Rainbow Boulevard Corridor Study
Blue Diamond Road to Sloan

presentation to
Metropolitan Planning Subcommittee
May 27, 2008

parsons
Overview

- Part of a group of planning studies being performed for the RTC
- Determine feasibility of extending Rainbow Blvd south to connect with I-15
Rainbow Boulevard Corridor Study

Blue Diamond Road to Sloan

Project Approach

- Collect data and define the main issues
- Develop alternatives
- Analyze and cost the alternatives
- Make recommendations and suggest how to move ahead
Data Collection

- Site reconnaissance
  - Topography
  - UPRR

- Environmental issues
  - Slopes and flood risk
  - Quarrying
  - Desert Tortoise habitat
Data Collection

Existing conditions and trends
- Land Use, population and employment
- Travel demand and traffic forecasts

➤ Transportation issues
- Rainbow north to the Beltway
- Connectivity to west Henderson
- Connectivity to I-15 south
Alternative Development and Analysis

- Two main alternatives to meet study objectives
- Alignments dictated by topography
- Variants – especially at southern end
- Develop evaluation criteria
- Analyze and compare alternatives
# Rainbow Boulevard Corridor Study

**Blue Diamond Road to Sloan**

## Quick Facts

<table>
<thead>
<tr>
<th>Component</th>
<th>Western Alternative</th>
<th>Eastern Alternative</th>
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</thead>
<tbody>
<tr>
<td>2030 projected traffic</td>
<td>17,000 to 22,000 daily</td>
<td>23,000 to 32,000 daily</td>
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<tr>
<td>Cost Estimate</td>
<td>Approx $200M</td>
<td>Approx $100M</td>
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<tr>
<td>Typical Sections</td>
<td>4-Lane Expressway</td>
<td>4-Lane Expressway</td>
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<tr>
<td></td>
<td>4-Lane Arterial</td>
<td></td>
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<tr>
<td>Interchanges and Intersections</td>
<td>North transition, 2 interchange modifications, 1 intersection, 2 new interchanges</td>
<td>North transition, 1 interchange modification</td>
</tr>
<tr>
<td>ROW Requirements</td>
<td>270 acres</td>
<td>200 acres</td>
</tr>
<tr>
<td>UPRR Coordination and Crossings</td>
<td>Crossing near Sloan Quarry</td>
<td>Crossing just south of Starr Avenue, continuing South along UPRR</td>
</tr>
<tr>
<td>Impact to Desert Tortoise CCMA</td>
<td>2.3 miles / 55 acres</td>
<td>1.3 miles / 30 acres</td>
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</table>
Western Alternative

Typical Sections

Four-Lane Limited Access Expressway

Four-Lane Arterial
Western Alternative
Connections & Crossing

- I-15 Direct Connect
- Expressway/Arterial Connection
- Signalized Arterial Intersection
- Overhead U.P.R.R. Crossing

Legend:
- New Interchange
- Intersection Improvements
- Grade Separation
- Grade Separation Enhancement
- Roadway Type
  - Interstate Highway
  - Other Roadways
  - Retained

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Rainbow Boulevard Corridor Study

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Eastern Alternative

Typical Section

Four-Lane Limited Access Expressway

Bridge over U.P.R.R.

Legend

- Intersection Improvements
- Grade Separation
- Interstate Capacity Enhancement

Roadway Types
- Interstate Highway
- Other Roadway
- Rail/
Phasing Suggestion

LEGEND

PHASE 1
- Construct Six-Lane Section
- Acquire ROW

PHASE 2
- Construct Two-Lane, Two-Way Road

PHASE 3
- Complete Expressway and Center Median with Landscaping

PHASE 4
- Complete Arterial Connections
- Interchange

NOTES:
1) For the Western Alternative, Phase 2 shows a connection to the planned Bernardo Road interchange because analysis shows this would have the highest benefit-cost ratio. However, there is also the option to connect to the Sloan interchange or the New-15 interchange, depending on funding availability and the development of the planned interchanges.
2) The Eastern Alternative could be completed in three phases. A fourth phase was not necessary for its color.
3) Alignments are not exact. This figure is for illustrative purposes only.

WESTERN ALTERNATIVE

EASTERN ALTERNATIVE
Questions?