



November 20, 2009

AGENDA ITEM 6(b)

TO: Regional Transportation Commission

FROM: Scott Gibson, PE
Project Manager

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Executive Director

SUBJECT: Pyramid/McCarran Intersection Update

RECOMMENDATION

It is recommended that the Regional Transportation Commission (RTC) acknowledge receipt of this report.

SUMMARY

Per direction from the RTC Board at the October 2009 meeting, staff is providing this update on the current status of the Pyramid/McCarran Intersection Project. A presentation will be provided to address the following topics:

- General Background
- Design alternatives under consideration
- Potential ROW impacts (both property and costs)
- Schedule
- Public outreach processes.
- October meeting issues.
 - Wedekind Road/Queen Way Congestion
 - Wild Creek Golf Course Routes
 - Emergency access to Village Green
 - Delay times
- Benefits to intersection area neighborhoods.

General Background

The Pyramid Highway/McCarran intersection is one of the most congested in the region and has a history as a high accident location. Even with other planned improvements to the regional system such as an upgrade of the Pyramid Highway to a freeway and the construction of a new freeway connecting the Pyramid Corridor to US-395, the severe congestion at this intersection is expected to worsen.

The project team has directed its focus back on the full intersection EIS process since work on the interim solutions for the southbound right turn lane have been suspended.

Design Alternatives under Consideration

Three build alternatives and their right-of-way (ROW) implication are under consideration (all three alternatives provide more through-lanes on both Pyramid and McCarran and a free-flowing right turn lane, southbound Pyramid to westbound McCarran):

- Alternative 1 – **Direct Connector** – Provides a bridge structure to carry the evening eastbound to northbound traffic directly through the intersection.
- Alternative 2 – **Expanded at Grade Intersection** – Increases the width of both Pyramid and McCarran and increases the number of turn lanes to address the evening traffic movements.
- Alternative 3 – **Grade Separation** – Provides a bridge structure on Pyramid to carry traffic over McCarran and the intersection south and touching down prior to York Avenue.

The project team continues to meet with the Technical Advisory Committee (TAC) and in December will seek a recommendation to eliminate the Grade Separation alternative from further consideration. The adoption of lower level of service (LOS) standards, commercial and residential access, conflicts in the touchdown area, and changes in projected major traffic movements are among the reasons that reduce the feasibility of this option.

Potential ROW impacts

All three build alternatives have similar footprints and therefore have similar and significant ROW implications. (Attachment A provides 12 ROW layouts) Each of the three alternatives is shown with four potential alignments: west and north, west and south, east and north, and east and south. These alignments are for evaluating the ROW implications only and DO NOT REPRESENT even a preliminary project level design.

A preliminary cost estimate for “worst case” alignments impacting commercial and residential properties was developed by RTC staff. The alternative 1 Direct Connector footprint was used for both. For predominantly residential impacts, an east/south alignment was used, and for predominantly commercial impacts, a west/south alignment was used.

The predominantly commercial alignment takes 34 residences and 13 commercial properties for a total cost of approximately \$36M. The predominantly residential alignment takes 71 residences and 3 commercial properties for approximately \$24M. The western alignment could potentially cost \$12M more than an eastern alignment.

The project team is seeking a recommendation from the TAC on a preferred ROW alignment to bring forward to the RTC Board.

Schedule

RTC has committed to fulfill the environmental requirements of the federal NEPA process even if the concept of accelerating the process in concurrence with the Sparks council resolution moves forward. The acceleration of the project saves time by eliminating the federal review process and allowing the ROW acquisition to begin at the beginning of final design. (The current schedule based on continuing the EIS under the NEPA process is shown in Attachment B).

Public Outreach Processes

Public outreach activities associated with the intersection EIS were suspended as the Southbound Right Turn Lane interim project was pursued. With the direction to accelerate the project under RTC procedures, an aggressive public outreach process is being developed and will begin in early 2010. The Village Green subdivision and the Immaculate Conception parish are active community members and have a strong interest in the project. Many Village Green residents are members of the Parish as well. RTC staff has recently met individually with residents and Parishioners to provide information on the project.

October Meeting Issues

During the October Board item on accelerating the Pyramid/McCarran intersection project, some issues were raised during public comment and subsequent board discussion that merit clarification.

- Wedekind Road/Queen Way Congestion – It was suggested that the congestion problems on Wedekind Road and at the Queen Way intersection are more significant and should be addressed before the Pyramid McCarran intersection. The Wedekind and Queen Way congestion is directly related to the congestion at Pyramid McCarran. This cut through traffic is also a problem for the neighborhood east of Pyramid Way as frustrated drivers try to find alternate routes around the intersection. Addressing the capacity issues at the intersection will alleviate these problems.
- Wild Creek Golf Course Routes – Referred to as the NW cutoff this concept was evaluated as a possible alternative during the RTC's analysis leading up to its direction to develop the Southbound Right Turn Lane project. Starting at disc drive and heading west over the mountain three possible connections were evaluated: tying into McCarran at Rock Blvd., tying into McCarran West of Rock, and also tying into El Rancho Drive because of the steep terrain construction costs were very high, ranging from \$80M to \$100M. The cost

factor eliminated it from further consideration. Moreover, the Pyramid Highway – US 395 Connection project will include a segment of roadway providing essentially the same function.

- Emergency access to Village Green – The concern is that because of the elimination of a left turn at Emerson, emergency access will be limited and response times increased. For the Expanded At-Grade intersection the median will be designed with a mountable curb approved by the fire department so there will be no impact with that alternative. The Direct Connector and Grade Separation alternatives have bridge structures and embankments that could affect this access. Further evaluation in conjunction with fire prevention officials will be pursued during detailed project development. It should be noted that the Immaculate Conception Church parking lot is an approved emergency vehicle access route providing access to Lagomarsino Drive and Holman Way in the Village Green subdivision.

- Delay vs. Travel Times – The table below provides results of VISSIM modeling for the three build alternatives and the No-Build alternative. The modeling was done using 2012 traffic projections and was part of an evaluation of proposed long term and interim alternatives. These projections show that the travel time from La Posada south to Queen Way in the AM peak using the No-build alternative is 27.5 minutes. Travel times with any of the build alternatives in place are reduced to approximately 10 minutes for a savings of 15 minutes per trip. Queue reductions with the build alternatives are also significant.

| Alternative | Level of Service (LOS) at Pyramid/McCarran | | South Bound Travel Time from La Posada to Queen Way (minutes) | | South Bound Queues from Queen Way North (miles) | |
|-------------------|--|----|---|------|---|-----|
| | AM | PM | AM | PM | AM | PM |
| No Build | F | F | 27.5 | 18.1 | 5.7 | 2.3 |
| Direct Connector | C | C | 10.3 | 8.7 | .9 | .1 |
| Expanded At-Grade | C | D | 9.6 | 15.9 | .5 | 1.0 |
| Grade Separated | D | E | 9.2 | 8.7 | 0.2 | 0.1 |

Benefit to Intersection Area Neighborhoods

The current intersection is not only congested with traffic but it also provides minimal amenities for pedestrians and cyclists. Because the ROW impacts of any of the build alternatives require acquisition of complete properties, there is a potential for there to be enough space to dramatically

improve the pedestrian environment and provide safe bicycle facilities. Through appropriate landscaping and design the project could greatly enhance the aesthetics of the area to the benefit of the neighborhood residents and businesses. (Attachment C provides a rendering of Pyramid Way looking south toward McCarran for the Expanded At-Grade alternative)

FISCAL IMPACT

There is no fiscal impact associated with this agenda item.

PREVIOUS BOARD ACTIONS

At the October 2009 Board Meeting, the RTC Board endorsed the resolution to accelerate the Pyramid McCarran Intersection Improvement Project passed by the Sparks City Council on October 12, 2009, and directed staff to proceed with accelerating the project as outlined therein.

At the August 2009 board meeting, Board denied adoption of resolution of condemnation for Lagomarsino property needed for the South Bound Right Turn Lane.

At the February 15, 2008 Board Meeting, the RTC Board directed staff to develop the Pyramid McCarran Southbound Right Turn Lane project to be funded with local monies.

At the August 2007 Board Meeting, the RTC Board directed staff and consultant to perform a benefit-cost analysis of two interim congestion alternatives at Pyramid McCarran Intersection; a Southbound Right Turn Lane on Pyramid, from Queen Way to McCarran Boulevard, and a Reversible Lane on Pyramid from Queen Way to York Way. The Board acknowledged caution from Project Manager Vann that federal funds would not be available for expenditure until the NEPA process is completed.

At the July 2005 Board meeting, the RTC Board authorized the Chairman to execute a Cooperative Agreement with the State of Nevada Department of Transportation (NDOT), including any subsequent necessary amendments as may be required for the Pyramid Way and McCarran Boulevard Intersection Improvement Project.

ADDITIONAL BACKGROUND

The RTC Project team has held a number of public meetings to provide information and gain citizen input on the Pyramid McCarran intersection project. In addition, a Citizens Advisory Committee (CAC) was established made up of citizens from the intersection area and commuters who use the intersection. This committee provided input on the alternatives, and aided in the development of the Purpose and Need statement. RTC staff has also met individually on several occasions with Village Green residents and Father King from the Immaculate Conception Church regarding the project. Following is a list of public meetings and CAC meetings held to date.

Public Meetings:

- May 9, 2006 – First public meeting to introduce the project to the public, at the Masonic Lodge on Pyramid Way.
- April 29, 2008 – Project workshop with the public at the Lazy 5 Park facilities
- April 30, 2008 – Project workshop with the public at the Masonic Lodge
- July 13, 2008 – Neighborhood meeting at the Catholic Church
- July 14, 2008 – Neighborhood meeting at the Catholic Church

In addition to the above meetings, we also met with the CAC on the following dates:

- October 18, 2007 – Overview meeting
- January 30, 2008 – Define Purpose and Need Workshop
- February 27, 2008 – Alternatives Workshop
- June 3, 2008 – Review from the Public Workshops

Other Alternatives Considered

The board may choose to not accept the report.

LGG/SDG

Attachments