2012 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 3: Preliminary Engineering $12.6 million; Construction $205 million; and Construction Engineering $26 million. There are no Right of Way Acquisition or Utility Relocation costs for this phase.

Phase 4 – US-95 at Horse Drive

The total cost for Phase 4 ranges from $60 to $69 million. The project was advertised to bidders in November 2008, and bids were opened in December 2008. Seven (7) bids, ranging from $41 to $50.7 million, were received. Two contractors contested the bids, and the City of Las Vegas resolved the issue. The contract was awarded thereafter.

The following is a breakdown of the actual costs for Phase 4: Preliminary Engineering $3 million; Right of Way Acquisition $13 million; and Utility Relocation $0.3 million. To allow for any unknown issues which may arise during construction, a value of $50 million for Construction and $2.8 million for Construction Engineering has been estimated. The 70% value determined during the Cost Estimate Review for Construction was $58.3 million and was $2.9 million for Construction Engineering.

Phase 5 – US-95 at Kyle Canyon Road

The total cost for Phase 5 ranges from $35 to $41 million. Construction costs are inflated to Fiscal Year 2017 which is the anticipated midpoint of construction. The following is a breakdown of the costs for Phase 5: Preliminary Engineering $2.8 million; Right of Way Acquisition $0.2 million; Utility Relocation $0.9 million; Construction $32.1 million; and Construction Engineering $2.7 million.

INFLATION

All cost estimates in this Financial Plan are in year-of-expenditure dollars. Year-of-expenditure costs are calculated by applying an estimated annual inflation rate to base year 2008 cost estimates. For the US-95 Northwest Corridor Initial Financial Plan, an annual inflation rate of 4% per year has been used unless stated otherwise.

COST ESTIMATING METHODOLOGY

Preliminary cost estimates for the US-95 Northwest Corridor project include estimates for construction items, design, construction engineering, right-of-way acquisition, utilities relocation, and contingencies.

Quantities for the major items of construction were estimated from preliminary engineering plans and investigations. Estimated unit costs for these major items were developed from actual bid prices for similar work in the Las Vegas urban area. The primary sources of current bid prices include:

- NDOT Reasonable Cost database which is updated as contracts are awarded.
- City of Henderson – I 15 at Galleria Drive Interchange. Bid date: January 2008.
- City of Las Vegas - Martin Luther King Roadway Improvements. Bid date: December 2007.
- Clark County 215 – Decatur Boulevard to North 5th Street. Bid date: October 2007.
- Clark County 215 – Hualapai Way to Charleston Boulevard. Bid date: September 2007.

In addition to the cost of the major construction items, other elements, such as mobilization, traffic control, etc., of the preliminary cost estimates have been accounted for as lump sum allowances or percentages of the cost of other elements.

As discussed above, the Cost Estimate Review validated the team's cost estimate by verifying the accuracy and reasonableness of the total cost estimate and schedule. During the Cost Estimate Review, the risks and opportunities were developed, and the

Project Team selected probability curves that best modeled the risk and opportunities. Probability ranges were developed for the cost estimate that represents the Project's current state of development.

Exhibit 3 – Project Cost Estimates (Fiscal Year Expenditures)

	PROJECT COSTS in Millions of Dollars								Project
Project Phase	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15-30	Total
Phase 1 - Washington Avenue to Ann Road									
Preliminary Engineering		$3.3							$3.3
Right of Way									$0.0
Utility Relocation		$2.0							$2.0
Construction				$66.7	$66.6				$133.3
Construction Engineering				$7.0	$6.9				$13.9
TOTAL	$0.0	$5.3	$0.0	$73.7	$73.5	$0.0	$0.0	$0.0	$152.5
Phase 2 - Ann Road to Kyle Canyon Road									
Preliminary Engineering					$6.0				$6.0
Right of Way								$6.5	$6.5
Utility Relocation								$6.9	$6.9
Construction								$168.7	$168.7
Construction Engineering								$17.3	$17.3
TOTAL	$0.0	$0.0	$0.0	$0.0	$6.0	$0.0	$0.0	$199.4	$205.4
Phase 3 - US-95 at CC-215									
Preliminary Engineering		$6.3	$6.3						$12.6
Right of Way									$0.0
Utility Relocation									$0.0
Construction				$100.0	$53.0	$52.0			$205.0
Construction Engineering				$13.0	$7.0	$6.0			$26.0
TOTAL	$0.0	$6.3	$6.3	$113.0	$60.0	$58.0	$0.0	$0.0	$243.6
Phase 4 - US-95 at Horse Drive									
Preliminary Engineering	$2.0	$0.4	$0.3	$0.3					$3.0
Right of Way	$13.0								$13.0
Utility Relocation		$0.3							$0.3
Construction		$10.0	$30.0	$10.0					$50.0
Construction Engineering		$0.7	$1.3	$0.8					$2.8
TOTAL	$15.0	$11.4	$31.6	$11.1	$0.0	$0.0	$0.0	$0.0	$69.1
Phase 5 - US-95 at Kyle Canyon Road									
Preliminary Engineering				$2.8					$2.8
Right of Way				$0.2					$0.2
Utility Relocation				$0.9					$0.9
Construction								$32.1	$32.1
Construction Engineering								$2.7	$2.7
TOTAL	$0.0	$0.0	$0.0	$3.9	$0.0	$0.0	$0.0	$34.8	$38.7
FISCAL YEAR TOTAL	**$15.0**	**$23.0**	**$37.9**	**$201.7**	**$139.5**	**$58.0**	**$0.0**	**$234.2**	**$709.3**

Exhibit 4 – Total Project Cost Estimate

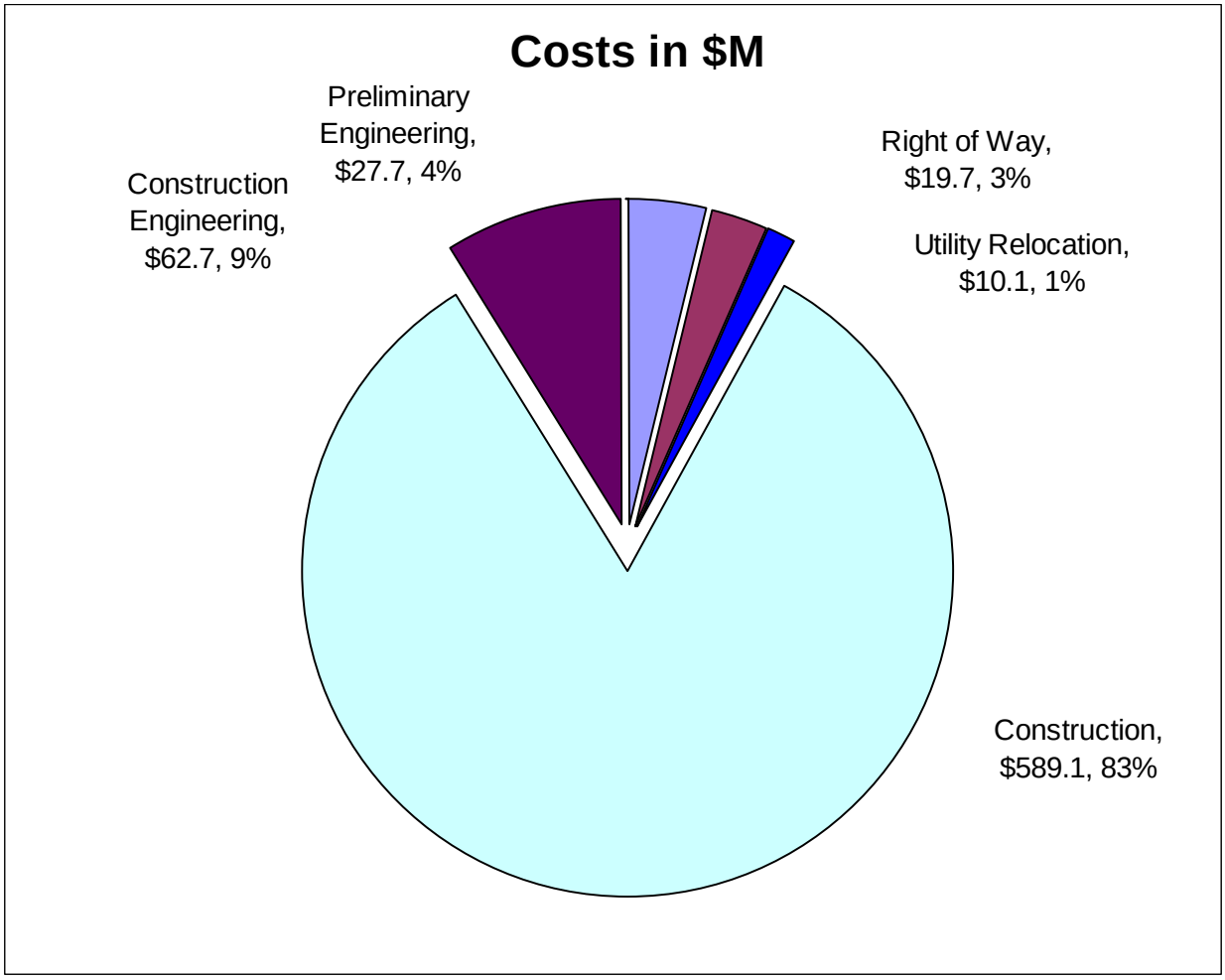


Exhibit 5 – Detailed Project Cost Estimates (Developed prior to CER)

Costs in $M*	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Preliminary Engineering					
Preliminary Engineering	$3.3	$3.6	$13.2	$2.6	$2.6
Right of Way					
R/W Acquisition	$0.0	$3.9	$0.0	$10.5	$0.2
Utilities					
Utility Relocation	$2.0	$4.1	$0.0	$2.6	$0.9
Construction					
Site Preparation/Grading	$8.8	$9.7	$6.5	$0.6	$3.9
Roadway Pavements	$27.1	$27.9	$18.2	$14.0	$5.0
Drainage Facilities	$6.7	$4.5	$17.1	$9.0	$0.9
**Structures	$36.1	$11.0	$73.1	$16.0	$5.2
Traffic Control Facilities	$6.5	$9.5	$10.5	$0.3	$1.2
Permanent Signs	$3.0	$3.5	$3.5	$0.5	$0.8
Signals/Lighting	$2.8	$2.0	$0.0	$5.0	$2.3
ITS	$9.1	$5.4	$0.0	$0.4	$0.2
***Incidentals	$3.5	$5.3	$14.3	$2.0	$2.4
Subtotal	$103.4	$78.8	$143.2	$47.8	$21.9
****Landscaping @ 3%	$3.1	$2.4	$4.3	$1.4	$0.7
Total Construction	$106.5	$81.2	$147.5	$49.2	$22.6
Construction Engineering					
Construction Engineering	$13.9	$10.3	$27.2	$2.0	$2.5
Phase Total	**$125.7**	**$103.1**	**$187.9**	**$66.9**	**$28.8**
Grand Total US 95 NW					**$512.5**

* Base costs (no contingency factors)

** new structures, existing structure work, MSE walls, retaining walls, tie back walls, sound walls, etc.

*** fencing, curb and gutter, median island paving, sidewalks, driveways, survey, mobilization, temporary erosion control, etc.

**** Percentage can increase based on participation from Local Public Agencies

SECTION 3 - FINANCING AND REVENUES

Generally, much of the revenue for highway improvements comes from fuel taxes. Nearly all sales of gasoline, diesel and jet fuel include federal, state and county taxes. Of course, the sale of state bonds is another common means to fund improvements. The various sources of revenue to the state are placed in the 'State Highway Fund' that is administered by NDOT. The federal funds are programmed by NDOT and the Metropolitan Planning Organizations on specific projects from one or more of the various funding categories. The project funds are programmed through locally, state and federally approved programming documents. The US-95 Northwest Corridor will be financed through a combination of federal, state and local funds. Exhibit 6 identifies the project financing programmed in the current Department Statewide Transportation Improvement Program (STIP), the Regional Transportation Commission of Southern Nevada (RTC) Transportation Improvement Program and Regional Transportation Plan. The project timeline covers Fiscal Year 2008 through Fiscal Year 2030.

Phase 4, the Horse Drive Interchange at US-95 project, is primarily funded through the Regional Transportation Commission of Southern Nevada Gas Tax that does not have any priority process. New roadway projects in the City of Las Vegas are identified with Traffic Engineering based on existing and proposed traffic demands.

Phase 5, the Kyle Canyon Road Interchange at US-95 project, will be financed through a combination of federal, local, and private funds. The City of Las Vegas has submitted a request for federal funds (Federal Appropriations) to be used for this project, which will be allocated for Fiscal Year 2009-2010. Local funding is being utilized for this project in the form of Regional Transportation Commission Gasoline Funds, although this has not yet been approved. This funding is programmed to be allocated as follows: $1,000,000 for Fiscal Year 2009, $2,926,750 for Fiscal Year 2010 and $2,926,750 for Fiscal Year 2011. Private funding has been committed for this project by the Kyle Canyon Gateway Project through a land owner-developer agreement.

It can be seen from Exhibit 6 that there are nine distinct sources of revenue for this corridor project.

Exhibits 7 through 11 demonstrate the funding breakdowns for each Phase of this project. Exhibit 12 shows the estimated project revenues are anticipated to be funded with approximately 7.2 percent federal resources, 5.7 percent state resources and 87.1 percent local resources.

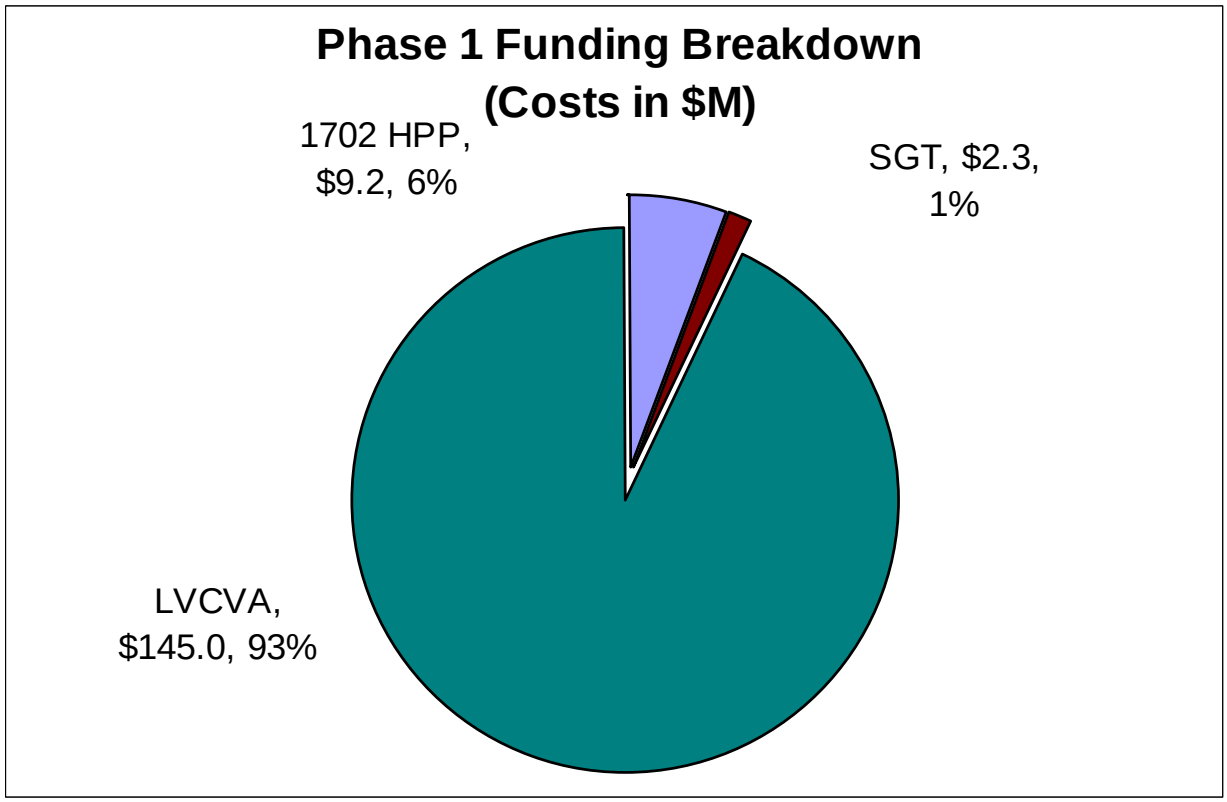
Exhibit 6 – Programmed Revenues

	PROJECT PROGRAMMING in Million of Dollars									
Funding Category	Phase	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15-30	Project Total
Phase 1 - Washington Avenue to Ann Road										
1702 HPP	PE,R/W,C		$9.2							$9.2
SGT	PE,R/W,C		$2.3							$2.3
LVCVA	PE,R/W,C				$145.0					$145.0
TOTAL		$0.0	$11.5	$0.0	$145.0	$0.0	$0.0	$0.0	$0.0	$156.5
Phase 2 - Ann Road to Kyle Canyon Road										
SGT	PE,R/W,C								$40.0	$40.0
LVCVA	PE,R/W,C					$4.0			$230.0	$234.0
TOTAL		$0.0	$0.0	$0.0	$0.0	$4.0	$0.0	$0.0	$270.0	$274.0
Phase 3 - US-95 at CC-215										
1702 HPP	PE,R/W,C		$10.6							$10.6
SGT	C		$0.5							$0.5
Q10 - Beltway	C				$216.7					$216.7
TOTAL		$0.0	$11.1	$0.0	$216.7	$0.0	$0.0	$0.0	$0.0	$227.8
Phase 4 - US-95 at Horse Drive										
1702 HPP	C		$3.9							$3.9
STP Clark	C	$20.0								$20.0
SGT	C		$0.2							$0.2
RFCD/RTC	C,PE	$7.0								$7.0
Q10 - HSLM	C,PE,R/W		$4.2	$15.0						$19.2
RTC	C,PE,R/W		$16.0	$2.9						$18.9
TOTAL		$27.0	$24.3	$17.9	$0.0	$0.0	$0.0	$0.0	$0.0	$69.2
Phase 5 - US-95 at Kyle Canyon Road										
STP Clark	C								$11.4	$11.4
SGT	C								$0.6	$0.6
RTC	PE		$1.0	$2.9	$2.9					$6.8
PDP	C								$18.5	$18.5
TOTAL		$0.0	$1.0	$2.9	$2.9	$0.0	$0.0	$0.0	$30.5	$37.3
PROJECT TOTAL		$27.0	$47.9	$20.8	$364.6	$4.0	$0.0	$0.0	$300.5	$764.8

1702 HPP	SAFETEA-LU Section 1702 High Priority Projects Category
STP Clark	SAFETEA-LU Surface Transportation Program Clark Urban Area
SGT	State Gas Tax
LVCVA	Las Vegas Convention and Visitors Authority Bonding
RFCD/RTC	Regional Flood Control District/RTC Bonding
Q10 - Beltway	Funding for Beltway Improvements
Q10 - HSLM	Funding for High Speed Lane Mile Improvements
RTC	Gas Tax Directed to RTC for Transportation Improvements
PDP	Private Development Participant

Source: RTP 2009-2030

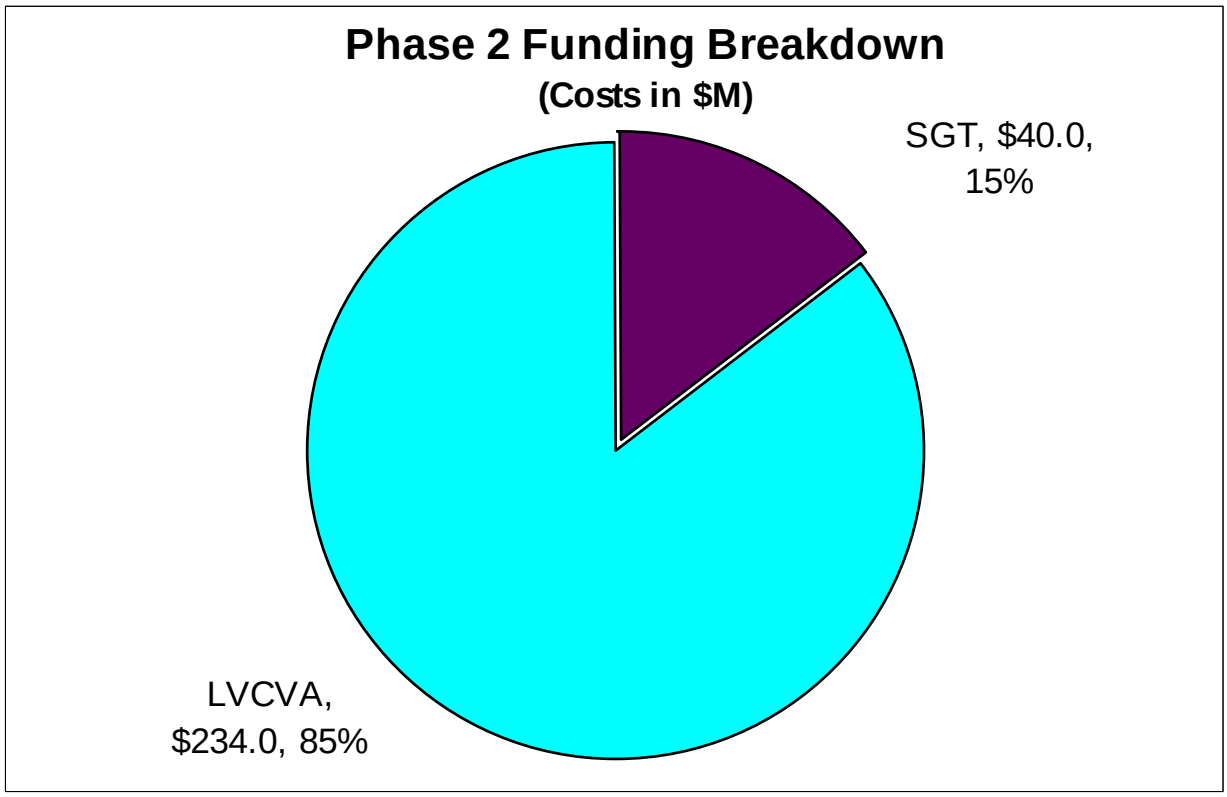
Exhibit 7 – Phase 1 Funding Breakdown



1702 HPP	SAFETEA-LU Section 1702 High Priority Projects Category
SGT	State Gas Tax
LVCVA	Las Vegas Convention and Visitors Authority Bonding

Source: RTP 2009-2030

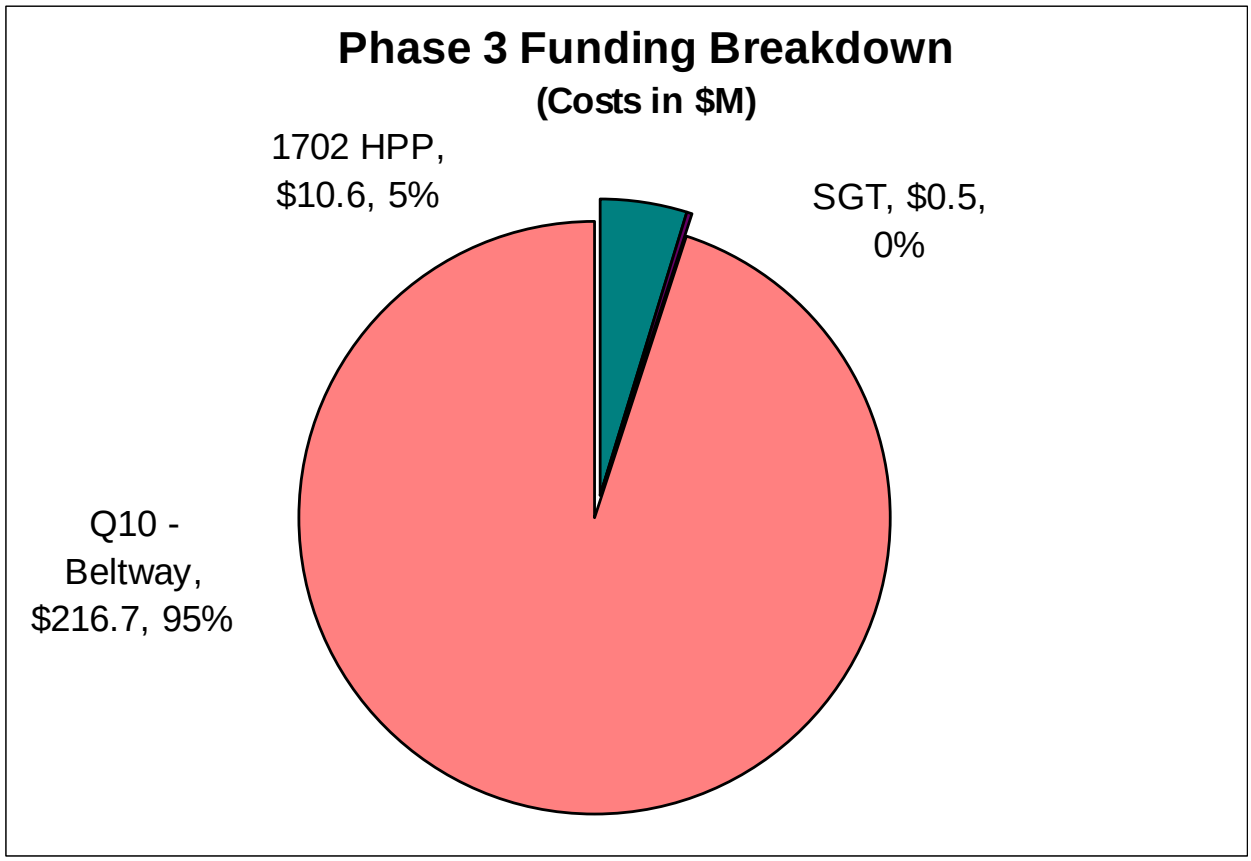
Exhibit 8 – Phase 2 Funding Breakdown



SGT State Gas Tax
LVCVA Las Vegas Convention and Visitors Authority Bonding

Source: RTP 2009-2030

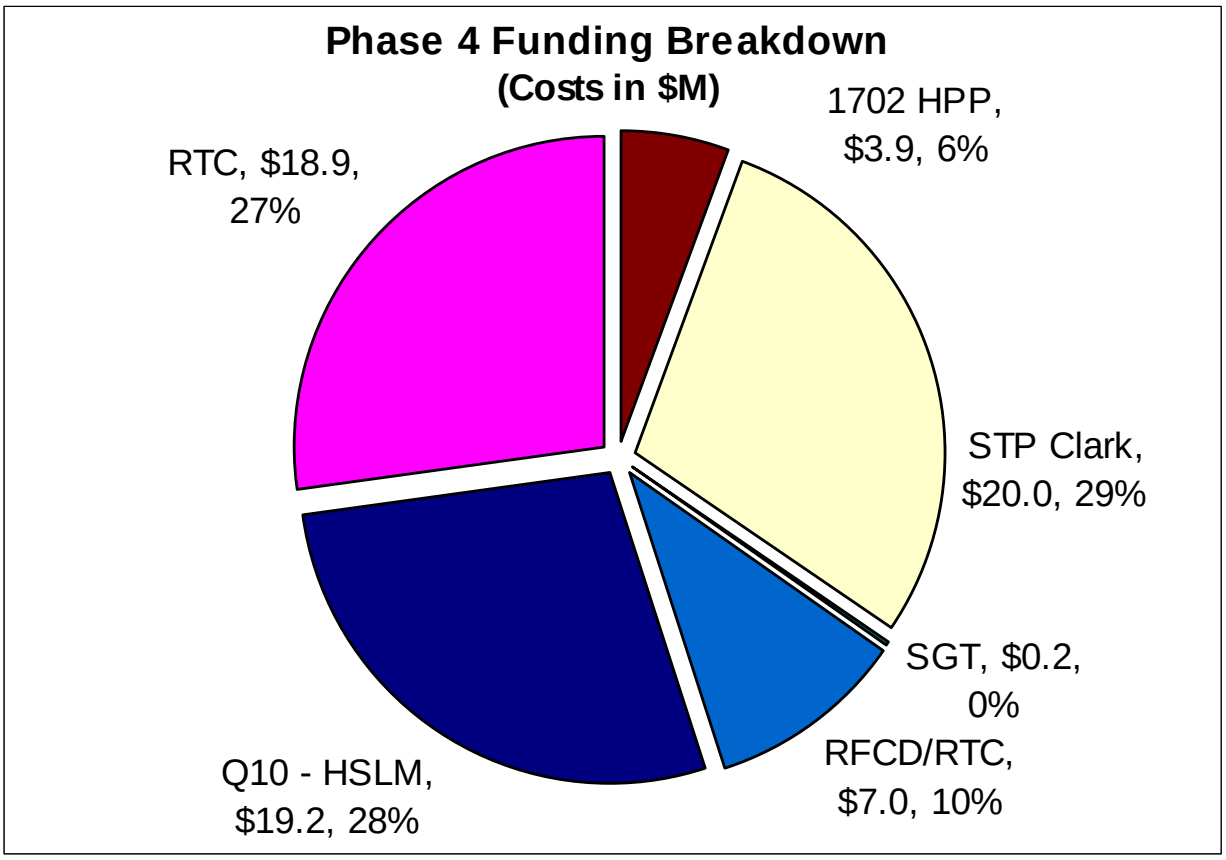
Exhibit 9 – Phase 3 Funding Breakdown



1702 HPP	SAFETEA-LU Section 1702 High Priority Projects Category
SGT	State Gas Tax
Q10 - Beltway	Funding for Beltway Improvements

Source: RTP 2009-2030

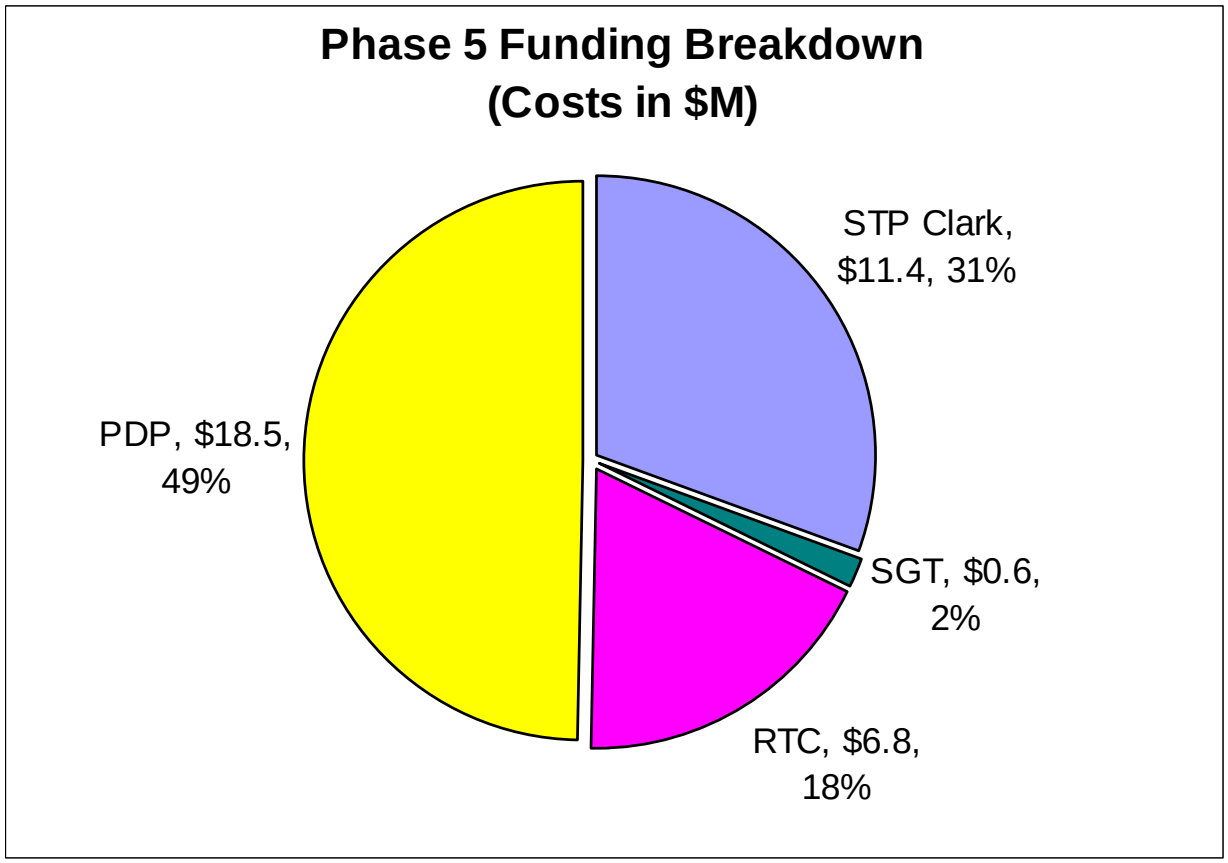
Exhibit 10 – Phase 4 Funding Breakdown



1702 HPP	SAFETEA-LU Section 1702 High Priority Projects Category
STP Clark	SAFETEA-LU Surface Transportation Program Clark Urban Area
SGT	State Gas Tax
RFCD/RTC	Regional Flood Control District/RTC Bonding
Q10 - HSLM	Funding for High Speed Lane Mile Improvements
RTC	Gas Tax Directed to RTC for Transportation Improvements

Source: RTP 2009-2030

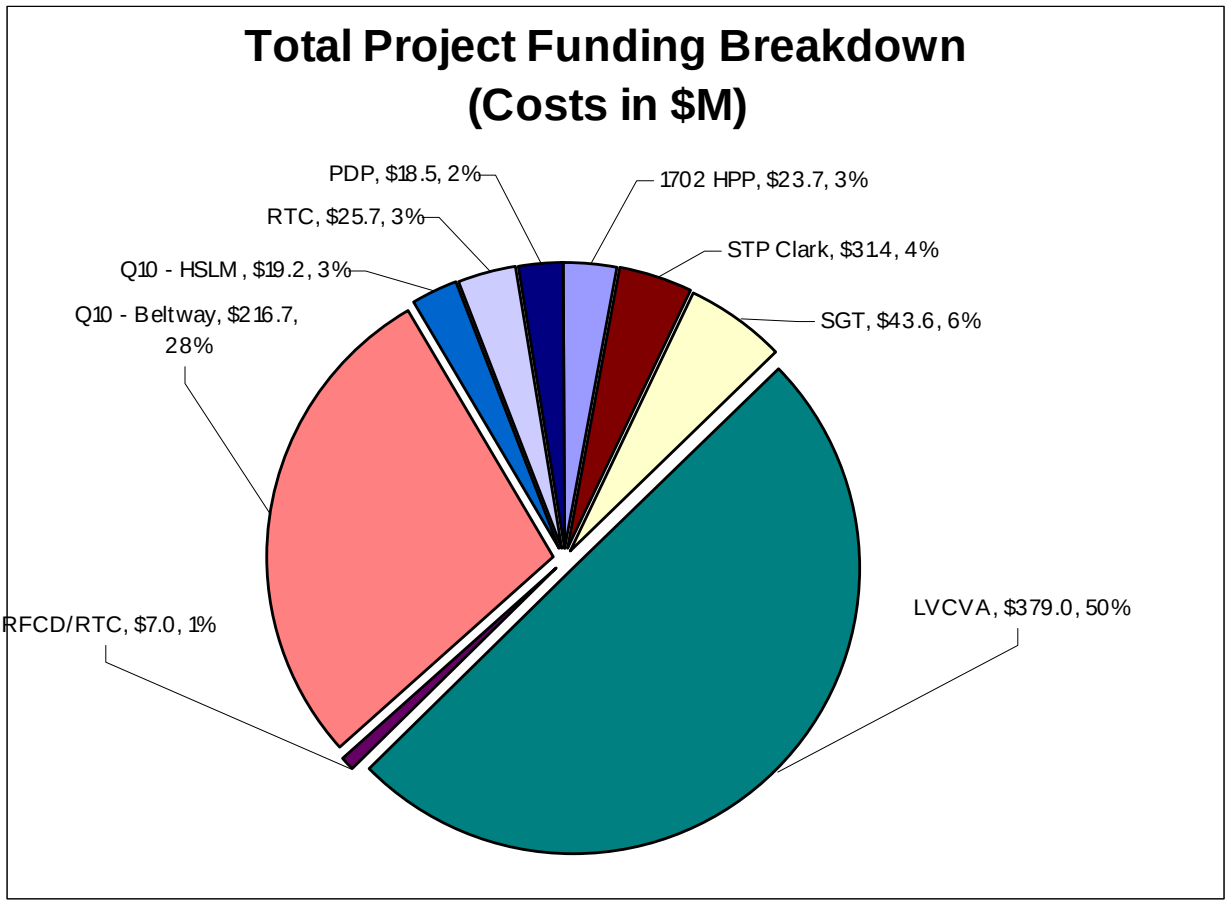
Exhibit 11 – Phase 5 Funding Breakdown



STP Clark	SAFETEA-LU Surface Transportation Program Clark Urban Area
SGT	State Gas Tax
RTC	Gas Tax Directed to RTC for Transportation Improvements
PDP	Private Development Participant

Source: RTP 2009-2030

Exhibit 12 – Total Project Funding Breakdown



1702 HPP	SAFETEA-LU Section 1702 High Priority Projects Category
STP Clark	SAFETEA-LU Surface Transportation Program Clark Urban Area
SGT	State Gas Tax
LVCVA	Las Vegas Convention and Visitors Authority Bonding
RFCD/RTC	Regional Flood Control District/RTC Bonding
Q10 - Beltway	Funding for Beltway Improvements
Q10 - HSLM	Funding for High Speed Lane Mile Improvements
RTC	Gas Tax Directed to RTC for Transportation Improvements
PDP	Private Development Participant

Source: RTP 2009-2030

The following paragraphs describe each of the ten funding sources depicted in the exhibits above, and are arranged by federal, state and local funding sources.

FEDERAL FUNDS

SAFETEA-LU Section 1702 High Priority Project Funding

SAFETEA-LU includes a number of earmarks for specific "High Priority" projects. The US-95 Northwest Corridor is identified as one of these projects within the State of Nevada. Section 1702 of SAFETEA-LU is expected to provide approximately $23.7 million to this project in Fiscal Year 2009.

Surface Transportation Program

The Surface Transportation Program (STP) is 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. Surface Transportation Program funds are divided into several sub-categories such as Surface Transportation Program-Statewide and Surface Transportation Program-Urban, and allocated for various priorities within the state. NDOT estimates that approximately $17 million will be allocated each year under the Surface Transportation Program-Statewide. These funds are available for distribution according to statewide priorities as determined by NDOT.

Thirty percent of the Surface Transportation Program funds are allocated to urbanized areas of the state with a population of 200,000 or more. 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. NDOT estimates that approximately $19 million will be allocated each year under the Surface Transportation Program-Urban program for use in the Las Vegas Urbanized Area, amounting to about $460 million over the 25-year Plan period. These funds are available for distribution according to local priorities as determined by the local Metropolitan Planning Organization in cooperation with the State Department of Transportation and local entities. The Regional Transportation Commission of Southern Nevada has allocated approximately $20 million Surface Transportation Program (STP) funding for the US-95 Northwest Corridor in Fiscal Year 2008 and $11.4 million in Fiscal Years 2015-2030 for a grand total of $31.4 million.

STATE FUNDS

State Highway Fund

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. Currently, this fund provides NDOT with approximately $300 million that is normally used to match federal highway funds and to support high priority projects which are not eligible for federal funds, or when other funds are not available.

For the US-95 Northwest Corridor, the State Highway Fund is expected to provide approximately $3 million in Fiscal Year 2009, approximately $40.6 in Fiscal Years 2015-2030 for a grand total of $43.6 million.

LOCAL FUNDS

LVCVA Bonds

The 2007 Assembly Bill 595, Section 46.5, requires local entities, at the request of Department, to provide bonding authority to help with highway improvements funded by the State Highway Fund. This legislation applied to only urban areas having a population of at least 400,000 which applies to the Las Vegas Urbanized Area. The law authorizes an initial $300,000,000 in bonding authority for the Las Vegas area, through the Las Vegas Convention and Visitors Authority (LVCVA). This source is expected to provide approximately $145 million for the US-95 Northwest Corridor in Fiscal Year 2011, approximately $4 million in Fiscal Year 2012 and approximately $230 million during Fiscal Years 2015-2030 for a grand total of $379 million.

RFCD/RTC

The Regional Flood Control District/Regional Transportation Commission bonding authority provides some funds for highway improvements. This source is expected to provide $7 million for the US-95 Northwest Corridor in Fiscal Year 2008.

Question 10 Funding

A second funding initiative for transportation projects in Southern Nevada was approved in 2002. Question 10 included a number of funding sources for transportation. They

include: an increase on residential and non-residential development, a jet aviation fuel tax increase, redirection of existing capital projects tax levy and a sales tax increase. The combined Question 10 revenues provide approximately $61 million annually divided among five programs; namely, high speed lane miles, beltway, project implementation and bonding, intermodal and long-term projects.

Question 10 Beltway Program is expected to provide approximately $216.7 million for the US-95 Northwest Corridor in Fiscal Year 2011.

Question 10 High Speed Lane Miles Program is expected to provide approximately $4.2 million for the US-95 Northwest Corridor in Fiscal Year 2009 and approximately $15 million in Fiscal Year 2010 for a total of $19.2 million.

The grand total funding expected from Question 10 is $235.9 million.

RTC Gas Tax

As authorized in NRS 373, in Clark County, there is 9 cents per gallon in gas tax revenue that is collected by the State of Nevada and administered by the local Regional Transportation Commission. This generates approximately $70 million per year for roadway overlays, reconstruction and new construction. This source is expected to provide approximately $17 million for the US-95 Northwest Corridor in Fiscal Year 2009, approximately $5.8 million in Fiscal Year 2010 and approximately $2.9 million in Fiscal Year 2011 for a grand total of $25.7 million.

Property Developer Participation (PDP)

Local private funds can be a significant source for improving and constructing secondary roads. From the history of this source, local governments expect approximately $30 million annually. Since there is a strong positive correlation between roadways and land use development, it is not surprising that private developers would financially participate in certain roadway improvements. This source is expected to provide $18.5 million for the US-95 Northwest Corridor in Fiscal Years 2015-2030 through a land development project, Kyle Canyon Gateway Project. An agreement will be needed to secure this funding source.

SECTION 4 - CASH FLOW

NDOT, with the support of federal and local funding, expects to have sufficient revenues available to complete the US-95 Northwest Corridor; however, adjustments to the State Transportation Improvement Program will need to be made in order to allocate the correct amount to each aspect of the project. See exhibits 13 through 18 for project cash flow.

Exhibit 13 – Phase 1 Cash Flow

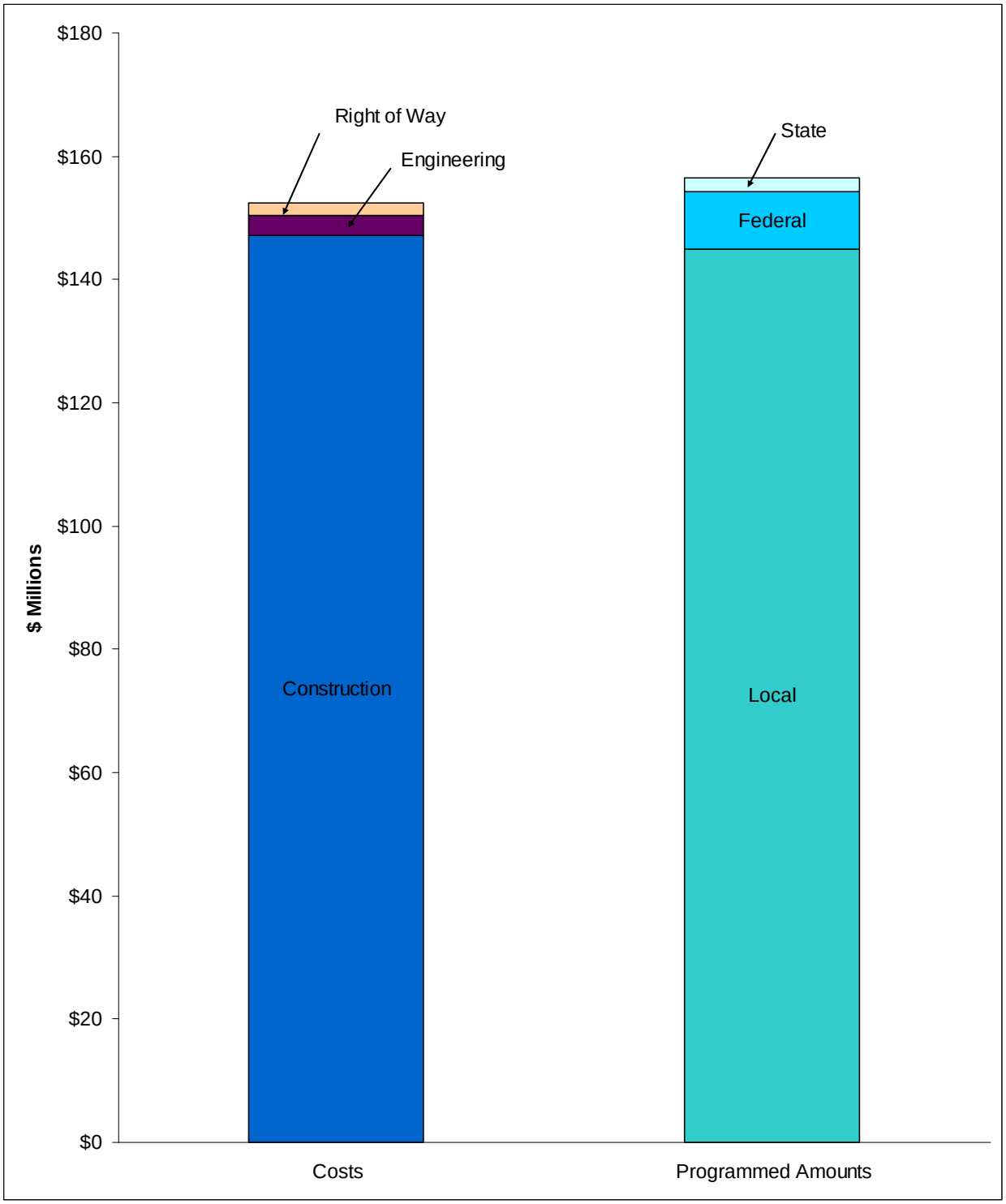


Exhibit 14 – Phase 2 Cash Flow

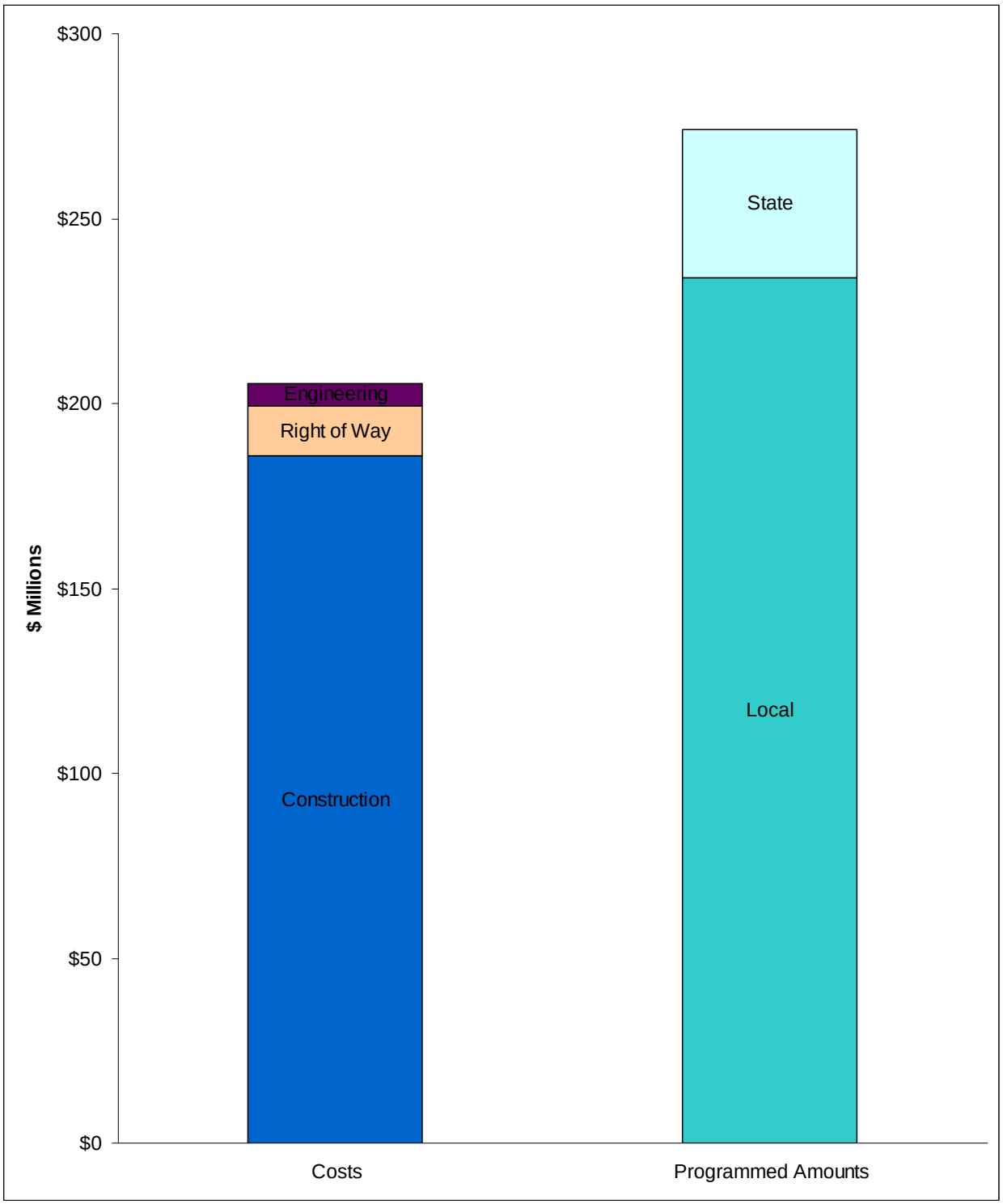


Exhibit 15 – Phase 3 Cash Flow

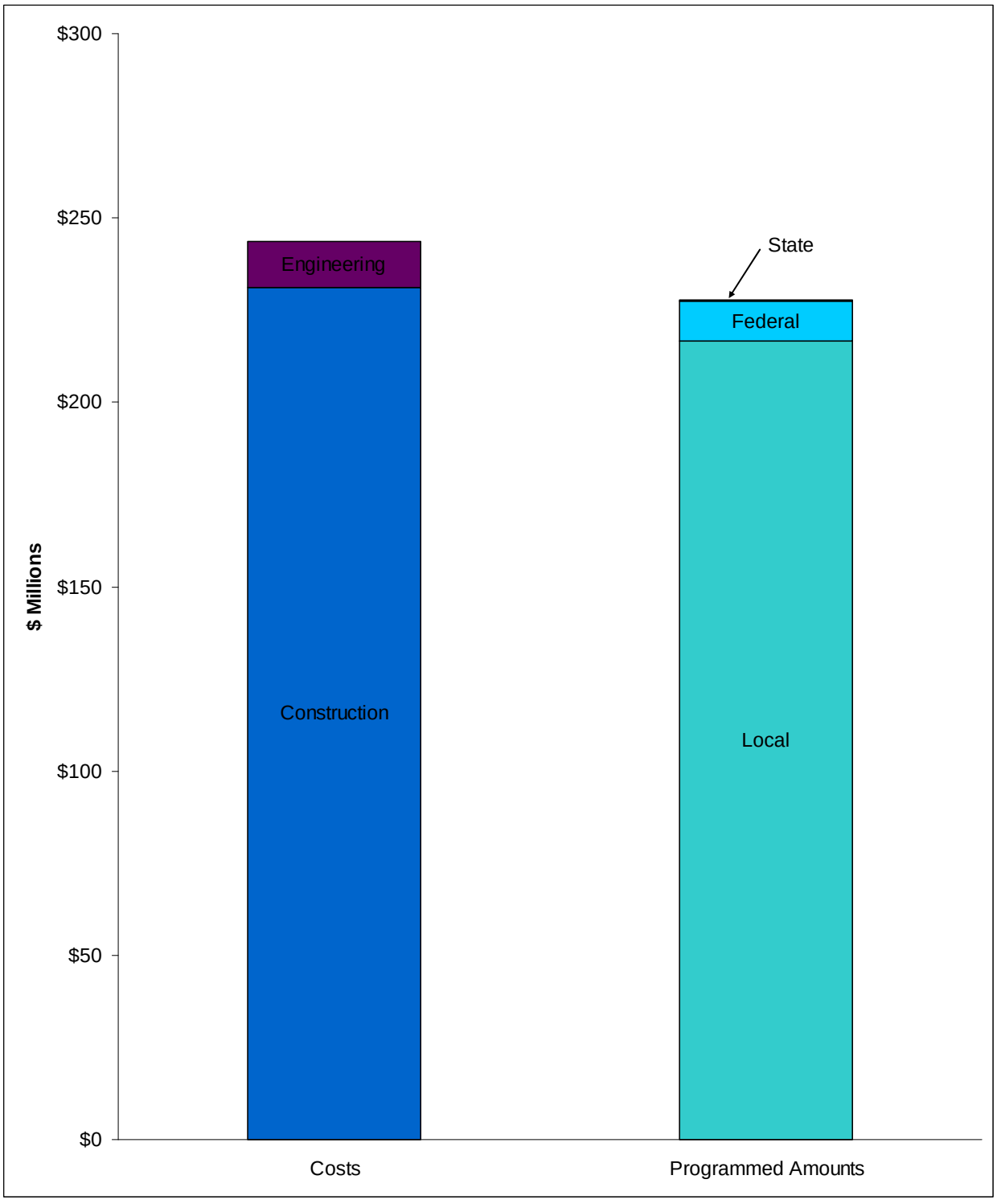


Exhibit 16 – Phase 4 Cash Flow

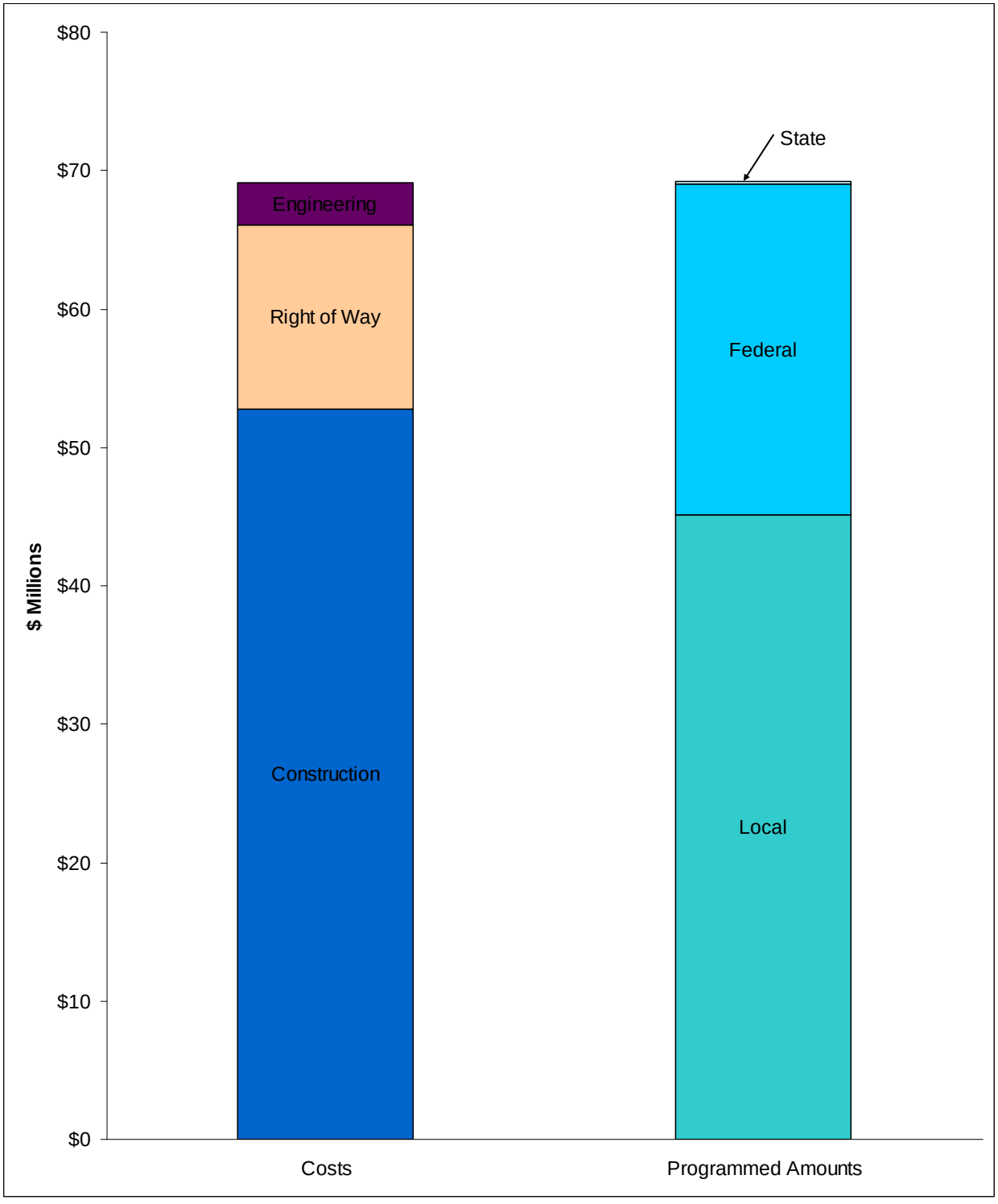


Exhibit 17 – Phase 5 Cash Flow

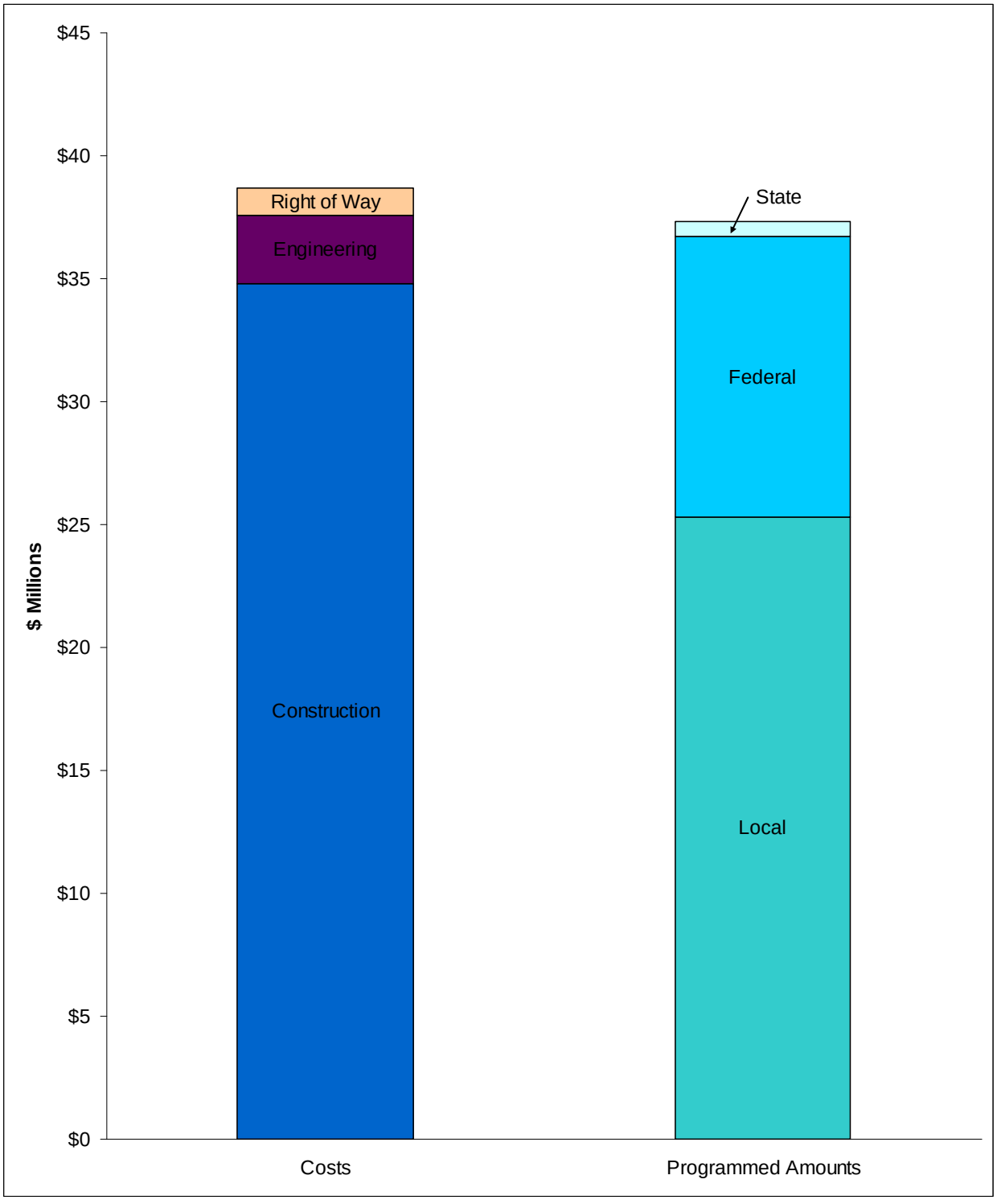
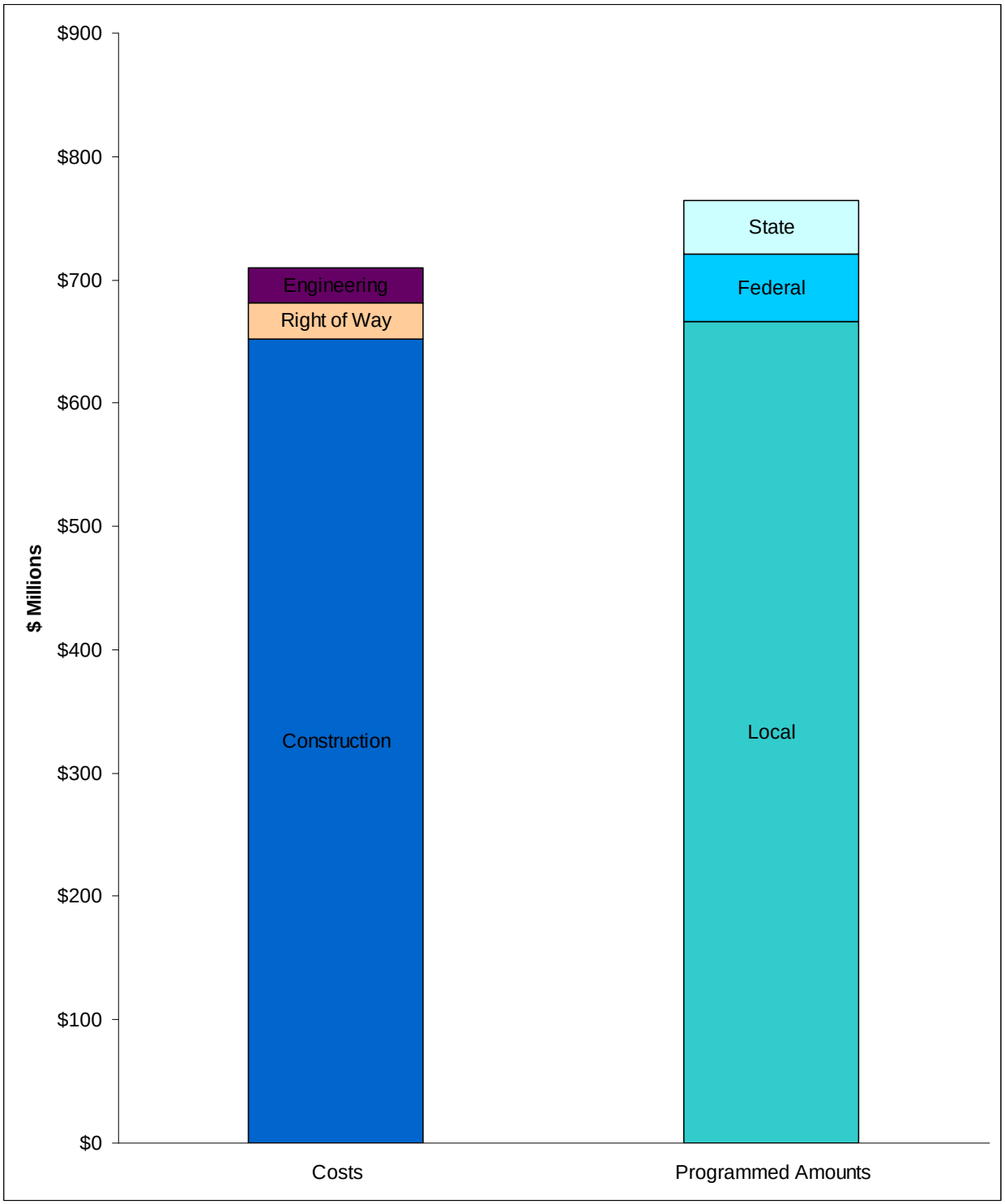


Exhibit 18 – Total Project Cash Flow



SECTION 5 - RISK IDENTIFICATION AND MITIGATION FACTORS

A Cost Estimate Review was conducted by the Federal Highway Administration in November 2008. The Cost Estimate Review validated the team's cost estimate by verifying the accuracy and reasonableness of the total cost estimate and schedule. During the Cost Estimate Review, the risks and opportunities were also developed, and the Project Team selected probability curves that best modeled the risk and opportunities. Probability ranges were developed for the cost estimate that represents the Project's current state of development. The Cost Estimate Review identified the following sensitivities impacting the estimates: years of escalation, roadway embankment, market conditions, escalation rate, construction engineering, contingency, market conditions, years of escalation, number of years and escalation rate. An executive summary for the Final Report can be found in the Project Management Plan.

To further identify and minimize risk to the cost estimate, both Risk Assessment analysis as well as Value Analysis will be conducted as final design progresses. The Risk Assessment process is a dynamic process that reviews initial cost estimates, schedule, and risk associated with these items. As part of the workshop, project risks will be identified and the potential for these risks to affect cost and schedule will be quantified. Based on these risks a project budget and overall schedule will be identified based on a 70% chance of the project meeting the schedule and budget.

The Risk Assessment for Phase 1 was completed in February 2009, and an executive summary for the report is included in the Project Management Plan.

The Value Analysis for Phase 1 was completed in December 2007, and an executive summary for the report and approval memo is included in the Project Management Plan.

Major Assumptions

Federal Funds

The major assumption for federal funding is a constant federal aid formula for funding available to Nevada at SAFETEA-LU levels. The project is scheduled for completion beyond the current SAFETEA-LU authorization; consequently, another assumption is that additional authorizations will at least provide a similar level of federal funding. This would mean that approximately $225 million per year in federal highway funding will continue through Federal Fiscal Year 2015.

State Funds

The major assumption is the current level of state funds from fuel taxes will be maintained through Fiscal Year 2015. There will be some fluctuation caused by variations in fuel sales and especially from a reduction in vehicle-miles of travel. Overall, the changes are assumed to be minimal. This would mean that Nevada State fuel taxes will provide approximately $300 million annually to the State Highway Fund through Fiscal Year 2015.

Local Funds

The major assumption is the level of local funding programs will continue much the same as at present. As discussed, a new source at the local level is Las Vegas Convention and Visitors Authority (LVCVA) bonding authority that was approved in Assembly Bill 595 during the 2007 legislature. This will provide up to $300 million for highway improvement in the near future. Additionally, this bill will add another revenue stream in Fiscal Year 2009 to support roadway improvement. This source in Section 47 will come from local property taxes.

Local funding, for Phase 4 Horse Drive Interchange, has been dedicated and cannot be used elsewhere.

Major Risks

Funding for this project is under review at all levels of government – federal, state and local. While most of the financial commitments for the project have been approved, significant sources of funding have not been finalized.

Federal Funds

Currently, the Federal Highway Trust Fund will have more than a $3 billion shortfall for Federal Fiscal Year 2009. In Federal Fiscal Year 2010, the shortfall will increase to approximately 50% of the total authorization. It is expected that Congress will keep the trust fund solvent, but there is no guarantee. Additional pressure is added due to the rapid increase in fuel prices that will reduce consumption and, subsequently, revenue. Another revenue problem is the increased use of ethanol which, at the federal level, is taxed at a lower rate then conventional gasoline. Finally, the federal formulas that allocate funds to the states could be revised and cause Nevada to lose some federal funds.

If funding stipulations are not met or completed by the sunset date, the funding could be re-disbursed.

State Funds

The state fuel tax revenue has shown signs of declining with increased fuel costs; however, there should be sufficient state funds to match the federal funds programmed for the project.

Local Funds

Some of the local funds are a direct function of fuel tax, which is proportional to the amount of travel. As economies decline, other revenue sources will decline as well. With the 2007 Assembly Bill 595 diverting significant local property taxes to the State Highway Fund, the local governments might request a change in the current law during the 2009 Legislative session to at least reduce the diversion. This change in the current diversion would reduce the level of roadway funding.

If funding stipulations are not met or completed by the sunset date, the funds could expire.

Mitigation

There are several mitigation actions that will be undertaken to deal with the previously discussed items. They are:

1. A Value Analysis will be conducted for each phase of the project.
2. Staging the construction for individual phases will be considered in order to postpone some of the significant costs. For example, construct bridges in Fiscal Year 2009 and Fiscal Year 2010 and widen lanes in Fiscal Year 2011.
3. Revenue increases may be requested in future Legislative sessions.
4. For Phase 4, Horse Drive Interchange, local funds may be used if federal funding is not available.
5. For Phase 4, Horse Drive Interchange, time extensions could be pursued for funding beyond sunset years.
6. NDOT has submitted an enabling legislation request to authorize the limited use of tolls.

SECTION 6 - COST AND REVENUE HISTORY

This Section will be added with annual updates to the Financial Plan.

SECTION 7 - COST AND REVENUE TRENDS

This Section will be added with annual updates to the Financial Plan.

SECTION 8 –SUMMARY OF SIGNIFICANT COST REDUCTIONS

This Section will be added with annual updates to the Financial Plan.

SECTION 9 – SUMMARY OF SIGNIFICANT COST INCREASES

This Section will be added with annual updates to the Financial Plan.

NDOT

Project # 201 **Location:** US 95 South **From:** CA State Line **To:** SR 163 Laughlin Hwy.
Description: Widen to a 4-lane divided highway **Total Scheduled:** **$5,000,000**

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
NDOT State Gas Tax	$0	$5,000,000	$0	$0	$0	$0	$0	$0

Project # 256 **Location:** US-95 North **From:** SR 578 Washington Av. **To:** Ann Rd.
Description: US-95 North Package 1: Widen from 6 to 8 lanes, to include HOV lanes add auxiliary lanes. Braid both the northbound and southbound ramps at the Rancho/Ann Rd. interchange. (PE, RW, Const.) **Total Scheduled:** **$156,463,332**

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
AB 595 Bonded	$0	$0	$145,000,000	$0	$0	$0	$0	$0
SAFETEA-LU High Priority Projects	$11,463,332	$0	$0	$0	$0	$0	$0	$0

Project # 257 **Location:** US-95 North **From:** Ann Rd. **To:** SR.157 Kyle Canyon Rd.
Description: US-95 North Package 2: Ann to Centennial: Widen from 6 to 8 lanes. Add auxiliary lanes. Centennial to Durango: Widen from 4 to 8 lanes. Durango to Kyle Canyon: Widen from 4 to 6 lanes. (PE.) **Total Scheduled:** **$4,000,000**

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
AB 595 Bonded	$0	$0	$0	$4,000,000	$0	$0	$0	$0

Project # 239 **Location:** Warm Springs Rd. **From:** Dean Martin Drive **To:** SR.604 Las Vegas Blvd. South
Description: SR-160 Phase 3: Construct a new 6-lane roadway with sidewalk and bicycle facilities and a grade separation over I-15 **Total Scheduled:** **$14,000,000**

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
NDOT State Gas Tax	$0	$7,000,000	$0	$0	$0	$0	$0	$0
STP Statewide	$0	$7,000,000	$0	$0	$0	$0	$0	$0
Total for NDOT	**$436,427,693**	**$64,860,000**	**$271,610,000**	**$27,600,000**	**$585,972,800**	**$362,500,000**	**$456,500,000**	**$6,094,843,400**

NDOT

Project # 197 **Location:** US 93/95 **From:** US 93/95 Jct. **To:** Foothills Grade Separation
Description: Boulder City Corridor Phase 1: Construct a new 4-lane freeway **Total Scheduled:** $230,000,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
NDOT Bonded Funds	$0	$0	$0	$0	$0	$230,000,000	$0	$0

Project # 4139 **Location:** US 93/95 **From:** US 93/95 Jct. **To:** Foothills Grade Separation
Description: Boulder City Corridor Phase 1: PE and right-of-way for the construction of a new freeway **Total Scheduled:** $6,992,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
FY04 Appropriations Act, S.115	$6,000,000	$0	$0	$0	$0	$0	$0	$0
Public Lands Highways	$992,000	$0	$0	$0	$0	$0	$0	$0

Project # 4019 **Location:** US 95 North **From:** Martin Luther King Boulevard **To:** Rainbow Interchange
Description: Landscaping **Total Scheduled:** $10,000,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
NDOT Bonded Funds	$10,000,000	$0	$0	$0	$0	$0	$0	$0

Project # 4148 **Location:** US 95 North (Package 2) **From:** Ann Rd. **To:** Kyle Canyon Rd.
Description: Ann to Centennial: Widen from 6 to 8 lanes. Add auxiliary lanes. Centennial to Durango: Widen from 4 to 8 lanes. Durango to Kyle Canyon: Widen from 4 to 6 lanes. (PE, RW, Const.) **Total Scheduled:** $270,000,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
AB 595 Bonded	$0	$0	$0	$0	$0	$0	$0	$230,000,000
NDOT State Gas Tax	$0	$0	$0	$0	$0	$0	$0	$40,000,000

Project # 4030 **Location:** US 95 Sierra Club Lawsuit Settlement Agreement **From:** **To:**
Description: Nationwide MSAT Study (PE) **Total Scheduled:** $700,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
National Highway System	$700,000	$0	$0	$0	$0	$0	$0	$0

Clark County

Project # 509 **Location:** CC-215 Northern Beltway **From:** @ I-15 **To:**
Description: Upgrade to system-to-system interchange and widen to 6 lanes PHASE 3 **Total Scheduled:** $118,721,143

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Clark County Beltway Program	$0	$0	$107,600,000	$0	$0	$0	$0	$0
SAFETEA-LU High Priority Projects	$0	$11,121,143	$0	$0	$0	$0	$0	$0

Project # 926 **Location:** CC-215 Northern Beltway @ US.95 **From:** Hualapai Way **To:** Tenaya Way
Description: Upgrade to system-to-systsem interchange and widen to 6 lanes **Total Scheduled:** $228,009,643

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Clark County Beltway Program	$0	$0	$216,740,000	$0	$0	$0	$0	$0
FY06 Appropriations Act, S.112	$148,500	$0	$0	$0	$0	$0	$0	$0
SAFETEA-LU High Priority Projects	$11,121,143	$0	$0	$0	$0	$0	$0	$0

Project # 504 **Location:** CC-215 Western Beltway **From:** Alta Dr **To:** north of Summerlin Pkwy
Description: Construct interchanges at Far Hills Ave and Summerlin Pkwy and widen to 6 lanes from Charleston Blvd to Summerlin Pkwy. **Total Scheduled:** $127,800,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Clark County Beltway Program	$127,800,000	$0	$0	$0	$0	$0	$0	$0

Project # 510 **Location:** CC-215 Western Beltway **From:** Craig Rd. **To:** Hualapai Way (North)
Description: Upgrade to 6-lane freeway with interchanges at Lone Mountain Rd and Ann Rd and an overpass at Centennial Pkwy. **Total Scheduled:** $134,300,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Clark County Beltway Program	$0	$134,300,000	$0	$0	$0	$0	$0	$0

Project # 2709 **Location:** Durango Dr. **From:** CC-215 Southern Beltway **To:** Desert Inn Rd.
Description: Signal interconnects and timing infrastructure **Total Scheduled:** $1,365,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
CMAQ	$700,000	$665,000	$0	$0	$0	$0	$0	$0

Las Vegas

Project # 740 **Location:** Bonneville Ave. / Clark Ave. Couplet **From:** Main St. **To:** Charleston Blvd.
Description: Convert to one-way couplet, 3 lanes in each direction; add landscaping between Casino Center Dr and Las Vegas Blvd **Total Scheduled:** $13,114,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
RTC Gas Tax	$6,900,000	$5,564,000	$0	$0	$0	$0	$0	$0
STP Enhancements	$650,000	$0	$0	$0	$0	$0	$0	$0

Project # 1561 **Location:** City of Las Vegas **From:** Union Park **To:** Main St
Description: Construct pedestrian overbridge across UPRR **Total Scheduled:** $3,500,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
FY04 Appropriations Act, S.115	$500,000	$0	$0	$0	$0	$0	$0	$0
Local Funds	$3,000,000	$0	$0	$0	$0	$0	$0	$0

Project # 2747 **Location:** Craig Rd **From:** Tenaya Way **To:** Decatur Blvd
Description: ITS and signal infrastructure improvements **Total Scheduled:** $511,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Q10 Traffic Signals & ITS Programs	$511,000	$0	$0	$0	$0	$0	$0	$0

Project # 4242 **Location:** Elkhorn Rd. **From:** at US 95 **To:**
Description: Construct HOV direct connect ramps **Total Scheduled:** $32,666,600

PHASE 4

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
CMAQ	$0	$0	$0	$0	$0	$18,666,600	$0	$0
STP Clark County	$0	$0	$0	$0	$0	$14,000,000	$0	$0

Project # 129 **Location:** Horse Dr. @ US-95 **From:** Grand Canyon Dr. **To:** Fort Apache Rd.
Description: Construct 6-lane overpass with an interchange at US.95 **Total Scheduled:** $42,345,268

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Q10 High Speed Lane Miles Program	$4,280,000	$15,000,000	$0	$0	$0	$0	$0	$0
RTC Gas Tax - Area-Wide Program	$16,043,000	$2,916,000	$0	$0	$0	$0	$0	$0
SAFETEA-LU High Priority Projects	$4,106,268	$0	$0	$0	$0	$0	$0	$0

PHASE 5

Appendix 1, Table 2: Regional Transportation Plan FY 2009-2030 : Projects by Sponsoring Entity

Las Vegas

Project # 4087 **Location:** Kyle Canyon Rd. **From:** at US-95 **To:**
Description: Construct 4 lane interchange/overpass at Kyle Canyon Rd and US95 **Total Scheduled:** $30,553,700

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Private Developers	$0	$0	$0	$0	$0	$18,553,700	$0	$0
STP Clark County	$0	$0	$0	$0	$0	$12,000,000	$0	$0

Project # 4267 **Location:** Kyle Canyon Rd. **From:** at US.95 **To:**
Description: PE and RoW for interchange at Kyle Canyon Rd and US95 **Total Scheduled:** $6,854,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
RTC Gas Tax	$1,000,000	$2,927,000	$2,927,000	$0	$0	$0	$0	$0

Project # 4249 **Location:** Oakey/Wyoming **From:** I-15 **To:** Main St.
Description: Construct a grade seperation at Oakey/Wyoming (PE, RW, Const.) **Total Scheduled:** $78,399,900

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
Q10 Extended	$0	$0	$0	$0	$0	$58,399,900	$0	$0
STP Clark County	$0	$0	$0	$0	$0	$20,000,000	$0	$0

Project # 1578 **Location:** Rainbow Blvd. **From:** Desert Inn Rd. **To:** US-95
Description: Intersection improvements at Desert Inn Rd, Oakey Blvd, Charleston Blvd and Alta Dr. **Total Scheduled:** $7,350,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
CMAQ	$2,600,000	$900,000	$0	$0	$0	$0	$0	$0
Q10 Bus Turnout Program	$1,500,000	$0	$0	$0	$0	$0	$0	$0
Q10 High Speed Lane Miles Program	$200,000	$2,150,000	$0	$0	$0	$0	$0	$0

Project # 1579 **Location:** Rainbow Blvd. **From:** at Sahara Ave **To:**
Description: Intersection improvements **Total Scheduled:** $5,300,000

Fund Sources	FY2009	FY2010	FY2011	FY2012	FY2013-15	FY2016-20	FY2021-25	FY2026-30
CMAQ	$0	$3,100,000	$0	$0	$0	$0	$0	$0
Q10 High Speed Lane Miles Program	$0	$800,000	$1,400,000	$0	$0	$0	$0	$0

Appendix B - Project Status and Summary Templates

US 95 Northwest – Phase 1
Rainbow Boulevard (SR 595) to Ann Road

Project Sponsor: NDOT
Senior Project Manager: Jenica K. Finnerty, P.E.
(775) 888-7321

Project Description:

- This is the first phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Project length: 6.02 miles

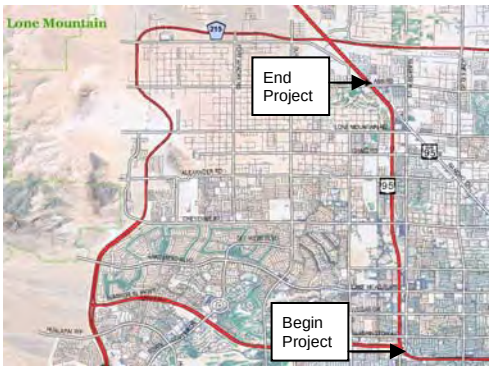
Schedule:

Planning:
Complete

Environmental Clearance:
Complete

Final Design:
2008-2009

Construction:
TBD



Project Cost Range (Final Design Phase Estimate):

Engineering: $2 - $4 million
Right-of-Way: $2 - $3 million
Construction: $133 – $166 million

Total Project Cost: $137 – $173 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope – No change
- Schedule – No change
- Cost – No change

Project Risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope
- Complex right of way and utilities issues may impact schedule and cost
- Potential lawsuit may increase costs

Financial Fine Points (Key Assumptions):

- Total funding Expended for Phase 1: $795,000
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 M
- Inflation escalation (4%) to midpoint of Construction in 2012
- Funding source:
  - $9 million Federal available 2009
  - $2 million State available 2009
  - $145 million AB 595 available 2011

% Design Complete	0	50	100	January 2009
% ROW Complete	0	50	100	

US 95 Northwest – Phase 2
Ann Road to Kyle Canyon Road (SR 157)

Project Sponsor: NDOT
Senior Project Manager: Jenica K. Finnerty, P.E.
(775) 888-7321

Project Description:

- This is the second phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Project length: 5.55 miles

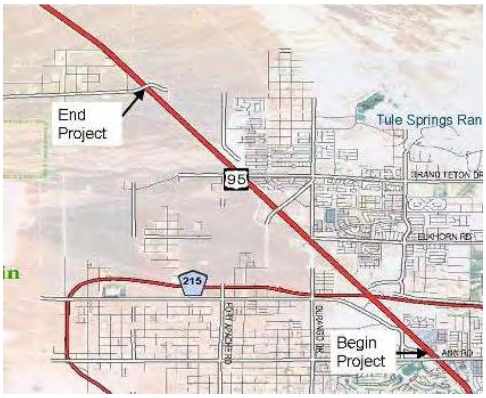
Schedule:

Planning:
Complete

Environmental Clearance:
Complete

Final Design:
Start 2009 - 2011

Construction:
TBD



Project Cost Range (Environmental Phase Estimates):

Engineering: $5 – $6 million
Right-of-Way: $12 – $14 million
Construction: $162 - $190 million

Total Project Cost: $179 – $210 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope – No change
- Schedule – No change
- Cost – No change

Project Risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope
- Complex right of way and utilities issues may impact schedule and cost

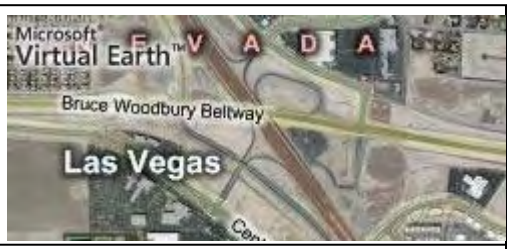
Financial Fine Points (Key Assumptions):

- Total funding Expended for Phase 2: $0.0 (Design phase not yet started)
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 M
- Inflation escalation (4%) to midpoint of Construction in 2027
- Funding source:
  - $4 M State available 2012
  - $40 M State available 2026
  - $230 M AB 595 available 2026

% Design Complete	0 50 100	January 2009	NEVADA DOT
% ROW Complete	0 50 100		

US 95 Northwest – Phase 3
Clark County 215 Interchange

Project Sponsor: NDOT and Clark County
Senior Project Manager: Jenica K. Finnerty, P.E.
(775) 888-7321



Project Description:

- This is the third phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Construct new interchange at CC 215

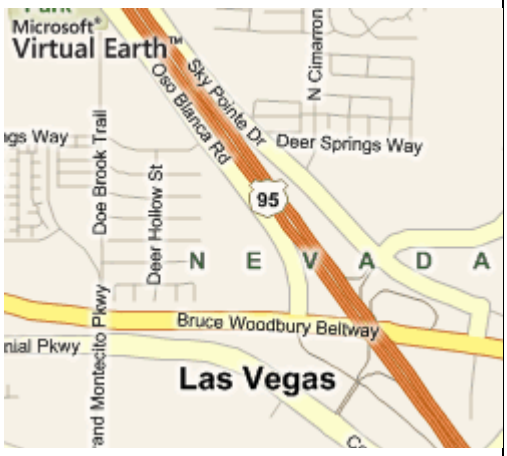
Schedule:

Planning:
Complete

Environmental Clearance:
Complete

Final Design:
Start 2009 - 2011

Construction:
TBD



Project Cost Range (Environmental Phase Estimates):

Engineering: $10 – $16 million
Right-of-Way: No cost
Construction: $210 - $273 million

Total Project Cost: $220 – $289 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope – No change
- Schedule – No change
- Cost – No change

Project Risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope

Financial Fine Points (Key Assumptions):

- Total funding Expended for Phase 3: $0.0 (Design phase not started)
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 M
- Inflation escalation (4%) to midpoint of Construction in 2012
- Funding source:
  - $10.6 million Federal available 2009
  - $0.5 million State available 2009
  - $244 million Local available 2011

% Design Complete	0 50 100	January 2009	NEVADA DOT
% ROW Complete	0 50 100		

US 95 Northwest – Phase 4
Horse Interchange

Project Sponsor: City of Las Vegas and NDOT
City Project Manager: Randy McConnell, P.E.
NDOT Project Manager: Bill Glaser, P.E.
(775) 888-7321

Project Description:

- This is the forth phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Construct a new interchange on US 95 at Horse Drive to increase capacity and improve safety in response to recent and planned development

Schedule:

Planning:
complete

Environmental Clearance:
Complete

Final Design:
Complete

Construction:
2009-2010

Project Cost Range (Final Design Phase Estimates):

Engineering: $1– $3 million
Right-of-Way: $11.3 million
Construction: $60 - $65 million

Total Project Cost: $72 – $87 million

Project Benefits:

- Increase capacity
- Improve safety
- Meet stakeholder/public expectations
- Reduce trip times
- Improve driver comfort
- Improve access

What's Changed Since Last Update?

- Scope – No change.
- Schedule – Project advertised and bids received. Second and third low bidders protesting award to low bidder. City of Las Vegas discussing with legal.
- Cost – No change.

Project Risks:

- Complex construction in a dense urban residential area

Financial Fine Points (Key Assumptions):

- Total funding expended by City of Las Vegas for phase 4: $14 million (11.3 million ROW, .3 million in-house engineering, Consultant Engineering 2.4 million)
- Total funding Expended for US 95 Northwest environmental studies (all phases): $5 M
- $4.1M Federal SAFTEA-LU Funds
- $21M RTC Clark County STP
- $48M City of Las Vegas

% Design Complete	0 50 100	January 2009
% ROW Complete	0 50 100	

US 95 Northwest – Phase 5
Kyle Canyon Road Interchange

Project Sponsor: City of Las Vegas and NDOT
Senior Project Manager: Jenica K. Finnerty, P.E.
(775) 888-7321

Project Description:

- This is the fifth phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Construct new interchange at Kyle Canyon Road

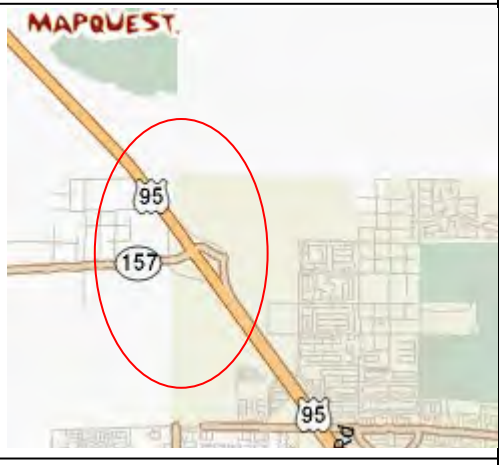
Schedule:

Planning:
Complete

Environmental Clearance:
Complete

Final Design:
Start 2011 - 2013

Construction:
TBD



Project Cost Range (Environmental Phase Estimates):

Engineering: $3 – $4 million
Right-of-Way: $1 - $2 million
Construction: $30 - $43 million

Total Project Cost: $34 – $49 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope – No change
- Schedule – No change
- Cost – No change

Project Risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope

Financial Fine Points (Key Assumptions):

- Total funding Expended for Phase 5: $0.0 (Design phase not started)
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 M
- Inflation escalation (4%) to midpoint of Construction in 2017
- Funding source:
  - $15 million Federal available 2016
  - $0.7 million State available 2016
  - $21 million Local available 2016

% Design Complete	0 50 100	January 2009
% ROW Complete	0 50 100	

Monthly Project Status Report

Project Name: US 95 NW Phase 1
EA, WO or ID EA 73451
Project Manager: Jenica Finnerty Current Date: 2/13/2009

Executive Summary:

Potential Stimulus Project. Project was delayed by 2 months due to inability to meet the deadline. New delivery date (Advertise) is mid-June. Constructability review to commence in February and continue through delivery.

Identify and describe your progress and reason behind *changes* in the following areas since the last update. Capture numerical and date changes to schedule, cost and expenditures on page 2 of this form.

Scope:

No change.

Schedule:

2 months delay. Team was unable to meet the deadline. The team will continue to work OT to meet the new date.

Funding source, budget and costs:

Federal funding as well as AB595 funding has been identified. AB595 funds are not available until FY2011. Total estimate is $158.6M (FHWA 70%).

Quality:

Final CEVP report was received. Following any comments, the report will be published and distributed.

Managing Risks (identify new risks and your plan to manage them):

1 potential lawsuit: Ernie Becker for hydraulic concerns.

Project Management Plan:

In progress.

Other:

Cooperative agreement needed with CLV. Sami sent out draft copy to CLV and received comments. Agreement will need to be on City Counsel agenda. Need timely turnaround of this from Agreement Services and CLV.

Monthly Project Status Report

Project Schedule			
Phase	**Last Month (date)**	**This Month (date)**	**% Complete**
Planning			100
Environmental		May 2008	100
Final Design	April 2009	June 2009	95
Right-of-way	April 2009	June 2009	95
Construction	FY 2010	FY 2012	0

Project Schedule				
Major Milestones/Deliverables	**Last Month**	**This Month**	**Date Due**	**% Complete**
Traffic Management Plan	☐	☐	June 2009	25
90% Submittal	☐	☐	N/A	0
Constructability Review	☐	☐	June 2009	0
QA Submittal	☐	☐	April 2009	95

Project Cost Estimates				
Project Phase	**Last Month**		**This Month**	
	Low	**High**	**Low**	**High**
Planning				
Environmental				
Final Design	1.8M	3.5M	1.8M	3.5M
Right-of-Way	1.9M	2.7M	1.9M	2.7M
Construction	127.7M	159.9M	127.7M	160M
Total	131.4M	166.1M	131.4M	166.2M

Project Expenditures				
Project Phase	**Last Month**		**This Month**	
	Internal	**Consultant**	**Internal**	**Consultant**
Planning				
Environmental				
Final Design	882K	293K	1.1M	307K
Right-of-Way	18K		20.9K	
Construction				
Total	900K	293K	1.1M	307K

Project Funding Source					
List Source	State	Federal	Bond	Other	Other
Planning					
Environmental					
Final Design		3.3M			
Right-of-Way		2M			
Construction	2.3M	3.9M	145M		
Total	2.3M	9.2M	145M		

Monthly Project Status Report

Project Name: US 95 NW Phase 2
EA, WO or ID WO 20167000
Project Manager: Jenica Finnerty Current Date: 2/13/2009

Executive Summary:

Project is in good shape and is currently in the scoping process.

Identify and describe your progress and reason behind *changes* in the following areas since the last update. Capture numerical and date changes to schedule, cost and expenditures on page 2 of this form.

Scope:

Project Scoping Report will identify issues.

Schedule:

DRAFT Project Scoping Report is now available. Contact Kent Steele for a copy.

Funding source, budget and costs:

Funding has not yet been identified. Total estimate is $194.6M (FHWA 70%).

Quality:

Managing Risks (identify new risks and your plan to manage them):

Project Management Plan:

In progress.

Other:

A Re-Evaluation to the Environmental Assessment may be required if extend HOV lanes to Kyle Canyon Road.

Monthly Project Status Report

Project Schedule			
Phase	**Last Month (date)**	**This Month (date)**	**% Complete**
Planning			100
Environmental		May 2008	100
Final Design	2009	2013	30
Right-of-way	2009	2013	0
Construction	FY 2014	FY 2016	0

Project Schedule				
Major Milestones/Deliverables	**Last Month**	**This Month**	**Date Due**	**% Complete**
PDFS	☐	☐		0
Value Analysis	☐	☐		0
60% Submittal	☐	☐		0
	☐	☐		

Project Cost Estimates				
Project Phase	**Last Month**		**This Month**	
	Low	**High**	**Low**	**High**
Planning				
Environmental				
Final Design	3.4M	3.8M	3.4M	3.8M
Right-of-Way	7.3M	8.6M	7.3M	8.6M
Construction	101M	118.7M	101M	118.7M
Total	111.7	131.1M	111.7M	131.1M

Project Expenditures				
Project Phase	**Last Month**		**This Month**	
	Internal	**Consultant**	**Internal**	**Consultant**
Planning				
Environmental				
Final Design				
Right-of-Way				
Construction				
Total				

Project Funding Source					
List Source	State	Federal	Bond	Other	Other
Planning					
Environmental					
Final Design	3.6M				
Right-of-Way	3.9M				
Construction	36.5M		150.6M		
Total	44M		150.6M		

Monthly Project Status Report

Project Name: US 95 NW Phase 3
EA, WO or ID WO 20167000
Project Manager: Jenica Finnerty Current Date: 2/13/2009

Executive Summary:

Project is currently in the scoping process. Amir has requested the scoping be completed earlier to determine if the work can be done In-house.

Identify and describe your progress and reason behind *changes* in the following areas since the last update. Capture numerical and date changes to schedule, cost and expenditures on page 2 of this form.

Scope:

Project Scoping Report will identify issues.

Schedule:

DRAFT Project Scoping Report will be available early 2009.

Funding source, budget and costs:

State, Federal, LVCVA and Q10 funding sources. Total estimate is $255.3M (FHWA 70%)

Quality:

Managing Risks (identify new risks and your plan to manage them):

Project Management Plan:

In progress.

Other:

Project is currently scheduled to be designed, awarded and adminstered by Clark County. NDOT would like to design the project. Waiting for Front Office and Clark County to decide.

Monthly Project Status Report

Project Schedule			
Phase	**Last Month (date)**	**This Month (date)**	**% Complete**
Planning			100
Environmental		May 2008	100
Final Design	2009	2011	30
Right-of-way	2009	2011	
Construction	FY 2011	FY 2013	0

Project Schedule				
Major Milestones/Deliverables	**Last Month**	**This Month**	**Date Due**	**% Complete**
PDFS	☐	☐		0
Value Analysis	☐	☐		0
60% Submittal	☐	☐		0
	☐	☐		

Project Cost Estimates				
Project Phase	**Last Month**		**This Month**	
	Low	**High**	**Low**	**High**
Planning				
Environmental				
Final Design		8M	9.9M	15.8M
Right-of-Way			0	0
Construction		206M	210M	272.5M
Total		214M	219.9M	288.3M

Project Expenditures				
Project Phase	**Last Month**		**This Month**	
	Internal	**Consultant**	**Internal**	**Consultant**
Planning				
Environmental				
Final Design				
Right-of-Way				
Construction				
Total				

Project Funding Source					
List Source	State	Federal	Bond	Other	Other
Planning					
Environmental					
Final Design	0.5M	10.6M		2.1M	
Right-of-Way					
Construction				242.1M	
Total	0.5M	10.6M		244.2M	

Monthly Project Status Report

Project Name: US 95 Phase 4 Horse Interchange
EA, WO or ID 73456
Project Manager: Bill Glaser Current Date: 2/7/2009

Executive Summary:

Bids were opened on December 18, 2008. Second and third low bidders are protesting award to low bidder. City of Las Vegas is discussing with legal.

Identify and describe your progress and reason behind *changes* in the following areas since the last update. Capture numerical and date changes to schedule, cost and expenditures on page 2 of this form.

Scope:

No change.

Schedule:

Open bids December 18, 2008. Award February 18, 2009.

Funding source, budget and costs:

$4.1M Federal SAFTEA-LU Funds; $21M RTC Clark County STP; $48M City of Las Vegas

Quality:

No change.

Managing Risks (identify new risks and your plan to manage them):

Need FHWA approval to award. Second and third bidders protesting award to low bidder. City of Las Vegas discussing with Legal.

Project Management Plan:

No change.

Other:

Bids were opened on December 18, 2008. Second and third low bidders are protesting award to low bidder. City of Las Vegas is discussing with legal.

Monthly Project Status Report

Project Schedule			
Phase	**Last Month (date)**	**This Month (date)**	**% Complete**
Planning			
Environmental	5/7/08	5/7/08	100
Final Design	7/29/08	7/29/08	100
Right-of-way	7/31/08	7/31/08	100
Construction	2008-2010	2008-2010	0

Project Schedule				
Major Milestones/Deliverables	**Last Month**	**This Month**	**Date Due**	**% Complete**
Environmental	☒	☐	5/7/08	100
Final Design	☒	☐	7/29/08	100
Right-of-Way	☒	☐	7/31/08	100
Finan Mgmt Programming Papers to FHWA	☒	☐	8/18/08	100

Project Cost Estimates				
Project Phase	**Last Month**		**This Month**	
	Low	**High**	**Low**	**High**
Planning				
Environmental				
Final Design	1 million	2 million	1 million	2 million
Right-of-Way	10.8 millio	10.8 millio	10.8 millio	10.8 millio
Construction	60 million	65 million	60 million	65 million
Total	61 million	73 million	61 million	73 million

Project Expenditures				
Project Phase	**Last Month**		**This Month**	
	Internal	**Consultant**	**Internal**	**Consultant**
Planning				
Environmental				
Final Design	316.36		0	
Right-of-Way	3444.54		0	
Construction				
Total				

Project Funding Source					
List Source	State	Federal	Bond	Other	Other
Planning					
Environmental					
Final Design					
Right-of-Way					10.8MCLV
Construction		4.1 mil SLU		21 M RTC	48 M CLV
Total					

Monthly Project Status Report

Project Name: US 95 NW Phase 5
EA, WO or ID
Project Manager: Jenica Finnerty Current Date: 2/13/2009

Executive Summary:

Project is currently on hold due to uncertainty of the Sheep Mountain Parkway project as well as Focus Property Group's development

Identify and describe your progress and reason behind *changes* in the following areas since the last update. Capture numerical and date changes to schedule, cost and expenditures on page 2 of this form.

Scope:

Alternative interchange configurations are currently being studied

Schedule:

GC Wallace, Consultant for City of Las Vegas, has been tasked to complete the 15% design

Funding source, budget and costs:

Federal, local and Developer funding sources. Budget is currently $42.3M (FHWA 70%).

Quality:

Managing Risks (identify new risks and your plan to manage them):

Coordination is needed with the Sheep Mountain Parkway design team to ensure spacing criteria standards are held.

Project Management Plan:

In progress.

Other:

Project is currently scheduled to be designed by the City of Las Vegas but it may be awarded and administered by NDOT.

Monthly Project Status Report

Project Schedule			
Phase	**Last Month (date)**	**This Month (date)**	**% Complete**
Planning			
Environmental		May 2008	100
Final Design	2009	2011	30
Right-of-way	2009	2011	
Construction	FY 2012	FY 2013	0

Project Schedule				
Major Milestones/Deliverables	**Last Month**	**This Month**	**Date Due**	**% Complete**
PDFS	☐	☐		0
Value Analysis	☐	☐		0
60% Submittal	☐	☐		0
	☐	☐		

Project Cost Estimates				
Project Phase	**Last Month**		**This Month**	
	Low	**High**	**Low**	**High**
Planning				
Environmental				
Final Design	2.2M	2.8M	2.2M	2.8M
Right-of-Way	0	0.4M	0.7M	1.3M
Construction	26M	37.2M	26.1M	37.2M
Total	28.2M	40.4M	29M	41.3M

Project Expenditures				
Project Phase	**Last Month**		**This Month**	
	Internal	**Consultant**	**Internal**	**Consultant**
Planning				
Environmental				
Final Design				
Right-of-Way				
Construction				
Total				

Project Funding Source					
List Source	State	Federal	Bond	Other	Other
Planning					
Environmental					
Final Design				2.6M	
Right-of-Way				0.2M	
Construction	0.7M	15.5M		18.4M	
Total	0.7M	15.5M		21.2M	

Appendix C - Risk Management Plan

Responsibilities for Managing Risk

The project manager for each Phase is responsible for managing the risk events for that phase. However, risk events encountered in each phase could inherently affect other phases as well. Therefore, the NDOT senior project manager is responsible for managing risks that affect all project phases.

Team members have a responsibility to bring forth issues that could become risk events and should notify the project manager when they identify such an issue. The project manager is the primary contact for the stakeholders and, therefore, is in the best position to coordinate risk management strategies.

Risk Assessment

Formal Risk Assessment

A formal risk assessment was conducted in July 2008 with the emphasis on Phase 1. Additional risk assessment workshops will be conducted for other phases as final design progresses. The objective of this formal risk assessment was to identify risk events that could have a major impact on the progression and completion of the project. Early identification of major risks allows the team to develop strategies for each event. Potential strategies are as follows:

- Assumption – The project assumes the risk based on an assessment of the impacts of costs, benefits, and other factors;
- Reduction – The reduction of risk through planning, analysis, and resource allocation;
- Hedging – Pursuing different but concurrent approaches with different risk exposures. Each approach should only be pursued as long as necessary (e.g. pursuing a second funding source to hedge against the possibility that the preferred funding source does not get appropriated);
- Avoidance – The risk is avoided through alternative approached to the project or aspects of the project;
- Transfer – Transfer the risk to other parties or entities that may be more qualifies to perform the task; and
- Substitution – Substitute lower risk or known project elements for higher risk or unknown elements.

As necessary, a formal risk assessment will be conducted for each project phase. A record of the progress for each risk event should be maintained in the risk matrix of

each project phase. High risk events must be communicated with the senior project manager and recorded in the project risk matrix.

As additional information is developed for each risk event, some of the issues may change, which could affect other risk events. Special attention should be given to each revision/update to determine its potential affect on other risk events. The outcome of risk mitigation could lead to changes in the scope of the project and thereby becomes a part of the change management process.

Identified Risk Events

Identified risk events are added into the risk management matrix along with the relevant issues. The issues are as follows:

- Risk Type – Technical (i.e. geotechnical, materials cost), non-technical (i.e. right-of-way costs, regulatory concerns), and political (i.e. funding, legal challenges);
- Risk Probability – How likely it is the event that creates the risk is likely to occur;
- Project Factors – Which factors of the project will be affected (i.e. design, capital costs, maintenance costs, right-of-way, etc.);
- Affected Elements – Identify the tangible elements of the project that could be affected such as roadway widths, pavement type, bridge types, and utility relocations;
- Strategy – Assign a strategy or strategies to the risk event. Strategies are noted above;
- Potential Mitigation – Identify items or actions of mitigation according to the strategies selected;
- Importance Factor – Assign an Importance factor to each risk event in order to assist the team prioritizing risk events;
- Costs – Estimate order-of-magnitude costs or savings for the risk event. A detailed cost estimate should be performed for each event;
- Time Savings/Loss – Estimate the time savings and loss for each event. This may need to be determined for several project factors such as design time, construction time, and materials procurement;
- Resources – Identify and quantify the resources necessary to take action according to the strategy. This may need to be determined in several successive phases during the course of the project (i.e. design resources and time to research options may be the only resource easily determined; the construction resources can only be identified after the outcome of the design effort); and
- Status – The status of each risk event should be updated monthly at a minimum (e.g. did a recent election eliminate a political risk? Is the design of the identified strategy 50% complete?). All status updates and comments should be dated to show the historical progression of the risk event.

Revise Scope, Schedule and Budget

Given the dynamic nature of the risk management plan, the project scope, schedule and budget will be re-evaluated periodically to develop specific analyses and strategies to better address risk events. The project manager will ensure that the project scope, schedule and budget are adjusted accordingly to reflect the change.

The project team will utilize Microsoft Project scheduler and Excel or other appropriate tools to assess and analyze the potential effects of a change on schedule and budget.

Appendix D – Phase 1 Risk Assessment Executive Summary

Executive Summary

A cost validation and risk assessment for the US 95 NW Project, Package 1 was conducted by the Nevada Department of Transportation (NDOT) and an independent assessment team. The evaluation was initially done without any constraints on the consideration of uncertainties such as funding, project initiation or other major factors controlling the basic project development. With this analysis as a reference, several additional analyses were conducted with specific set constraints on the availability of funding to initiate the construction of the project. The results presented in this report describe the cost and schedule estimate given three constrained funding scenarios. For all analyses, the objectives were to: 1) validate the cost and schedule estimates; 2) quantify uncertainty in the cost and schedule to implement each scenario; and 3) begin a process to identify critical risks and opportunities for future risk management.

The validation and risk assessment followed an approach similar to the Washington State Department of Transportation's Cost Estimate Validation Process (CEVP®), and was led by consultants who were integral to the creation and implementation of CEVP for WSDOT. The NDOT project team and a number of subject-matter experts (internal to NDOT and external consultants) from various disciplines provided the necessary information for the validation and risk assessment. The information for the assessment was gathered during a workshop in July 2008, and subsequently updated with additional cost information in the fall of 2008.

An independent review of the project cost estimate was conducted by Parsons Corporation. During the risk assessment workshop, the cost reviewer led a discussion of the project cost estimate, focusing primarily on the unit costs and quantities of the major elements of work. The estimate review included participation and input from representatives of individual technical disciplines, and resulted in some recommended changes to the cost estimate; these changes were incorporated into the project baseline cost estimate for use in the risk assessment.

Information from the cost and schedule validation fed directly into the integrated cost and schedule risk assessment. The validation results, referred to here as the "base" component of the analysis, reflect the "planned project if the project goes as planned", but still include uncertainties within the assumptions made for the estimates. The risk assessment then considered potential significant deviations from the "base", either beneficial (i.e., opportunities) or adverse (i.e., risks) to project cost and schedule. Collectively, risk and opportunity events are referred to here as the "risk" component of the analysis. The "base" and "risk" components were then combined appropriately in a probabilistic, risk-based, integrated cost and schedule model.

The analyses were conducted for 5 different funding scenarios, as follows:

1. Uncertain Funding Date
2. 2009 funding (essentially an unconstrained funding scenario)
3. Funding in FY 2010
4. Funding in FY 2011

5. Funding in FY 2012

The important results from the workshop and risk assessment model are summarized below. *Note that results in this report reflect a "snapshot" of the alternatives at the time of the workshop, and include no "credit" for future potential risk mitigation efforts (i.e., results are "unmitigated") unless otherwise noted in the Risk Register (Appendix E1). Ultimately, the base uncertainties will reduce over time as the project evolves, and the risks and opportunities will either occur or not (i.e., the probability for each will converge to either 1 or 0).*

Summary Cost and Schedule Uncertainty for the Funding Alternatives

Figures ES-1 and ES-2 provide graphical "cumulative distribution functions", or CDFs, for consideration of the total project cost in year-of-expenditure dollars (YOE $) and project completion date. These figures overlay the results for multiple funding scenarios and graphically depict the impact of funding delays on project cost and completion date.

A summary of the cost and schedule results for each of the alternatives at the 85th percentile is as follows:

Alternative	***Approximate Cost at 85th percentile (YOE, $M)***	***Approximate Completion date at 85th percentile***
Uncertain Funding	*166*	*July 2015*
FY 2009	*150*	*May 2013*
FY 2010	*154*	*October 2013*
FY 2011	*164*	*February 2014*
FY 2012	*176*	*September 2016*

The specific results for the all of the alternative funding scenarios, including cost and schedule data, and risk and opportunity rankings, are presented in Chapter 4 of this report. Details regarding the Uncertain Funding Scenario are presented in the following paragraphs of this Executive Summary.

Cost and Schedule Uncertainty for the Uncertain Funding Date Scenario

Probability distributions for ultimate *total project cost* for the uncertain funding scenario are shown in Figure ES-3 and Figure ES-4 in terms of both probability mass functions (PMFs) and cumulative distribution functions (CDFs). Figure ES-3 is in 2008 dollars, while Figure ES-4 is in Year-of-Expenditure (YOE) dollars. Figure ES-5 shows the probability distribution for the date the project is fully open to traffic. The corresponding characteristics of distributions for total project cost and schedule are presented in Table ES-1. The values in the table are presented in the form of tabular cumulative distribution functions (CDFs), which allow direct identification of particular percentiles

(e.g., 90th percentile). There is an x% chance that the actual outcome will be less than or equal to the xth percentile.

A CDF represents the cumulative probability of not exceeding a particular value (also known as a percentile or, less formally, confidence level). PMFs (the left panels of Figures ES-3 and ES-4) are useful for illustrating the most-likely value from among the range of values.

Another measure of spread and confidence is the "mid-80 percent confidence interval", which is defined by a reasonable lower bound (the 10th percentile) and a reasonable upper bound (the 90th percentile). There is an 80 percent likelihood that the total cost will fall within this range, and only a 20 percent likelihood that the total cost will fall outside this range.

The ranges shown below represent the 10th to 90th percentile range (i.e., the mid 80% confidence interval) for the uncertain funding date scenario. The results indicate that there is only a 20 percent chance that the respective value will fall outside the range shown below (based on the uncertain funding date scenario):

- Total project cost (2008 $ in millions): 111.0 to 137.0
- Total project cost (YOE $ in millions): 126.1 to 169.5
- Project Advertisement Date: November 2009 to January 2013
- Project Completion Date: July 2012 to September 2015

Other key results associated with the Uncertain Funding Date scenario include the following (see Table ES-1):

- *Inflation without cost or schedule risk* (base in YOE $ vs. base in 2008 $ for the total project: +7.4%. This value represents escalation to the mid-point of construction (assuming a mid-2009 construction start and average escalation of 4%/yr).
- *Cost risk without escalation* (90th percentile in 2008 $ vs. base in 2008 $): +13.5%. This value is typical for projects a relatively advanced design level.
- *Schedule risk* (90th percentile completion date vs. base completion date): +49 months (vs. 36 month base duration). This high number reflects the significant uncertainty in the timing of project funding.
- *Cost risk plus escalation and schedule risk* (90th percentile in YOE $ vs. base in 2008 $ for the total project): +40.4%. This number reflects the combined impact to project cost from cost and schedule risk and the corresponding escalation. This value is higher than most projects at a comparable design level; however, that is due to significant uncertainty in the timing of project funding.

Significant Risks, Opportunities, and Uncertainties for the Uncertain Funding Scenario

The probable range in cost and schedule is driven by two key components: 1) "base uncertainties", which reflect the limited information available on the current "base" plan, scope, and delivery strategy for the two alternatives, as well as, 2) risks (potential adverse project outcomes) and opportunities (potential beneficial project outcomes) which represent potential deviations from the assumed "base" alternatives. Uncertainties, risks, and opportunities were all defined in terms of likely changes to cost and duration relative to the assessed "base" alternatives.

The most significant cost and schedule risks and opportunities, in terms of impact to the 85th percentile YOE cost, are summarized below. This risk ranking approach incorporates the impact of 1) schedule delays, 2) escalation (including uncertainty in the escalation rate), 3) the timing of cost risk impacts relative to the schedule flowchart, and 4) the impact of cost risks on the "tail" of the cost distribution.

- Cost risks (approximate 85th percentile YOE cost impact, Table 4-2):
  - A delay in the timing of remaining project funding would result in additional cost escalation ($10M)
  - Legal challenges to the project may result in an additional cost ($3.8M)
  - The construction cost escalation rate might be higher than the 4% generally assumed by NDOT ($2.9 M)
  - An increase in miscellaneous change orders might be experienced ($2.4 million).

- Cost opportunities (approximate 85th percentile YOE cost impact, Table 4-3):
  - Opportunity for lower asphalt costs in the local market (-$3.0M)
  - Drainage channel modifications near Alexander (-$0.7M)
  - Reduced costs associated with viewshed impacts to the auto dealership (-$0.4M)

- Schedule risks (approximate 85th percentile schedule impact, Table 4-7):
  - A delay in the timing of remaining project funding would result in delayed project completion (21 mos.)
  - Project delays might be experienced in association with legal challenges (7.3 mos.)
  - Updates to the NEPA documentation (3.3 mos.)

No significant opportunities for schedule acceleration were identified for the Uncertain Funding scenario.

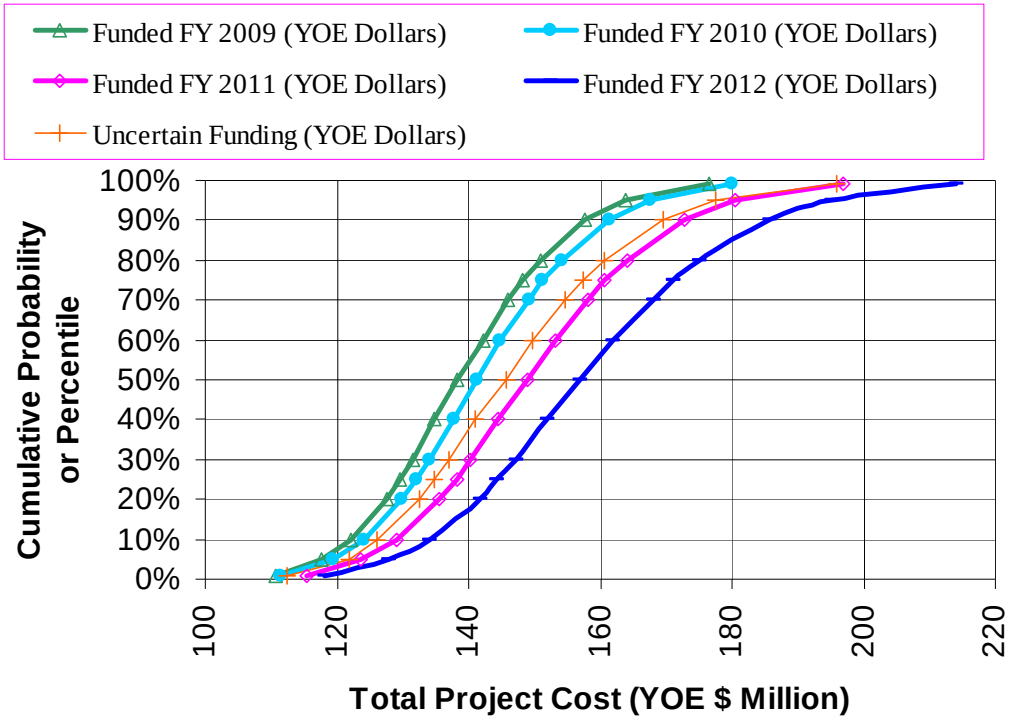


Figure ES-1. Comparison of Year-of-Expenditure Cost Distributions for Various Funding Scenarios

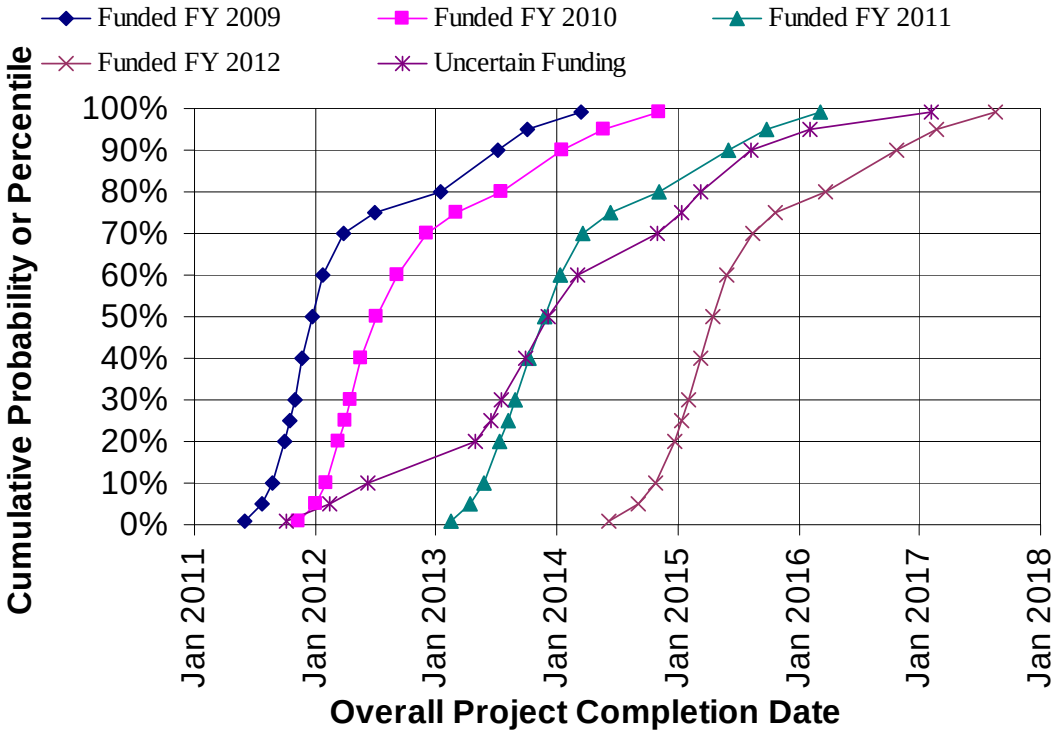


Figure ES-2. Comparison of Project Completion Date for Various Funding Scenarios

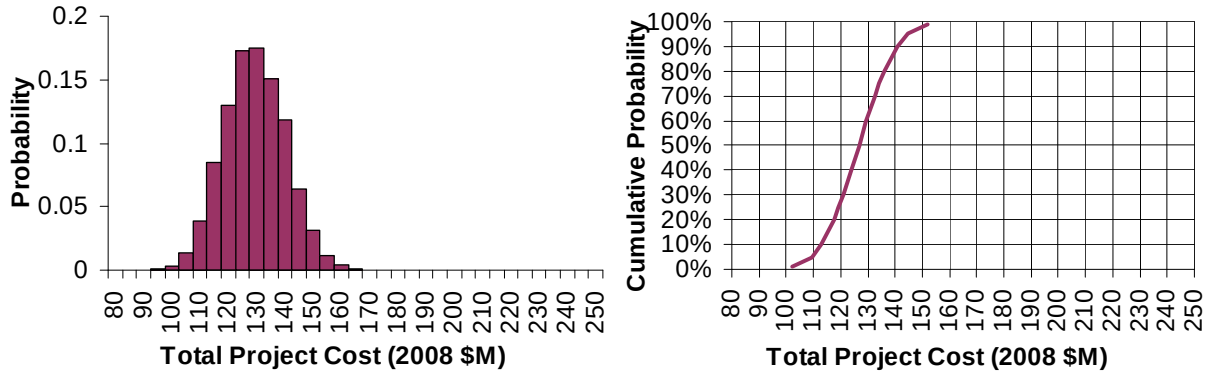


Figure ES-3. Probability Distribution for Total Project Cost in 2008 Dollars (Uncertain Funding Date Scenario), presented in two ways: a) probability mass function (PMF); b) cumulative distribution function (CDF)

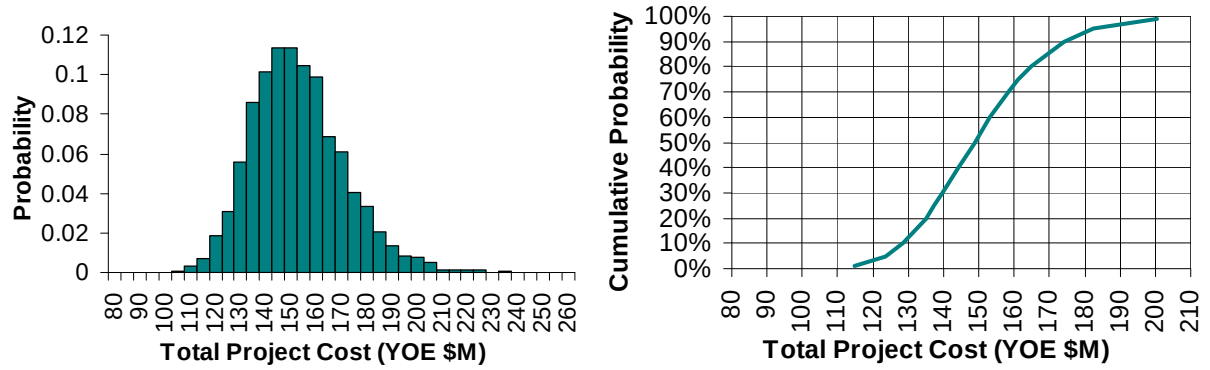


Figure ES-4. Probability Distribution for Total Project Cost in Year-of-Expenditure Dollars (Uncertain Funding Date Scenario), presented in two ways: a) probability mass function (PMF); b) cumulative distribution function (CDF)

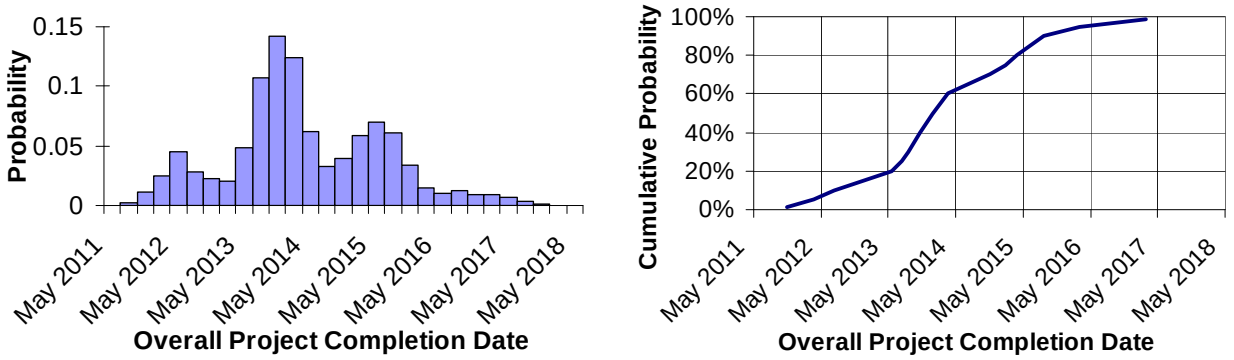


Figure ES-5. Probability Distribution for Date the Overall Project is Completed (Uncertain Funding Date Scenario), presented in two ways: a) probability mass function (PMF); b) cumulative distribution function (CDF)

Table ES-1. Characteristics of Probability Distributions for Total Project Cost and Schedule Milestones (Uncertain Funding Date Scenario)

	Total Project Cost (2008 $M)	Total Project Cost (YOE $M)	Ad Date	NTP Date	Project Complete
Base (no risk)	120.7	129.6	Mar 2009	Jun 2009	Aug 2011
Mean	124.0	146.9	Aug 2011	Nov 2011	Mar 2014
Standard Dev.	10.2	17.4			
Percentiles					
1%	101.4	112.5	Jun 2009	Sep 2009	Oct 2011
5%	107.3	121.8	Oct 2009	Jan 2010	Mar 2012
10%	111.0	126.1	Nov 2009	Feb 2010	Jul 2012
20%	115.3	132.5	Dec 2010	Apr 2011	May 2013
25%	116.9	134.9	Jan 2011	Apr 2011	Jul 2013
30%	118.4	137.0	Feb 2011	May 2011	Aug 2013
40%	121.2	141.1	Apr 2011	Jul 2011	Oct 2013
50%	123.9	145.6	Jun 2011	Sep 2011	Jan 2014
60%	126.6	149.7	Aug 2011	Nov 2011	Apr 2014
70%	129.5	154.6	Jun 2012	Sep 2012	Nov 2014
75%	131.0	157.4	Aug 2012	Nov 2012	Feb 2015
80%	132.6	160.7	Oct 2012	Jan 2013	Apr 2015
90%	137.0	169.5	Jan 2013	Apr 2013	Sep 2015
95%	140.7	177.5	Aug 2013	Nov 2013	Mar 2016
99%	147.7	195.8	Aug 2014	Nov 2014	Mar 2017

Notes:

1. Results include costs expended to date.

Recommendations for Using These Results

The results from this cost validation and risk assessment may serve many purposes, but three typical uses are to: 1) help make decisions among alternatives or options; 2) help establish a funding level for a particular alternative if chosen; and 3) conduct formal risk management.

Formal risk management is outside the scope of this initial assessment but can be conducted subsequently. The team recommends that NDOT implement a suitable risk management and tracking program (e.g., based on the risks identified in this effort) to increase the likelihood of controlling project cost and schedule.

NDOT may wish to use the results of this assessment to help establish a funding level for the project. To do so, NDOT will need to establish a suitable percentile corresponding to an acceptable level of risk. In selecting a suitable percentile, NDOT may wish to balance the consequences of funding at too low a level (i.e., having a higher chance of overrunning the budget, and having to seek additional funding) versus funding at too high a level (i.e., reserving too much money for this project, potentially taking money away from other deserving projects). Some US federal and state-level government agencies who conduct risk assessment for transportation projects choose to budget for the 80th percentile in year-of-expenditure costs. However, some budget for lower percentiles and others for higher percentiles (e.g., 90th).

Appendix E – Phase 1 Value Analysis Executive Summary

Executive Summary

VALUE ANALYSIS STUDY

US 95 NW
December, 2007

Introduction

MACTEC was pleased to provide the VA team leader to work with the fine NDOT team assembled for this study. They worked very diligently and generated numerous recommendations which are presented in this report. This **Executive Summary** contains a brief overview of the team's recommendations and design suggestions. The **Study Identification** section that follows lists the team and provides some information about the US 95 projects. The **VA Recommendations** portion of the report contains more detailed information and back up for each recommendation. Lastly, the **Appendix** includes a complete record of the value analysis process followed by the team in conducting the study.

Considerations

The VA Team was asked to consider all five projects being planned and designed in this section of the US 95 corridor, but to concentrate on the two NDOT projects. No formal constraints to the VA process were identified but the team was reminded that significant changes to the project could result in the need to revisit the environmental document. This would make it difficult to meet the tight schedule for Package One, for which design must be completed by December, 2008.

At this stage of development, there was no itemized cost estimate available and thus the Team's estimates for the most part are rough. The Team attempted to provide enough cost information to allow consideration of the concepts proposed.

After creating a cost and function model of the project, the Team selected 9 of 15 Elements for value analysis, on the basis of life-cycle cost impact, functionality, and complexity.

Results Obtained

The VA Team generated 12 Recommendations and 4 Design Suggestions. Some of the recommendations would add nominally to the construction cost of the project and others would significantly reduce that cost. The Team believes that the net result would be a higher-value project.

The VA Team conducted a brief presentation of its findings on December 7 with video conferencing to Las Vegas. The following personnel were in attendance and the Team appreciated their interest and support:

Jenica Finnerty	NDOT	Project Manager
Dennis Taylor	NDOT	Project Development
Scott Rawlins	NDOT	Director's Office
Mohamed Rouas	NDOT	District One
Mark Eliceghi	NDOT	Bridge
Roshelle Olson-Smith	NDOT	Materials-Road Design
Dean Weitzel	NDOT	Materials
Patty Brisbin	NDOT	Environmental
Jeff Shapiro	NDOT	Construction
Reed Gibby	NDOT	Operations Analysis
Russ Law	NDOT	Location
Terry O'Philbin	FHWA	OPS

Recommendation Highlights

D-2 Half-Diamond Interchange at Lake Mead

This recommendation would reconfigure the west side of the existing interchange into a diamond, which would relieve congestion. The half-diamond could be constructed within the existing R/W.

The total potential increase if accepted is $(1,500,000).

This Recommendation is: Accepted As Written ____ Accepted As Amended ____
Rejected X Implementation Decision By: _____ JM Loula 2/12/08

Poor geometrics!

D-3 Lake Mead Interchange Enhancement Options

If the previous recommendation cannot be implemented, this recommendation offers several alternate enhancements to improve operations at the interchange, including a potential roundabout at Rock Springs and the SB exit ramp.

The total potential increase if accepted is up to $200,000, depending on alternate implemented.

This Recommendation is: Accepted As Written ____ Accepted As Amended X
Rejected ___ Implementation Decision By: _____ Use signal option.

JM Loula 2/12/08

F-4 Additional Right Turn Lane – Ann Road

This change would provide an additional lane for the EB Ann Road to SB on-ramp movement, which would alleviate the queuing problem in the area.

The total potential increase if accepted is ($320,000).

This Recommendation is: Accepted As Written ____ Accepted As Amended ____
Rejected X Implementation Decision By: _____
Utility Impacts JM Soula 2/12/08

F-5 Additional Right Turn Pocket WB Ann to NB Centennial

This recommendation would alleviate queuing and enhance ramp operation with only a small increased construction cost.

The total potential increase if accepted is ($50,000).

This Recommendation is: Accepted As Written ____ Accepted As Amended ____
Rejected ✓ Implementation Decision By: _____
Will not correct problem. JM Soula 2/12/08

C-4 Eliminate EB to NB Loop Ramp at Cheyenne Interchange

This change would avoid significant impact on the existing detention basin which would costly to restore elsewhere. The function of the loop ramp can be provided by an enhanced turn lane and storage for the left turn.

The total potential savings if accepted is $2,300,000.

This Recommendation is: Accepted As Written X Accepted As Amended ____
Rejected ___ Implementation Decision By: _____
JM Soula 2/12/08

A-10 Sound Walls on Retaining Walls

Combining the sound walls and retaining walls into a single structure would minimize the R/W requirement, minimize drainage impacts, and improve maintenance access.

The total potential savings if accepted was not estimated.

This Recommendation is: Accepted As Written X Accepted As Amended ____
Rejected ___ Implementation Decision By: _____
JM Soula 2/12/08

A-1 Perpetuate Drainage Within Existing R/W

The VA Team recommends closing Alexander and Lone Mountain cross roads during the installation of box culverts, needed to divert existing channels and create space for widening, in lieu of jack and bore.

The total potential savings if accepted is $4,000,000.

This Recommendation is: Accepted As Written X **Accepted As Amended** ___
Rejected ___ **Implementation Decision By:** _____

2/12/08

B-8 Eliminate 4' HOV Buffer

This change would keep the proposed HOV lanes consistent with existing HOV lanes and would significantly reduce construction cost and R/W requirement. The VA Team noted that the Design Team is already considering this idea.

The total potential savings if accepted is $1,100,000.

This Recommendation is: Accepted As Written ___ **Accepted As Amended** X
Rejected ___ **Implementation Decision By:** _____

Use 4' of pavement in shoulders / HOV lane 2/12/08

B-13 Add 3-R Rehabilitation to this Contract

The existing pavement within the Package One limits will be scheduled for maintenance by the time that contract begins construction. Combining the two activities will add approximately $8M to the Package One cost but would yield an overall savings to NDOT.

The total potential savings if accepted was not estimated.

This Recommendation is: Accepted As Written X **Accepted As Amended** ___
Rejected ___ **Implementation Decision By:** _____

2/12/08

A-5 Integrate Sign Bridges into Sound Wall

This change would require a special design but would reduce the R/W requirement and increase flexibility in sign placement.

The total potential savings if accepted was not estimated.

This Recommendation is: Accepted As Written ___ **Accepted As Amended** X
Rejected ___ **Implementation Decision By:** _____

Confirm Maintenance activities can occur within ROW 2/12/08

G-1 Advanced and Delayed R/W Acquisition

This recommendation would advance the acquisition of construction easements or acquisitions and delay the acquisition of maintenance R/W in order to accelerate the design schedule.

The total potential savings if accepted is $3,300,000.

This Recommendation is: Accepted As Written ____ Accepted As Amended ____
Rejected X Implementation Decision By: _____

No new ROW identified at current time. JM Soula 2/12/08

H-1 Eliminate the Interim Project

The proposed interim re-striping project, which was being advertised at the time of the VA study, would provide a traffic improvement for only a short time within the Package One limits. Adding a third lane and then quickly removing it during construction would be confusing to the traveling public.

The total potential savings if accepted is $3,000,000.

This Recommendation is: Accepted As Written ____ Accepted As Amended ____
Rejected X Implementation Decision By: _____

JM Soula 2/12/08

Design Suggestions

The following ideas were not retained as Recommendations but the VA Team believes they may have merit. We suggest that the Design Team consider them as project development continues:

1. Dual SB to WB right turn lanes for the off-ramp at Cheyenne Interchange.
2. If the interim project goes forward, stage traffic control for this project to construct the outside lanes first.
3. Consider the use of the lane rental concept for this project.
4. Evaluate conventional designs, such as a full cloverleaf, to reduce the cost of the 215 system interchange.

Appendix F – Cost Estimate Review Executive Summaries

EXECUTIVE SUMMARY

The Federal Highway Administration (FHWA), the Nevada Department of Transportation (NDOT), City of Las Vegas, Clark County Public Works and their consultants VTN and GC Wallace conducted a workshop to review the cost and schedule estimates for the US 95 Northwest Corridor Project (Project) at the NDOT Las Vegas District Office, November 3-6, 2008. The objective of the review was to verify the accuracy and reasonableness of the current NDOT total cost estimate and schedule and to develop a probability range for the cost estimate that represents the Project's current stage of development.

Significant results of the review:

- The Nevada Department of Transportation estimate of $551.0 million (Year of Expenditure) was revised to $616.3 million during the review.

- Based on the review, the range of costs for this Project is between $592.8 million and $675.9 million.

- The current estimate of $616.3 million is at a confidence level of 2% which is normally considered too low for use in a NEPA document or major project Finance Plan. The 70% confidence level equates to a $635.7 million cost estimate which is normally considered the minimum level.

- The most significant risk is the estimated construction inflation for Phase 3. The estimated mid-point of construction ranged from 2013 - 2016. This could have a very significant impact on the overall cost of the Project due to the uncertainty of constructions escalation due to inflation.

Reassessment of Cost Estimate Review for US95 Northwest Corridor

April 23, 2009

Executive Summary

The FHWA Division Office and NDOT met on April 23, 2009 to discuss proposed schedule changes to the US95 Northwest Corridor Project necessary due to recent changes to the RTP. Their impact on the probability range for the cost estimate is discussed in this report.

- There is an 80% chance that the final cost for the project will be between $683 and $722 million dollars. This is an increase from the previous review range of $617 million to $645 million.

- The Current NDOT funding available in the RTP for the new schedule is $764 million. This is greater than the 90% confidence level for this Project ($722 million)

- The most significant risk to the project remains escalation. Variability in the escalation rate, and the mid-point of construction for Phases 3 and 2 are the greatest contributors to the variation in the final escalated project cost.

Review Summary

The FHWA Division Office (Greg Novak and Wes Rutland-Brown) and NDOT (Jenica Finnerty) met on April 23, 2009 to discuss NDOT-proposed changes to the project schedule. Recently the RTP was updated, and project schedule changes were necessary to accommodate funding as it will become available in the RTP. Only the schedule and length of the phases were addressed during this reassessment. No other changes were made to the original cost estimate review (CER).

The escalation rate itself was modeled the same as in the previous CER: 4% most likely with a range of +/- 10% (3.6% to 4.4%). In the previous review, however, it was modeled separately for each phase, and the individual assumptions were not correlated. During the reassessment, only one escalation assumption curve was used for all the projects, thus correlating it for all phases and better emphasizing its role during the sensitivity analysis (see Results section).

Details on the proposed changes and the risks associated with those changes are presented below.

- Phase 1: No changes made from previous CER. This Phase remains on schedule for a start date of July 1, 2010 and a mid-year of construction of July 1, 2011. Best case: 6 months sooner. Worst Case: 12 months later.

- Phase 2: Significantly delayed from previous CER. This phase had the largest change from the previous CER, going from a start date of 2014 to a start date of 2026. Phase 2 is the mainline widening of US95 north of Anne Rd. This area's growth has been curbed significantly due to the recent economic downturn. The pressure for expansion, both in

terms of traffic needs and from developers, has therefore abated. The RTP amended their funding plans for this phase and delayed financing until 2026 to 2030. The CER mid-year construction dates were adjusted accordingly. Best Case: Same as most-likely (7/1/2027). Worst case: 4 years later

- Phase 3: Change in best case and time for construction from previous CER. Phase 3 (the largest dollar amount phase in the Project) would construct the major interchange between US95 and SR215. It remains on schedule to start in July of 2011. However, any opportunity of it starting sooner (as previously modeled) has been removed. The same potential for up to a two year delay from the previous model was retained. Additionally, further progress on the design since the previous CER have suggested a three year construction time frame is more appropriate than a two year time frame, so the mid-year was pushed out by an additional six months. Best Case: Same as most-likely (1/1/2013). Worst case: 1/1/2015

- Phase 4: This phase is already under construction. No changes were made.

- Phase 5: Significantly delayed from previous CER. This Phase would construct a new interchange at the northern limits of the project (Kyle Canyon). Similar to Phase 2, this area has seen drastic reduction in growth projections, and therefore the immediate need for the interchange has been reduced and the delayed in funding is reflected in the revised RTP. Previously it had a start date of 7/1/2012. This has now been delayed to 2016 to 2020. Best case: Same as most-likely (7/1/2017). Worst case: 4 years later

Appendix G - Change Management Plan

The project team recognizes that changes will take place on this project. To assure project success and good financial performance, avoid project delays, improve team performance, and enhance the quality of the project, the project team will implement this Change Management Plan to manage changes and to mitigate the impact of the change events as they occur.

Responsibilities for Managing Change

The NDOT project manager of each phase is responsible for managing change, including the authorization of any changes to the budget and schedule. The project manager is the primary contact for the stakeholders and, therefore, is in the best position to identify potential client-initiated changes.

Team members must control and manage change in their areas of responsibility. Typically, team members can exercise the most control over changes created by increases in level of effort and to a certain extent, scope creep. Team members can frequently identify potential changes to the project that can have either positive or negative effects. They have a responsibility to bring forth ideas that add value as well as potential circumstances that could result in negative change.

The NDOT project manager is responsible for understanding the potential for change in a project, reviewing and discussing potential and real changes with the NDOT senior project manager and stakeholders as they are identified, reaching agreement on a desirable course of action, and endorsing that action.

Forecast of Potential Changes

A scoping report, following NDOT project development and scoping process, will be prepared for each phase of the project. Potential changes and impacts will be identified during this process.

Change Resolution Process

The project manager will be responsible for implementing the following change resolution process in the event of a project change event:

- The project manager and team members identify the nature and source of the change. The project manager records the change.
- The project manager and team members analyze the change and assess its impact. Assessment would normally occur during the monthly project

management team (PMT) meetings but significant changes may require a dedicated meeting.

- The project manager and team members develop an action plan as a response to the change based on the nature of the change and the impact on the project.
- The project manager communicates the action plan to project stakeholders and gains acceptance or endorsement. The action plan is then implemented.
- The project manager and team revise Work Plan elements and monitor effects of change.

Identify Change

All project team members are responsible for reporting any circumstances that would require additional effort, time, rework, or expense beyond what is currently accounted for in the contract, to the project manager. The project manager shall verify the change issue by determining whether it leads to change in cost, scope, schedule, quality, or team performance. Anyone that identifies a potential change should complete a Change Management Form and submit it to the project manager. The project manager will record the identified change and the change initiator.

Analyze and Assess Impact of Change

Verifying the change issue is the responsibility of project management or a team member familiar with the work plan, and particularly with the scope, the schedule, and the budget as it relates to the specific change. The project manager will verify the change issue by determining whether it leads to a change in cost, scope, or schedule. Change analysis is facilitated when the elements of the Work Plan have been entered into the project planning software (Microsoft Project and Excel) so the potential effects of a change on various aspects of the project can be examined. For example, any change to scope, whether it is additive, deductive, or qualitative, will affect the cost, so budgets must be adjusted to reflect the change. Bases on the analysis, the project manager can be prepared to explain the effect and the value of the change to our client. The project manager will set aside, for internal planning purposes, a contingency to temporarily accommodate internal project changes until permanent corrective actions can be implemented.

Develop Action Plan

An action plan will be developed based on the nature, source, and impact of the potential changes in this project. Based on the nature of the change, an analysis will be performed to indentify impact and corresponding actions based on the affected project element and the corresponding responsible team member.

Gain Acceptance

The project manager will communicate the change to the stakeholders (i.e., project team, management). Changes affecting cost, scope, schedule, deliverables, or management expectations for the final product will involve all parties on the project. The project manager will seek acceptance or endorsement of the action plan the project team considers pertinent, based on the outcome from the change resolution process.

Change Implementation

After a change has been resolved and accepted, the following dictates the approval and implementation process for the change:

- The Senior Project Manager, the Project Management Chief and assistant Director of engineering must approve any significant budget or scope change. The sponsor of the change must process a scope and budget change form to obtain this approval.
- Since this project is in the STIP, any significant changes or the need for new right-of-way may require an amendment. NDOT's Program Development Division will process the amendment in close coordination with the PMT.
- Any significant changes to the project that affect the information contained in the current program documents (e.g., scope, project limits, right-of-way, or utility relocations) may require an amendment to these documents. The Financial Management Division will process this amendment in close coordination with the PMT.
- If an approved change conflicts with the project NEPA documents, they will need to be amended. The PMT will work with the Chief Environmental Engineer to process these changes.
- Any changes requiring new right-of-way or utility relocations require a right-of-way setting even if a right-of-way setting for the project has already occurred. The Right-of-Way Division will then develop estimates, provide parcel numbers, and return the information to the NDOT project manager. Appendix P of the Project Development and Design Manual contains the procedures for right-of-way settings. The Environmental Services Division must clear new rights-of-way, including easements, for the existence of hazardous materials and other environmentally sensitive attributes.

Revise Scope, Schedule and Budget

Given the dynamic nature of the risk management plan, the project scope, schedule and budget will be re-evaluated periodically to develop specific analyses and strategies to better address risk events. The project manager will ensure that the project scope, schedule and budget are adjusted accordingly to reflect the change.

The project team will utilize Microsoft Project scheduler and Excel or other appropriate tools to assess and analyze the potential effects of a change on schedule and budget.