



The Grant Road Corridor Project is Funded by the Regional Transportation Authority

# GRANT ROAD

*Improvement Plan*

Mobility Vitality Sustainability

## Grant Road Improvement Plan

### Oracle Area Revitalization Plan

### Citizen Steering Committee

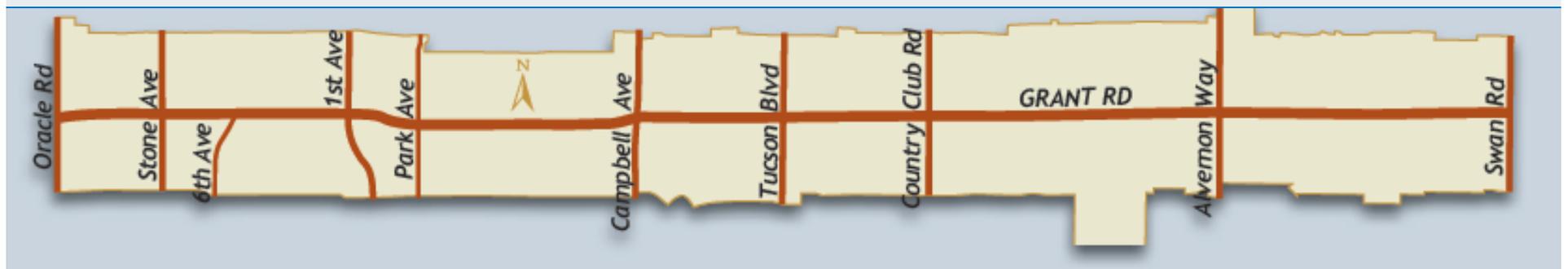
September 24, 2008



# Project Timeline



# Project Planning Area



# Visioning Phase Summary

September 2007 - January 2008

- 35 public meetings held with 1,000 participants
- 1,013 web, paper & phone surveys completed
- 4,000 comments received



# Community Character Segment Workshop—Round 1, January 2008

- Workshop Attendance
  - East Segment **78** table participants
  - Central Segment **88** table participants
  - West Segment **36** table participants
- 287 Total Attendance !



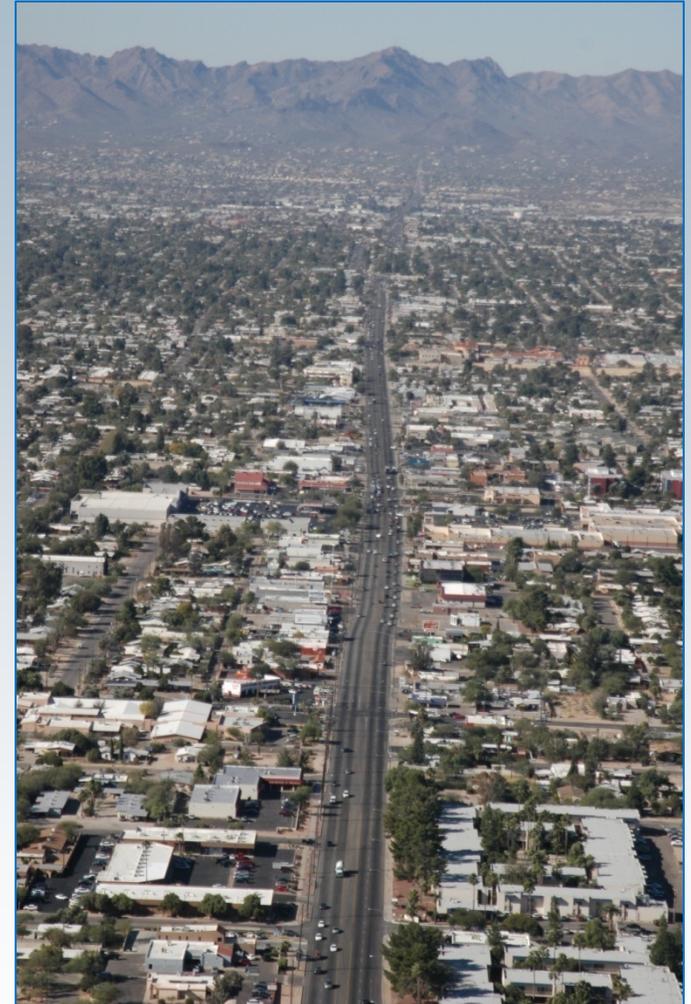
# Community Character Segment Workshop—Round 2, May 2008

- Workshop Attendance
  - East Segment **64** table participants
  - Central Segment **69** table participants
  - West Segment **36** table participants
- 233 Total Attendance !



# Project-Wide Design Concepts

- Typical street sections
- Bicycle lanes
- Crossings and access
- Transit features
- Intersection improvements
- Rain water harvesting



# Project Wide Concepts Worksheet



## INSTRUCTIONS

Several project-wide concepts were introduced in the "Project Wide Design Concepts" presentation. Each project-wide design concept was developed based on input received from Round 1 Character Segment Workshops. These concepts are illustrated on this sheet, and include:

- Street section
- Bicycle lanes
- Crossings and access
- Transit features
- Intersection improvements
- Water harvesting

This Workshop Activity focuses on elements related to "Street sections", and "Crossings and access." Please review each concept and answer the associated questions.

## GUIDING PRINCIPLES

THE FOLLOWING ARE GUIDING PRINCIPLES OF THE GRANT ROAD IMPROVEMENT PLAN RELEVANT TO THE CONCEPTS IN THESE EXERCISES

- 1.1 Balance the transportation need for those travelling locally with those passing through Grant Road
- 1.2 Improve the mobility and safety for all modes travelling along and across Grant Road
- 1.3 Balance mobility along and across Grant Road with access to businesses, residences, and other destinations.
- 1.4 Ensure that roadway improvements support and enhance the community's values
- 2.9 Work to create environments that discourage crime and enhance the community's values
- 3.1 Create an aesthetically pleasing, comfortable, inviting environment
- 3.6 Mitigate watershed issues

## PROJECT-WIDE DESIGN CONCEPTS

### CROSSINGS AND ACCESS

 PELICAN Pedestrian Crossing  
 HAWK Pedestrian Crossing  
 TOUCAN Bicycle and Pedestrian Crossing  
 Directional Median Openings

### BICYCLE LANES

 6' Bicycle Lane, with a 1' buffer between the bicycle lane and the travel lane  
 Painted Bicycle Lanes, at potential bicycle/vehicle merge areas  

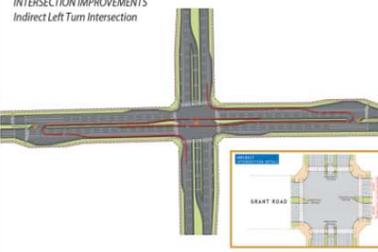
### WATER HARVESTING



### STREET SECTIONS

 137 FOOT RIGHT-OF-WAY  
 160 FOOT RIGHT-OF-WAY

### INTERSECTION IMPROVEMENTS

 Indirect Left Turn Intersection

### TRANSIT FEATURES

 Bus Pull-Outs  
 Enhanced Bus Shelters

## WORKSHOP QUESTIONS

AS ILLUSTRATED IN THE STREET SECTIONS CONCEPT, HOW DOES THE PEDESTRIAN REALM ADDRESS THE GUIDING PRINCIPLES OF IMPROVING THE MOBILITY AND SAFETY FOR PEDESTRIANS TRAVELLING ALONG GRANT ROAD? DO YOU HAVE SUGGESTIONS THAT WOULD FURTHER IMPROVE PEDESTRIAN MOBILITY AND SAFETY?

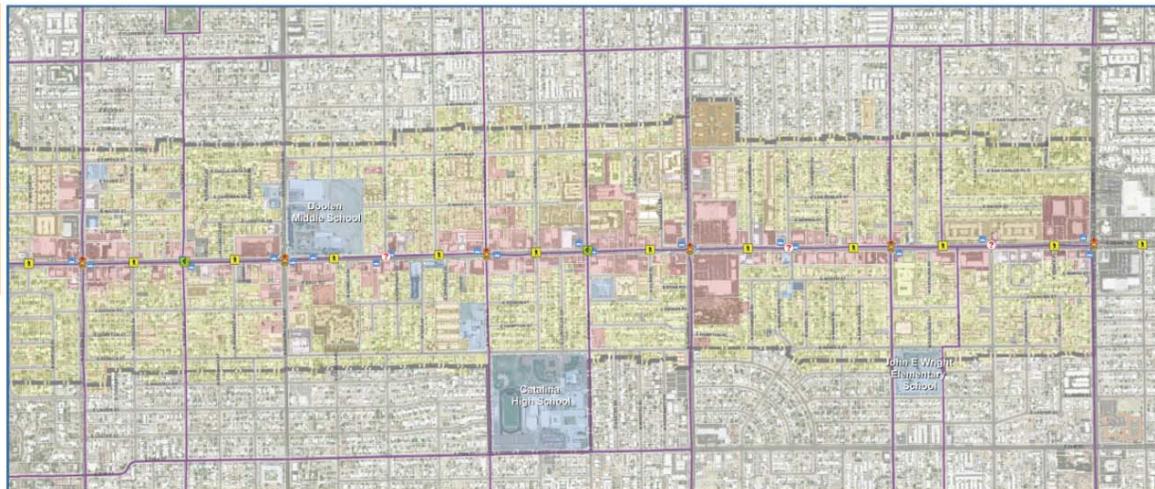
HOW DOES THE BICYCLE LANE CONCEPT ADDRESS THE GUIDING PRINCIPLES OF IMPROVING THE MOBILITY AND SAFETY FOR BICYCLISTS TRAVELLING ALONG GRANT ROAD? DO YOU HAVE SUGGESTIONS THAT WOULD FURTHER IMPROVE THE MOBILITY AND SAFETY OF BICYCLISTS?

IF YOU HAVE DETAILED COMMENTS, SUGGESTIONS, OR CONCERNS ON ANY OF THE PROJECT-WIDE DESIGN CONCEPTS, PLEASE FILL OUT A COMMENT CARD AND GIVE IT TO YOUR FACILITATOR.

## CROSSING AND ACCESS LOCATIONS

### LEGEND

- Signalized Intersection Crossing Opportunity
- Pelican Crossing Opportunity
- Toucan Crossing Opportunity
- Optional Pelican/Toucan or Median Opportunity
- Future Bus Stop Location
- Existing Signalized Intersection
- Grant Road Planning Area
- Generalized Land Use
- Park / Open Space
- Single Family Residential
- Multi-Family Residential
- Office
- Commercial / Industrial
- Schools / Recreational Uses
- Vacant



## WORKSHOP QUESTIONS

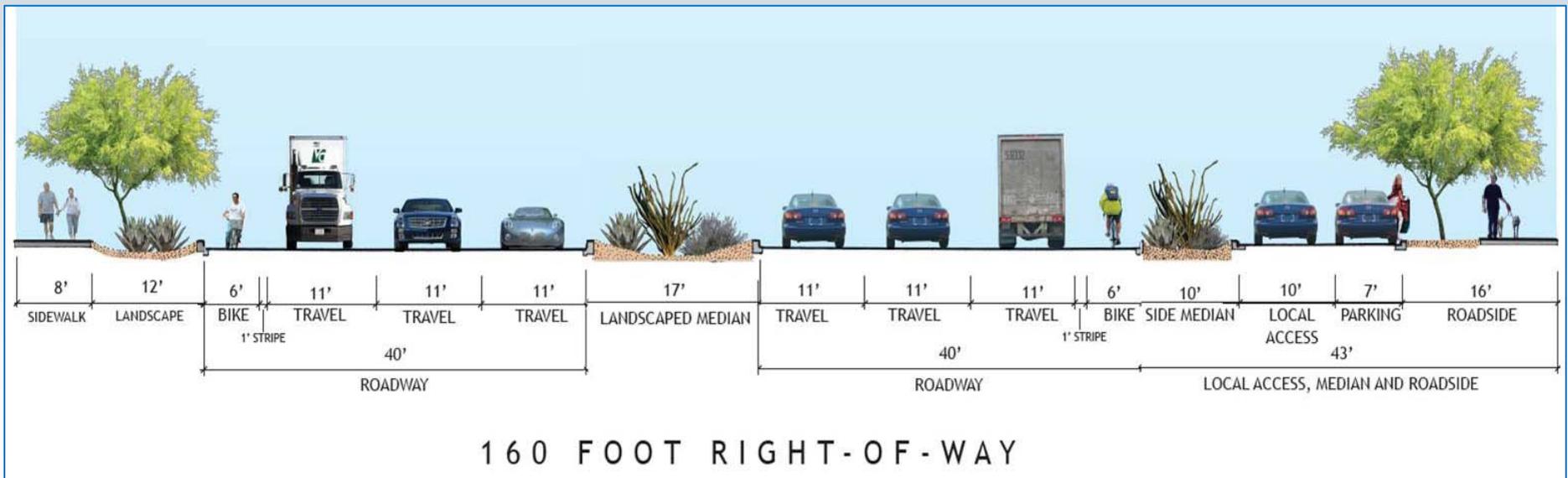
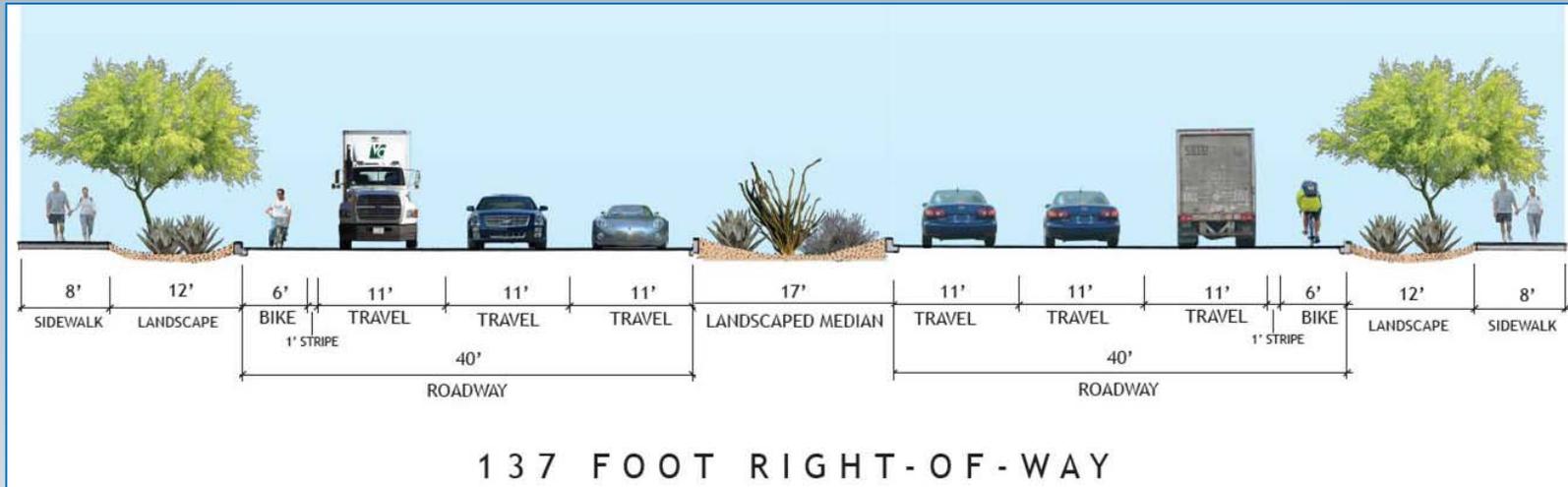
WHICH OF THE CROSSING LOCATIONS WILL PROVIDE IMPORTANT CONNECTIONS BETWEEN KEY LAND USES OR IMPORTANT ORIGINS AND DESTINATIONS?

WHERE OPTIONS ARE AVAILABLE, SELECT BETWEEN PROVIDING A PEDESTRIAN/BICYCLE CROSSING OR PROVIDING A MEDIAN OPENING FOR IMPROVED ACCESS TO NEIGHBORHOODS OR BUSINESSES.

IDENTIFY NEW ROUTES THAT COULD SERVE AS ALTERNATIVES TO USING BICYCLE LANES THAT WILL BE ON GRANT ROAD.

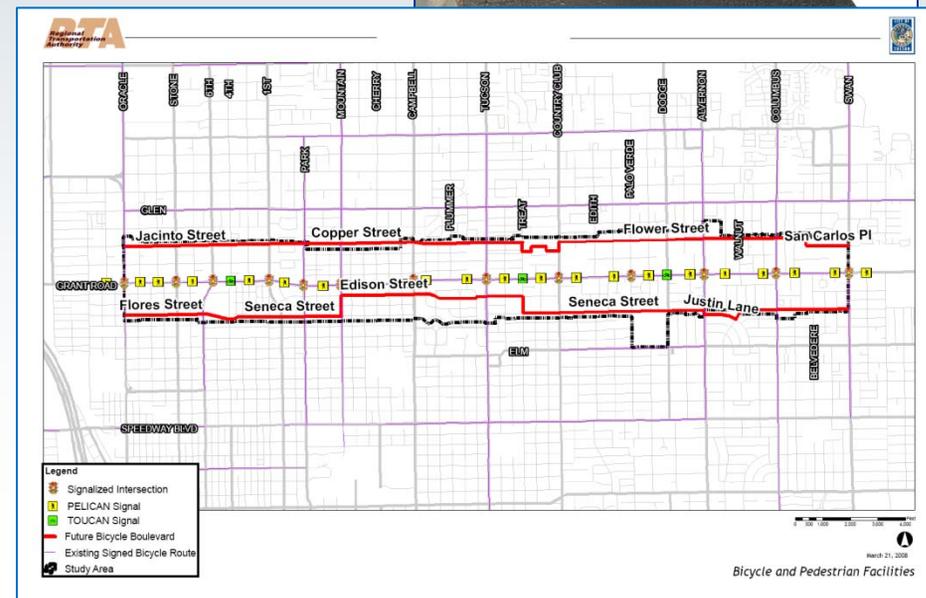
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# Conditional Task Force Endorsement

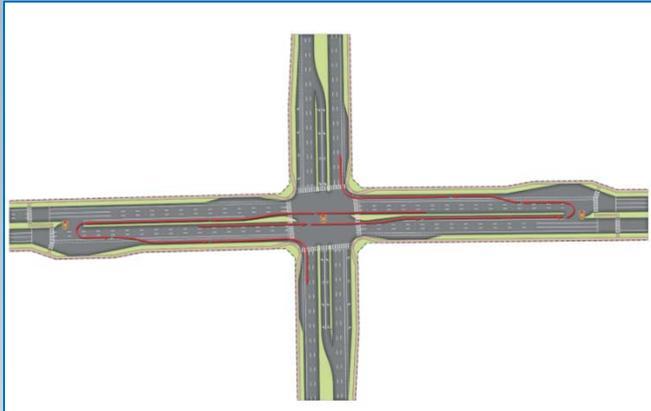


# Bicycle Mobility & Safety Improvements

- Enhanced bike lane
  - 6-foot wide
  - 1-foot wide buffer
  - Conflict area thermoplastic
- Parallel bike boulevards
- Toucan bike & pedestrian crossings
  - Dodge Boulevard
  - Palo Verde
  - Treat Avenue
  - 6<sup>th</sup> Avenue
- Bicycle amenities at enhanced bus stops & transit plazas



# Crossings & Median Openings



- Tally
- 48 Pedestrian crossings
  - 4 Toucan crossings
  - 41 Directional MOs



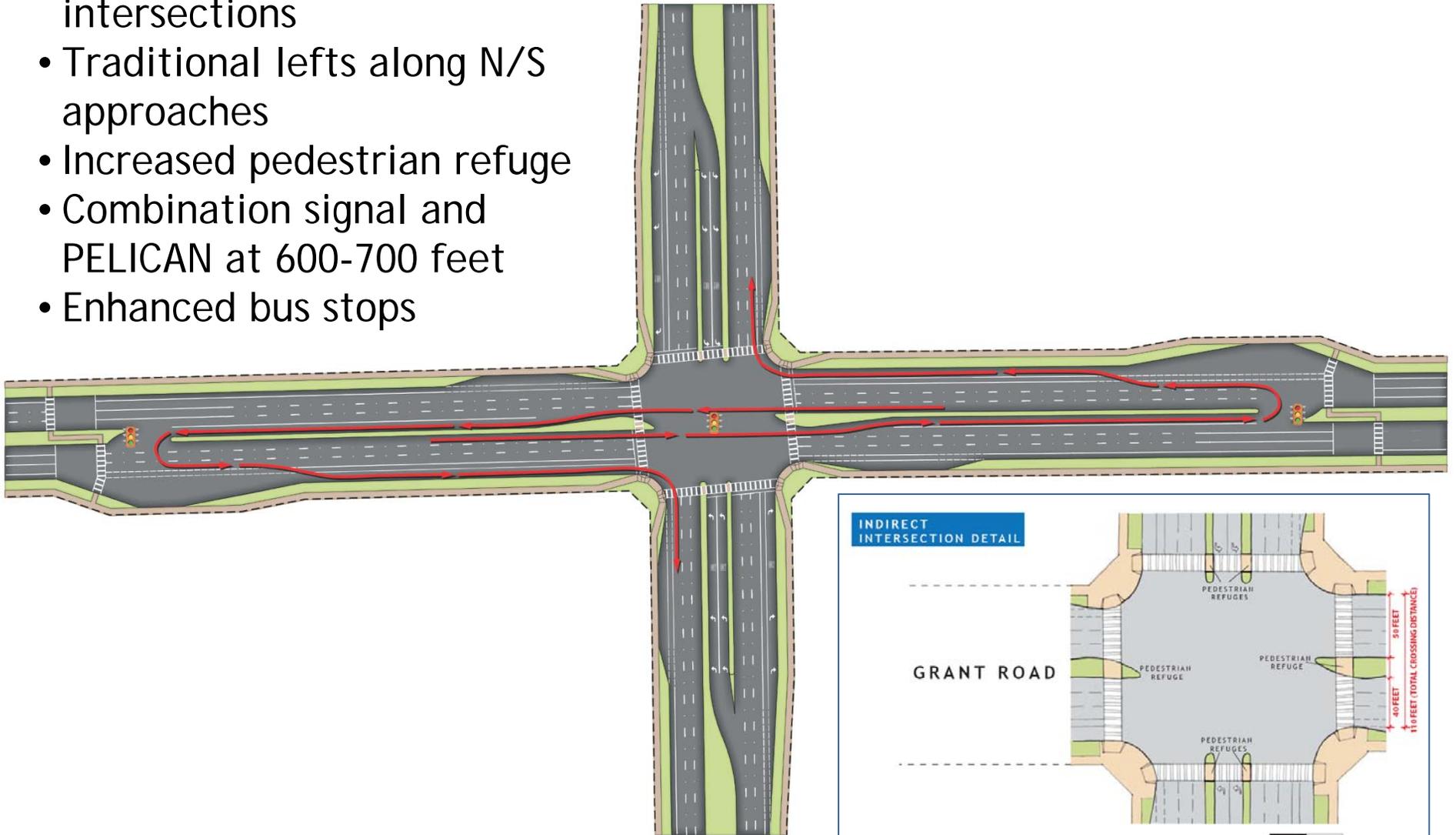
# Enhanced Bus Stop



- Bus pull-outs
- Lighting
- Bicycle parking
- Benches
- Wayfinding signs
- Landscaping and shading
- Water harvesting potential

# Indirect Left-turn Intersections

- Indirect left at 7 arterial intersections
- Traditional lefts along N/S approaches
- Increased pedestrian refuge
- Combination signal and PELICAN at 600-700 feet
- Enhanced bus stops



# Indirect Left-turn Intersections



# Indirect Left-turn Advantages

## For 2030 traffic conditions...

- Reduces vehicle delay by an average of 42%
- Reduces fuel use by an average of 9%
- Reduces travel time by an average of 27%
- Improves level of service at 4 of 7 intersections (Oracle, Stone, Alvernon, Swan)

## For pedestrians...

- Reduces pedestrian crossing distance by 15%

## For safety...

- Reduces intersection crashes by 16%
- Reduces intersection injury crashes by 30%

## For property impacts near intersections...

- Reduces right-of-way needed for intersections

# Rain Water Harvesting Themes

- Of course!
- Great idea!
- Like the idea of trying different systems
- Water harvesting should address pollutants
- Near unanimous support for water harvesting concepts

# Local Case Studies

## Roadway and Streetscape



# Local Case Studies

## Roadway and Streetscape



# Local Case Studies

## Public Areas

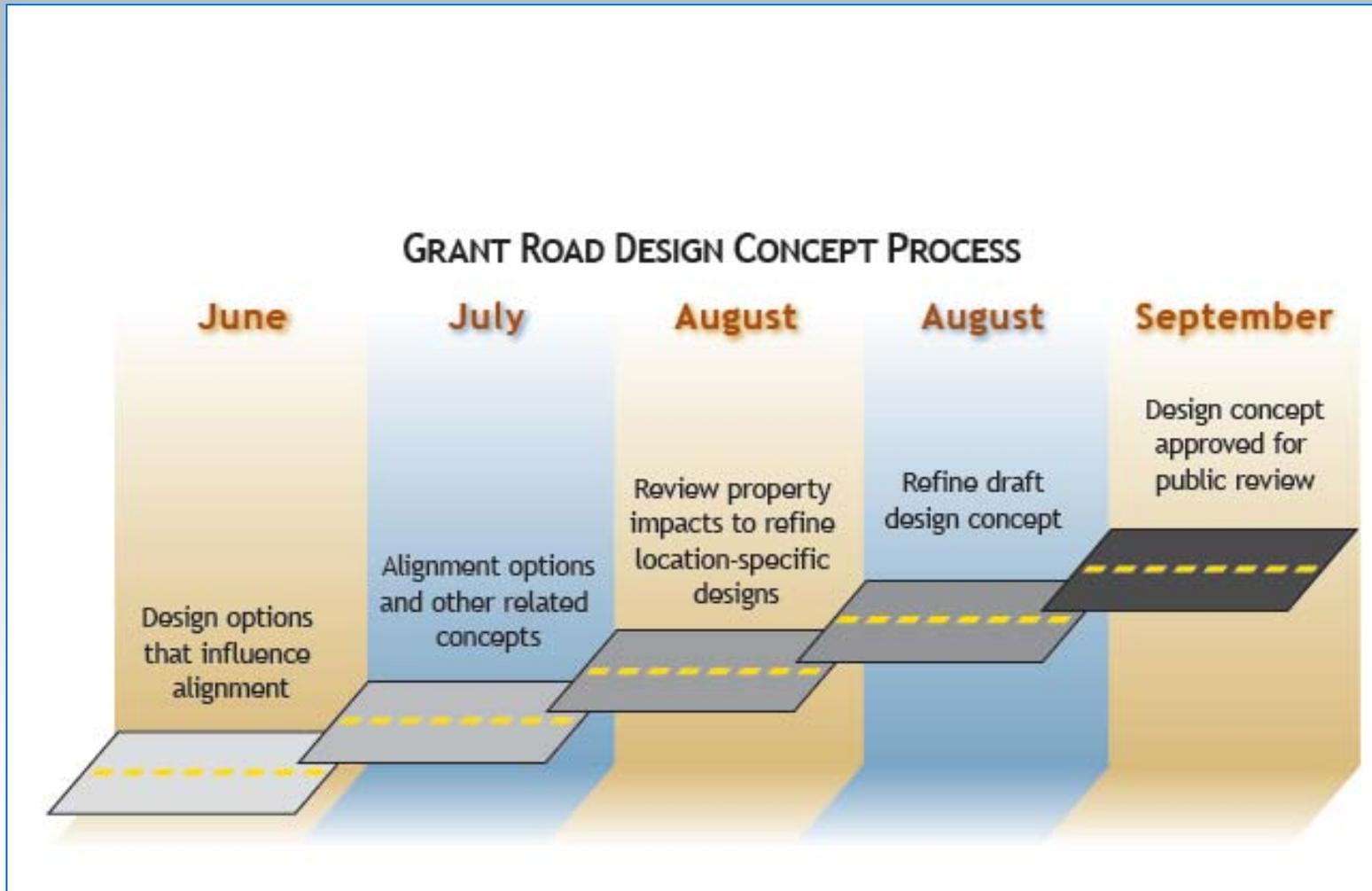


# Local Case Studies

## Roadway and Streetscape



# Proposed Alignment Concept





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# GRANT ROAD

## Improvement Plan

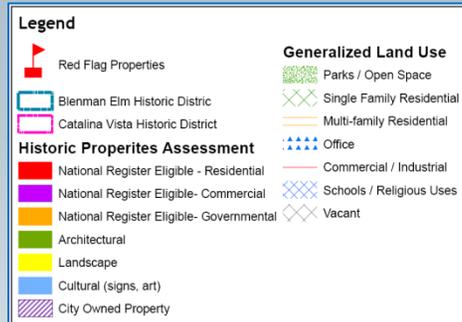
Mobility Vitality Sustainability

## Work Session: Alignment & Alignment Options



# Resource Information

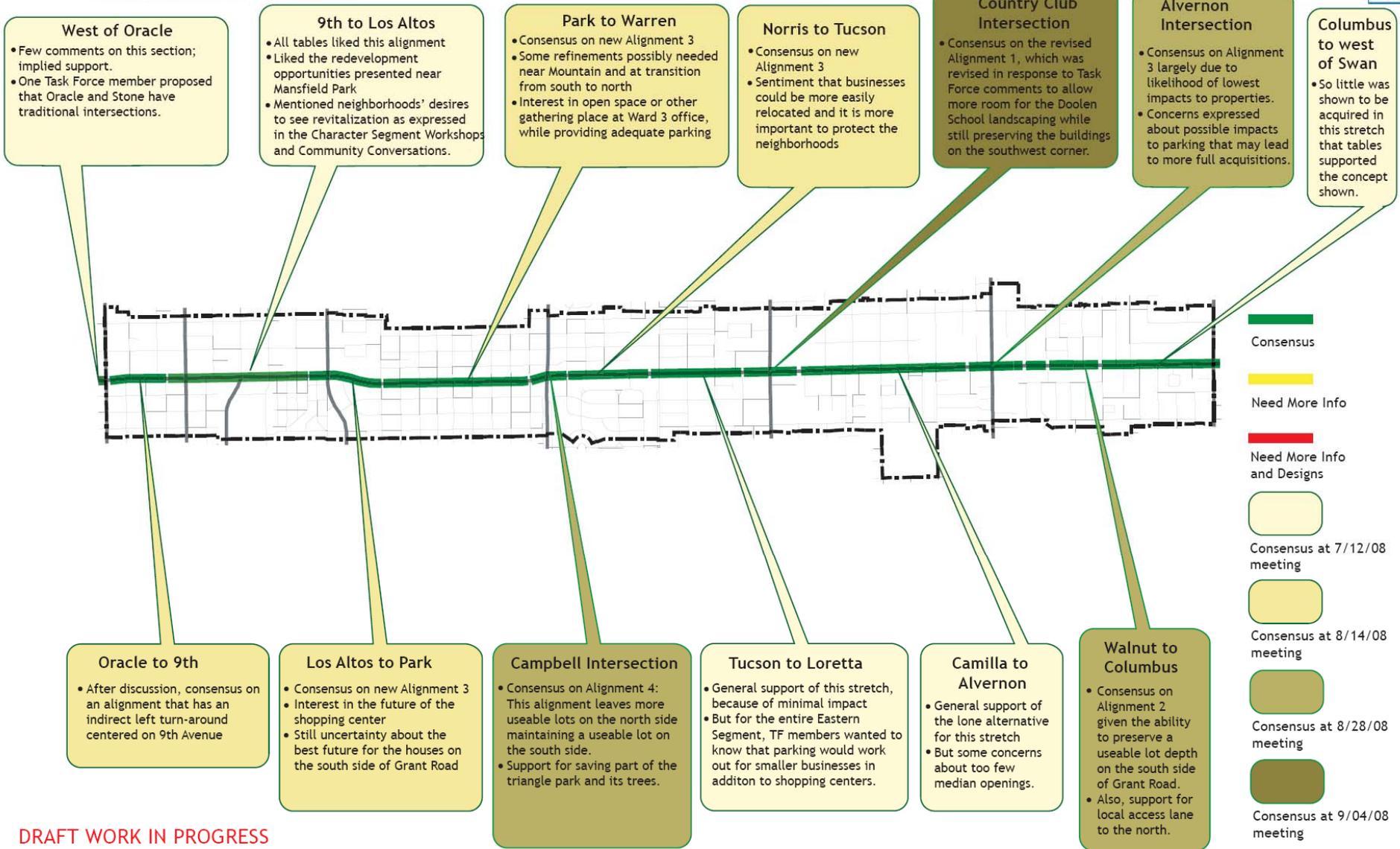
- Guiding Principles
- Red Flag Properties
- Historic Districts
- Neighborhood Associations
- Land Use
- NRHP Eligibility
- Comparative Real Estate Input
- Comparative Historical Integrity Input



# Task Force Endorsement



DRAFT WORK IN PROGRESS



DRAFT WORK IN PROGRESS

# Grant Road - 6<sup>th</sup> Avenue



# Grant Road - 6<sup>th</sup> Avenue



# Grant Road - 6<sup>th</sup> Avenue



# Next Steps

- September
  - Finalize and approve proposed alignment concept for public review
  - Property owner notifications followed by tenant notifications
- October
  - Property owner meetings & briefings
  - 30-day public review & comment on proposed alignment concept
  - Open Houses - Wed. 10/15, Thur. 10/16, Sat. 10/18
- November
  - Task Force review of public input & development of preferred concept
- December
  - Finalize preferred alignment concept
- January
  - Task Force recommends preferred alignment concept to Mayor/Council

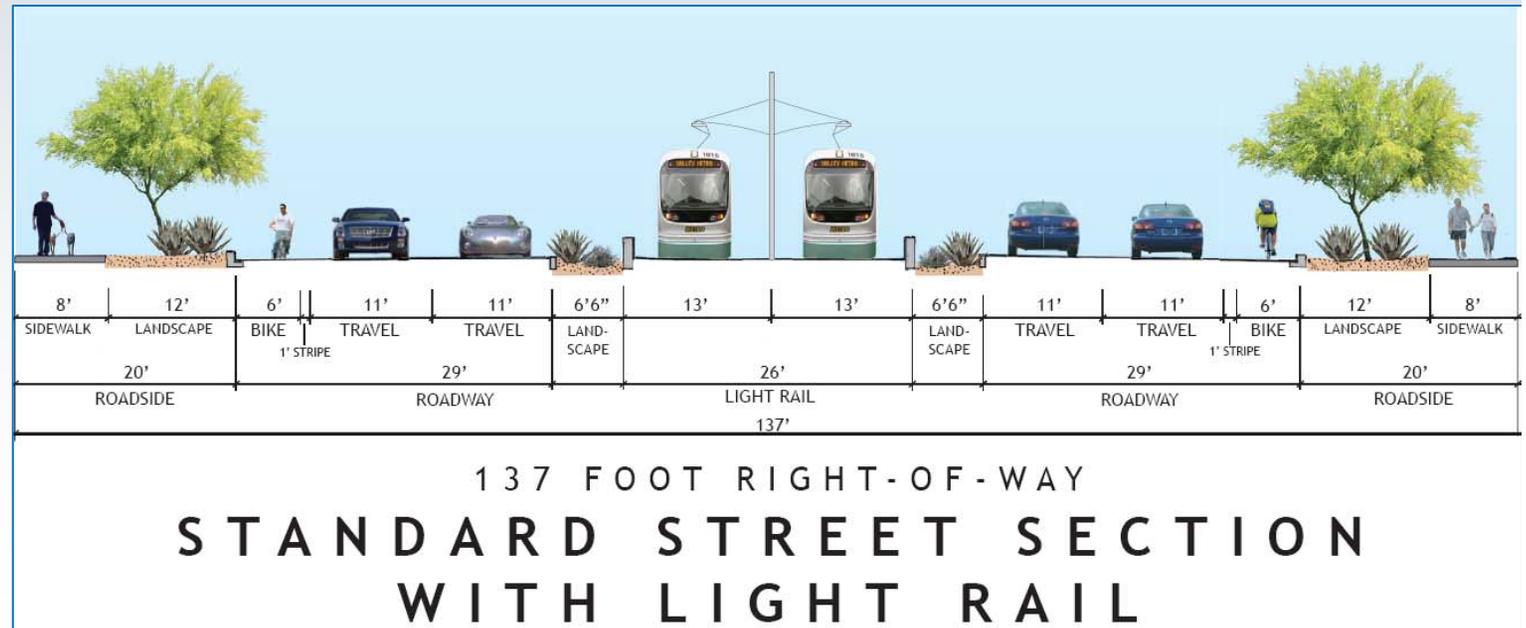
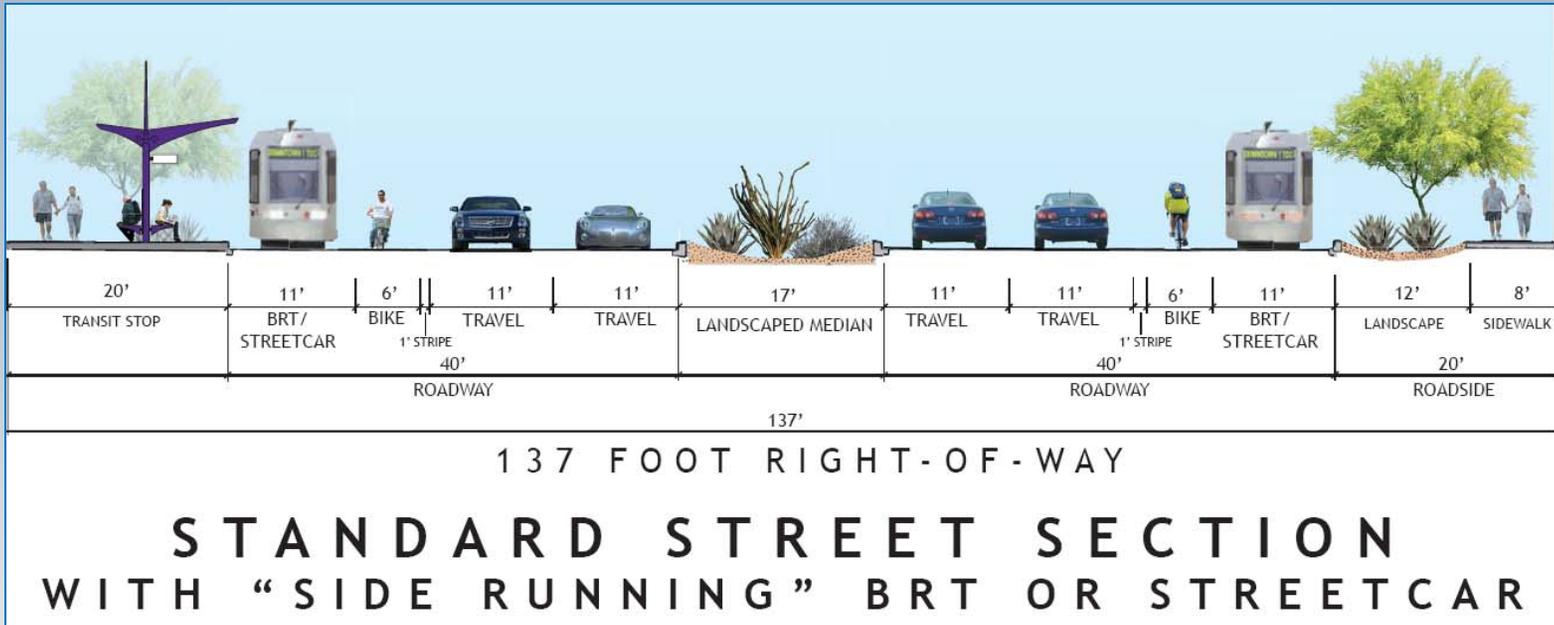
# Public Open Houses

- Western Segment - Wednesday October 15<sup>th</sup> at the Executive Inn and Suites from 4:00 p.m. - 8:00 p.m.
- Central Segment - Thursday October 16<sup>th</sup> at Salpointe High School Gym from 4:00 p.m. - 8:00 p.m.
- Eastern Segment - Saturday October 18<sup>th</sup> at Catalina High School Cafeteria 12:00 p.m. - 4:00 p.m.

Thank You.



# Accommodating Future Transit



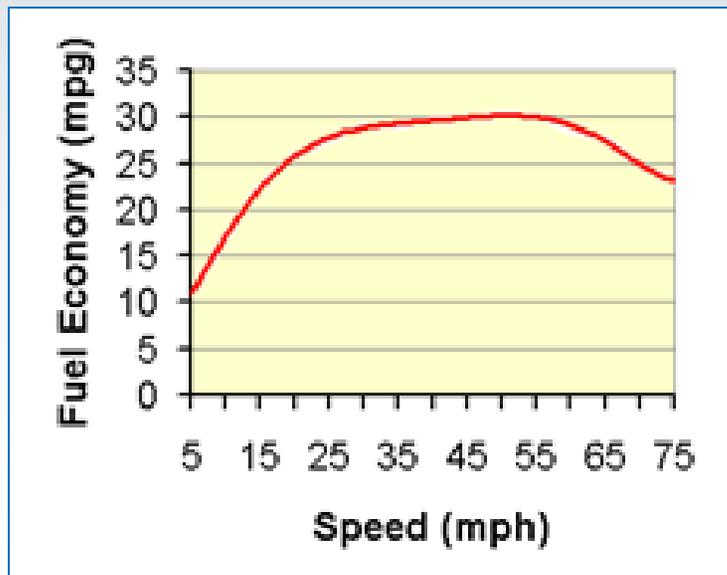
# Speed Limit

- Target Speed is the speed at which vehicles should operate on Grant Road. The target speed is the posted speed.
- Design Speed is the speed that governs geometric features such as roadway curvature & sight distance.



# Task Force Endorsement

- Target speed: 35 mph
- Posted speed limit: 35 mph
- Design speed: 35 mph (per *ITE Recommended Practice for CSS in Designing Major Urban Thoroughfares for Walkable Communities*)



- US Department of Energy
- US Environmental Protection Agency
- [www.fueleconomy.gov](http://www.fueleconomy.gov)