

**REGIONAL TRANSPORTATION COMMISSION OF  
SOUTHERN NEVADA**

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**AMENDMENT TO THE UNIFIED PLANNING  
WORK PROGRAM FOR FISCAL YEAR 2008-2009**

Prepared May, 2008  
Revised June 20, 2008

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SECTION I

CARRY - OVER WORK TASKS  
FOR  
FISCAL YEAR 2008-2009

## UPWP WORK TASK DESCRIPTIONS

### UPWP Description Format

Each of the work tasks in the UPWP is presented in the following format:

- Task Number – Identifying number assigned to the work task. The task numbers have been grouped into the following categories:
  - *Task #1000-1999:* Air Quality
  - *Task # 2000-2999:* Transportation Model and Data Support
  - *Task # 3000-3999:* MPO Plans and Continuing Activities
  - *Task # 4000+:* Special Studies
- Task Numbers end in two digits that indicate the fiscal year in which the project was first included in the work program.
  - *Last digits 07:* FY 2007 projects.
  - *Last digits 07/08:* Indicates the project was included in the Unified Planning Work Program in FY 2007 and is carried over to FY 2008.
  - *Last digits 08, 09, or 08/09:* Indicates a new UPWP project.
- Title – Descriptive name for the work task.
- Objective – Purpose of the work task
- Previous Work – Studies and other related work already completed or underway.
- Task Elements – Major milestones or activities.
- Expected Products – Anticipated materials, reports, databases, and plans associated with the work task.
- Completion Date – The date the work task is expected to be completed. Tasks shown as on-going are continued from year to year.
- Financial Responsibility – Agency with control over task expenditures.
- Functional Responsibility (Staffing) – RTC Project Manager followed by expected primary staffing responsibility.
- Participating Agencies – Agencies with oversight and/or minor staffing responsibilities.
- Budget – Work task cost and funding source.

## Regional Transportation Commission of Southern Nevada

**Table 1: FFY 2009 Unified Planning Work Program  
Carry-over projects**

Task Number	Work Task	Projected balance of contract	PL 2009	FTA 5303	Notes	Other local funds	Local Match	FY 2009 carry over budget
	Estimated balance brought forward FY 2008>		\$ 1,247,838					
	Allocation FY 2009		\$ 1,482,000	\$ 456,338				
	Available for Programming		\$ 2,729,838					
<b>Carry over projects</b>								
1130-06/09	Estimating Volume Delay Functions for Post-processing Travel Model Outputs for Input to Air Quality Modeling	\$ 22,547			(b)	\$ 22,547		\$ 22,547
2430-08/09	Travel Demand Model (TDMC) Calibration - Phase II	\$ 290,000	\$ 232,750	\$ 36,000	(a)		\$ 21,250	\$ 290,000
2610-08/09	Regional Traffic Counts V	\$ 105,000			(b)	\$ 105,000		\$ 105,000
2620-09	Regional Traffic Counts VI	\$ 250,000			(b)	\$ 250,000		\$ 250,000
4120-08/09	Ivanpah Airport Transit Options Study	\$ 100,000		\$ 80,000			\$ 20,000	\$ 100,000
4130-08/09	Maryland Pkwy. BRT Feasibility Study	\$ 129,722		\$ 103,778			\$ 25,944	\$ 129,722
4140-08/09	UNLV Transportation Center Assessment	\$ 125,473		\$ 100,378			\$ 25,095	\$ 125,473
5520-08/09	Downtown Pedestrian Circulation Study	\$ 25,876	\$ 24,582				\$ 1,294	\$ 25,876
5530-08/09	Pedestrian Oriented Strategies for Critical Facilities	\$ 175,000	\$ 166,250				\$ 8,750	\$ 175,000
6320-07/09	Boulder Highway Corridor Investment Strategy Transportation Planning	\$100,000			(b)	\$100,000	\$ -	\$ 100,000
6405-08/09	Pecos Corridor Study	\$ 150,559	\$ 143,031				\$ 7,528	\$ 150,559
6420-08/09	Las Vegas Blvd. North, Land Use, Transit, and Pedestrian	\$ 48,842		\$ 39,074			\$ 9,768	\$ 48,842
6430-08/09	Valley View Blvd., Study: US 95 to Harmon	\$ 70,341	\$ 66,824				\$ 3,517	\$ 70,341
6450-08/09	Las Vegas Valley Arterial Development Study	\$ 41,049	\$ 38,997				\$ 2,052	\$ 41,049
6800-07/09	Las Vegas Valley Transportation Safety Analysis and Database	\$ 36,533			(b)	\$ 36,533		\$ 36,533
6810-08/09	Analysis of Alternatives for Accommodating Trucks on Urban Freeways in Southern Nevada	\$ 195,000			(d)	\$ 195,000		\$ 195,000
7090-08/09	Planning Process for Evaluation and Optimization of Ramp Metering in Las Vegas	\$ 100,000			(c)	\$ 100,000		\$ 100,000
	<b>Total</b>	\$ 1,965,942	\$ 672,434	\$ 359,230		\$ 809,080	\$ 125,199	\$ 1,965,942
	<b>Balance available for new projects</b>		\$ 2,057,404	\$ 456,338				

**Notes**

- (a) Amendment pending in the amount of \$45,000 (FTA 5303, \$36,000, local match \$9,000)
- (b) RTC local funds - gas tax
- (c) RTC Question 10 funds
- (d) UNLV UTC funding includes 50% from federal UTC funding and 50% from RTC local match.

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**TASK #1130-06/09: Estimating Volume Delay Function for Post-Processing Travel Model Outputs for Input to Air Quality Modeling**

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Objective: To develop a local volume-delay curve(s) based on the RTC Travel Time and Delay Study. This volume-delay curve(s) will be used to post-process congested model speeds for air quality conformity demonstration.

Previous Work:

- RTC Travel Time and Delay Study
- Air quality analysis work done at the Transportation Research Center at the University of Nevada, Las Vegas.
- FETSIM program in California

Task Elements:

- Evaluate the RTC Travel Time and Delay Study completed in various corridors.
- Inventory parallel road configurations.
- Collect additional travel time data as necessary.
- Develop volume-delay function curve(s) based on observed speeds and facility characteristics.
- Compare the post-processed congested speed (estimated with new volume-delay functions) with the observed data.
- Investigate the possibility of incorporating the curve into the future travel demand model.

Expected Products: Las Vegas area volume delay function curve(s) and methodology

Completion Date: December 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

UPWP Task #1130-06/09 Budget	
<b>(RTC Gas Tax )</b>	
<b>Amended carry over</b>	<b>\$ 22,547</b>

**TASK #2430-08/09: Travel Demand Model Calibration – Phase II**

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Objective: To continue with activities to re-estimate, calibrate and validate the RTC's Travel Demand Forecast Model in a manner consistent with RTC guidelines and acceptable national practice. Phase 1, defined as UPWP Task 2420-06/07, focuses primarily on the changes to the "resident-based" models for the Las Vegas region. Phase II focuses on updates to the transit processing and mode choice models for resident trips and the "visitor based" models. Much of the input for the calibration activities for the travel demand model in Phase II builds on data collected from studies and surveys that are underway and scheduled to be completed prior to the start of the FY 08 UPWP.

Previous Work:

- FY 2007 Phase I Travel Demand Model Calibration and Validation
- FY 2007 Volume Delay Function Study
- 2006 Land Use Working Group Allocation Activities
- 2006 On-Board Transit Survey
- 2007 Visitor Survey
- 2005 McCarran Airport Survey
- 2006 Transit Master Network Automation and Database Highway Network Automation
- 2006 Regional Traffic Counts
- 2006 Signal System Performance Measures Study

Task Elements:

- Review and Coordination of Previous/Concurrent Work
- Validation Plan Update – ensuring that work completed in Phase I coincides with work undertaken for transit processing, mode choice, and the visitor models
- Model Estimation, Calibration, and Validation
- Documentation of Methodologies and Results

Expected Products:

- Estimation, Calibration and Validation of the RTC's Travel Demand Model that meet the criteria established by the RTC
- Documentation of Process

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

**TASK #2430-08/09: Travel Demand Model Calibration – Phase II (CONTINUED)**

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Participating Agencies:

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

UPWP Task #2430-08/09 Budget	
<b>Carry over amount</b>	<b>\$ 290,000</b>
FHWA PL (95%)	\$ 232,750
Local Match (05%)	\$ 12,250
<b>Amended amount *</b>	<b>\$ 45,000</b>
FTA S. 5303 (80%)	\$ 36,000
Local Match (20%)	\$ 9,000

\*Approval pending on amendment.

**TASK #2610-08/09: Regional Traffic Counts V**

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Objective: To collect ground traffic counts that validate the RTC's Travel Demand Model, augment existing Nevada Department of Transportation (NDOT) traffic counts, and provide supporting information for traffic operational improvements.

Previous Work: TDFMS list of regional count locations

Task Elements:

- Specify count locations with the assistance of the Traffic Count Working Group.
- Determine optimal counter tie points and document locations.
- Prioritize count locations according to greatest need for supporting data.
- Collect counts at the specified locations under the standards prescribed in the FHWA Traffic Monitoring Manual.
- Prepare a report documenting process and results.
- Transmit the collected data to the Nevada Department of Transportation (NDOT) for inclusion in their Annual Count Report.

Expected Products: A report documenting the process and traffic count information for approximately 195 locations in the Las Vegas urbanized area.

Completion Date: December 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #2610-08/09 Budget	
<b>(RTC Local Funds) Carry-over amount</b>	<b>105,000</b>

**TASK #2620-09: Regional Traffic Counts VI**

Objective: To collect ground traffic counts that validate the RTC's Travel Demand Model, augment existing Nevada Department of Transportation (NDOT) traffic counts, and provide supporting information for traffic operational improvements.

Previous Work: TDFMS list of regional count locations

Task Elements:

- Specify count locations with the assistance of the Traffic Count Working Group.
- Determine optimal counter tie points and document locations.
- Prioritize count locations according to greatest need for supporting data.
- Collect counts at the specified locations under the standards prescribed in the FHWA Traffic Monitoring Manual.
- Prepare a report documenting process and results.
- Transmit the collected data to the Nevada Department of Transportation (NDOT) for inclusion in their Annual Count Report.

Expected Products: A report documenting the process and traffic count information for approximately 210 locations in the Las Vegas urbanized area.

Completion Date: December 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #2620-09 Budget	
<b>(RTC Local Funds)</b>	
<b>Carry-over amount</b>	<b>\$ 250,000</b>

**TASK #4120-08/09: Ivanpah Airport Transit Options Study**

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Objective: To provide decision makers with a preliminary study defining transit options that serve the proposed airport at Ivanpah. The study will examine the available corridors from St. Rose Parkway south to the Ivanpah site, along the alignment of Las Vegas Boulevard South SR 604 and I-15. It will emphasize the accommodation needed for mass transit, public and private, including recommendation of appropriate transit modes, needed facilities to support them, the corridor right-of-way (ROW) width, and the location of stops and stations. This study will emphasize the development of a bus rapid transit (BRT), similar to the style of the current ACE transit lines, in an exclusive transit lane where feasible.

Previous Work:

- Clark County Department of Aviation Ivanpah feasibility studies
- Ivanpah Environmental Impact Study (EIS) draft sections
- RTC Sloan-Ivanpah Corridor Study
- RTC Transit Mode Options Study
- RTC Regional Transportation Plan and Short-Range Transit Plan
- RTC Long-Range Transit Survey

Task Elements:

- Data Collection/Project Management
- Analysis of Existing Conditions
- Travel Demand Modeling/Evaluation of Future Impacts
- Evaluate Alternatives
  - Bus system
  - Enhanced bus system
  - BRT (e.g., ACE) in exclusive lane
  - Light rail
- Prepare Draft Report/Final Report
- Public Stakeholder Involvement & Information Program

Expected Products: The study will provide a report to participating agencies with a range of innovative, cost-effective, and workable alternatives for the corridor. The report will provide conceptual designs and provide preliminary analyses of the social, economic, environmental, and cost impacts.

Completion Date: December 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

**TASK #4120-08/09: Ivanpah Airport Transit Options Study (CONTINUED)**

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Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Clark County Department of Aviation
- Clark County Public Works
- City of Henderson
- Bureau of Land Management

UPWP Task #4120-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 100,000</b>
FTA 5303 (80%)	\$ 80,000
Local Match (20%)	\$ 20,000

**TASK #4130-08/09: Maryland Parkway BRT Feasibility Study**

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Objective: To provide decision makers with an action plan that defines transit design and lane configuration for the portion of Maryland Parkway running from McCarran International Airport to downtown Las Vegas. The portion heading to downtown Las Vegas will have a connection with bus rapid transit (BRT), specifically the Downtown Connector ACE transit line, at an appropriate area between Sahara Avenue and Charleston Boulevard. This study will emphasize the development of a BRT line in an exclusive transit lane where feasible.

Previous Work:

- RTC Transit Mode Options Study
- RTC Regional Transportation Plan and Short-Range Transit Plan
- RTC Long-Range Transit Survey
- Maryland Parkway/UNLV Community Realignment Plan – Phase One Traffic Study
- Clark County Master Plan of Streets and Highways
- Clark County Mixed Use Development Ordinance

Task Elements:

*Problem Definition*

- Conduct an origin/destination survey, collect data that will help determine whether to interconnect with the Downtown Connector at Sahara or Charleston.
- Identify existing and ultimate travel demand along Maryland Parkway, including the potential for increased travel demand resulting from the implementation of the Clark County Mixed Use Overlay District, with special reference to the Midtown University of Nevada Las Vegas (UNLV) project.
- Identify existing and planned right-of-way and roadway geometrics, including center and side-running options and station locations.

*Alternative Development & Selection*

- Define the role that enhanced transit service might be expected to play in meeting projected demand in the corridor.
- Identify the benefits and costs of the various transit mode options, including express buses in general traffic, express buses in exclusive lanes, and BRT in exclusive lanes.
- Describe the types of transit-supportive actions that may be implemented under the Clark County Mixed Use Development Ordinance.
- Develop options for enhanced transit along the portion of Maryland Parkway running from McCarran International Airport to a connection with the Downtown Connector ACE line at an appropriate location between Sahara Avenue and Charleston Boulevard.
- Identify critical right-of-way or other physical constraints.

**TASK #4130-08/09: Maryland Parkway BRT Feasibility Study (CONTINUED)**

- Develop cost estimates for implementation and operating support.
- Outline possible financing mechanisms to supplement existing local and federal funds for both the development and operation of transit service in this corridor.

Expected Products:

- Develop a draft report, recommendations, and presentations.
- Report describing the definition and evaluation of alternatives, preliminary cost estimates, description of right-of-way needs, recommendations, description of recommended project concept and financing mechanisms, and cost estimates for implementation and operating support.

Completion Date: December 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Nevada Department of Transportation
- Clark County
- UNLV

UPWP Task # 4130-08/09 Budget	
<b>Carry over amount</b>	<b>\$ 129,722</b>
FTA 5303 (80%)	\$ 103,778
Local Match (20%)	\$ 25,944

## **TASK #4140-08/09: UNLV Transportation Center Assessment Study**

---

Objective: Conduct a transit terminal feasibility study, alternative site selection, and basic site planning for a transportation center within the University of Nevada Las Vegas (UNLV).

Previous Work: Maryland Parkway – UNLV Community Realignment Plan

### Task Elements:

- Define preferred areas of the UNLV campus for a possible transit terminal or transfer facility site. Preliminary areas of main interest include the south and west portions of the campus, particularly the area adjacent to the Thomas and Mack Center, and sites entered from Tropicana.
- Develop site selection and evaluation criteria and conduct a site search, detailing available and recommended sites that would accommodate the construction of an intermodal terminal/transfer facility. Identify locations (both improved and unimproved) in the preferred area.
- Data will be collected on each site at an appropriate level of detail to screen alternative sites and to select preferred alternatives. At a minimum, the following will be considered among the criteria utilized to determine the optimum sites: site and regional transportation access, location, shape/configuration, existing zoning and relation to land uses on and adjacent to the site, utilities, topography, drainage, flood zone, soils and geology, hazardous materials, and mitigation measures and costs. Provide a rank order listing of the sites evaluated.
- Prepare a feasibility assessment that includes the following details:
  - Identify 5 alternative sites
  - Determine the site impacts both economic and physical
  - Identify basic circulation and building location and design for the top three sites as selected by UNLV and RTC staff
  - Incorporate UNLV transit services in any examination

### *Develop Conceptual and Alternatives Plan*

- Create a list of alternatives that specify best locations and functions for the transportation center in the UNLV campus. From there, any plans and designs, from the selected list of alternatives, will be based on a fully multimodal facility that will take into account the integration of the terminal with other transit modes.
- The design will consider the possible future connection of these modes to the facility, even in cases where connection will not occur upon its initial completion.
- Allow for the potential of a private-public partnership for the transportation site, which will include institutional and retail opportunities.

**TASK #4140-08/09: UNLV Transportation Center Assessment Study  
(CONTINUED)**

- An examination of possible shared space park and ride spaces and any impacts on UNLV student and staff parking will be included.
- Elements of the site master plan will include site delineation, on-site bus circulation and passenger loading/unloading, pedestrian circulation, bus and facility parking and staging layout, amenities, bus operator facilities, restrooms, supervisor area, public restrooms, bike lockers and racks, and potential retail space.
- The conceptual design will include 3 site layout alternatives, building concept floor plans, and site renderings.

*Meetings*

- Provide monthly progress reports to the RTC and hold meetings with the RTC and UNLV during the project.
- Make presentations to the RTC committees and Board upon conclusion of the project.

Expected Products:

- Feasibility assessment
- Detailed program/concept design of site selected, including space programming for current and projected operations.
- Proposed detailed work plan.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

- Regional Transportation Commission of Southern Nevada
- UNLV

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- UNLV
- Clark County

UPWP Task #4140-08/09 Budget	
<b>Carry over amount</b>	<b>\$ 125,473</b>
FTA 5303 (80%)	\$ 100,378
Local Match (20%)	\$ 25,095

**TASK #5520-08/09: Downtown Pedestrian Circulation Study**

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Objective: As the Downtown Las Vegas area continues to redevelop with high density residential and more intense commercial uses, it is important that a comprehensive study be done to ensure adequate improvements are made for safe pedestrian travel. This study will determine existing and future pedestrian counts for Downtown Las Vegas along with other nearby predominant corridors. There is also a need to identify and prioritize potential pedestrian corridors and crossings, including widened sidewalks, bridges, and crosswalks. Results from this study will help determine possible transit stops, trail routes, and other amenities in Downtown Las Vegas. Establishing safe pedestrian corridors are critical to ensure a vibrant and lively downtown that will attract both tourist and local guests.

Previous Work: The RTC and the City of Las Vegas are presently underway with the Downtown Traffic Capacity, Transit, and Parking Needs Study

Task Elements:

Data Collection and Project Coordination

- Coordinate with related transportation and transit planning/study activities in and around the Downtown area.
- Identify both existing and ultimate pedestrian volumes based on projected land-use plans.
- Identify major existing and potential pedestrian tourist and employment destinations and employment locations within the Downtown area.

Project Development

- Develop multiple pedestrian route alternatives in the downtown.
- Evaluate benefits and problems with each alternative route.
- Develop crossing alternatives through major streets and intersection.
- Conduct surveys for tourists and residents input.
- Evaluate alignments and possible cost sharing with adjacent property owners.
- Draft report, recommendations and project presentations.

Implementation

- Develop conceptual plans for the pedestrian routes, crossings and overpasses, including typical cross-sections.
- Identify right-of-way needs and costs.
- Provide preliminary project cost estimates.
- Final report and Presentation(s).

Expected Products: Alternative evaluation report with specific recommendations, preliminary cost estimates, right-of-way needs and descriptions, and preliminary plans.

**TASK #5520-08/09: Downtown Pedestrian Circulation Study (CONTINUED)**

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Completion Date: December 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

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

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- City of Las Vegas
- Clark County

UPWP Task #5520-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 25,876</b>
FHWA PL (95%)	\$ 24,582
Local Match (05%)	\$ 1,294

## **TASK #5530-08/09: Pedestrian Oriented Strategies for Critical Corridors**

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Objective: The Las Vegas Valley is experiencing a change in land-use development, as developers are taking advantage of the new zoning districts occurring within the jurisdictions of the Valley. New zoning policies include the mixed-use development overlay being created in Clark County (including the Strip), and similar initiatives in Las Vegas, Henderson, and North Las Vegas. In light of this recent movement in development, there is a need to study pedestrian travel patterns within areas that have these new zoning districts. Currently, many of the corridors within these areas only have the bare minimum standards in place for pedestrian activities. This might not be enough to attract future pedestrian movement as new high-density development occurs. Thus, the following study will look to address this issue and find any potential solutions to the pedestrian issue in the Valley.

The main objective for this study is to identify corridors that can benefit from enhanced solutions to its existing pedestrian environment. The study would then develop design standards and improvements that would address any safety and pedestrian-vehicular conflict within the identified corridors. The main geographic areas of concern for this project are major arterial streets in the Las Vegas Valley, particularly those with current or future bus-rapid transit (BRT) plans. Examples include Flamingo, Tropicana, Nellis, Eastern, and Valley View.

### Previous Work:

- RTC Regional Transportation Plan (RTP) 2006-2030, which includes the Bicycle and Pedestrian Element in Chapter 4.
- Clark County Master Plan of Streets and Highways
- Clark County Mixed Use Overlay District (MUD) Circulation and Transportation Needs Study
- RTC Alternative Transportation Mode Study
- RTC Various Corridor Studies (e.g., Rancho, Boulder Highway, Sahara, North 5<sup>th</sup> Street, Maryland Pkwy. and Flamingo)

### Task Elements:

- Identify corridors that show potential pedestrian movement, are in close proximity to important transportation facilities and major destinations, and are within any jurisdictional MUD.
- Review prior corridor studies with any type of pedestrian element or implementation strategy.
- Data collection, which will include pedestrian counting of identified key intersections.
- Explore the opportunity to develop “themed corridors” and their potential to complement the MUD strategy of development. Also explore the potential effectiveness of connecting pedestrian movement to these corridors.
- Research and define link transit and pedestrian movement within MUDs.

**TASK #5530-08/09: Pedestrian Oriented Strategies for Critical Corridors  
(CONTINUED)**

- Select pedestrian improvements that are cost effective and would work within the environment of Las Vegas.
- Develop design standards and objectives for signage, pavement markings, widths, easement amenities (e.g., benches, landscaping and shade), and adjacent uses for pedestrian areas in MUDs, including the Las Vegas Strip.
- Prioritize pedestrian improvements based on criteria developed from the case study and data collection stage of this study.
- Develop a report and any presentations associated with the study.

Expected Products:

- Stakeholder agreement on a plan, implementation strategy, and timeline.
- Stakeholder agreement on a pedestrian plan to enhance opportunities that allow pedestrian to walk to major destinations and transit stops and enhance the quality of the pedestrian experience.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #5530-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 175,000</b>
FHWA PL (95%)	\$ 166,250
Local Match (05%)	\$ 8,750

**TASK #6320-07/09: Boulder Highway Corridor Investment Strategy,  
Transportation Planning Element**

---

Objective: To take advantage of the planned Bus Rapid Transit (BRT) system along Boulder Highway in order to encourage economic development and revitalization, transit-oriented development, to use alternative modes of transportation, and to improve transportation safety within the corridor. The Boulder Highway Corridor Investment Strategy will build upon past planning efforts, including the RTC Boulder Highway BRT Study, in order to examine the planning and transportation needs of the area located approximately ½ mile surrounding the roadway corridor. As described below, funding is sought for the transportation planning component of the Boulder Highway Corridor Investment Strategy.

Previous Work:

- Boulder Highway Bus Rapid Transit Study (Regional Transportation Commission)
- Nevada Department of Transportation I-515 Corridor Study Final Report, August 2005
- Recommendations received from the Bus Shelter and Bench Advisory Committee, as established by Assembly Bill 239

Task Elements:

- Station locations have been determined through the RTC's Boulder Highway BRT Stations Design and Operational Analysis, which were based primarily on current ridership of the existing bus system. Designs will be developed for areas located outside of the currently identified BRT station location envelopes. The design will focus on providing access to the stations for all modes of travel transitioning to/from the BRT.
- The RTC has developed standard designs for all stations located within the Boulder Highway corridor. However, local agencies have the opportunity to customize station design components while remaining within the station envelope, as identified by the RTC. Methods will be developed for customizing stations, including signage or designs for the customizable rear panels of the proposed stations.
- Analyze existing traffic patterns, including accident data, and suggest alternatives to improve safety and efficiency along Boulder Highway. Identify opportunities for separated grade crossings, pavement markings at crossings, or other methods to improve connectivity and the safety of trail users.
- Determine additional amenity needs that would support the existing bicycle use along Boulder Highway, which may include guidelines for end-of-use

**TASK #6320-07/09: Boulder Highway Corridor Investment Strategy,  
Transportation Planning Element (CONTINUED)**

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facilities at major employment centers, and bicycle storage and parking facilities.

- Identify future potential transit connections to nearby destinations, including but not limited to the following: 1) downtown Henderson, 2) Nevada State College, 3) the proposed Regional Fixed Guideway, which may be located within the Union Pacific Railroad right-of-way, 4) schools and parks, including Basic High School, Wells Park, the Bird Viewing Preserve, and the Clark County Wetlands Park, 5) the Clark County Heritage Museum, 6) the future interchange at Galleria Drive, 7) Sam Boyd Stadium, 8) proposed major commercial and residential developments, and 9) other destinations identified through the planning process.
- Analyze existing pedestrian and bicycle facilities within the corridor and identify any necessary improvements to encourage walking and bicycling to the BRT stations. Assist the City of Henderson with updates to the Master Streets and Highways and the Master Bicycle Plan.
- Determine the needs for park and ride facilities necessary to support the Boulder Highway BRT system within Henderson. Identify potential locations or need areas.
- Identify all capital, operations, and maintenance costs for all improvements identified through the Boulder Highway Investment Strategy Transportation Component.

Expected Products:

Report to include :

- Designs to enhance the area immediately surrounding the proposed BRT station in order to further enhance accessibility and the experience and comfort of the transit rider;
- Station design components to customize the stations for Henderson, which may include signage, customizable rear panels, and other features;
- An analysis of the current traffic patterns within the Boulder Highway corridor and the identification of improvements to increase pedestrian and bicyclist safety;
- Guidelines for bicyclist end-of-use facilities and the identification of proposed locations for bicycle storage, parking facilities, and other amenities;
- The identification of future potential transit connections;
- Analysis of existing pedestrian and bicycle facilities and the identification of potential improvements;
- Analysis of park and ride needs and facility locations or service areas; and
- The identification of all costs associated with the improvements identified through this study.

**TASK #6320-07/09: Boulder Highway Corridor Investment Strategy,  
Transportation Planning Element (CONTINUED)**

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Completion Date: December 2009

Financial Responsibility:

- Regional Transportation Commission of Southern Nevada
- City of Henderson

Functional Responsibility (Staffing): City of Henderson

Participating Agencies:

- City of Henderson
- Regional Transportation Commission of Southern Nevada
- Clark County
- Nevada Department of Transportation

UPWP Task #6320-07/09 Budget	
<b>(RTC Local Funds) Carry-over amount</b>	<b>\$ 100,000</b>

**TASK #6405-08/09: Pecos Road Corridor Study**

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Objective: To determine the optimal lane configuration and Transit use for Pecos Road between the proposed north campus of the University of Nevada Las Vegas (UNLV) just north of I-215 and Boulder Highway, including: number and type of travel lanes; intersection spacing and turn lanes; access management and median control; potential for signal timing coordination; Intelligent Transportation Systems (ITS) applications; and transit, bicycle, and pedestrian opportunities.

- To determine the feasibility, costs, and benefits of constructing a grade separated Pecos Road connection across I-15 and potential re-alignment of Pecos Road between Corporate Center Drive and Washburn Road.
- To determine how the design of Pecos Road may be affected by its proposed interchange with I-515 and proposed I-15 interchange with Craig Road.
- To determine the feasibility, costs, and benefits of providing for an enhanced level of transit service and/or bicycle and pedestrian facilities in the Pecos Road corridor.

Background: Travel demand increases over recent years and lack of alternatives for north-south travel through the City of North Las Vegas has resulted in the need to improve or develop additional corridors and opportunities for increasing traffic capacity and transit use. Traffic signal optimization and synchronization, additional right/left turn lanes, as well as other capacity improvements will be required to accommodate the projected traffic. Also, Pecos Road currently does not connect with the interstate system. The proposed interchange at I-515 could considerably alter travel demand on Pecos Road, particularly to the north of that interchange. The I-15 / Craig Road and I-515 / Pecos Road interchanges are currently planned and are expected to add traffic onto the Pecos Road corridor.

Previous Work:

- I-15 Northeast Corridor Study
- Martin Luther King Drive Corridor Study
- North 5<sup>th</sup> Street Super Arterial Corridor Study
- RTC3 Needs Assessment
- I-515 Corridor Study and EIS

Task Elements:

- Identify existing and ultimate travel demand along north-south corridors in North Las Vegas, for the specific purpose of gauging the benefit of capacity improvements along Pecos Road between Boulder Highway and CC 215, with consideration of the long-term travel demand arising from the proposed north campus of the University of Nevada Las Vegas north of CC 215. This

**TASK #6405-08/09: Pecos Road Corridor Study (CONTINUED)**

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analysis should include the potential for connecting the corridor with a grade separation over I-15.

- Evaluate alternative transportation and transit opportunities, including the potential for dedicated bus lanes, bicycle routes/lanes, and pedestrian facilities.
- Identify critical right-of-way and other physical constraints to both roadway expansion and the I-15 crossing.
- Evaluate how this demand may be affected by the proposed I-515 interchange.
- Identify existing and planned right-of-way and roadway geometrics, including any intended for transit service or pedestrian use.
- Estimate the right-of-way costs of the proposed alignments and improvements.
- Outline possible financing mechanisms to supplement existing local and federal funds for both the development of the corridor and operation of possible transit alternatives.
- Prepare a report documenting the study findings

Expected Products: A report documenting the study findings, preliminary cost estimates, description of right-of-way needs, recommendations, description of recommended project concept and financing mechanisms, and presentations.

Completion Date: June 2009

Fiscal Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #6405-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 150,559</b>
FHWA PL (95%)	\$ 143,031
Local Match (05%)	\$ 7,528

**TASK #6420-08/09: Las Vegas Boulevard North Land Use, Transit, and Pedestrian Study**

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Objective: To help reinvigorate ridership, this study will help identify a community-based, long-term, integrated land-use and transportation vision for the corridor. The study will be based on the City of North Las Vegas' Downtown Master Plan/Investment Study which will be completed concurrently and will include urban design solutions that capitalize on new developments, vacant sites, and redevelopment initiatives. These initiatives will be extended from the Downtown to Nellis AFB in ways that are derivative and adapted to the changing corridor. This, in turn, will help establish development patterns that fully leverage the MAX service. The North Las Vegas study will define regulatory and financial tools to promote development and/or redevelopment that will be incorporated into this work, while it also integrates site planning practices that promote transit/pedestrian infrastructure.

The RTC, in cooperation with Nevada Department of Transportation (NDOT) and the City of North Las Vegas, developed the Las Vegas Valley's first bus rapid transit (BRT) public transit service along Las Vegas Boulevard between downtown Las Vegas and Nellis Air Force Base (AFB). Known as the Metropolitan Area Express (MAX), the high capacity transit line uses advanced design rapid transit vehicles, off-board fare collection, services architecturally distinct stations, and affords a level of service that past studies have shown are highly regarded by transit passengers. However, events over the last several years have seen stagnation in ridership along the corridor.

Previous Work:

North 5<sup>th</sup> Street Transit Supportive Land Use Concept Plan  
Visioning 2025 Strategic Plan  
City of North Las Vegas Comprehensive Master Plan

Task Elements:

Baseline Inventory –

- Develop population and employment forecasts.
- Review previous and current land-use and transportation plans for the Las Vegas Boulevard North corridor.
- Identify vacant and underutilized parcels with potential for development and/or redevelopment.
- Identify property ownership patterns.
- Assess development trends.
- Develop an inventory of pedestrian amenities and connectivity infrastructure surrounding MAX stations.
- Assess pedestrian safety issues.

**TASK #6420-08/09: Las Vegas Boulevard North Land Use, Transit, and Pedestrian Study (CONTINUED)**

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Outreach and Education –

- Facilitate a coordination meeting among staff from appropriate North Las Vegas Departments.
- Develop a key stakeholder working group, including but not limited to agency officials, business leaders and community representatives, which will engage in a “hands-on” approach to identify options, opportunities, and strategies that serve as a basis for creating a vision of the future role of Las Vegas Boulevard.
- At the beginning of the planning process, the City of North Las Vegas and their Downtown Study consultant will provide materials and staff in attendance at a planning workshop or Charrette that provides stakeholders and the general public an opportunity to shape the vision, goals, and plan elements for this corridor. RTC and its consultant will participate in these initial outreach efforts and will provide materials as appropriate. Provide project information for the City of North Las Vegas website.
- Hold a public meeting to present and receive input on the draft plan.
- Present the final plan to the North Las Vegas Planning Commission and City Council.

Implementation Tools –

- Define the corridor vision based on community input, develop short- and long-term goals for corridor development, and identify targeted development markets (such as types of business and mix of development uses).
- Develop recommendations to improve corridor aesthetics, specifically, identifying possible gateway locations and alternative design treatments.
- Create policies and planning implementation tools to encourage transit-supportive land uses surrounding MAX stations.
- Develop recommendations to enhance the pedestrian environment.
- Create site planning standards and architectural guidelines that promote walking, transit station integration, and site accessibility.
- Review parking requirements and best practices for developing shared parking and shared circulation patterns.

Expected Products: Meeting materials and summaries; draft and final plan for the Las Vegas Boulevard North Study

Completion Date: December 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): City of North Las Vegas

**TASK #6420-08/09: Las Vegas Boulevard North Land Use, Transit, and Pedestrian Study (CONTINUED)**

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Participating Agencies:

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

UPWP Task #6420-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 48,842</b>
FTA 5303 (80%)	\$ 39,074
Local Match (20%)	\$ 9,768

**TASK #6430-08/09: Valley View Boulevard Study – US 95 to Harmon Road**

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Objective: To evaluate the widening and alignment of Valley View Boulevard between Harmon Avenue and US.95 to improve traffic flow, including the feasibility, costs and benefits of providing for an enhanced level of transit service in the Valley View corridor

Background: Travel demand increases over recent years make it desirable to examine all opportunities to make optimum use of available right-of-way. With the proposed connection between Valley View Blvd and Harmon Avenue just west of the City Center project, it is believed that Valley View Boulevard can be a major north/south corridor to facilitate traffic flow in and out of the central part of the Resort Corridor.

Previous Work:

Clark County Public Works is currently studying Valley View Boulevard between Flamingo Road and Harmon Avenue. The intent of their project is to provide another high capacity access to the Strip for resort employees and visitors.

Task Elements:

Data Collection and Project Coordination

- Identify and coordinate with any other transportation projects or studies adjacent to Valley View Boulevard.
- Identify existing and ultimate traffic volumes along the corridor and at all major intersections.
- Identify existing right-of-way and roadway geometrics.

Project Development

- Develop critical roadway alternatives including: conceptual travel lane configurations, conceptual major intersection designs, and access management.
- Evaluate advantages and disadvantages to each roadway alternative.
- Evaluate advantages and disadvantages to transit options.
- Draft report, recommendations, and presentations.

Implementation

- Develop a conceptual plan for roadway geometric data, including number of lanes, intersection configurations and business/residential access.
- Identify concept layouts including costs, plan view, and cross-sections.
- Identify right-of-way needs and costs.
- Provide preliminary project cost estimates.
- Final report and presentation(s).

**TASK #6430-08/09: Valley View Boulevard Study – US 95 to Harmon Road  
(CONTINUED)**

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Expected Products: An alternative evaluation report describing specific recommendations, preliminary cost estimates, right-of-way needs & descriptions, and conceptual plans.

Completion Date: June 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- City of Las Vegas
- Clark County

UPWP Task #6430-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 48,842</b>
FHWA PL (95%)	\$ 39,074
Local Match (05%)	\$ 9,768

## **TASK #6450-08/09: Las Vegas Valley Arterial Development Study**

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Objective: To identify segments of the arterial road system that have potential to accommodate a significant increase in traffic volumes; to show how these higher capacity segments could be combined in a network of higher capacity facilities that would complement the freeway system in meeting regional travel demand; to inventory various strategies that could be used to realize the full potential of the roadways in this high-capacity network; and to demonstrate how this network relates to the development of a region-wide network of higher capacity rapid transit routes.

### Background:

The region has a limited freeway network and relies on the arterial road system for a high proportion of regional travel needs. The Master Plan of Streets and Highways is an inventory of existing and planned rights-of-way, but many roadways in the network are congested and intersections are failing. For reasons of costs and impacts on property, the comprehensive development of new limited-access roads is not an option, so there is a need to provide decision makers with suggestions as to how to maximize the potential of a system that is largely based on existing alignments and does not involve substantial acquisition of new rights-of-way.

This study will help the RTC, local, and regional planning agencies coordinate their planning efforts for the development of the arterial road system so as to enhance the mobility, safety, and security of the transportation system in the region. This study will provide decision makers the various strategies for arterial system development. These strategies could include, but are not limited to:

- Addition of travel lanes;
- Designation of managed lanes;
- Prioritization of directional traffic flows through one-way couplets or preferential signal timing;
- Increasing capacity of intersections through added turn lanes, pedestrian grade separation, or elimination of turns; and
- Access and median control.

### Previous Work:

- FY 2006-2030 Regional Transportation Plan
- Master Plan of Streets and Highways
- Local comprehensive plans
- RTC corridor planning studies

### Task Elements:

- Review the various existing classifications of the highway and street network.
- Identify possible routes for development in coordination with RTC, local, state, and other planning partners.
- On these possible regional routes, inventory lane and intersection configurations, signal timing practices and available right-of-way.

**TASK #6450-08/09: Las Vegas Valley Arterial Development Study  
(CONTINUED)**

- Identify the segments or locations that limit the overall capacity of the route (including gaps in the system) and analyze the reasons for these limitations.
- Identify potential strategies to raise effective capacity at these locations and assess the feasibility of implementation.
- Identify which routes offer greatest potential to provide enhanced capacity for regional traffic movement.
- Identify which routes offer greatest potential for the development of the regional transit system
- Evaluate growth patterns for their impact on the thoroughfare network.
- Recommend arterial routes for development and the potential strategies needed to develop their full potential.

Expected Products:

- Recommended network of arterial routes with potential to accommodate increased regional travel.
- A report containing an inventory of potential strategies and recommendations as to their application.
- Plans and maps showing the data collected, including technical memorandums prepared for the technical meetings.

Completion Date: March 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

- RTC Project Manager
- Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #6450-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 41,049</b>
FHWA PL (95%)	\$ 38,997
Local Match (05%)	\$ 2,052

**TASK #6800-07/09: Las Vegas Valley Transportation Safety Analysis and Database**

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Objective: Develop a comprehensive database of accident, roadway performance, and roadway inventory data that can be updated on a regular basis. Develop procedures for quantifying the benefits of capital and operational projects/procedures.

Data will be incorporated into Geographic Information Systems (GIS) software so it can be synthesized with traffic performance, traffic volume, and operational parameters. Additionally, descriptive information about key arterial (non-freeway) roadway corridors will be collected-ideally all minor arterials and above and selected collectors. Other affected side-street segments will also be inventoried.

This inventory will aid development of guidelines and recommendations for capital and operational projects and procedures. The project deliverables will provide public agencies with the substantiation needed to support requests related to roadway safety improvements and access management techniques.

Previous Work:

- Various corridor studies in the Las Vegas Valley
- Video data-logs
- Evaluation of Signal Preemption for Emergency Vehicles

Task Elements:

- Develop specific plans and objectives for needed data, use of data, and data collection and update plan.
- Identify sources for accident data, format of data, and data reporting cycle.
- Assess opportunities to automate collection and reconcile data into the Freeway and Arterial System of Transportation (FAST) database. Collect the most current data and historical datasets.
- Develop procedures for timely and efficient collection of data as it becomes available.
- Using RTC/MPO visual data logs, roadway and traffic signal data files, aerial photography, and field visits, develop an inventory of roadway features.
- Obtain roadway performance and operational data.
- Obtain information related to the Nevada Department of Transportation's access management program and other formal access management activities implemented by Clark County entities.
- Develop a standing procedure and guidelines to analyze, evaluate, and synthesize accident data with roadway inventory and performance data.
- Identify safety related capital improvements, operational treatments, and programs that have been successful in the United States.

**TASK #6800-07/09: Las Vegas Valley Transportation Safety Analysis and Database (CONTINUED)**

- Synthesize all information from preceding tasks into a report and electronic database that is accessible on the internet and recommend that the information and guidelines be consulted and utilized to the extent possible in all transportation planning and capital improvement program activities that are sponsored and/or funded by RTC.
- Develop guidelines/steps for maintaining and updating the data files and quantifying the benefits of capital and operational improvements that are implemented.

Expected Products: Procedure for collecting, updating, and maintaining accident, transportation system performance, and roadway inventory data. Guidelines for using data to select capital projects and operational procedures and to support the planning and operational analysis of potential transportation corridor improvements.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

- Regional Transportation Commission of Southern Nevada
- Freeway and Arterial System of Transportation

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Freeway and Arterial System of Transportation
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- Clark County
- Nevada Department of Transportation
- Las Vegas Metropolitan Police Department

UPWP Task #6800-07/09 Budget	
<b>(RTC Local Funds)</b>	
<b>Carry-over amount</b>	<b>\$ 36,533</b>

**TASK #6810-08/09: Analysis of Alternatives for Accommodating Trucks on Southern Nevada Urban Freeways**

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Objective: The main objective(s) of the proposed project is to evaluate any shorter-term operational strategies that can deal with existing and near-term growth in truck traffic. Additionally, longer-term, capital-intensive alternatives to accommodate the future truck traffic on urban freeways in Southern Nevada will be examined. The project will take into account the opinions of stakeholders, possible alternative strategies, and potential benefits and adverse impacts of the most plausible alternatives.

Previous Work: I-15 North Corridor Study, I-15 South NEPA Corridor Study, Project NEON, and I-15 Weigh-In-Motion Field Study (2002).

Task Elements:

- Literature review of truck accommodation in congested roadways, using sources from other jurisdictions in the US and from international organizations.
- An opinion survey of stakeholders, including truck operators, general traveling public, traffic enforcement personnel, and traffic engineering personnel.
- A collection of current and future traffic flow data on selected streets, highways, and freeways. The data will include passenger car traffic data, truck volume data, crash data forecasts for cars and trucks, and locations of traffic conflicts with large trucks.
- Video monitor and evaluate current freeway traffic operations to observe situations and locations where traffic conflicts with trucks need to be addressed.
- Generate and analyze alternative strategies, which will include such measures as various lane restrictions for trucks, dedicated truck lanes, and separate truckways. The dedicated lane and truckway alternatives will be analyzed with and without tolls. Computer simulation is expected to be used in this analysis.
- Report of findings and recommendations for consideration by the RTC, Nevada Department of Transportation (NDOT), and other stakeholders.

Expected Products: The study will provide participating agencies with a range of innovative, cost-effective, and workable alternatives in a report format. The report will provide a preliminary assessment of the engineering, social, economic, environmental, and cost impacts associated with developing the alternatives.

Completion Date: December 2008

Financial Responsibility: Nevada Department of Transportation

**TASK #6810-08/09: Analysis of Alternatives for Accommodating Trucks on Southern Nevada Urban Freeways (CONTINUED)**

Functional Responsibility (Staffing): NDOT Project Management

Participating Agencies:

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

UPWP Task #6810-08/09 Budget	
<b>Carry-over amount</b>	<b>\$ 195,000</b>
UNLV UTC* FY 2009	\$ 115,000
NDOT FY 2009	\$ 80,000

\*Note: UNLV funding includes 50% from federal UTC funding and 50% from RTC local match.  
(a) The total expenditures for this project as of March 31, 2008 are \$45,000.

**TASK #7090-08/09: Planning Process for Evaluation and Optimization of Ramp Metering in Las Vegas**

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Objective: The Freeway and Arterial System of Transportation (FAST) has embarked on a major implementation of ramp metering in the Las Vegas Valley. This project would analyze lessons learned, current procedures, and areas where additional study or analysis is required. The project would recommend mitigation measures such as future geometric revisions and revisions to current ramp metering procedures and operations. The project will develop objective criteria in establishing the implementation times and duration periods for ramp metering. Also, develop objective criteria to determine when a ramp should not be metered.

Previous Work:

- Traffic Management Center
- Intelligent Transportation Systems (ITS) Regional Architecture
- Freeway Flow Analysis

Task Elements:

- Evaluate present ramp metering procedures and operations. Identify problem locations (such as high volume ramps) with queuing onto the arterial system, inadequate geometry and storage, and recurring congestion on the freeway mainline.
- Meet with FAST to get feedback on existing conditions and problem areas for ramp metering.
- Contact other freeway management agencies to analyze their approach to similar problems and issues.
- Recommend means of mitigating identified problems and issues.
- Recommend objective criteria for determining when a ramp should be metered, the duration of the metering, and recommended metering rates.
- Recommend objective criteria for determining that a ramp should not be metered.

Expected Products: A report that describes the process for evaluation and implementation of ramp metering, along with recommendations.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

- Freeway and Arterial System of Transportation
- Regional Transportation Commission of Southern Nevada

**TASK #7090-08/09: Planning Process for Evaluation and Optimization of Ramp Metering (CONTINUED)**

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Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Freeway and Arterial System of Transportation
- Nevada Department of Transportation
- City of Las Vegas
- City of Henderson
- City of North Las Vegas
- Clark County
- Nevada Department of Public Safety
- Nevada Highway Patrol

UPWP Task #7090-08/09 Budget	
<b>(RTC Local Funds)</b>	
<b>Carry-over amount</b>	<b>\$ 100,000</b>

SECTION II

NEW WORK TASKS  
FOR  
FISCAL YEAR 2008-2009

**Table 2: FF 2009 Unified Planning Work Program  
New Projects**

Task Number	Work Task	FY 2009 Budget	PL FY 09	FTA 5303 FY09	Other funds	Local Match	Total
<b>Balance available for new projects FY 09&gt;</b>			\$ 2,057,404	\$ 456,338			\$ 2,513,742
<b>Data Collection</b>							
2485-09	Street Digital Imaging	\$ 150,000	\$ 142,500			\$ 7,500	\$ 150,000
<b>MPO Plans/Activities</b>							
3100-09	Unified Planning Work Program	\$ 20,000			(b) \$ 20,000		\$ 20,000
3200-09	Transportation Improvement Program	\$ 65,000			(b) \$ 65,000		\$ 65,000
3300-09	Regional Transportation Plan 2009-2030	\$ 65,000	\$ 28,500		(b) \$ 65,000	\$ 1,500	\$ 95,000
3305-08/09	Process Improvement Team Development of Project Selection Prioritization Process	\$ 20,000			(b) \$ 20,000		\$ 20,000
3400-09	Public Involvement Plan	\$ 20,000			(b) \$ 20,000		\$ 20,000
3500-09	Short Range Transit Plan	\$ 40,000			(b) \$ 40,000		\$ 40,000
3500-09	Environmental Justice	\$ 20,000			(b) \$ 20,000		\$ 20,000
<b>Regional Transportation Planning Studies</b>							
5540-09	Development of Pedestrian Action Safety Plan	\$ 200,000	\$ 190,000			\$ 10,000	\$ 200,000
5550-09	Alternative Mode Access Facilitation Policy Development Study	\$ 50,000	\$ 47,500			\$ 2,500	\$ 50,000
6440-09	Valley View Blvd. Study Phase 2 - Harmon Rd. to Cactus Ave.	\$ 200,000	\$ 190,000			\$ 10,000	\$ 200,000
6500-09	East Charleston Blvd. Corridor & Parking Study	\$ 400,000	\$ 380,000			\$ 20,000	\$ 400,000
6510-09	Jones Blvd., Corridor Study	\$ 300,000	\$ 285,000			\$ 15,000	\$ 300,000
<b>Intelligent Transportation System (ITS) Studies</b>							
7100-09	Applicability of Adaptive Traffic Signal Control Systems in Southern Nevada's Urban Areas	\$ 145,000	\$ 137,750			\$ 7,250	\$ 145,000
<b>Total new projects</b>		\$ 1,695,000	\$ 1,401,250		\$ 250,000	\$ 73,750	\$ 1,725,000
<b>Remaining balance</b>			\$ 656,154	\$ 456,338			

Notes  
 (a) Amendment pending in the amount of \$45,000 (FTA 5303, \$36,000, local match \$9,000)  
 (b) RTC local funds - gas tax  
 (c) RTC Question 10 funds  
 (d) UNLV UTC funding includes 50% from federal UTC funding and 50% from RTC local match.

**TASK #2485-09: Street Digital Imaging**

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Objective: To utilize state of the art techniques to collect visual information on the street network within the Las Vegas Valley. The information, which is collected on the Nevada State Plane coordinates, provides users direct access to view, measure, store, and create GIS layers that are spatially accurate for longitude and latitude. This information will provide a wealth of research data to be applied, which will include but is not limited to; review of accident locations to develop possible countermeasure, tools to site bus stop to reduce pedestrian/vehicle conflicts, traffic control signage inventories to ensure conformity with the MUTCD, location and condition of cross walks and school zones, coordination for safe routes to schools by review and measurement of widths and identification of obstructions.

Previous Work: Digital imaging element completed in 2008

Task Elements:

- Vehicle marshalling in the Las Vegas area
- Completion of data protocol
- Collection of actual images for selected street/roadway segments

Expected Products:

- Report detailing the collection effort
- Delivery of the images to the RTC on a computer hard drive

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

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

UPWP Task #2485-08/09 Budget	
<b>Work Task Total</b>	<b>\$150,000</b>
FHWA PL (95%)	\$142,500
Local Match (05%)	\$7,500

**TASK #3100-08/09: Unified Planning Work Program (Amendment)**

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Objective: Coordinate transportation planning activities in the region. Develop and maintain the Unified Planning Work Program (UPWP) for FY 2008 and 2009. This document describes the transportation planning and transportation-related air quality planning activities expected to be undertaken in the region.

Previous Work:

- FY 2007 Unified Planning Work Program
- Continuing consultation with member entities
- FY 2006-2030 Regional Transportation Plan

Task Elements:

- Current UPWP administration throughout the fiscal year including document distribution, funding agreement preparation, contract administration, amendment preparation, and document updates as required.
- Planning activity status report preparation for current UPWP.
- Interagency coordination to develop the FY 2008-2009 UPWP work program and technical studies.
- FY 2008-2009 UPWP amendment preparation, including budget preparation, program review by the member agencies, and the public and proposed study selection.
- Monitor transportation planning activities to maintain conformity with Southern Nevada Regional Policy Plan and to meet the requirements of the conformity agreement with the Southern Nevada Regional Planning Coalition (SNRPC).

Expected Products: An amendment programming FY 2009 of the FY 2008-2009 Unified Planning Work Program with information on on-going and new work task activities.

Completion Date: May 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City

**TASK #3100-08/09: Unified Planning Work Program (Amendment)  
(CONTINUED)**

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- City of Mesquite
- Nevada Department of Transportation

UPWP Task #3100-08/09 Budget	
<b>Work Task Total (RTC Funds)</b>	<b>\$20,000</b>

## **TASK #3200-08/09: Transportation Improvement Program**

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Objective: Develop and maintain a fiscally constrained and air quality conforming Regional Transportation Improvement Program (TIP). This document will set out a prioritized, fiscally constrained program of transportation projects to be undertaken within Clark County during the RTC FY 2007-2009. The TIP contains all federally-funded highway, transit, and other transportation projects, as well as locally-funded projects that are regionally significant. The TIP includes a Congestion Management System (CMS). TIP projects must be consistent with the 20-year Long-Range Regional Transportation Plan, developed under Task Element 3300-08/09 and are supported by the air quality conformity finding on that Plan.

### Previous Work:

- (This is an on-going Task)
- Regional Transportation Plan: FY 2006-2030
- TIP FY 2006-2008
- Amendments to the 2006-08 TIP

### Task Elements:

- Prepare documentation and draft agenda items to develop the TIP
- Determine that sufficient federal, state and local revenue sources are available to fund the projects programmed.
- Ensure that all non-Exempt projects included in the TIP come from a conforming Long-Range Transportation Plan, as required under the Clean Air Act Amendments of 1990.
- Ensure that the TIP gives priority to eligible Transportation Control Measures identified in the air quality State Implementation Plans.
- Utilize the Congestion Management System to evaluate projects considered for inclusion in the TIP.
- Coordinate the development of the TIP program with the preparation of the Statewide TIP (STIP) by the Nevada Department of Transportation, to ensure subsequent integration of the RTC TIP into the STIP.
- Provide reasonable opportunity for public comment in accordance with the RTC's Public Participation Plan and Federal Regulations.
- Incorporate Environmental Justice and ADA considerations, as appropriate.

### Expected Products:

- Amendments and Revisions to the current TIP for FY 2006-2008.
- Development of TIP for FY 2009-2012.

Completion Date: July 2008

**TASK #3200-08/09: Transportation Improvement Program (CONTINUED)**

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Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- City of Mesquite
- Nevada Department of Transportation

UPWP Task #3200-08/09 Budget	
<b>Work Task Total (RTC Local Funds)</b>	<b>\$65,000</b>

**TASK #3300-08/09: Regional Transportation Plan 2009-2030**

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Objective: Develop and maintain a Long-Range Regional Transportation Plan defining the system improving program to meet the travel demands of the rapidly growing Las Vegas metropolitan area for the next 20 years. These improvements are developed through the RTC consultative planning process that includes outreach to the general public.

Previous Work:

- (This is an on-going task)
- Regional Transportation Plan 2006-2030
- Master Plan of Streets and Highways Map
- Public meetings on the 2006-2030 RTP and the 2006-2008 TIP
- Southwest valley transportation planning charrette, 2003

Task Elements:

- Develop a timeline of actions necessary to meet the requirements of SAFETEA-LU.
- Solicit lists of all regionally significant transportation projects for all modes, irrespective of whether or not they are to be federally funded.
- Identify and document anticipated trends in population, employment, and tourism in the area and the resulting projected demand for transportation from residents and visitors, as well as the projected demand for goods movement.
- Evaluate all submitted projects and develop a prioritized listing based upon their effectiveness in meeting demand, the Congestion Management Process, the other planning factors as identified in SAFETEA-LU, and local prioritization policies and procedures.
- Develop traffic management programs, Intelligent Transportation Systems, and transportation demand management strategies that may serve to improve system performance across all modes and most cost-effectively meet the mobility needs of the community.
- After allowing for the resources needed to maintain the existing system determine that sufficient federal, state, and local revenue sources are available to fund the projects included in the Plan.
- Prepare a transportation/air quality conformity determination for the RTP for 2009-2030 to ensure compliance with the Clean Air Act Amendments of 1990.
- Coordinate with the RTP's Bicycle and Pedestrian Plan and the Short-Range Transit Plan to ensure consistency among the various modes.
- Continue working on objectives related to the Freight Element.
- Develop alternative plans for future transportation and land development probabilities, accounting for evolving technologies and for policies that ensure closer integration between land and transportation planning.
- Conduct charettes and similar activities to assist in the development of regional transportation planning concepts.

**TASK #3300-08/09: Regional Transportation Plan 2009-2030 (CONTINUED)**

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- Retain the services of professional facilitators as necessary.
- Develop newsletters and other media to publicize opportunities for public involvement in the planning process.
- Establish focus groups as appropriate to advice on specific issues or aspects of the planning process.
- Conduct public meetings on the Plan, TIP and related documents.
- Incorporate Environmental Justice considerations.

Expected Products:

- RTP for FY 2009-2030
- Reports on the nature and disposition comments made as part of the formal consultation process.
- Amendments to the RTP for 2006-2030, if necessary.

Completion Date: August 2008

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- City of Mesquite
- Clark County Department of Air Quality Management
- Nevada Department of Transportation

UPWP Task #3300-09 Budget	
<b>Work Task Total</b>	<b>\$ 95,000</b>
FHWA PL (95%)	\$ 28,500
Local Match (05%)	\$ 1,500
RTC Funds	\$ 65,000

**TASK #3305-08/09: Process Improvement Team Development of Project Selection Prioritization Process**

Objective: To carry out a collaborative program to improve the Metropolitan Planning Organization project selection prioritization process.

Previous Work:

- Question 10 Prioritization Process
- Regional Transportation Plan FY 2006 - 2030

Task Elements:

- Create an inclusive Process Improvement Team, including representatives of government and private sector groups.
- Hold a series of meetings to develop a consensus on the improved prioritization process.
- Review and categorize best practices in project selection
- Develop criteria based on federal requirements and local preference.
- Develop list of applicable criteria measurements
- Carry out modeling assessments of draft selection process
- Assess options for project selection process policy document
- Develop final process selection document
- Present to committees for comment and RTC for adoption
- Implement the adopted Project Selection Prioritization Process

Expected Products: RTC Project Selection Prioritization Process Policy Document

Completion Date: March 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

UPWP Task #3305-08/09 Budget	
<b>Work Task Total (RTC Local Funds)</b>	<b>\$20,000</b>

## **TASK #3310-08/09: Public Participation Plan**

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Objective: The Public Participation Plan is intended to meet the requirements of the federal surface transportation act known as The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This Plan enables state, metropolitan, and local agencies to deliver numerous transportation projects during the next four years.

Previous Work:

- Regional Transportation Plan (RTP) FY 2006-2030
- Transportation Improvement Program (TIP) FY 2006-2008
- Unified Planning Work Program FY 2007

Task Elements:

The Public Participation Plan, according to section 450.316 of SAFETEA-LU, allows for a process to provide various transportation stakeholders with reasonable opportunities to be involved in the metropolitan transportation planning process. This includes public agencies, freight providers, private transportation providers, users of transit, bicycle, and pedestrian facilities, and other interested parties such as the disabled. Thus, the Plan will be developed in consultation with all interested parties and, at a minimum, describe explicit procedures, strategies, and desired outcomes for:

- Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including but not limited to a reasonable opportunity to comment on the proposed RTP and TIP;
- Providing timely notice and reasonable access to information about transportation issues and processes;
- Employing visualization techniques to describe the RTP and TIP;
- Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the Internet;
- Holding any public meetings at convenient and accessible locations and times;
- Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;
- Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;
- Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the metropolitan planning organization (MPO) and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts;
- Coordinating with the statewide transportation planning public involvement and consultation processes; and

**TASK #3310-08/09: Public Participation Plan (CONTINUED)**

- Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.

When significant written and oral comments are received on the RTP and TIP (including the financial plans) as a result of the participation process, a summary, analysis, and report on the disposition of comments will be made as part of the final metropolitan transportation plan and TIP.

A minimum public comment period of 45 calendar days will be provided before the initial or revised participation plan is adopted by the MPO. Copies of the approved participation plan will be provided to the FHWA and the FTA for informational purposes and will be posted on the Internet.

Expected Products: The Public Participation Plan document, in association with the Regional Transportation Plan

Completion Date: January 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- City of Mesquite
- Nevada Department of Transportation

Task #3310-08/09 Budget	
<b>Work Task Total (RTC Funds)</b>	<b>\$20,000</b>

**TASK #3400-08/09: Short Range Transit Plan**

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Objective: Develop and maintain a Short Range Transit Plan (SRTP) addressing transit-related investments, operational plans, and budget for RTC FY 2009-2013. Specific attention will be paid to issues associated with intermodal coordination of multiple transit modes, the Citizens Area Transit (CAT) fixed route bus system, ADA paratransit services, and the proposed Bus Rapid Transit (BRT) routes.

Previous Work:

- (This is an on-going task)
- SRTP FY 2004-2008
- Transit Mode Option Study (2002)
- Transit Origin/Destination Study (2002)
- Long-Range Transit Plan (2006)

Task Elements:

- Develop data displays including graphics and presentations on the state of CAT fixed route and paratransit service.
- Assess degree of progress towards reaching the adopted transit goals of the RTC.
- Prepare revenue, capital, and operating costs for the relevant time period.
- Analyze fiscal reasonableness to determine that sufficient federal, state, and local revenue sources are adequate for the programmed projects and operating costs.
- Incorporate Environmental Justice/Title VI Civil Rights and ADA considerations, as appropriate, in project development planning.
- Using the best available data, develop, and prioritize service enhancements for the relevant time frame.
- Coordinate the SRTP with relevant local entities throughout development; provide opportunities for public input.
- Provide reasonable opportunity for public comment in accordance with the RTC's Public Participation Plan and federal regulations.

Expected Products: SRTP for FY 2009-2013

Completion Date: July 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

**TASK #3400-08/09: Short Range Transit Plan (CONTINUED)**

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Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- City of Mesquite
- Nevada Department of Transportation

UPWP Task #3400-08/09 Budget	
<b>Work Task Total (RTC Local Funds)</b>	<b>\$40,000</b>

**TASK #3500-08/09: Environmental Justice**

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Objective: To develop products and procedures to implement Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," in accordance with subsequent USDOT Guidance and Regulations.

Previous Work:

- (This is an on-going Task)
- Civil Rights Act of 1964-Title VI Program Report, March 1998
- Title VI Program Update Report, September 2004

Task Elements:

- Monitor the effectiveness of the transportation system in providing access for low-income groups within the population.
- Assess the impacts of transportation system changes on low-income, minority, elderly and disabled populations. Identify instances where adverse impacts are disproportionately high and develop potential strategies to eliminate or mitigate such impacts.
- Monitor the planning and project development process to ensure that it continues to provide adequately for public involvement, including consideration of public input received, in particular from those segments of the population that may be under-served or negatively affected by the existing transportation system.
- Provide reasonable opportunity for public comment in accordance with the RTC's Public Participation Plan and Federal Regulations.

Expected Products:

- Annual report on environmental justice issues related to transportation planning. Reports on specific issues arising from UPWP planning studies.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

**TASK #3500-08/09: Environmental Justice (CONTINUED)**

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Participating Agencies:

- Clark County
- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- City of Boulder City
- City of Mesquite
- Nevada Department of Transportation

UPWP Task #3500-08/09 Budget	
<b>Work Task Total (RTC Local Funds)</b>	<b>\$20,000</b>

## **Task #5540-09: Development of a Pedestrian Action Safety Plan**

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Objective: To develop a coordinated, tailored safety action plan that can be uniformly used by all jurisdictions and interested parties to identify recurring areas of conflicts and apply various infrastructure, operational and/or policy options or countermeasures to mitigate problem areas for the community of non-motorized travelers.

Previous Work:

- Street Digital Imaging
- GIS Crash Safety Data Base
- 2006 Bicycle and Pedestrian Plan

Task Elements:

Establish a working group representing entities and community-based groups in areas covered by the plan.

- Identify institutional policies and practices that perpetuate safety issues in the built environment.
- Review existing street standards to determine if designs need to be modified to improve the safety infrastructure
- Evaluate work zone guidelines and practices, lighting policies, crosswalk marking (when and where) maintenance practices and schedules, and signal strategies
- Identify regional institution policies and practices that influence driver/pedestrian behavior and interactions. This should include a review of local laws, enforcement and judicial practices.

Develop outreach strategies that create diverse opportunities for public input; establish a report on top safety issues reported during public process.

Obtain/ Develop GIS map layers including:

- Pedestrian crashes
- Schools
- Transit stops
- Commercial activity centers
- Sidewalks
- Crosswalks
- Projects planned over the next 10 years

Obtain and classify crash data for 3-5 years; merge crash data file into the RTC's GIS Crash Safety Database.

- Develop an agreed to methodology to identify high crash locations and areas of concern based on intensity of land use.

**Task #5540-09: Development of a Pedestrian Action Safety Plan  
(CONTINUED)**

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Develop a process for selecting and ranking improvement areas - high crash locations and areas of concern.

- Establish a process for the periodic sharing/reporting of strategies used to address/mitigate high crash location and areas of concern.

Develop regional design guidelines for high pedestrian activity centers.

Identify strategies to increase awareness and modify behavior

- Develop an implementation strategy for the awareness strategies

Expected Products:

- Interim Report on Task Elements Identified in Task 1; Policies and Practices, Streets Standards, Guidelines and Practices.
- Report on the location of street attributes; driveways, crosswalks, sidewalk/sidewalk classification, median type, street widths, signage and lighting.
- Report on Input from the public from outreach activities.
- Manual on how to apply the Pedestrian Safety Action Plan Elements
- Final report on the Pedestrian Action Safety Program

Completion Date: May 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

Clark County

Cities of Las Vegas

North Las Vegas

City of Henderson

City of Mesquite

Boulder City

Nevada Department of Transportation

Safe Communities/Safe Kids

Look out Kids About

Statewide Highway Safety Plan – Technical Working Group

UNLV's Transportation Research Center

**Task #5540-09: Development of a Pedestrian Action Safety Plan  
(CONTINUED)**

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UPWP Task #5540-09 Budget	
<b>Work Task Total</b>	<b>\$ 200,000</b>
FHWA PL (95%)	\$ 190,000
Local Match (05%)	\$ 10,000

**TASK # 5550-09: Alternative Mode Access Facilitation Policy Development Study**

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Objective: Prove the concept that opening existing corridors will result in increased continuity between residences and destinations such as schools, parks, transit, and retail and, therefore, facilitate more alternative mode travel.

Previous Work:

Mapping reveals a multitude of such opportunities in the Valley.

Task Elements:

- Use existing information sources to plot destinations in relationship to residential subdivisions and to identify most direct paths between them. Review ground level photography to determine which direct paths are closed to alternative mode travel. Identify any that appear to be used in spite of the blockage, so they may be accessed only by jumping over the walls or gates.
- Use aerial photography to confirm ground level continuity.
- Rank by distance saved and cost of construction or additional equipment, e.g., gate lock.
- Investigate each in the field and document with photographs of existing use and proposed access corridor. Verify that there are no obvious hazards that could not easily be remedied.
- Review title information available at County Recorder's office to determine ownership of the corridor. Verify liability issues.
- Elicit participation by Metro or local entity police in homeowner association meetings. Prepare exhibits to include crime maps and access facilitation proposals.
- Meet with homeowners associations responsible for each path and elicit at least three that are willing to participate.
- Coordinate with UNLV to complete before and after pedestrian counts.
- Develop policies that can be adopted by entities for approving alternative mode connectivity aspects of development plans.
- Prioritize retrofitting of existing common area facilities to facilitate alternative mode access.
- Identify funding sources.

Expected Products:

- Agendas and meeting notes, as appropriate, regarding the enhanced coordination with the various organizations identified above.

**TASK # 5550-09: Alternative Mode Access Facilitation Policy Development Study (CONTINUED)**

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- Final report on effect of opening corridors to alternative mode travel, priorities and funding sources for retrofitting, and policies for use in reviewing alternate mode connectivity aspects of new developments.

Completion Date:

On-going though FY 2010

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): RTC Intern

Participating Agencies:

University of Nevada, Las Vegas

Entity Public Safety Agencies

Regional Transportation Commission of Southern Nevada

UPWP Task #5550-09 Budget	
<b>Work Task Total</b>	<b>\$ 50,000</b>
FHWA PL (95%)	\$ 47,500
Local Match (05%)	\$ 2,500

**Task #6440-09: Valley View Boulevard Study Phase 2–Harmon Road to Cactus Avenue**

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Objective: To evaluate future improvement needs in the Valley View Boulevard corridor between Harmon Avenue and Cactus Avenue to improve traffic flow, including the feasibility, costs and benefits of providing for an enhanced level of transit service in the Valley View corridor as well as roadway and intersection improvements.

Background: Travel demand increases over recent years make it desirable to examine all opportunities to make optimum use of available right-of-way. With the proposed connection between Valley View Blvd and Harmon Avenue just west of the City Center project, it is believed that Valley View Boulevard can be a major north/south corridor to facilitate traffic flow in and out of the central part of the Resort Corridor. The county has designated much of this area as high density mixed use development. Also, the Asian District Zoning Overlay is adjacent to Valley View on the west side between Desert Inn and Flamingo.

Previous Work:

Clark County Public Works is currently studying Valley View Boulevard between Flamingo Road and Harmon Avenue. The intent of their project is to provide another high capacity access to the Strip for resort employees and visitors. Phase one of a Valley View Corridor Study is currently underway to the north of this request. A second phase will complete the Valley View Corridor Study. The county just recently increased the planned right of way from 100 feet to 120 feet on Valley View between Sirius Avenue and Oquendo Road.

Task Elements:

Data Collection and Project Coordination

- Identify and coordinate with any other transportation projects or studies adjacent to Valley View Boulevard.
- Identify existing and ultimate traffic volumes along the corridor and at all major intersections.
- Identify existing right-of-way and roadway geometrics.

Project Development

- Develop critical roadway alternatives including: conceptual travel lane configurations, conceptual major intersection designs, and access management.
- Evaluate advantages and disadvantages to each roadway alternative.
- Evaluate advantages and disadvantages to transit options.
- Draft report, recommendations, and presentations.

**Task #6440-09: Valley View Boulevard Study Phase 2–Harmon Road to Cactus Avenue (CONTINUED)**

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Implementation

- Develop a conceptual plan for roadway geometric data, including number of lanes, intersection configurations and business/residential access.
- Identify concept layouts including costs, plan view, and cross-sections.
- Identify right-of-way needs and costs.
- Provide preliminary project cost estimates.
- Final report and presentation(s).

Expected Products:

- An alternative evaluation report describing specific recommendations, preliminary cost estimates, right-of-way needs & descriptions, and conceptual plans.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Clark County

UPWP Task #6440-09 Budget	
<b>Work Task Total</b>	<b>\$ 200,000</b>
FHWA PL (95%)	\$ 190,000
Local Match (05%)	\$ 10,000

## **Task 6500-09: East Charleston Boulevard Corridor & Parking Study**

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Objective: Evaluate improvements to Charleston Boulevard between I-15 and Pecos Road, including the potential restriping and/or widening of the road to 6 lanes between Maryland Pkwy to Pecos Road, elimination of on-street parking and determination of appropriate locations for access control. The study should identify the number of potential travel lanes, intersection modifications, access management and median control; potential for signal timing coordination; and other Intelligent Transportation Systems (ITS) applications along with cost estimates. The study should also evaluate the impact on traffic operations along Charleston Blvd resulting from possible major developments on adjoining land, as well as from the proposed reconstruction of I-15 known as “Project Neon”

### Previous Work:

- City of Las Vegas 2020 Master Plan
- City of Las Vegas Master Plan of Street & Highways
- RTC Regional Transportation Plan and Short-Range Transit Plan

### Task Elements:

#### Data Collection & Project Coordination

- Identify and coordinate with any other transportation projects or studies adjacent to East Charleston Boulevard.
- Identify existing and ultimate traffic volumes along the corridor and at all major intersections.
- Identify existing right-of-way and roadway geometrics, including parking, driveway access, transit stops and bus pull-outs, and sidewalk conditions.
- Identify accident locations and the documented nature of crashes.
- Identify and coordinate with any major land use developments that have the potential to impact travel demand or traffic operations along Charleston Boulevard.

#### Project Development

- Develop critical roadway alternatives including: travel lane configurations, major intersection designs, median control and access management.
- Evaluate advantages and disadvantages to each roadway alternative.
- Develop and evaluate potential strategies for parking, transit operations and pedestrian circulation
- Develop potential strategies for parking, transit operations and pedestrian circulation
- Draft report, recommendations and presentations.

**Task 6500-09: East Charleston Boulevard Corridor & Parking Study  
(CONTINUED)**

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Implementation

- Develop a conceptual design level plan for roadway geometric data including number of lanes, intersection configurations, business/residential access management, transit stops and pull-outs and the pedestrian environment.
- Identify concept layouts including costs, plan view and cross-sections.
- Identify right-of-way needs and costs.
- Provide preliminary project cost estimates.
- Final report and Presentation(s).

Expected Products:

- Alternative evaluation report with specific recommendations, preliminary cost estimates, right-of-way needs & descriptions, and preliminary design plans.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

City of Las Vegas

Clark County

Nevada Department of Transportation

UPWP Task #6500-09 Budget	
<b>Work Task Total</b>	<b>\$ 400,000</b>
FHWA PL (95%)	\$ 380,000
Local Match (05%)	\$ 20,000

## **Task 6510-09: Jones Boulevard Corridor Study**

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Objective: To evaluate the widening and potential intersection modifications of Jones Boulevard between US95 and Desert Inn Road to improve traffic flow. The study should identify the number of potential travel lanes, intersection spacing and turn lanes; access management and median control; potential for signal timing coordination; and other Intelligent Transportation Systems (ITS) applications along with cost estimates. The study should also investigate the possibility of operating Jones Boulevard as a one-way preference couplet system with another close by arterial roadway.

### Previous Work:

- Rainbow Boulevard Corridor Study
- Sahara Avenue Bus Rapid Transit and Corridor Study
- US95 Widening Project

### Task Elements:

#### Data Collection & Project Coordination

- Identify and coordinate with any other transportation projects or studies adjacent to Jones Boulevard.
- Identify existing and ultimate traffic volumes along the corridor and at all major intersections.
- Identify existing right-of-way and roadway geometrics.

#### Project Development

- Develop critical roadway alternatives including: travel lane configurations, major intersection designs and access management and alternative corridors for preferenced couplets.
- Evaluate advantages and disadvantages to each roadway alternative.
- Draft report, recommendations and presentations.

#### Implementation

- Develop a conceptual design level plan for roadway geometric data including number of lanes, intersection configurations and business/residential access management and alternative corridors for preferenced couplets.
- Identify concept layouts including costs, plan view and cross-sections.
- Identify right-of-way needs and costs.
- Provide preliminary project cost estimates.
- Final report and Presentation(s).

**Task 6510-09: Jones Boulevard Corridor Study (CONTINUED)**

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Expected Products:

- Alternative evaluation report with specific recommendations, preliminary cost estimates, right-of-way needs & descriptions, and preliminary design plans.

Completion Date: June 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing): Regional Transportation Commission of Southern Nevada

Participating Agencies:

City of Las Vegas

Clark County

Nevada Department of Transportation

UPWP Task #6510-09 Budget	
<b>Work Task Total</b>	<b>\$ 300,000</b>
FHWA PL (95%)	\$ 285,000
Local Match (05%)	\$ 15,000

**Task # 7100-09: Applicability of Adaptive Traffic Signal Control Systems in Southern Nevada's Urban Areas**

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Objective: The primary objectives of this research are: to provide a comprehensive evaluation of the conditions when adaptive signal systems are applicable and cost effective; to develop guidelines on assessing and implementing adaptive signal control systems. This will be the first adaptive signal system to be implemented and evaluated in Nevada's urban areas

Previous Work: A closely related project is a pilot study to implement and evaluate an adaptive traffic signal control system on a segment along Boulder Highway consisting of 10 signals. Various adaptive traffic signal control systems have been deployed in several U.S. urban areas. There have been conflicting reports and study results regarding the effectiveness of adaptive signal control systems. The performance of adaptive signal systems is affected by a number of factors.

Task Elements:

- Conduct literature review and agency survey regarding experiences of implementing various adaptive signal control systems.
- Develop coordinated signal timing plans for traditional closed-loop systems, which will be used as a base case when evaluating adaptive systems.
- Participate in initial system installation and parameter set up of the candidate adaptive systems.
- Conduct simulation studies to provide a comprehensive assessment of the candidate adaptive systems.
- Conduct before and after field data collection.
- Produce implementation guidelines and make recommendations on the most effective adaptive signal control systems.

Expected Products:

- Research reports documenting the major findings, conclusions, and recommendations regarding implementation of adaptive signal control systems in Nevada's urban areas; presentations of research results at international/national conferences.

Completion Date: December 2009

Financial Responsibility: Regional Transportation Commission of Southern Nevada

Functional Responsibility (Staffing):

- University of Reno
- University of Las Vegas Nevada

**Task # 7100-09: Applicability of Adaptive Traffic Signal Control Systems in Southern Nevada's Urban Areas (CONTINUED)**

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UPWP Task #7100-09 Budget	
<b>Work Task Total</b>	<b>\$ 145,000</b>
FHWA PL (95%)	\$ 137,750
Local Match (05%)	\$ 7,250

SECTION III

NON-UPWP WORK TASKS  
FOR  
FISCAL YEAR 2008-2009

FOR INFORMATIONAL PURPOSES ONLY

**Table 3: Planning studies to be funded wholly from non-UPWP sources**

Task Number	Work Task	Project Sponsor	FY 08-09 budget		Notes	Project total
#6000-05/09	California-Nevada Super Speed Train Project (Maglev).	California-Nevada Super Speed Train Commission			f	
#6300-07/09	Apex to Mesquite and Moapa Valley Northeast Corridor.	NDOT	\$500,000		e	\$500,000
#6310-08/09	Eastern Transportation Corridor Study	NDOT	\$1,000,000		e	\$1,000,000
#6400-07/08	I-15 Resort Corridor Transportation Configuration Study	NDOT	\$1,000,000		e	\$1,000,000
	<b>Total</b>		<b>\$2,500,000</b>			<b>\$2,500,000</b>

Notes:

(e) Nevada State Gas Tax

(f) Federal Railroad Administration (FRA); \$45 million earmark signed on June 6, 2008.

**TASK #6000-05/09: California-Nevada Super Speed Train Project**

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Objective: Since passage of the Transportation Equity Act of the 21<sup>st</sup> Century (TEA-21), Congress has encouraged the development and construction of a transportation system that employs magnetic levitation (Maglev) technology capable of safe use by the public. This advanced transportation technology uses magnetic forces to lift, propel, and guide a vehicle over a specially designed guideway. Utilizing state of the art electric power and control systems, this configuration eliminates contact between vehicle and guideway and permits cruising speeds exceeding 300 miles/hour.

Under SAFETEA-LU funding, the Nevada Department of Transportation (NDOT), in cooperation with the Federal Railroad Administration (FRA), the California Department of Transportation (Caltrans), and the California-Nevada Super Speed Train Commission (CNSSTC), are continuing activities toward completion of a combined Programmatic Environmental Impact Statement (PEIS) and Programmatic Environmental Impact Report (PEIR) for the proposed action to design and construct the California-Nevada Interstate Maglev Project. In addition, the project is continuing activities toward completing an Environmental Impact Statement (EIS) for the first 40 miles between Las Vegas and Primm, NV. Upon completion, the project is proposed to occupy a 269 mile corridor between Las Vegas, NV and Anaheim, CA.

Task Elements:

- Scoping and Work Plan Refinement
- Purpose and Need Statement
- Submission Requirements
- Project Management

Financial Responsibility: Nevada Department of Transportation

Functional Responsibility (Staffing):

- Nevada Department of Transportation
- Regional Transportation Commission of Southern Nevada

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Nevada Department of Transportation
- Caltrans
- CNSSTC

Task #6000-05/09 Budget: No PL or 5303 funds involved.

Federal Railroad Administration (FRA): \$45 million earmark signed on June 6, 2008.

**TASK #6300-05/09: Apex to Mesquite and Moapa Valley Northeast Corridor Study**

Objective: To evaluate the need and feasibility of enhancing mobility on US 93, SR 168 and I-15 to accommodate future increased residential, commercial, and industrial traffic. Increased traffic is expected from a population expansion at the proposed Coyote Springs development, Mesquite development, Moapa Valley development, and the proposed construction of a cement plant along the I-15 Corridor near the Moapa Indian Reservation. The proposed boundary of the study area will include: I-15 North from Apex to Mesquite, SR 168 from I-15 to US 93, and US 93 from I-15 to the Lincoln County Line.

Previous Work: Master Traffic Study for Coyote Springs, March 2005

Task Elements:

- Identify and evaluate existing and future congestion and safety issues along the corridor.
- Analyze severity and level of congestion and identify corrective strategies to mitigate.
- Determine traffic impacts to I-15 resulting from the operational use of the proposed cement plant along the I-15 corridor.
- Develop detailed cost estimates, possible funding sources and a timeline to implement corrective strategies.
- Develop construction phasing alternatives.

Expected Products: A comprehensive report detailing study recommendations, costs and timing of proposed improvements, possible funding sources, and construction phasing.

Completion Date: June 2008

Financial Responsibility: Nevada Department of Transportation (NDOT)

Functional Responsibility (Staffing): NDOT Program Development

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Clark County
- Moapa Band of Paiutes
- City of Mesquite
- City of Moapa
- Moapa Valley Town Advisory Board

**TASK #6300-05/09: Apex to Mesquite and Moapa Valley Northeast Corridor  
Study (CONTINUED)**

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Non-UPWP Task #6300-05/09 Budget	
<b>(State Gas Tax)</b>	<b>\$500,000</b>

**TASK #6310-08/09: Eastern Transportation Corridor Study**

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Objective: To determine the feasibility of developing an Eastern Transportation Corridor that will provide increased north-south capacity and improve transportation service to the eastern part of the Las Vegas Valley. To provide decision makers along the corridor an action plan that defines the ultimate alignment and lane configuration. Prepare recommendations for development through preliminary environmental analysis.

Previous Work: I-15 Northeast Corridor Study and I-515 Corridor Study

Task Elements:

- Data Collection/Project Management
- Analysis of Existing Conditions
- Identify existing right-of-way and roadway geometrics and planned changes
- Travel Demand Modeling/Evaluation of Future Impacts
- Link travel demands and intersection demands
- Develop and evaluate different alternative options
- Prepare Draft Report/Final Report and presentation(s)
- Public Stakeholder Involvement & Information Program

Expected Products: The study will provide participating agencies with a report that definition and evaluation of alternatives, preliminary cost estimates, description of right-of-way needs, and recommendations. The recommendations will provide a range of innovative, cost-effective, and workable alternatives along the corridor. The study will provide a preliminary analysis of engineering, social, economic, environmental, and cost impacts of these alternatives.

Completion Date: June 2009

Financial Responsibility: Nevada Department of Transportation

Functional Responsibility (Staffing): NDOT Program Development

Participating Agencies:

- Regional Transportation Commission of Southern Nevada
- Clark County
- City of Las Vegas
- City of Henderson
- City of North Las Vegas
- Bureau of Land Management
- National Park Service

**TASK #6310-08/09: Eastern Transportation Corridor Study (CONTINUED)**

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Non-UPWP Task # 6310-08/09 Budget	
<b>(State Gas Tax)</b>	<b>\$1,000,000</b>

**TASK #6400-07/09: I-15 Resort Corridor Transportation Configuration Study**

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Objective: To provide decision makers along the Resort Corridor an action plan that defines the ultimate lane configuration of I-15 between I-215 and the US 95 interchange. The study will consider the 14 lane improvement project listed in the RTC Regional Transportation Plan and integrate that with a collector-distributor (CD) system that will provide access through the corridor and to the current interior “Managed Lanes Project.”

Previous Work:

I-15 North Corridor Study, I-15 South Corridor Study, and Project NEON

Task Elements: The study will include a collection of current and future traffic flow data on selected streets, highways, and freeways. The data will include passenger car traffic data, truck volume data, crash data forecasts for cars and trucks, and locations of traffic conflicts with large trucks. Other elements include:

- Data Collection/Project Management
- Analysis of Existing Conditions
- Travel Demand Modeling/Evaluation of Future Impacts
- Evaluate Alternatives
- Prepare Draft Report/Final Report
- Public Stakeholder Involvement & Information Program

Expected Products: The study will provide participating agencies with a range of innovative, cost-effective, and workable alternatives in a report format. The report will provide a preliminary assessment of the engineering, social, economic, environmental, and cost impacts associated with developing the alternatives.

Completion Date: June 2008

Financial Responsibility: Nevada Department of Transportation

Functional Responsibility (Staffing): NDOT Program Development

Participating Agencies:

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

**TASK #6400-07/09: I-15 Resort Corridor Transportation Configuration Study  
(CONTINUED)**

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Non-UPWP Task #6400/07-09	
<b>Estimated Amount (State Gas Tax)</b>	<b>\$1,000,000</b>