



TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY  
DISCRETIONARY GRANT APPLICATION FOR  
I-215 / AIRPORT CONNECTOR INTERCHANGE

Organization

Clark County Department of Public Works  
(DUNS No. 083782953 / CCR 3VNR8)  
500 South Grand Central Parkway  
Las Vegas Nevada, 89155-4000



A CENTURY OF SERVICE

Project Title and Name

**Southern I-215 Bruce Woodbury Beltway  
Las Vegas Boulevard to Windmill Lane and  
I-215 / Airport Connector Interchange**

Type of Project

Highway

Location

State of Nevada  
County of Clark, Urban Area  
Nevada Congressional District 3

Primary Contact

Denis Cederburg, Director  
Clark County Department of Public Works  
500 S. Grand Central Pkwy, 2nd Floor  
Las Vegas Nevada, 89155-4000  
Phone: (702) 455-6020  
Fax: (702) 455-6040  
Email: [dlc@co.clark.nv.us](mailto:dlc@co.clark.nv.us)

Secondary Contact

Joanna Wadsworth, P.E.  
Clark County Department of Public Works  
500 S. Grand Central Pkwy, 2nd Floor  
Las Vegas Nevada, 89155-4000  
Phone: (702) 455-6009  
Fax: (702) 455-6040  
Email: [joanna@co.clark.nv.us](mailto:joanna@co.clark.nv.us)

Amount of Grant Request

\$ 132,000,000.00

Submitted

September 15, 2009



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## **A. PROJECT DESCRIPTION**

This project consists of the Southern I-215 Bruce Woodbury Beltway and the Interstate-215 / Airport Connector Interchange, located in the unincorporated area of southern Nevada's Las Vegas valley. The Las Vegas valley is considered the economic engine that drives the state's economy. On average, 37 million people visit Las Vegas each year. While gaming is the largest attraction, other recreational opportunities, including Lake Mead National Recreation Area, Hoover Dam, and Red Rock Canyon National Conservation Area, to name a few, make Las Vegas a popular tourist destination.

The Southern Bruce Woodbury Beltway (I-215) and the Airport Connector (State Route 171) are key southern Nevada transportation corridors. Local commuters and visitors heavily travel both to access McCarran International Airport and points north as well as the two major freeways consisting of Interstate 15 and Interstate 515.

While the Beltway functions as the major east west corridor in the southern Las Vegas valley, the Airport Connector provides a critical north south link between residential and employment centers. There are a limited number of north-south options for travel within this vicinity due to the location of McCarran International Airport, which precludes, by its nature, other arterial or collector roadways. Las Vegas Boulevard (the Las Vegas Strip) and Interstate 15 (I-15) are located approximately 1.25 miles and 1.7 miles, respectively, west of the Airport Connector and Eastern Avenue is located approximately 1.5 miles east. All of these alternative north-south routes are already heavily congested.

The Airport Connector provides a critical link in the operations of the Airport. The Airport Connector and the Beltway provide freeway direct access to and from the airport. Regional travelers, once on the interstate or beltway, can travel unimpeded directly to the terminal facilities without experiencing any delays from signalized intersections or local roadways. Additionally, the airport's rental car facilities are located south of the beltway and west of the Airport Connector. Almost all of the people flying in and out of McCarran International Airport will use the Airport Connector either in an airport shuttle to the rental car facility or in their personal vehicles.

### **1. Project Location**

The project is located south of the Las Vegas Strip and the McCarran International Airport and east of I-15. The project limits begin just east of I-15 and continue east approximately 3 miles, along the Beltway, to Windmill Lane and along the Airport Connector, for approximately 1 mile from the Beltway off ramps to Sunset Road. The location of the project within the Las Vegas Valley is illustrated in **Figure 1**.

### **2. Project Need**

Clark County Public Works (CCPW) has identified the need to upgrade the I-215 from Las Vegas Boulevard to Windmill Lane and the Airport Connector from I-215 to Sunset Road, hereafter called the I-215/Airport Connector Interchange Project. These corridors have seen tremendous growth in usage over the past several years contributing to reduced levels of service and increased travel time delays. In order to meet the existing demands and demands from



projected growth, upgrades to I-215 and the Airport Connector are needed.

The purpose of the project is to mitigate or possibly eliminate operational deficiencies and improve the flow of traffic to McCarran International Airport and between employment and residential areas.

Traffic projections prepared by the Regional Transportation Commission of Southern Nevada (RTC), indicate the Airport Connector Interchange will continue to see increased demands and suffer deterioration in operational performance due to regional development and the development in and around the interchange itself. Continued growth in passenger and cargo traffic at McCarran International Airport also contributes to the heavy use of the facility.

The proposed project will improve traffic flow on I-215 from the Las Vegas Boulevard Interchange to the Windmill Lane Interchange. It will also improve the operational performance of the Airport Connector and the Airport Connector Interchange.

With projected year 2030 traffic, I-215 and the Airport Connector are expected to operate at Level-of-Service (LOS) E and F at most locations between Las Vegas Boulevard and Windmill Lane. In addition, during peak periods, by the year 2030, the I-215 ramps at Las Vegas Boulevard, Warm Springs Road, and the Airport Connector are expected to operate at LOS E and F at most locations. LOS E and F are also expected at the Sunset Road access ramps to the Airport Connector. **Table 1** summarizes the projected 2030 levels of service on I-215 and the Airport Connector for the no-build and build conditions.

With projected year 2030 traffic and the proposed improvements, I-215 and the Airport Connector are expected to operate at LOS D or better during the AM and PM peak periods. In addition, by the year 2030, during the peak periods, the I-215 ramps at Las Vegas Boulevard, Warm Springs Road, Airport Connector and intersection and local roadways within the project study area are also expected to operate at LOS D or better. Please refer to the project's "Traffic Report"<sup>1</sup> for additional information.

**Table 1 - Level of Service Summary**

Location	No-Build (2030 LOS)		Build (2030 LOS)	
	AM	PM	AM	PM
EB I-215 – Las Vegas Blvd to Windmill Lane	F	F	C / D	C / D
WB I-215 – Las Vegas Blvd to Windmill Lane	F	F / E	C / D	C / D
NB Airport Connector	F	F / E	B	C
SB Airport Connector	F	F	B	D

<sup>1</sup> The "Traffic Report" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>









### **3. Project Scope**

The proposed project will provide the following improvements to I-215 and the Airport Connector. These improvements are shown schematically in the project's Change of Access Report<sup>2</sup> Figures 2-2A to 2-2G:

- I-215 will be widened to include one additional general-purpose lane, for a total of four lanes in each direction between Las Vegas Boulevard and Windmill Lane. This improvement will address the need for added capacity on the I-215. The additional freeway lane will help to meet the future freeway demand where this facility experiences noticeable delays during peak hours. In order to avoid severely impacting traffic during construction, the median of I-215 will be improved to allow the use of the existing shoulder as a through lane during construction. Post construction, these improvements can be used for NDOT and RTC's planned HOV lane connection to I-15.
- Auxiliary lanes will be added to I-215 between the following ramps to mitigate current weaving issues at the merge locations and increase capacity of the I-215:
  - Eastbound I-215 from the Las Vegas Boulevard on ramp to the Airport Connector off ramp.
  - Eastbound I-215 from the Airport Connector's direct connection to I-215 to the Windmill Lane off ramp. This auxiliary lane will also serve eastbound I-215 traffic entering from Warm Springs Road.
  - Westbound I-215 from the Airport Connector on ramp to the Las Vegas Boulevard off ramp.
- The westbound I-215 to Airport Connector and the eastbound I-215 to Windmill Lane off ramps will be widened to accommodate two-lane exits.
- The existing loop on-ramp from eastbound Warm Springs Road will be realigned to merge with the westbound Warm Springs Road on-ramp. This loop ramp modification will include a grade separation structure over Warm Springs Road and the reconstruction of the Paradise Road superstructure. By combining the Warm Springs on-ramps (eastbound and westbound), the existing weave merge conflict between the loop on-ramp and the westbound I-215 off-ramp to the Airport Connector will be moved away from the high speed freeway, alleviating the effects of the closely spaced Warm Springs and Airport Connector interchanges. Both Warm Springs ramps will retain access to both I-215 and the Airport Connector.
- The I-215/Airport Connector Interchange will be modified to include a two lane, directional, "flyover", ramp from the southbound Airport Connector to eastbound I-215. This directional ramp will relieve the existing "loop" ramp that will remain to serve as the connection from the Airport Connector to Warm Springs Road. The directional ramp will eliminate backups on southbound Airport Connector that are the result of the existing merge weave operations between Airport Connector traffic entering I-215 and I-215 traffic exiting to Warm Springs Road. Southbound Airport Connector traffic destined to

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<sup>2</sup> The "Change of Access Report" is at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



Warm Springs Road will be routed via the existing loop ramp onto a widened I-215 structure over the Airport Connector. The loop ramp traffic will parallel I-215 but will be separated from freeway traffic I-215 and will merge with the relocated eastbound I-215 off-ramp prior to the existing signalized intersection at Warm Springs Road.

- The southbound Airport Connector will be widened from three to four lanes between the Sunset Road on-ramp and the Airport Connector on-ramp to I-215. This improvement will increase southbound capacity, facilitate the movement of the Airport's rental car shuttle and the RTC's transit Route 109 and reduce traffic on Sunset Road.
- The southbound Airport Connector on-ramps to westbound I-215 will essentially remain unchanged.
- A braided ramp will be added to the northbound Airport Connector to pre-position vehicles from eastbound I-215 destined for Sunset Road. This braided ramp will alleviate congestion resulting from the existing weave merge that occurs between the westbound I-215 off-ramp and the Sunset Road exit from the northbound Airport Connector.
- The Sunset Road exit ramp will be widened from one lane to two lanes. This improvement will increase capacity, improve safety, and provide additional storage prior to the Sunset Road traffic signal.

## **B. PROJECT PARTIES**

Clark County Department of Public Works (CCPW) in conjunction with the Nevada Department of Transportation (NDOT) are requesting consideration for the I-215/Airport Connector Interchange Project for construction funding through the TIGER Discretionary Grant Program. NDOT is the administrator for projects funded by the Federal Highway Administration within the State of Nevada and will be the direct recipient of grant funds. A Stewardship Agreement between NDOT and CCPW will transfer the project construction funds and construction oversight to CCPW.

At this time, NDOT and CCPW have prepared a draft Stewardship Agreement for the project. Both parties are working towards executing the Stewardship Agreement to obligate the funds already allocated. It is anticipated that the Stewardship Agreement will be completed by the end of 2009. If the I-215/Airport Connector Interchange Project is selected to receive TIGER Discretionary Grant funding, an amendment to the Stewardship Agreement will be prepared and executed immediately.

CCPW is the lead agency that initiated and provided funding for the planning, Environmental Assessment, and final design of the I-215/Airport Connector Interchange Project. CCPW will also procure and fund the Construction Management for the project once funding is secured for construction.

The I-215/Airport Connector Interchange Project is a unique project in that the project is located within the jurisdictional boundaries of several public agencies. The following is a description of



these agencies and their involvement in the project.

- **Clark County, Department of Aviation (CCDOA):** McCarran International Airport is owned by Clark County, Nevada and is managed by the CCDOA. The I-215/Airport Connector Interchange Project is located generally south of the Airport and immediately to the north of the project the Airport Connector crosses under the Airport's east-west runways. In the 1990's, CCDOA was the lead agency that oversaw the original design and construction of the Beltway between I-15 and the Airport Connector and the Airport Connector. Right-of-way for the Airport Connector and portions of the I-215 are owned by CCDOA.

The Airport Connector provides primary and direct access to and from the Airport. It also provides access to the McCarran Rent-A-Car Center located approximately 3 miles southwest of the Airport on Gilespe Street. McCarran provides shuttle buses to the Rent-A-Car Center. Therefore, CCDOA has a vested interest in maintaining access to the Airport from I-215 and the Airport Connector, particularly during construction. The design plans and construction staging have been developed in coordination with CCDOA. Additionally, improvements to the I-215/Airport Connector Interchange were designed to accommodate future additional access to the center tunnel under the Airport's east-west runways. (Website: [www.mccarran.com](http://www.mccarran.com))

- **Nevada Department of Transportation (NDOT):** NDOT maintains the Beltway (I-215) between I-15 and Warm Springs Road and the Airport Connector (State Route 171) between I-215 and Sunset Road. East of Warm Springs Road, the Beltway is maintained by Clark County. The beltway from I-15 to the City of Henderson was incorporated into the Interstate Highway System in the 1990's after approval of the EIS by FHWA. The project was designed in coordination with NDOT. (Website: [www.nevadadot.com](http://www.nevadadot.com))
- **Regional Transportation Commission of Southern Nevada (RTC):** The RTC owns and operates the South Strip Transfer Terminal (SSTT) and park-and-ride facility located south of McCarran International Airport and southwest of the intersection of Sunset Road and Gilespe Street. The SSTT was completed in 2004. It serves as a hub for transfers between seven (7) transit routes. It also benefits travelers to McCarran International Airport by providing the park-and-ride facility with bus service to the airport thus giving travelers to McCarran a free parking option. (Website: [www.rtcsonthernnevada.com](http://www.rtcsonthernnevada.com))

## **C. GRANT FUNDS AND SOURCES AND USES OF PROJECT FUNDS**

CCPW has funded the planning and design phases for the project through the County's Master Transportation Plan, Las Vegas Beltway Construction Fund. This fund is the composite of the net revenues from motor vehicle privilege taxes and new development fees. However, impacts of the economy and decreases in the revenues have impacted the County's budget and its ability to fund the construction of the I-215/Airport Connector Interchange Project. Currently, the County does not have sufficient budget for construction of this project.

The I-215/Airport Connector Interchange Project was programmed to begin construction in the summer of 2009 and continue through 2011. This project is a high priority for the County due to





the current levels of congestion experienced on the Southern I-215 Beltway and the Airport Connector. However, the decrease in revenue from the economic downturn has severely impacted the County's budget. Available funding has been allocated to other projects, including other Beltway improvements, already in construction.

The total estimated construction cost for the I-215/Airport Connector Interchange Project is \$140,000,000. Federal funding has been allocated through SAFETEA-LU in the amount of \$5,303,930 and an additional \$2,850,000 has been appropriated through the 2009 Omnibus Appropriations Bill for construction of the Beltway Interchanges. CCPW in conjunction with NDOT is requesting consideration for the I-215/Airport Connector Interchange Project for construction funding through the TIGER Discretionary Grant Program in the amount of **\$132,000,000**.

A summary of the project costs, available funding sources, and percentage shares from each party are provided in **Table 2**.

**Table 2 – Summary of Project Costs versus Available Funding Sources**

	Total Cost	Available Funding Source			Unfunded Balance Requested for TIGER Funds
		Clark County Beltway Construction Fund	2009 Federal Transportation Bill Appropriation	SAFETEA-LU Funding	
<i>Preliminary Engineering Costs</i>	\$11,000,000	\$11,000,000	\$0	\$0	\$0
<i>Right-of-Way Costs</i>	\$0	\$0	\$0	\$0	\$0
<i>Construction Engineering Costs</i>	\$18,200,000	\$18,200,000	\$0		\$0
<i>Estimated Construction Costs</i>	\$140,000,000	\$0	\$2,850,000	\$5,303,930	(\$131,846,070)
<b>Total Project Cost</b>	<b>\$169,200,000</b>	\$29,200,000	\$2,850,000	\$5,303,930	(\$131,846,070)
<b>Percentage Per Party</b>	<b>100%</b>	<b>17.3%</b>	<b>1.67%</b>	<b>3.1%</b>	<b>77.9%</b>

## D. SELECTION CRITERIA

### 1. Primary Selection Criteria

#### a. Long Term Outcomes

The I-215/Airport Connector Interchange Project is a substantial project expected to provide significant long-term benefits to the Las Vegas valley. The project's long-term outcomes are as follows.

#### i) State of Good Repair

Construction of the existing I-215/Airport Connector Interchange was completed in 1996. It was



the first segment of the Beltway to be completed and was constructed in accordance with applicable freeway designs standards at the time. NDOT monitors the condition of the facilities and tracks conditions with their pavement management database and bridge inspection report protocols. Routine preventative maintenance is conducted by NDOT and CCPW within their respective maintenance jurisdiction. These activities include sealing and filling cracking pavement to maintain a good state of repair and extend pavement life. Currently, there are no significant deficiencies in the condition of the pavement or structures and its condition is not a threat to future economic growth.

Due to the age of the facility and the preventative maintenance methods employed, the existing roadway is not in need of major repairs. However, it is important to note that the current project will extend the life of the project beyond that of the existing roadway. The project will include preventative maintenance measures and ride quality improvements. The plans and specifications include the repair of localized failures in the Portland Cement Concrete Pavement (PCCP) on existing travel lanes and shoulders for the I-215 and Airport Connector. The project also includes a 1-inch rubberized asphalt overlay of I-215. The overlay is expected to improve ride quality, extend pavement life and reduce freeway noise. Rubberized asphalt is new to the Las Vegas Valley and was first used by NDOT on Interstate-515 in Henderson, Nevada. The rubberized asphalt was well received by road users after experiencing a quieter and smoother commute. Rubberized asphalt is recommended for “long-term crack-fill performance” per the Technical Brief prepared by ERES Consultants, Inc. entitled “Sealing and Filling Cracks in Asphalt Pavements”, dated November 1999. **The rubberized asphalt overlay will extend the life of the I-215 and Airport Connector, improve the ride-ability for commuters, and reduce freeway noise.**

## ***ii)* Economic Competitiveness**

The Economic Competitiveness of the I-215/Airport Connector Interchange Project is demonstrated by the project’s ability to increase the efficiency and effectiveness of the transportation system through integration and better use of the existing transportation network. The southern Nevada economy is based primarily on tourism, gaming, and conventions. In 2008, visitor spending in the valley was approximately \$42 billion. This economy is heavily reliant on the ability of the local and regional transportation systems to efficiently move goods and people (both tourists and commuters) into and out of the employment and entertainment centers located in the center of the valley. Tourists who enjoy convenient connections to resort destinations will return for future visits. A positive visitor experience will result in continued growth in visitors resulting in sustained growth in tourist sector employment.



North of the project is the business, employment and tourism center of the valley. This central area contains the McCarran International Airport, the University of Las Vegas Nevada (UNLV), and numerous resort properties, all of which are among the top twenty employers in the valley. South of the project are residential areas. The Regional Transportation Plan<sup>3</sup> (RTP) for 2006-2030 and the current draft of the 2009-2030 RTP identify infrastructure projects necessary to the continued growth of the valley. The I-215/Airport Connector interchange project is a key component of this plan. The figure to the right is from the 2009 RTP. **This figure shows the relationship between jobs within the Las Vegas valley to housing. Central to the employment centers and residential areas is the I-215/Airport Connector interchange project, which provides the main transportation link between these two halves of the economy.**

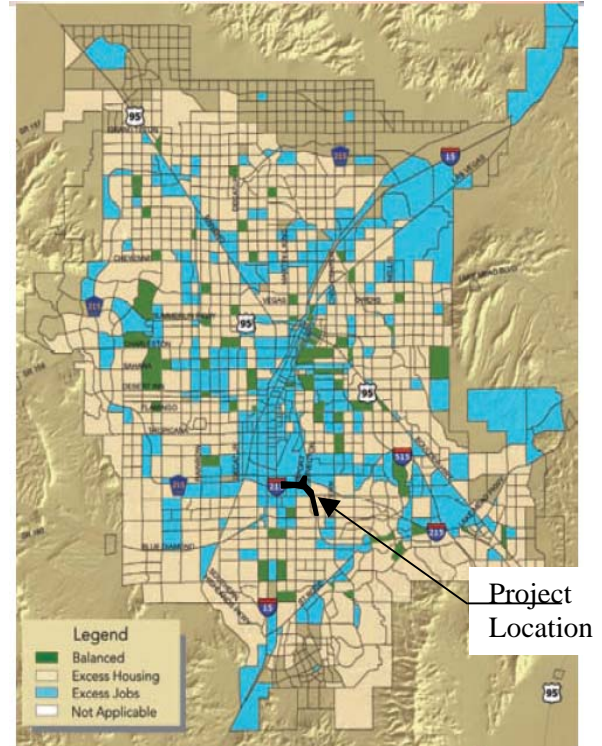


Figure 2-2: Jobs-Housing Balance

### iii) Livability

#### Affected Community

The I-215/Airport Connector Interchange project is located in the south central portion of the Las Vegas Valley's Metropolitan Planning area. The Metropolitan Planning Area, often referred to as "Southern Nevada", includes the City of Las Vegas, City of North Las Vegas, City of Henderson, and the unincorporated parts of Clark County within the urban boundary. The Las Vegas Valley has been, and still is one of the fastest growing communities in the country. Since 1990, the population has increased two and a half times to approximately 1.9 million people. In this same time frame, employment, enrollment in colleges and universities and the number of visitors to the valley has doubled. To accommodate this growth, maintain the standard of living that attracts people to the area and provide for continued growth in tourism, there has been a continuous investment in public infrastructure. Billions of dollars have been spent on the public school system, valley wide flood control projects, airport expansion and the transportation system including improvements to the interstate, beltway, transit and the arterial roadway system. In general, the valley continues to expand outward from the downtown area. Substantial growth is anticipated in the south and southwest portions of the valley. The majority of these areas are residential master plan developments. The transportation link provided by the project between residential and employment centers will only increase in importance.

<sup>3</sup> The RTP can be viewed at <http://www.rtcsonthernnevada.com/mpo/plansstudies/>





### **Operational Deficiencies**

I-215, originally called "the Southern Segment of the Las Vegas Beltway", received a Record of Decision on August 10, 1992 from the FHWA. The 1992 EIS and preliminary design of the facility were based on 2010 traffic projections. These traffic projections reflected the need for three basic lanes in each direction plus auxiliary lanes between selected interchange ramps. Construction of I-215 within the project limits and the Airport Connector were completed in 1996. Currently, I-215 is three lanes in each direction through the project area.

The congestion on I-215 became evident at the start of the millennium. Hourly traffic counts, in 2006, were as much as 2.6 times those predicted for this year. NDOT collects average daily trip (ADT) volumes annually on Las Vegas valley roadways. In 2008, I-215's ADT at the Airport Connector was 140,000 daily trips (NDOT Count Station 0030131). In the same year, ADT on the Airport Connector was 102,000 daily trips (NDOT Count Station 0030887). Over the past ten years, the average annual growth in ADT for these roadways has been over 9%. Although temporary reductions in ADT have occurred during 2008-2009, due to the economic downturn, this section of the freeway has been shown to require two additional lanes on I-215 and on the Airport Connector to meet 2030 traffic projections. Currently, delays are routinely experienced on these roadway segments during morning and evening peak hours of travel.



**AM Peak Hour Traffic – WB I-215**



**AM Peak Hour Traffic – NB Airport Connector**

Traffic projections prepared by the RTC indicate the I-215/Airport Connector Interchange will continue to see increased demands and suffer deterioration in operational performance due to regional development and the development in and around the interchange itself. Continued growth in passenger and cargo traffic at McCarran International Airport also contributes to the heavy use of the facility. With projected year 2030 traffic, I-215 and the Airport Connector are expected to operate at Level-of-Service (LOS) E and F at most locations between Las Vegas Boulevard and Windmill Lane. In addition, during peak periods, by the year 2030, the I-215 ramps at Las Vegas Boulevard, Warm Springs Road, and the Airport Connector are expected to operate at LOS E and F. LOS E and F are also expected at the Sunset Road access ramps to the Airport Connector.

The proposed project will improve traffic flow on I-215 from the Las Vegas Boulevard



Interchange to the Windmill Lane Interchange. It will also improve the operational performance of the Airport Connector Interchange and Airport Connector roadway. With projected year 2030 traffic and the proposed improvements, I-215 and the Airport Connector are expected to operate at LOS D or better during the AM and PM peak period. In addition, by the year 2030, during the peak periods, the I-215 ramps at Las Vegas Boulevard, Warm Springs Road, and the Airport Connector are expected to operate at LOS D or better. Intersections and roads within the proposed project area are expected to operate at LOS D or better. Please refer to the project's "Traffic Report"<sup>4</sup> for detailed information.

**The level of service improvements resulting from this project are expected to significantly enhance the mobility of commuters within the Las Vegas valley and improve access to destinations such as the University of Nevada Las Vegas, Las Vegas Strip, downtown Las Vegas employment centers and the McCarran International Airport. The benefits include reduced travel times and decreased travel costs for those using the I-215 and the adjoining arterial roadways also serving this area.**

### **Improved Modal Connections**

RTC owns and operates the SSTT and Park and Ride Facility located just northwest of the project (See Figure 1). The SSTT is one of two transfer terminals operated by the RTC in Las Vegas. The SSTT is a transit hub that provides transfer options to seven (7) fixed transit routes with destinations that including McCarran International Airport and the Las Vegas Strip. The SSTT also provides connections with Paratransit and private service providers from Pahrump, Nevada, and charter service providers from Primm, Nevada. Of the seven (7) fixed routes that make transfers at the SSTT, two (2) of the routes - Route 301 Deuce on the Strip and Route 109 Maryland Parkway, are ranked as the top two busiest routes for RTC Transit Service as of June 2009.

The RTC's fixed Route 109, which uses the Airport Connector and provides service to the Airport, UNLV, and employment and retail centers on Maryland Parkway, will benefit directly from the project due to the added capacity and the elimination of the congestion at the Sunset Road exit. Existing routes on Sunset Road and Warm Springs Road will be indirectly benefited by the project through reduced congestion and improved travel times.

The Park and Ride and SSTT are effective alternatives for commuters from the City of Henderson and residential communities in the southwest valley to access the Strip. Improvements to I-215 and the auxiliary lanes to Las Vegas Boulevard will improve access to these RTC facilities.

Per the RTC's Website, ridership of the transit service provided by RTC exceeds the national average. In June 2009, the average boarding rate for RTC transit service was 39.15 passengers per service hour. Transit Route 301 with service to the Las Vegas Strip had a rate of 74.79 passengers per service hour, and Transit Route 109 with service through the Airport Connector to Maryland Parkway had a service rate of 52.24 passengers per hour. With ridership rates such as those on Transit Routes 301 and 109, transit efficiency is essential. The efficiency can only be maintained by the levels of service of the roadway of the transit route and adjacent roadway

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<sup>4</sup> The "Traffic Report" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



network.

Furthermore, the SSTT also provides a Park and Ride facility and transit service to McCarran International Airport. Travelers departing from the Airport have an affordable option to park at the Park and Ride Facility at not cost and ride the RTC transit service to the airport at a minimal cost in comparison to the airport's on-site parking rates.

**With improvements to the I-215 Beltway and Airport Connector, the service to the Airport will be reliable and efficient thus attracting new riders to the transit service.**

**The improvements proposed by the I-215/Airport Connector Interchange Project are expected to improve the travel times for transit services using the Airport Connector and adjacent to the I-215 Bruce Woodbury Beltway. The improvements are expected to increase the reliability of the transit headways, which in turn would increase the reliability for passengers making connections at the SSTT and beyond.**

**Improved Modal Choice for Economically Disadvantaged Populations, Non-Drivers, Senior Citizens, and Persons with Disability**

Ridership of the RTC's Transit Service has increased dramatically in the past 6 years per statistics available from the RTC's website. In 2002, the annual ridership was 45,340,031 compared to an annual ridership of 66,895,932 in 2008. This equates to a 47.5% increase in ridership from 2002 to 2008. With an unemployment rate of 12.3% for Southern Nevada compared to the national average of 9.7% for the month of June 2009, the ridership is expected to continue to increase.

The transit service provided by the RTC is a reliable and affordable modal choice for visitors to the Las Vegas valley and residents especially for the economically disadvantaged populations, non-drivers, senior citizens, and persons with disabilities.

The improvements proposed by the I-215/Airport Connector Interchange Project are expected to improve the travel times for all modes of travel on I-215 and the Airport Connector including the fixed transit and paratransit routes. It should be noted that paratransit service does utilize I-215 and the Airport Connector for service to senior citizens and persons with disabilities. As a result, the improved roadway levels of services will benefit the transit service with increased reliability of the transit headways and reliability for passengers making connections at the SSTT and beyond.

An additional benefit of this project is the reduction of travel times to McCarran Airport.

**Reduced Freeway Noise Impacts to Residential Neighborhoods Adjacent to I-215**

The PCCP pavement on I-215 was originally constructed with transverse tines in the pavement travel lanes. Shortly after opening of the facility, nearby residences complained to the County about excessive noise, generated primarily by the transverse tines. In response to these complaints, the County ground longitudinal tines into the pavement, creating a diamond tine pattern within the travel lanes. While this reduced the freeway noise, it has also detracted from the facility's ride quality. Overlaying the I-215 with rubberized asphalt will address the ride quality and residual noise issues along this section of the beltway.

The construction of the I-215/Airport Connector Interchange Project will include a rubberized asphalt overlay on I-215 within the project limits. The application of the rubberized asphalt is





expected to result in a quieter commute on I-215 as well as provide a reduction in maintenance activities and extend the life of the roadway. The rubberized asphalt is expected to extend the life of the pavement 10 years and beyond and provide a reduction in pavement cracking and rutting. The use of rubberized asphalt was not studied in the environmental assessment (EA). The EA concluded that the existing noise walls would have to be increased in height to mitigate the additional noise from the projected traffic volumes. The project includes the construction of the recommended noise walls. The use of rubberized asphalt will further reduce noise impacts.

**The application of the rubberized asphalt overlay on I-215 is expected to result in a reduction of noise pollution and improve ride quality. Studies indicate that a 3 to 6 db decrease in noise results from rubberized asphalt surfacing.**

#### **iv) Sustainability**

An Environmental Assessment (EA) was prepared for the I-215/Airport Connector Interchange project. The EA evaluated the environmental impacts resulting from the project and its construction. Only four mitigation measures were identified in the EA. Three of which were impacts due to construction activities. Impacts due to construction include particulate matter (PM<sub>10</sub>), construction noise and water quality. All of these issues are mitigated to the fullest extent via the project special provisions. The last impact, noise generated by freeway traffic, will be mitigated through the design of noise barriers and incorporation into the project's construction plans. The project does not impact cultural resources, relocate or displace people or businesses nor does it have any individual or cumulative environmental impacts.

**There are features included in the project, which can be considered to benefit the environment. These features include a reduction in fuel consumption, further reduction of noise, recycling of used tires and improved air quality.**

The benefit-cost analysis<sup>5</sup> prepared for this grant application calculated the anticipated reduction in fuel consumption resulting from this project for the AM and PM peak hour periods. As a result of the project, peak hour commuters will save approximately 97,000 gallons of fuel per year in 2030. This calculation only represents a portion of the fuel savings. Additional fuel savings will be accumulated throughout the day.

As discussed in the Livability Section above, I-215 will be overlaid with rubberized asphalt. Rubberized asphalt has many beneficial characteristics. In addition to improving the ride quality of the beltway it will reduce freeway noise impacts to adjacent neighborhoods and businesses and will provide for a means of disposing of used tires. Reports from state DOTs on the amount of noise reduction from rubberized asphalt vary. In general, a reduction of 3 to 5 dB is reported for roadway with existing open grade surfacing. Higher noise reductions have been seen for PCCP surfaces. Recycling of used tires is an added benefit to the environment. The project is estimated to place 18,800 tons of rubberized asphalt.

The RTC ran the TDM and emissions calculation models for the I-215/Airport Connector Interchange project for the 2032 build and no-build alternatives. This analysis showed a reduction in the quantity of ozone emissions, no change to PM<sub>10</sub> and an increase in the CO

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<sup>5</sup> The "Benefit-Cost Analysis" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



emissions. These changes are summarized in the table below. The relationship between CO emissions and vehicle speeds is convex. The vertex of the CO emissions curve is at a speed of 55mph per the model used by the RTC, where traffic speeds above 55 mph result in an increased rate of CO emissions. Even with this increase in CO emissions for the year 2032, the total CO emissions for the Las Vegas Valley are 457 tons per day and are far below the budget of 817 tons per day.

**Table 3 - 2032 Horizon Year Emissions for TDF Modeling Area**

<b>Emission</b>	<b>Build (tons/day)</b>	<b>No-build (tons/day)</b>	<b>Change (tons/day)</b>	
NO <sub>x</sub>	15.47	15.50	0.03	Reduction
VOC	40.75	40.86	0.11	Reduction
CO	457.18	456.48	0.70	Increase
PM <sub>10</sub>	107.5	107.5	0.00	No Change

### **v) Safety**

The I-215/Airport Connector Interchange project is the result of identified capacity related deficiencies. It is not the result of safety concerns nor does it have a history of high accident rates. In the Project's Pre-design Report<sup>6</sup>, there is a summary of crash data within the project study area. The report also lists intersections adjacent to the project, identified by NDOT, as being high crash rate locations. The conclusion reached regarding the crash data was that most crashed were due to high volumes and driver inattention and there are very few counter measures that would reduce the number of crashes.

The FHWA website contains a "Desktop Reference for Crash Reduction Factors" which provides estimates for the crash reduction that might be expected after the implementation of countermeasures. The project's operational improvements incorporated many of these countermeasures and are expected to result in a reduction in the number of accidents when comparing the build and no-build alternatives. The countermeasures include the elimination of weave/merge operations and the addition of travel lanes and acceleration/deceleration lanes. Specifically, these countermeasures are located at the following locations:

- Additional of basic lanes in both directions on I-215,
- Auxiliary lanes between I-215 interchange ramps,
- Additional lanes in both directions on the Airport Connector,
- Additional lane on the ramp connection between the Airport Connector and Sunset Road,
- Elimination of weaving areas where an on ramp is followed closely by and off ramp.
  - I-215 - Airport Connector on-ramp followed by Warm Springs Road off-ramp, will be replaced with a directional ramp and auxiliary lane for the Airport Connector and a deceleration lane will be added to the Warm Springs Road off-ramp
  - Northbound Airport Connector – the I-215 ramp followed by Sunset Road off-ramp, will be modified to minimize the existing merge/weave condition, and,
- An additional lane for the westbound I-215 off ramp to the Airport Connector.

<sup>6</sup> The "Pre-Design Report" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



The reduction factors, for all crash types and severities, range between 10% for the addition of deceleration lanes to 25% for an increase in the number of lanes.

### b. Evaluation of Expected Project Costs and Benefits:

A benefit-cost analysis<sup>7</sup> was prepared in support of this grant proposal. The analysis quantitatively calculates the benefits and costs of the build alternative compared to the no-build alternative. Costs and benefits were monetized to present year, 2009, values using a discount rate of 7% per guidance given in OMB Circulars A-4 and A-94. Project benefits were calculated for an analytic time horizon of 20 years, beginning in the year 2012, the completion of the proposed improvements, to 2032. The benefit-cost ratio for the proposed project is 3.08. The table below summarizes the results of the analysis.

Table 4 - Benefit-Costs Analysis Summary

<b>Build Alternative Capitol Costs</b>	<b>\$154,270,000.00</b>
<b>Project Benefits</b>	
Travel Time Savings	\$ 286,520,000
Fuel Cost Savings	\$ 6,450,000
Non-fuel operating costs	\$ (11,890,000)
Accident Costs Savings	\$ 194,710,000
Revenue Transfers	\$ (1,330,000)
Emissions	
NOx	\$ 590,000.00
VOC	\$ 700,000.00
CO	\$ (100,000.00)
<b>Total Benefits</b>	<b>\$ 475,820,000</b>
<b>Benefit-Costs Ratio</b>	<b>3.08</b>

### c. Evaluation of Project Performance

In accordance with the requirements outlined in Federal Register (Volume 74, No. 115), CCPW will measure the short- and long-term performance of the project with respect to the economic recovery measures and long-term outcomes. CCPW will maintain a record of the employment data as provided by the Contractor based on the requirements of American Recovery and Reinvestment Act. The type of short-term economic data that may be recorded include the Contractor's name, Subcontractor's name, workforce per month, hours worked per month, and total dollar amount of wages paid per month. The long-term benefits may be evaluated by using the database maintained by the Nevada Department of Employment, Training and Rehabilitation.

Additionally, the project may be evaluated on a number of factors as specified in the long-term outcomes listed in the Federal Register Notice for TIGER. Below is a summary of the types of performance measures that may be evaluated for the project. Once notice is given for selection for funding, the project performance criteria will be finalized by CCPW and as specified in the

<sup>7</sup> The "Benefit-Cost Analysis" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>





individual grant agreements.

- **State of Good Repair:** Evaluate the roadway conditions annually after the application of the rubberized asphalt. It is anticipated that the life span of the roadway will be increased.
- **Economic Competitiveness:** As mentioned above, the economic data such as workforce maintained per month, hours worked per month, and total dollar amount for wages paid per month will be tracked by the Contractor throughout the project. These indicators will quantify the economic impact of the project on the Las Vegas Valley.
- **Livability / Sustainability:** The project is expected to increase the speeds and decrease the travel times on the 215-Beltway and through the Airport Connector. The average travel times and speeds can be recorded before construction of the project. Once the project is completed the average travel times and speeds can be recorded to document the benefits of the project. Additionally, the noise levels could be quantified before the application of the Rubberized Asphalt Overlay and Construction of the sound walls, and compared to the levels after the construction.
- **Safety:** Data relating to the time, date, and type of crash has been obtained from NDOT. The crash data may be obtained for a period of at least 3 years after the completion of the project to evaluate any differences in the crash trends based on the project.

#### **d. Job Creation and Economic Stimulus**

The project is expected to have a two (2) year construction schedule that will provide direct employment opportunities for that duration. The types of positions to be required for the construction include carpenters, laborers, ironworkers, operators, masons, and teamsters. The project will also have requirements in accordance with the Disadvantaged Business Enterprise (DBE) and equal opportunity policies to promote employment opportunities for Women and Minorities.

Applied Analysis prepared an “Economic Impact Assessment”<sup>8</sup>, dated August 2009 for the I-215/Airport Connector Interchange Project. This paper outlines the economic impacts of the project to the economy of the Las Vegas valley. Below is a bullet summary of the findings:

- **Direct Employment:** The project is estimated to require 1,449 person years of employment, which will generate \$80.5 million in wage and salary payments for those working on the project, which is expected to generate \$164 million in economic activity to the Las Vegas valley.
- **Short Term Infusion on Las Vegas Economy:** The project will have an impact on industry suppliers and supporting industries such as grocery stores and family physicians as a result of the direct employee spending within the community. It was estimated within the Applied Analysis’ assessment that 760 person years of employment and \$29.4 million in wages and salary will generate approximately \$86 million in economic activity to the Las Vegas valley.

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<sup>8</sup> The “Economic Impact Assessment ” is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



- **Total Project Impact:** The project as a whole is expected to support an estimated 2,208 person years of employment and generate \$109.8 million in wage and salary payments and stimulate approximately \$250.1 million in aggregate economic activity. As indicated in the assessment, for every \$1.00 spent on the Project, \$1.53 in economic activity is generated throughout the Las Vegas valley local economy.

**These economic benefits will be significant to the Las Vegas Valley that has experienced an average unemployment rate of 7.59% for the past 24-month period from July 2009 to August 2007 as compared to the national unemployment rate for the same 24-month period of 6.48%.** The unemployment rate<sup>9</sup> for the Las Vegas valley was 13.1% in July 2009. Per Section 301 of the Public Works Economic Development Act of 1965, one of the criteria to designate an area as economically distressed is that the area has an unemployment rate that is, for the most recent 24-month period for which data are available, at least 1 percent greater than the national average unemployment rate. As seen by the unemployment rates outlined above, the Las Vegas valley (Clark County) unemployment rate is 1.11% above the national unemployment rate thus classifying the Las Vegas valley as an economically distressed area.

Furthermore, the RTC has prepared a paper entitled “State of the Southern Nevada Economy and its Implications on Transportation”<sup>10</sup>. Within this paper, the RTC outlines the economic indicators for the Las Vegas Valley and illustrates the severe negative trends that have been experienced. Of note, unemployment is at the highest rate in years with significant unemployment experienced in the construction sector. These economic indicators strongly show that the Las Vegas valley has been suffering significantly from the recession and should be considered classified as an economically depressed area.

### **i) Project Schedule**

**The I-215/Airport Connector Interchange project is “shovel ready” and waiting construction funding.** CCPW staff and PB Americas Inc., the design consultant, are ready to mobilize for construction phase services. The construction package, which includes the design plans and special provisions for the project are 100% complete. The project was set to advertise for the Invitation to Bid by Contractors in May 2009. However, the advertisement of the project for construction has been held due to funding.

CCPW will be poised to advertise the project for Invitations to Bid by Contractors immediately if the Project is selected for funding under the TIGER Discretionary Grant Program. The project will be advertised for approximately two (2) months after notification of selection for funding and execution of the Stewardship Agreement with NDOT. The anticipated notice to proceed for the selected construction contractor will occur within approximately three (3) months after advertisement. The overall construction schedule<sup>11</sup> is anticipated to be approximately 24 months with completion of the project by mid-February 2012, if notification of TIGER Grant award is received in the fall of 2009.

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<sup>9</sup> Rates have been obtained from [www.nevadaworkforce.com](http://www.nevadaworkforce.com)

<sup>10</sup> The “State of the Southern Nevada Economy and its Implications on Transportation” is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>

<sup>11</sup> See the project website at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp> for the project construction schedule.



## **ii) Environmental Approvals**

In February 2005, The Environmental Assessment for the improvements to the I-215 Corridor from Las Vegas Boulevard to Windmill Lane<sup>12</sup> was completed. The project, SPI-215-1(004), E.A. 73224, was evaluated and found not to have any significant environmental impact as described in 23 CFR 771.117 (a) and (b) and did not involve any unusual circumstances. On March 31, 2005, the FHWA concurred with NDOT's conclusion that this action is considered a Categorical Exclusion under 23 CFR 771.177 (d).

## **iii) Legislative Approvals**

The I-215/Airport Connector Interchange project does not require any specific legislative approvals or changes in state law for the project to be constructed. It should be noted however that the project is widely supported at the local, state, and national level. Below is a summary of the entities that have shown support for the project.

- Clark County Board of County Commissioners (BCC): The beltway has had the support of the BCC from its inception and this support continues today. The BCC approves the capital improvement program annually that outlines the roadway improvements projects such as the I-215 / Airport Connector Interchange project and anticipated construction schedule.
- Clark County, Department of Aviation (CCDOA): CCDOA has worked with CCPW to design for improvements to the I-215 and Airport Connector to achieve efficiencies in the design and construction of the improvements proposed by each agency. CCDOA has proposed upgrades to the Airport Connector Tunnel, which traverses under the existing east-west runways at McCarran. Coordination between the two agencies was necessary for compatible designs. CCDOA has submitted a letter of support<sup>13</sup> for the project.
- Regional Transportation Commission of Southern Nevada: The RTC is in support of the I-215 / Airport Connector Project and has submitted a letter of support for the project.
- Nevada Department of Transportation (NDOT): NDOT is in support of the I-215/Airport Connector Project and this application has been submitted jointly between NDOT and CCPW. NDOT has submitted a letter of support for the project.
- State and National Support: Funding has been appropriated by the Senate Appropriations Committee through requests made by Senator Reid and Senator Ensign. In 2009, \$2.8 Million was appropriated to Beltway Interchanges within the Omnibus Bill, and an additional request has been made for Fiscal Year 2010. (See Clark County Beltway Interchanges on the following website: [http://reid.senate.gov/appropriations\\_requests.cfm](http://reid.senate.gov/appropriations_requests.cfm).) The appropriation of funds within the Omnibus Bill and the current request illustrates the strong State and National Support for the Beltway Program.
- The project has been verbally endorsed by the following members of the Nevada Senate and Assembly:
  - Senator Shirley Breeden

<sup>12</sup> The "Environmental Assessment" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>

<sup>13</sup> Letters of support are located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>



- Senator Terry Care
- Senator Joyce Woodhouse
- Assemblyman Paul Aizley
- Assemblyman Kelvin Atkinson
- Assemblyman Joseph Hogan

#### **iv) State and Local Planning**

The Bruce Woodbury Beltway is the result of planning efforts that had begun in the early 1990's through a cooperative effort between members of the Clark County Commission, Clark County staff, and members of the public. Bruce Woodbury, a former Clark County Commissioner, was instrumental in proposing the Clark County Master Transportation Plan and Fair Share Funding Program, which led to the beltway. The Bruce Woodbury Beltway continues to gain national and local recognition as an example of innovative, proactive measures employed by Clark County to address the demands of explosive urban growth. A 53-mile stretch of roadway, the Beltway circles three-quarters of the Las Vegas valley to provide transportation mobility to one of the fastest-growing metropolitan areas of the United States.

Today, the remaining sections to be constructed or upgraded are outlined in Clark County's Five-Year Capital Improvement Plan (CIP). The CIP is reviewed and updated annually in conjunction with the preparation of the County's operating budget. The CIP describes the projects and programs within the Governmental Fund and the Proprietary Fund Categories. Once the CIP is finalized, it is presented to the Board of Clark County Commissioners for approval. The County CIP for Fiscal Years 2009 to 2013 included the I-215/Airport Connector Project with construction to begin in 2009. Due to the decrease in fiscal revenue and the resulting fiscal shortfalls, there was insufficient funding available for the Project. As a result, the project will not begin construction during Fiscal Year 2009/2010 as indicated in the County's CIP from the previous year.

The current County CIP for Fiscal Years 2010 to 2014<sup>14</sup> has been recently approved and adopted by the Clark County Board of County Commissioners on July 21, 2009. The I-215/Airport connector Interchange project was moved into future years 2013/2014 within the CIP. The likelihood of the funds being allocated for the project in the future year 2013/2014 is subject to the availability of sufficient funds and their allocation to the project.

It should also be noted that the I-215/Airport Connector Interchange project is also included in the RTP/TIP maintained by the RTC and the Statewide Transportation Improvement Plan maintained by NDOT. The project is also included in the RTC's Regional Transportation Plan (RTP) for FY 2009 to 2030. RTC's RTP is a long-range plan for the transportation system in the Las Vegas valley. It outlines the transportation improvements that are needed within the valley by the year 2030. NDOT develops a Statewide Transportation Improvement Program (STIP) for statewide transportation projects. The I-215/Airport Connector Interchange project is also included in NDOT's STIP.

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<sup>14</sup> The current year CIP may be accessed at the following link:  
[http://www.accessclarkcounty.com/depts/Finance/Budget/Documents/Capital%20Improvement%20Program\\_10-14.pdf](http://www.accessclarkcounty.com/depts/Finance/Budget/Documents/Capital%20Improvement%20Program_10-14.pdf).





### **v) Technical Feasibility**

The project is technically feasible and able to meet the time constraints as outlined in the TIGER Grant Application. The preliminary engineering work for the project is 100% complete and ready for construction. The project was set for advertisement in summer 2009. Due to revenue shortfalls, funding was not available for the advertisement and construction of the project. The allocation of ARRA funding through the TIGER Discretionary Grant Application process would allow this project to be constructed and remain on schedule. Furthermore, the project has no outstanding technical items that would impact the project certification process with the FHWA. Below is a summary of the key aspects of the project that are anticipated to meet the federal requirements for the certification process with FHWA:

- **Right of Way Requirements:** The project will be constructed within existing rights-of-way. All right-of-way documentation that outlines ownership by Clark County has been assembled and provided to NDOT for the Right-of-Way Certification Process.
- **Environmental Assessment:** A Categorical Exclusion, under 23CFR 771.117 (d) was signed by FHWA on March 31, 2005.
- **Utility Conflicts:** The project has minimal impacts to existing utilities within the project limits. An existing electrical vault is the only utility that will be impacted by the project and require relocation by Nevada Energy. The agreement process has begun to outline the Nevada Energy's responsibility to relocate the electrical vault. All other utilities within the project area will be protected in place.

### **vi) Financial Feasibility**

The preliminary engineering for the project has been funded entirely by Clark County. Construction funding was anticipated to be from local and federal sources. The federal sources include appropriations through the SAFETEA-LU High Priority Projects fund in the amount of \$5,303,930. An additional \$2,850,000 has been identified through the Omnibus Appropriations Bill approved in March 2009. The remaining funds required for construction were anticipated to come from Clark County. However, due to revenue shortfalls, sufficient funds are currently not available to fund the balance of the construction costs. Appropriation of ARRA funding through the TIGER Grant Applications would complete the financing package and allow for construction of the project. The ARRA funding, if received, would be used to fund the construction of the project. CCPW is committed to funding the construction management component of the project.

NDOT is currently charged with the stewardship of the Federal Highway Program for the State of Nevada. In 1999 the NDOT and FHWA entered into a Stewardship Plan allowing NDOT to assume the responsibilities of the FHWA under Title 23 of the United States Code for the design, plans, specifications, estimates, contract awards and inspection of projects. The plan further allows NDOT to delegate project review and administration to capable local public agencies. NDOT has documented the requirements for delegation of the stewardship responsibility to the local public agencies within the Local Public Agencies (LPA) Manual.

CCPW has worked closely with NDOT through the Stewardship Plan process to transfer the design, plans, specifications, estimates, contract awards, and inspection of a project from NDOT to Clark County for federally funded projects. When selected for funding through the TIGER



Grant Application program, CCPW staff will be dedicated to work with NDOT to fulfill the requirements of Stewardship for the I-215/Airport Connector Interchange Project.

## **2. Secondary Selection Criteria**

### **a. Innovation**

As mentioned in Section D, State of Good Repair, the project will include the application of a one-inch rubberized asphalt overlay of I-215 within the project limits, which is expected to improve ride quality, extend pavement life and reduce freeway noise. Rubberized asphalt is new to the Las Vegas valley and was first used by NDOT on Interstate-515 in Henderson, Nevada. As a result of the project, the rubberized asphalt was well received by road users after experiencing a quieter and smoother commute. Rubberized asphalt is recommended for “long-term crack-fill performance” per the Technical Brief prepared by ERES Consultants, Inc. entitled “Sealing and Filling Cracks in Asphalt Pavements”, dated November 1999.

The project also includes the installation of conduit for future installation of fiber optic cable for connection to the existing Freeway and Arterial System of Transportation (FAST) network. FAST is the integrated Intelligent Transportation System (ITS) organization that monitors and controls the traffic on the freeway and arterial network within the Las Vegas valley. The transportation management center (TMC) for FAST is located just west of the project site near the interchange of the CC-215 Beltway with Decatur Boulevard. The installation of the conduit for ITS communications for FAST would allow for expansion of the FAST system east on the I-215 Beltway and future deployment of ITS devices such as dynamic message signs, vehicle detectors, and incident management cameras to better manage the freeway operations. This system has not been extended east on I-15 on the I-215 prior to this time due to the anticipation of the I-215/Airport Connector Interchange project. Delay of the I-215/Airport Connector Interchange project has delayed installation of ITS infrastructure on I-215. It should also be noted that this segment on I-215 within the project limits will be one of the last fiber segments to be installed in order to complete the fiber network loop on I-15, US-95, and the Beltway to provide a redundant communication path to the FAST TMC.


### **b. Partnership**

The Beltway program has had strong partnership with transportation and non-transportation partners over the past years. From inception, the creation of the Beltway system has been widely supported by elected officials, residents, and agencies within the Las Vegas Valley for many years. The Bruce Woodbury Beltway is the result of planning efforts that had begun in the early 1990’s through a cooperative effort of members of the Clark County Commission, Clark County staff, and members of the public.



## E. FEDERAL WAGE RATE REQUIREMENT

*The undersigned certifies that this application complies with the requirements of subchapter IV of chapter 31 or title 40, United States Code (USC) Federal Wage requirements as required by the Recovery Act*

  
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Denis Cederburg, P.E., Director of Public Works

## F. NEPA REQUIREMENT

The project, Improvements to the I-215 Corridor from Las Vegas Boulevard to Windmill Lane, project SPI-215-1(004), E.A. 73224, was evaluated and found not to have any significant environmental impact and did not involve any unusual circumstances. On March 31, 2005, the FHWA concurred with NDOT's conclusion that this action is considered a Categorical Exclusion<sup>15</sup> under 23 CFR 771.117(d).

## G. ENVIRONMENTALLY RELATED FEDERAL, STATE AND LOCAL ACTIONS

The I-215/Airport Connector Interchange project will require a Right-of-Way Occupancy Permit from the NDOT. Currently, NDOT maintains a section of the I-215 from Las Vegas Boulevard to Warm Springs Road and the permit is required for performance of work within NDOT's jurisdiction. Since all work shall be completed within one year from the date of issuance, the permit will be submitted once notification of selection for funding is issued. NDOT has been a stakeholder during the project design phase and is aware of the improvements to be constructed. The permit will be obtained concurrent with the project advertisement and no delays are anticipated to the project schedule due to the acquisition of the Right-of-Way Occupancy Permit.

A dust control<sup>16</sup> permit from Clark County and water pollution control<sup>17</sup> permit from the State of Nevada will be required for the construction of the project. These permits are to be obtained by the General Contractor responsible for the construction of the project. The requirements for these permits are included in the Special Provisions in Section 637, Pollution Control of the Contract Documents.

<sup>15</sup> The "Categorical Exclusion" is located at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp>

<sup>16</sup> Dust control permit information is located at:  
[http://www.accessclarkcounty.com/depts/dagm/aq/permit/pages/permits\\_dust.aspx](http://www.accessclarkcounty.com/depts/dagm/aq/permit/pages/permits_dust.aspx)

<sup>17</sup> Water pollution control permit information is located at: <http://ndep.nv.gov/bwpc/storm01.htm>



## H. PROTECTION OF CONFIDENTIAL BUSINESS INFORMATION

This application does not include confidential or financial data or information considered to be a trade secret. The engineer's estimate of probable cost has not been included in this grant application nor has it been placed on the website with supporting information. CCPW holds this information confidentially until bids are opened. The engineer's estimate is available upon request.

## I. INDEX OF WEBSITE SUPPORTING INFORMATION

The following documents supporting the grant application statements and status of project can be found at <http://pwgate.co.clark.nv.us/arra/tiger/airport/airport.asp> :

- Project Implementation Schedule
- NEPA Documentation – Signed CAT-X
- Environmental Assessment for Improvements to the I-215 Corridor from Las Vegas Boulevard to Windmill Lane
- Change of Access Report
- Traffic Report
  - Technical Memorandum 1 Existing Conditions
  - Technical Memorandum 2 Future Conditions
  - Technical Memorandum 2 (Addendum)
- Project Plans
  - Volume 1 Roadway
  - Volume 2 Structures
- Special Provisions
- Final Pre-Design Report
- Benefit-Cost Analysis
- Economic Impact Assessment by Applied Analysis, August 2009
- Letters of Support (NDOT, RTC of SN, and McCarran International Airport)
- State of the Southern Nevada Economy and its Implications on Transportation prepared by RTC of Southern Nevada

Additional back-up information can be found at the following websites:

- Local and State Improvement Programs
  - Regional Transportation Commission's Transportation Improvement Plan:  
<http://www.rtcsonv.com/mpo/plansstudies/tip0912/Revised%20Amendedtable-2-FY2009-2012%20TIP-9-2-2009.pdf>
  - NDOT's Statewide Transportation Improvement Program:  
[http://www.nevadadot.com/traveler/construction\\_projects/stip/pdfs/clark.pdf](http://www.nevadadot.com/traveler/construction_projects/stip/pdfs/clark.pdf)
- Federal Appropriations
  - [http://reid.senate.gov/appropriations\\_requests.cfm](http://reid.senate.gov/appropriations_requests.cfm)