



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

GRANT ROAD

Improvement Plan

Mobility Vitality Sustainability

Eastern Community Character Segment Workshop, Round 2

Tucson Boulevard to Swan Road
May 5, 2008



Tonight's Workshop

- Start on time and stick to the schedule
- Informational presentations
- Facilitated small group activities
- Worksheet gallery
- Comment cards for detailed comments, concerns, and suggestions
- Receive valued community input
- Finish by 9:00pm





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GRANT ROAD

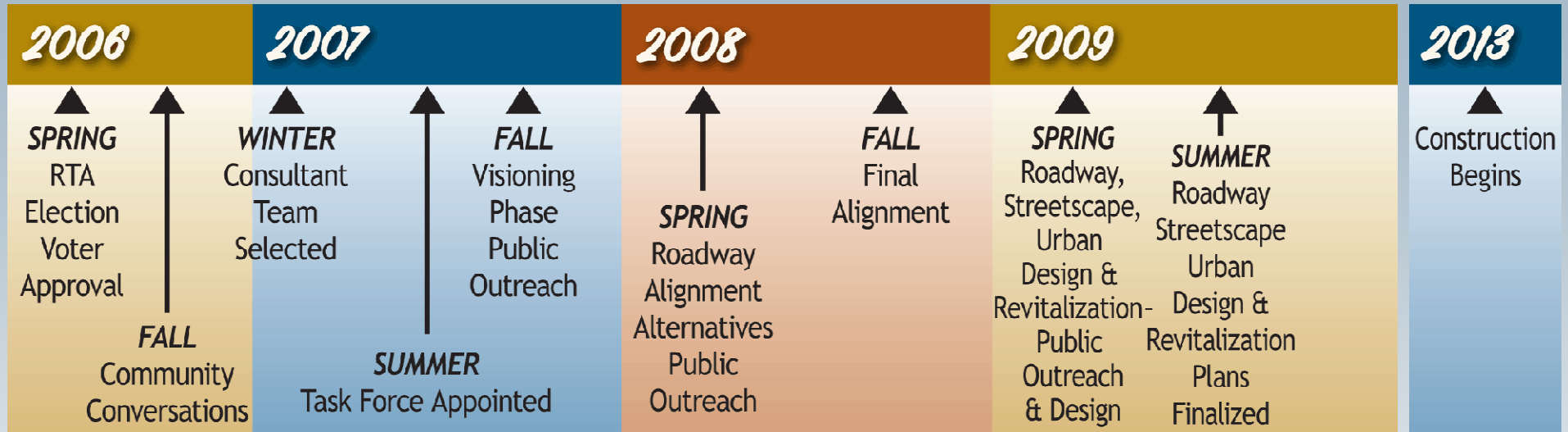
Improvement Plan

Mobility Vitality Sustainability

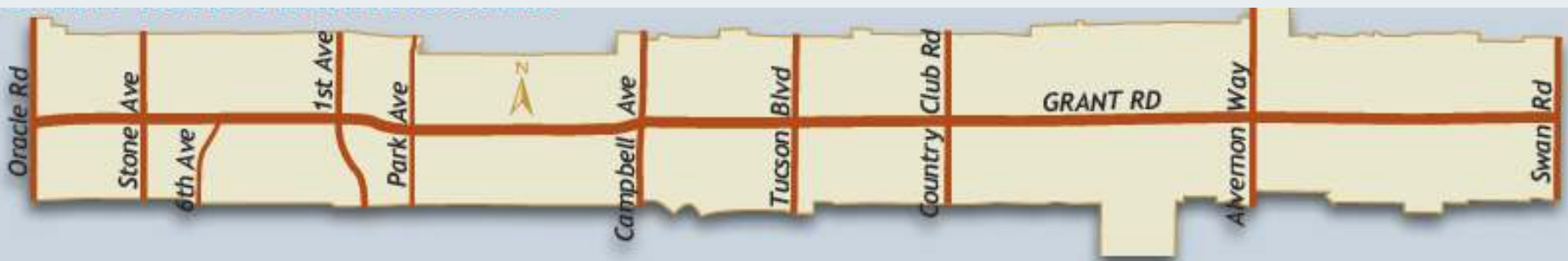
Project Background



Project Timeline



Project Planning Area



Context Sensitive Solutions Meeting of Three Contexts



Community Needs

Built & Natural Environment

Design Excellence

Multi-modal Transportation



GRANT ROAD
Improvement Plan
Mobility Vitality Sustainability

Visioning Phase Summary

- 35 public meetings held with 1,000 participants
- 1,013 web, paper & phone surveys completed
- 4,000 comments received
- Input used by Task Force to create Vision & Guiding Principles document



Vision & Guiding Principles

The image shows the cover of a report titled "GRANT ROAD Improvement Plan". At the top left is the RTA logo. The title "GRANT ROAD Improvement Plan" is in a large, stylized font. Below the title is a navigation bar with three tabs: "Mobility", "Vitality", and "Sustainability". A diagonal banner on the left side reads "FINAL Developed by the Grant Road Task Force with public input & review 2007-08". The main title of the report is "Final Vision Statement & Guiding Principles February 19, 2008". The content is divided into two main sections: "Vision Statement" and "Guiding Principles". The "Vision Statement" section contains three paragraphs of text. The "Guiding Principles" section starts with "1. Mobility and Access" and includes a sub-section "1.1 Balance the transportation needs of those traveling locally with those passing through Grant Road by:" followed by a bulleted list of three items. At the bottom of the page, there is a small disclaimer: "This is a project of the Regional Transportation Authority. The voter-approved, \$2.1 billion RTA plan will be implemented through 2026. Details about the full plan are available at www.RTAmobility.com. The Regional Transportation Authority has a nine-member board with representatives from local, state and tribal governments. This project will be managed by the City of Tucson."

RTA Regional Transportation Authority
www.grantroad.info

GRANT ROAD *Improvement Plan*

Mobility Vitality Sustainability

FINAL
Developed by the Grant Road Task Force
with public input & review 2007-08

Final Vision Statement & Guiding Principles February 19, 2008

Vision Statement

The improvements resulting from the Grant Road Improvement Plan will enhance safety and balance mobility and accessibility for all users including motorists, pedestrians, bicyclists, transit riders, and those with disabilities. The Plan will direct the widening of Grant Road to six lanes, also improving its function as an urban arterial street within Tucson's network of streets. The Plan will balance the needs of those traveling through the area on Grant Road with those who live, work, and shop along Grant Road.

The community values the scale, character, and diversity of the neighborhoods and businesses along Grant Road and the Plan will reflect these values. The Plan will recognize the diversity of residents and independent businesses along Grant Road, and will help them to revitalize the places in which they live and work.

The Plan will strive to improve the visual character and quality of Grant Road and the land uses along it, and it will define Grant Road as a unique and vital place that ultimately enhances the community and region as a whole.

The Grant Road planning process and its implementation will balance a long range vision with the definition of improvements and programs that fit within the financial resources identified for this project. It will be forward-thinking in its design, consider likely future trends and work to effect positive change to the environment and public health. It will set high standards for community involvement while providing an inspirational model for future Tucson roadway enhancements.

Guiding Principles

1. Mobility and Access

Mobility and Access mean moving along and connecting with uses on Grant Road – both for people living and working nearby and those passing through; both freeing up motion (mobility) and getting to specific destinations (access). Through mobility and access, the Plan will work toward sustainable transportation both for the local community and the Tucson region by doing the following:

1.1 Balance the transportation needs of those traveling locally with those passing through Grant Road by:

- improving Grant Road's role in Tucson's street network and its role for neighbors;
- recognizing all populations using Grant Road; and by
- increasing the efficiency of traffic flow along Grant Road while designing Grant Road and the context along it to encourage drivers to travel at safe speeds.

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GRANT ROAD Improvement Plan MILESTONE REPORT



Mobility

Vitality

Sustainability

April 2008

CREATING A NEW GRANT ROAD —MORE THAN 4,000 PUBLIC COMMENTS HEARD DURING VISION CONVERSATIONS

The Grant Road Improvement Plan Citizens Task Force has finalized a Vision Statement and Guiding Principles plan. The document will guide the Task Force and the planning team as they work to develop roadway alignment and design options for the five miles of Grant Road between Swan and Oracle Roads.

The collective vision was developed based on more than 4,000 public comments, suggestions, and concerns received during late 2007 and early 2008 at meetings, open houses, and through a survey. The Task Force used this public input, plus a detailed technical assessment of the roadway, to create the Vision Statement and Guiding Principles.



More than 35 community conversations, with large and small groups, provided public input to the Task Force.

PROCESS FOR DEVELOPING PREFERRED DESIGN



The Vision Statement and Guiding Principles will guide the Task Force as it evaluates design criteria and reviews roadway options.

"The Vision Statement and Guiding Principles will allow us to evaluate design options for Grant against a set of criteria that takes both community values and technical issues into account," said Sarah Evans, a Task Force neighborhood representative. Robert Tait, representing business interests on the Task Force, agreed. "We heard a lot of input from residents and businesses and the Vision Statement and Guiding Principles captures that input well. It gives us a set of guidelines that will be very valuable as we evaluate options for the road."

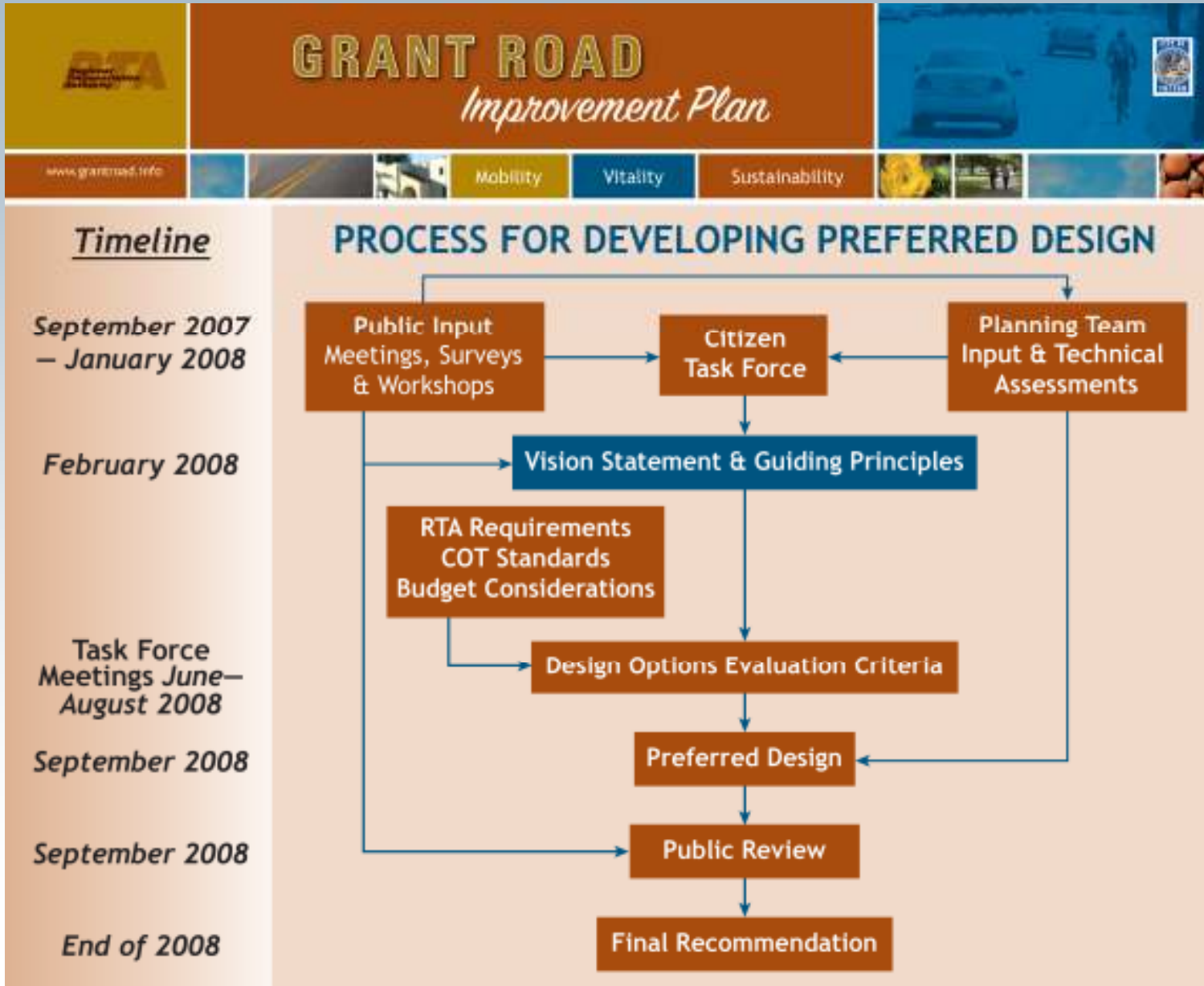
The Vision Statement and Guiding Principles document is available on the web at www.grantroad.info and at public libraries across the region.

This is a project of the Regional Transportation Authority. The voter-approved, \$2.1 billion RTA plan will be implemented through 2026. Details about the full plan are available at www.RTAmobility.com. The Regional Transportation Authority has a nine-member board with representatives from local, state and tribal governments. This project will be managed by the City of Tucson.

www.grantroad.info

Milestone Report to the Public

What's Next?





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What We've Heard

Character Segment Workshops Round 1

January 14, 16, 17, 2008



What We've Heard

- Vary cross-section width and alignment to fit situations (road doesn't have to be straight)
- Where necessary, take one side and enhance cross-section
- Minimize width in commercial areas to protect existing businesses



What We've Heard

- Include wide bike lanes and enhanced pedestrian realm where possible
- Need more and better pedestrian crossings
- Bus pullouts rather than transit lane
- Consider bus or light rail transit lanes, if not now, in the future
- Consider local access lanes in residential and mixed-use areas



What We've Heard

- Consolidate and improve access points to businesses
- Consider different buffering options depending on context (walls, buildings, green space, public art)
- Address neighborhood cut-through traffic
- Fix congestion at major intersections and make them more pedestrian-friendly
- Maintain character and minimize impacts to existing local businesses



What We've Heard

- Create urban villages, cluster businesses, add café frontage, buildings near the street
- Revitalize commercial areas
- Improve access to existing parks and create public gathering places and green space
- Add landscaping with native plants - use water harvesting
- Address flooding



Round 2 Workshop Objectives

- Present project background & what we've heard from Round 1 & other public input
- Review & refine design concepts for the entire project
- Review design options for representative locations in each segment





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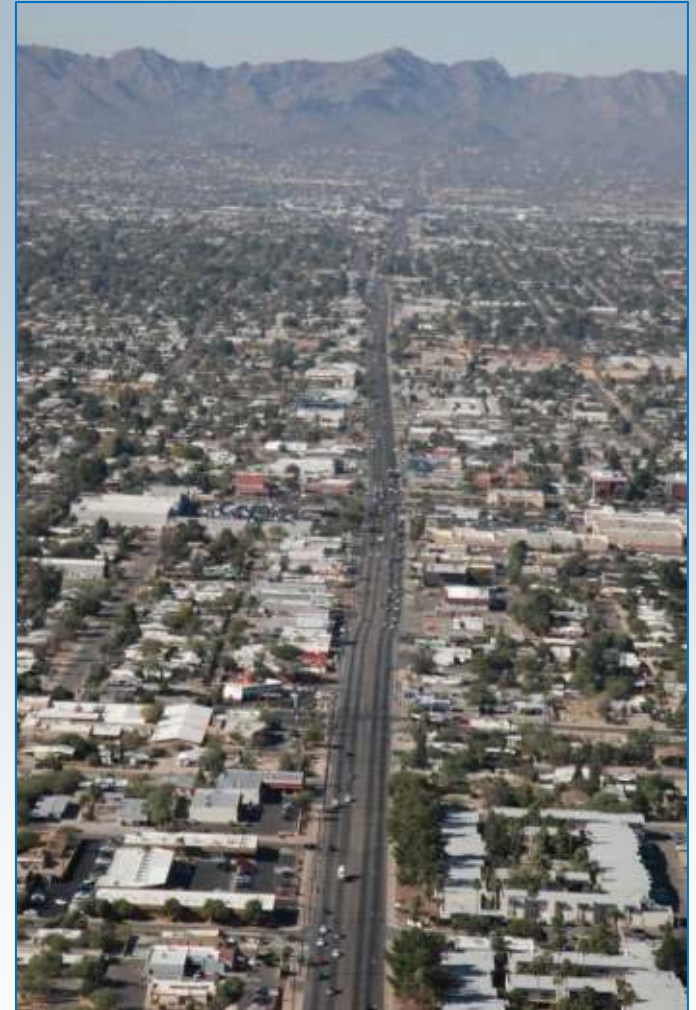
Community Character Segment Workshops Round 2

Design Concepts for the Entire Project



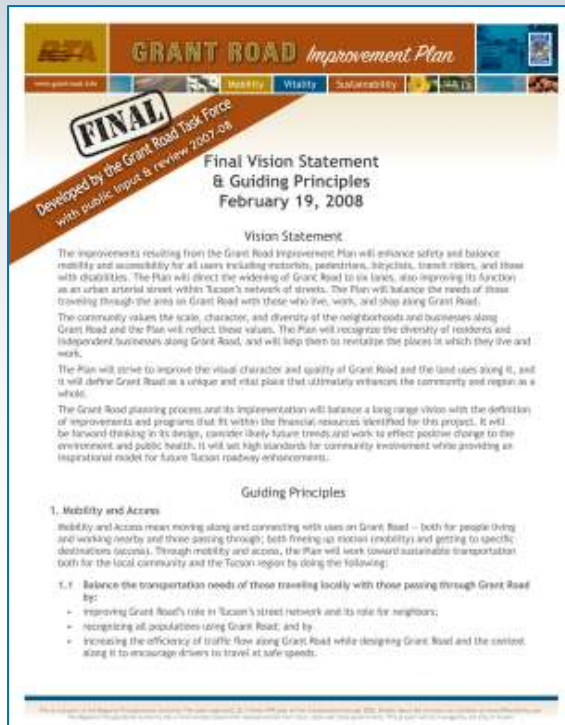
Project-Wide Design Concepts

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



Basis for Design Concepts

- What we've heard from Round 1 & the public
- Issue guidelines from the City
- Relevant guiding principles



Issue Guidelines

- City's *Roadway Development Policies* require that **striped bicycle lanes** be included in major roadway projects
- A **striped bicycle lane does not count** as a travel lane
- Separate **multi-use paths** can be included in the project, in addition to on-street striped bicycle lanes



Issue Guidelines

- Grant Road improvements will serve as the **build-out**
- City's *Roadway Development Policies* **limit arterials to 6-lanes** (additional lanes may be needed at intersections)
- **Additional lanes** beyond 6-lanes shall be dedicated to transit or high-occupancy vehicles
- **Grade-separated intersections** (GSIs) are not recommended by the City but will be considered if requested



Relevant Guiding Principles

Mobility & Access

- 1.1 Balance the transportation needs for those traveling locally with those passing through Grant Road
- 1.2 Improve mobility and safety for all modes traveling along and across Grant Road
- 1.3 Balance mobility along and across Grant Road with access to businesses, residences, and other designations
- 1.4 Ensure that roadway improvements support and enhance the community's values



Relevant Guiding Principles

Character & Vitality

2.9 Work to create environments that discourage crime and increase personal safety

Aesthetics & Environment

3.1 Create an aesthetically pleasing, comfortable, inviting environment

3.6 Mitigate watershed issues

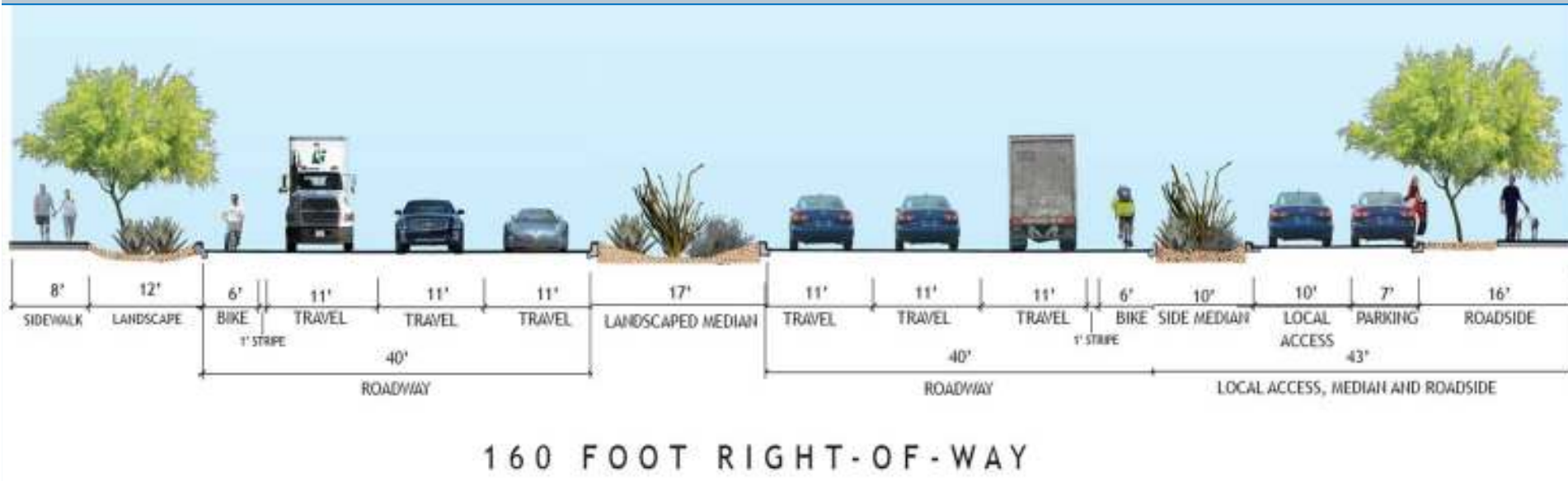


Typical Street Section



137 FOOT RIGHT-OF-WAY

Street Section-Local Access Lane



Bike Lane Design Concept



- Width: 6-foot
- Lane buffer: 1-foot painted stripe
- Conflict areas: painted (color under review)

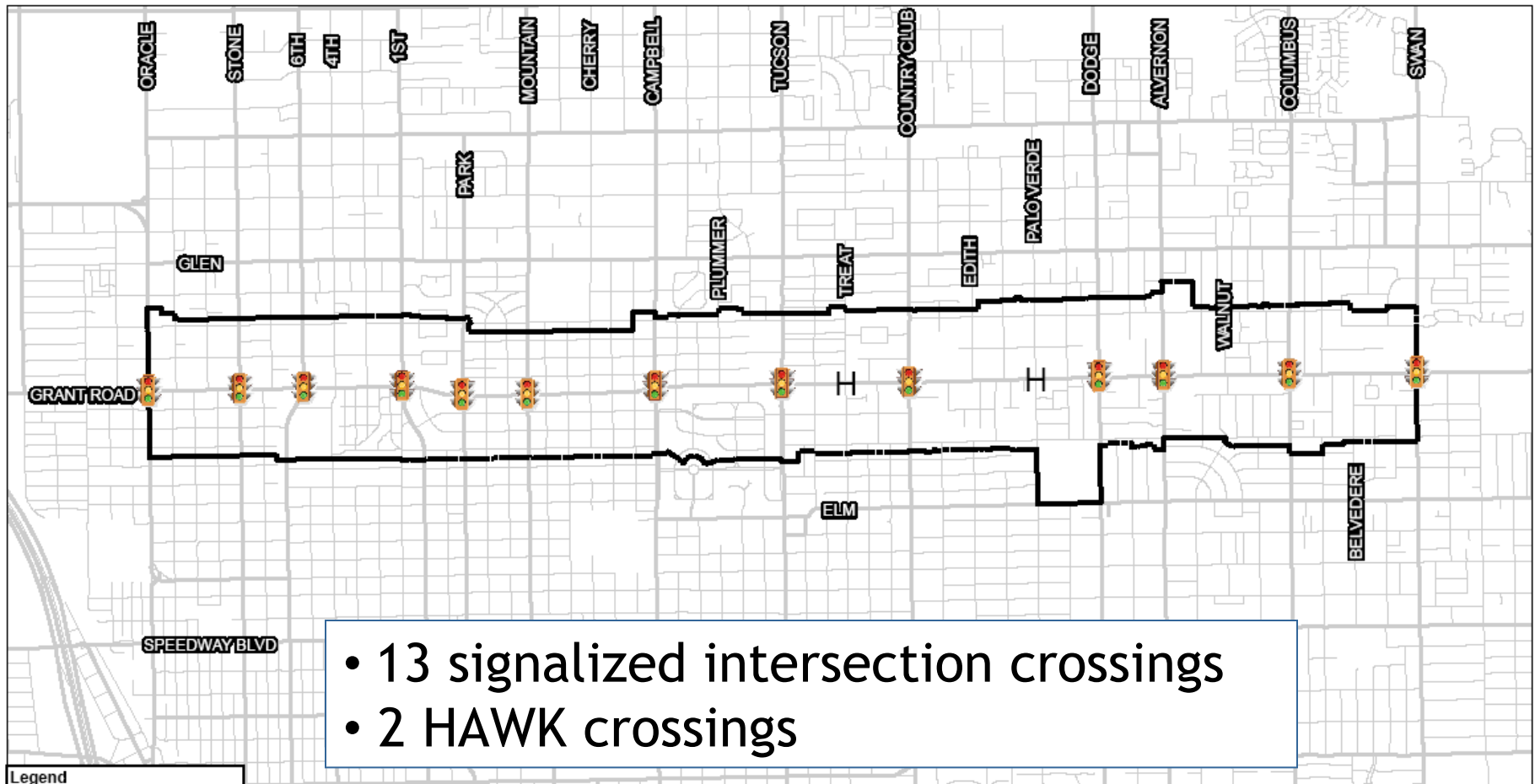


Crossings & Access

- Signalized intersections
- Pelican and Hawk crossing opportunities
- Toucan crossing opportunities
- Access to neighborhoods & businesses via median openings



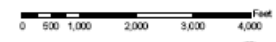
Existing Pedestrian & Bike Crossings



- 13 signalized intersection crossings
- 2 HAWK crossings

Legend

- H HAWK Signal
- Signalized Intersection
- Study Area



March 21, 2008

Traffic Signal Locations (Existing)

Crossing & Access Opportunities



Directional Median Opening

- A strategy for balancing access & mobility
- Allow left-turns to cross-street
- Allows U-turns
- Does not allow for left-turns from cross-street



Oracle Road south of
Prince Road

Bus Pull-Outs vs. Continuous Transit Lanes

Criteria	Bus Pull-Outs	Continuous Transit Lanes
• Reduces traffic disruptions	✓	✓
• Serves as access lane		✓
• Reduces right-of-way requirements	✓	
• Improves transit operations	✓	
• Improves bike safety	✓	
• Converts to future transit technologies		✓



Bus Stops

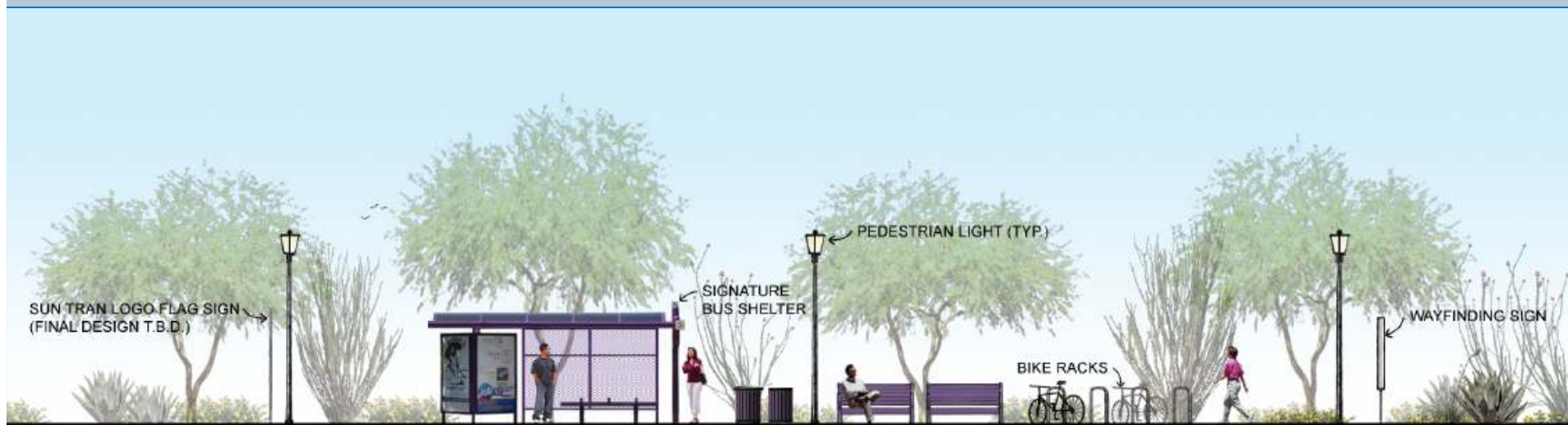


Fort Lowell,
Single bus stop, solar
powered advertising
lights



Campbell,
Double bus stop,
solar powered
advertising lights,
street light

Enhanced Bus Stop



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

Transit Design Concept

- Provide bus pull-outs at every stop
- Acquire right-of-way on far side of intersection
- Provide stops at quarter mile intervals
- Provide enhanced bus stops (45 total stops)
- Provide continuous sidewalks along Grant Road
- Convert travel lane to transit lane for future transit technologies (subject to future City approval)



Major Intersection Improvements

- Grade separated intersections are not recommended by the City unless requested
- At-grade intersection improvements
 - Enhanced traditional intersections
 - Indirect left-turn intersections

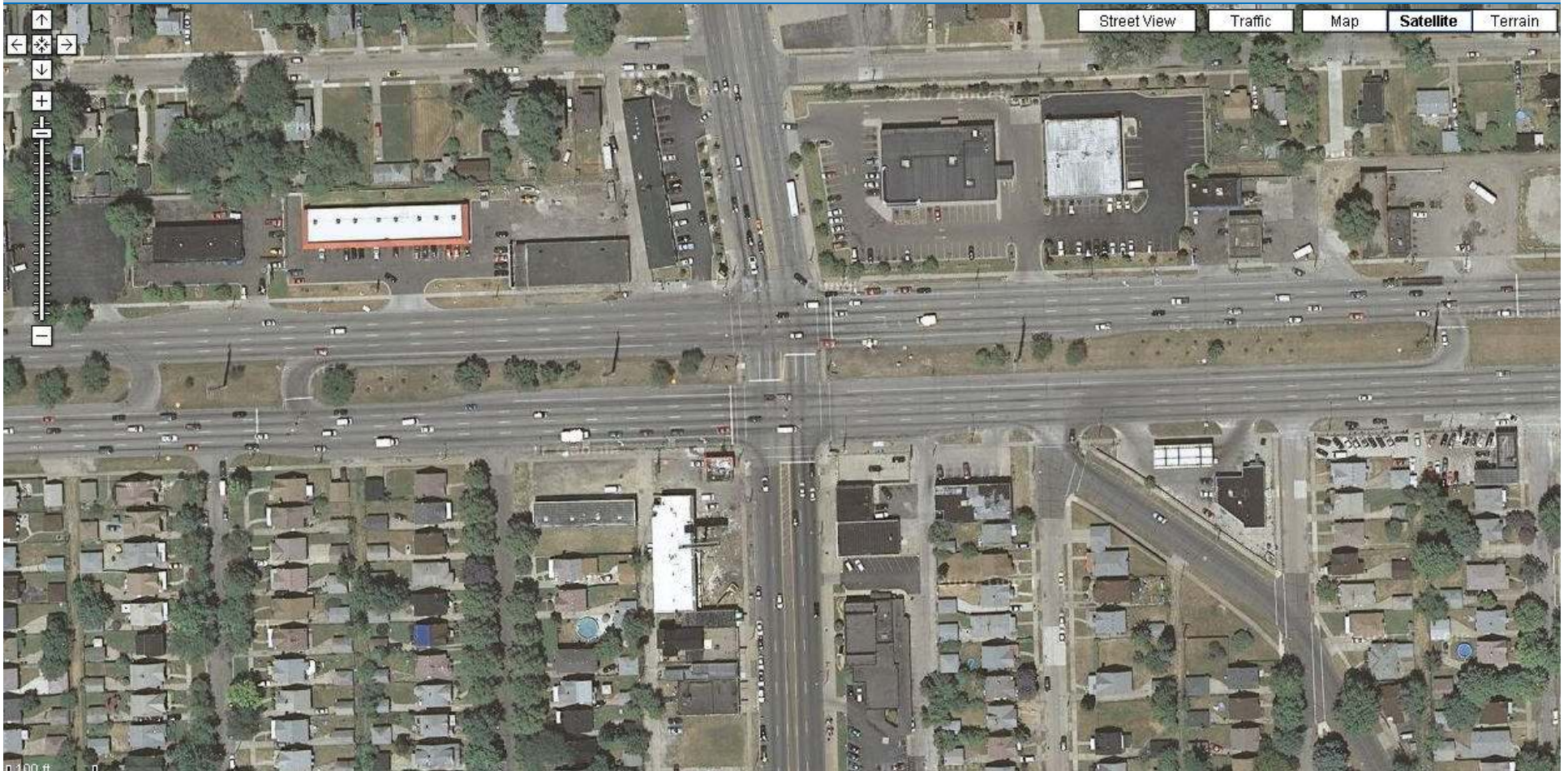


Pedestrian Refuge Enhancements

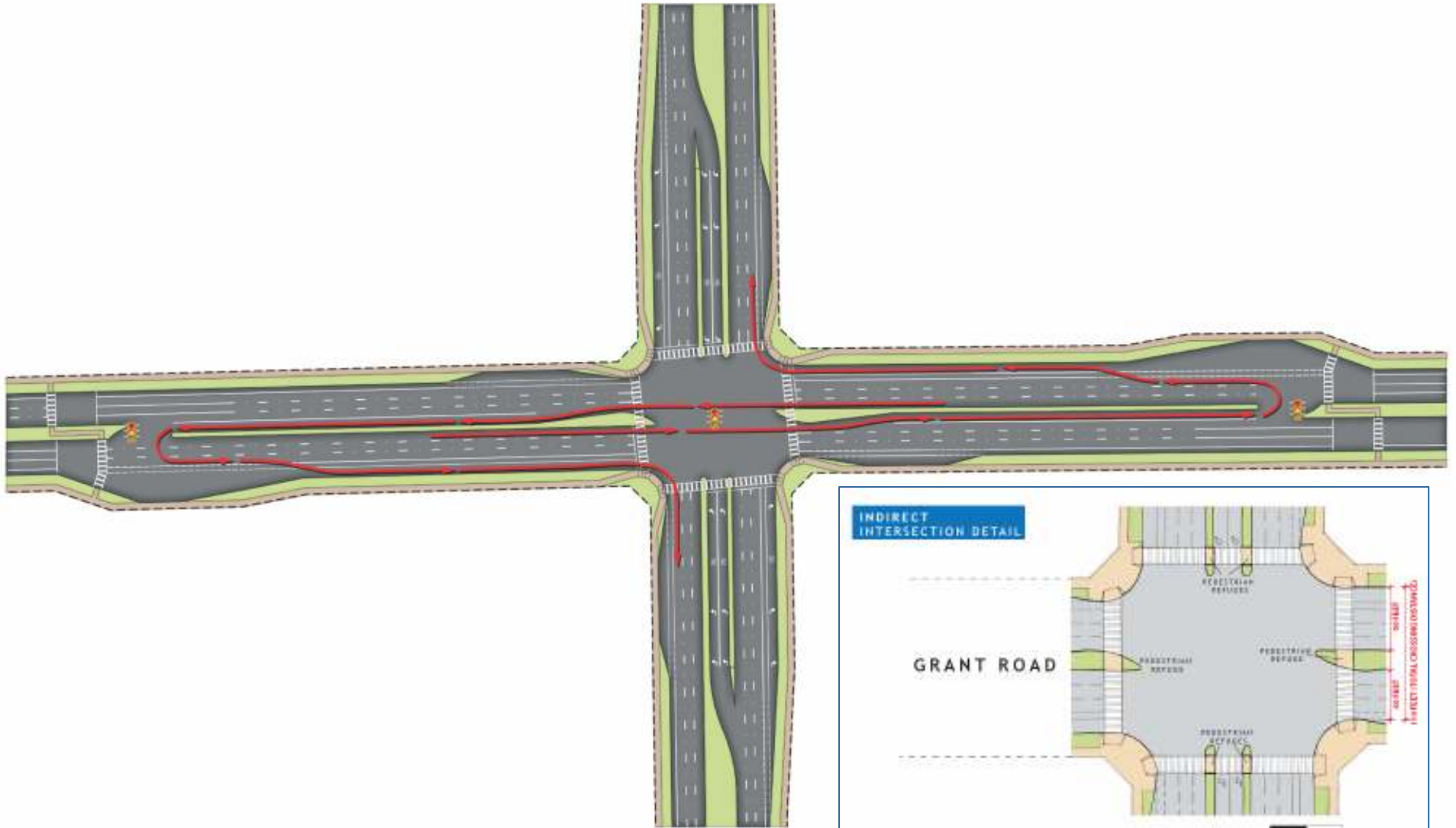


Cortaro Road, west
of I-10 in Marana

Indirect Left-Turn Intersections



Indirect Left-Turn Intersection

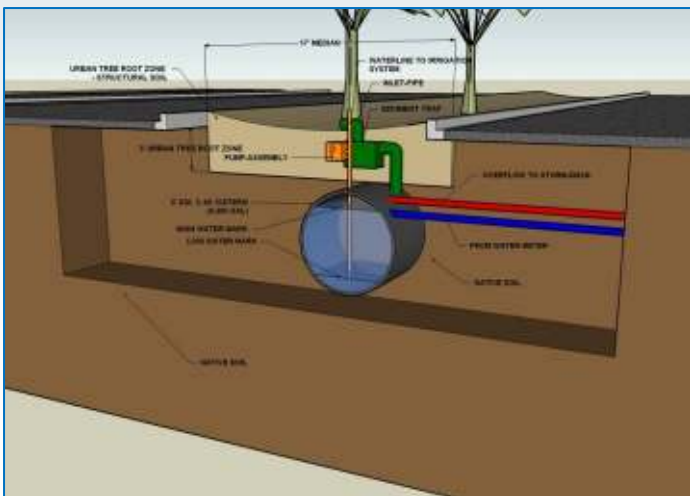


Traditional versus Indirect Left-turn

Criteria	Traditional Left-Turn	Indirect Left-Turn
• Reduces vehicle crash potential		✓
• Reduces pedestrian crash potential		✓
• Reduces pedestrian crossing distance		✓
• Increases intersection capacity		✓
• Reduces travel time		✓
• Requires less right-of-way		✓
• Increases travel distance	✓	
• Driver familiarity	✓	

Water Harvesting

- Collect and harvest local flow on the new Grant Road so existing flooding does not worsen
- Harvest in median and pedestrian realm
- French drains, swales, and micro-basins in pedestrian realm where feasible
- Storm drains will collect harvesting overflow
- Landscape with native plants
- Water harvesting demonstrations





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Small Group Activity 1

Review Project-Wide Design Concepts
Street Sections—10 minutes
Crossings & Access—15 minutes





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Community Character Segment Workshops Round 2

Representative Location Design Options

Eastern Segment, Tucson Blvd. to Swan Rd.



Representative Location Design Concepts

- Examine design concepts for **example places**
- Issues & solutions are **applicable to multiple locations**
- A lot to do in the next hour
- First round of workshops proved you are up to the challenge!

Group Activity Format

- Presentation on 1st Location
- 1/2 hour small group session broken up into 2 to 3 focused activities
 - General discussion of issue & design concepts
 - Answer questions
- Presentation on 2nd Location
- 1/2 hour small group session - same format

Eastern Segment Representative Locations

- Tucson Boulevard -
preserving existing businesses



Tucson Boulevard

Preserving Existing Businesses

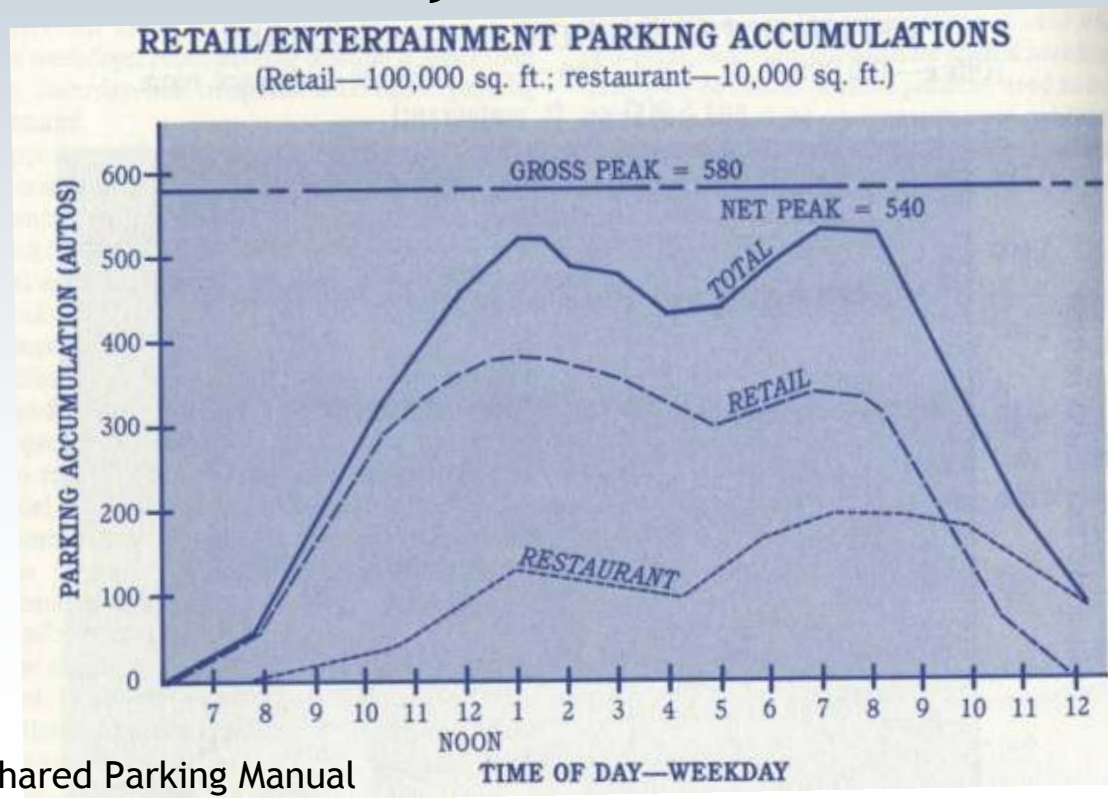
- Activity 1 - Replacement Parking
 - Grant Road improvements can impact business parking
 - Opportunities to create shared district parking
 - Review range of methods for replacement parking



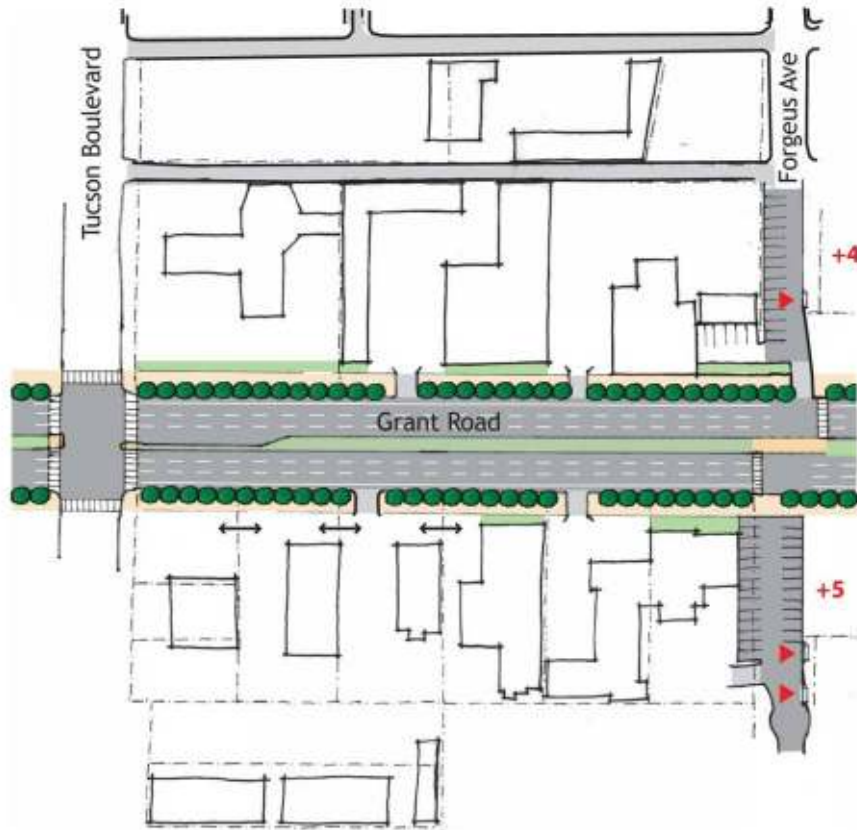
Potential
reduction of
61 spaces

Replacement Parking

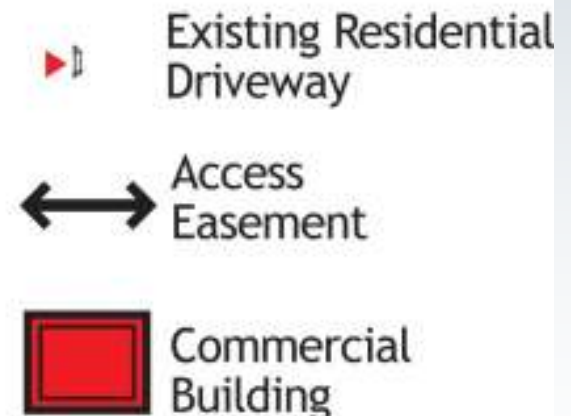
- Shared Parking to increase efficiency
 - Different uses (e.g.; homes, restaurants, and offices) have peak parking demand at different times of day



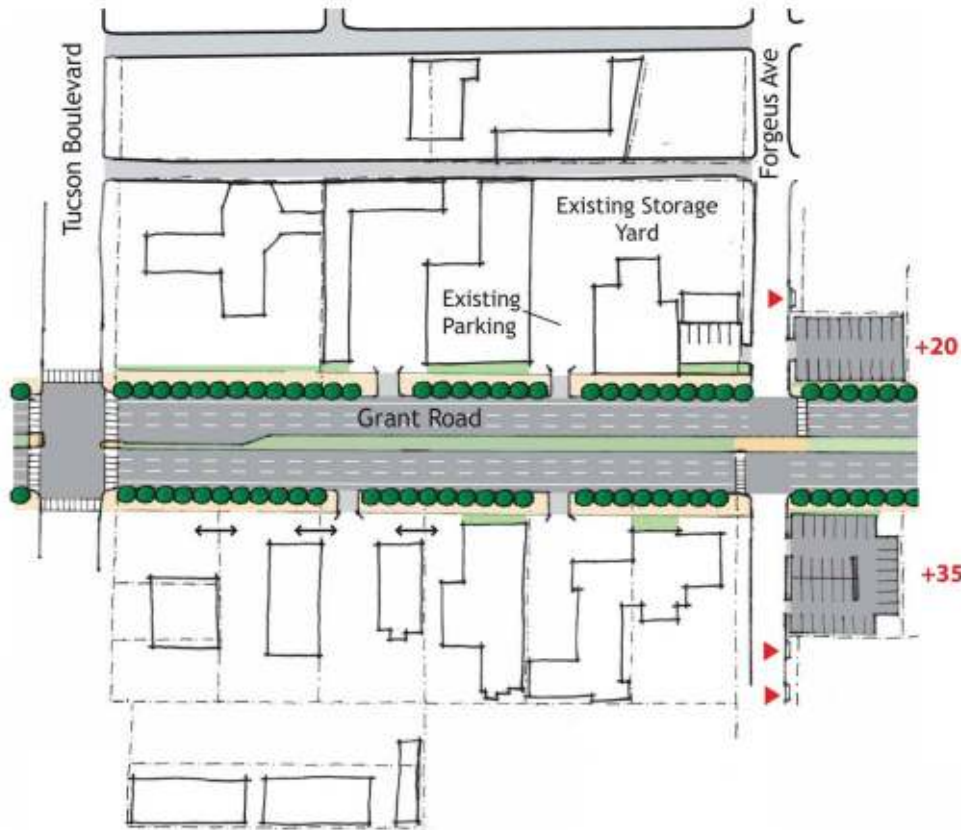
Replacement Parking



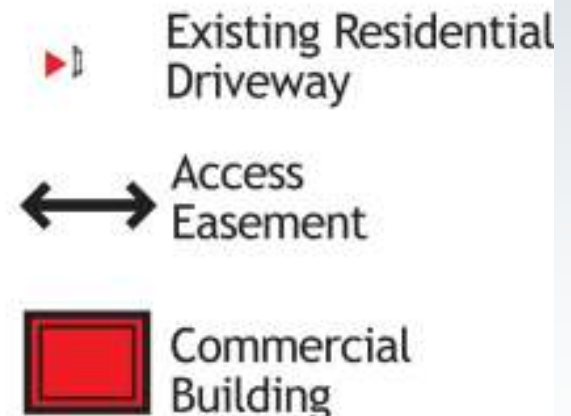
- Method A
 - Street Reorganization
 - 9 spaces gained



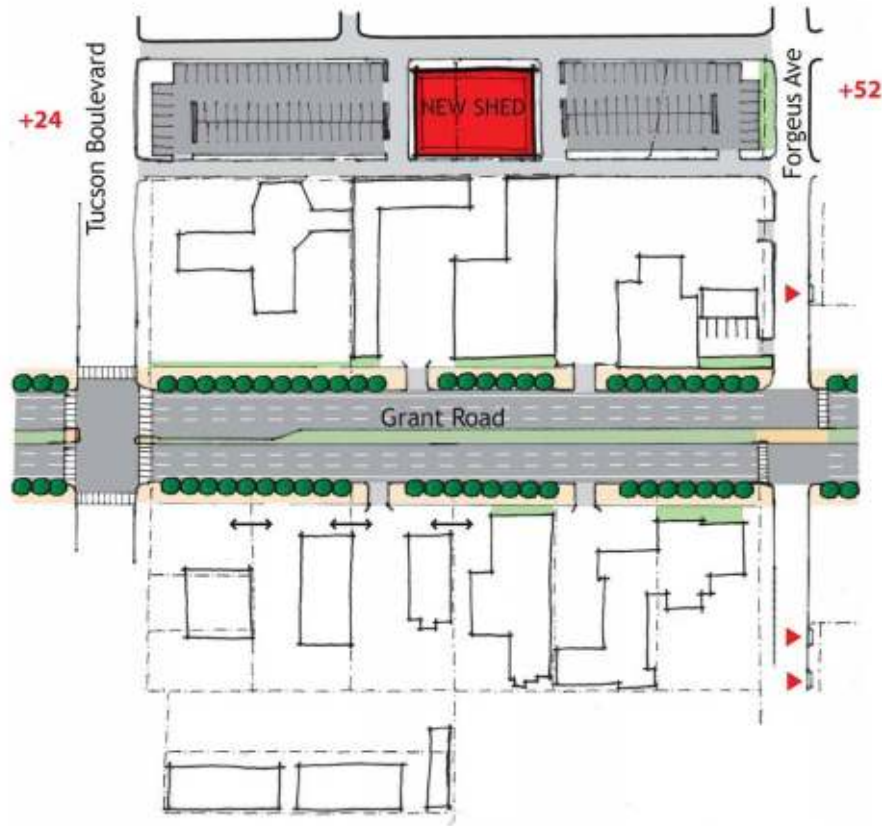
Replacement Parking



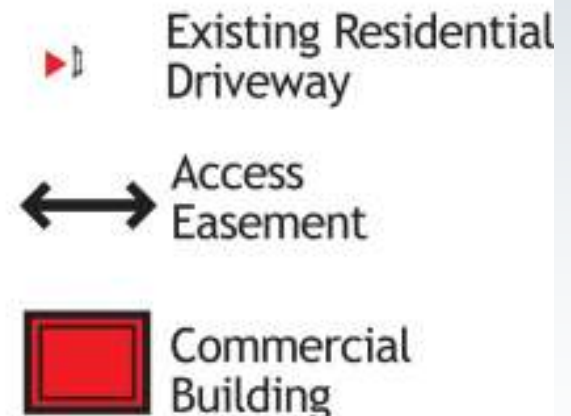
- Method B
 - Reuse of Property Taken by Alignment
 - 55 spaces gained



Replacement Parking

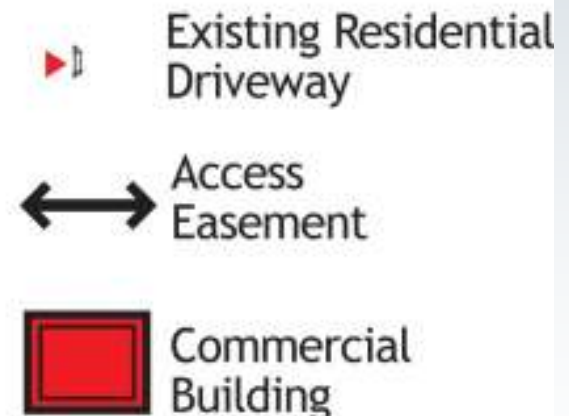
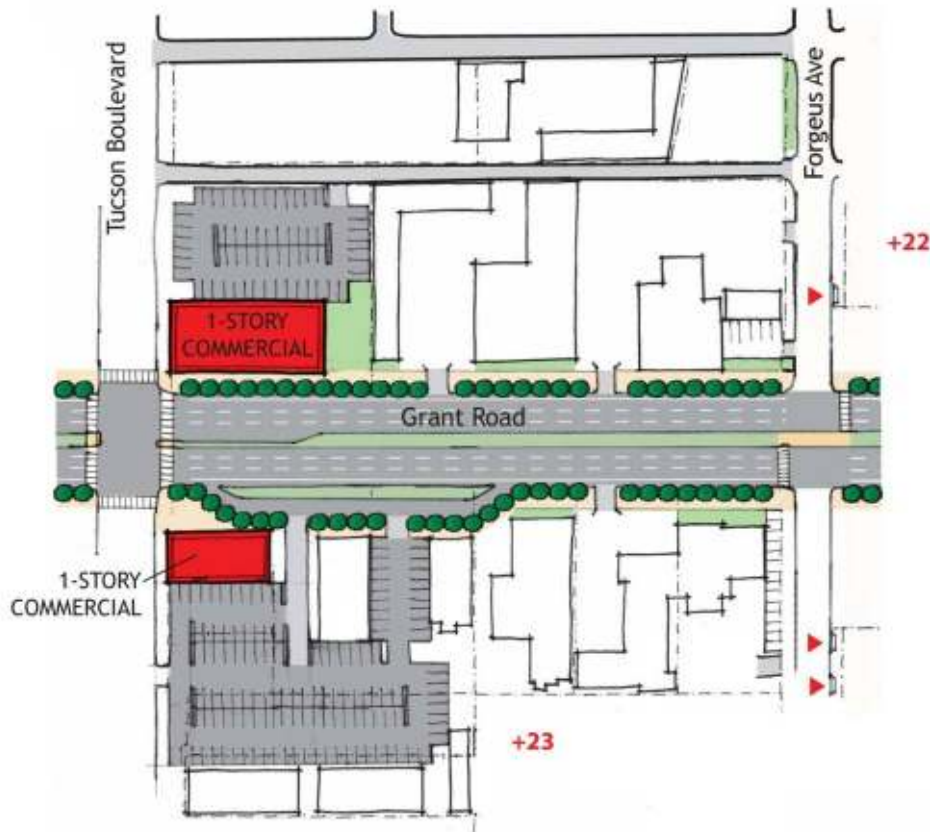


- Method C
 - Site Reorganization
 - 76 spaces gained



Replacement Parking

- Method D
 - Site Redevelopment
 - 54 spaces gained



Local Access Lane for Street-front Parking



Tucson Boulevard

Preserving Existing Businesses

- Activity 2 - Pedestrian Realm
 - 137 ft. 'Standard' cross section 'squeezes' between building fronts
 - Can we still achieve good pedestrian comfort?



Existing Condition

Tucson Boulevard

Preserving Existing Businesses

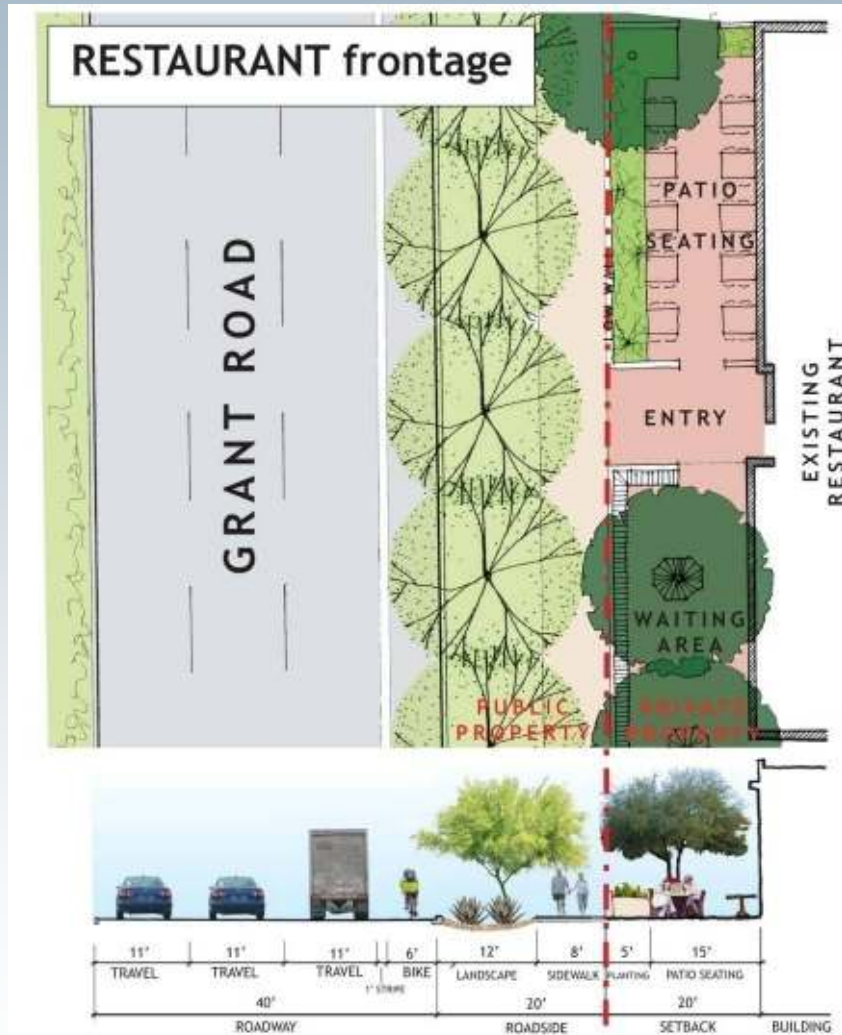
- Activity 2 - Pedestrian Realm
 - 137 ft. 'Standard' cross section 'squeezes' between building fronts
 - Can we still achieve good pedestrian comfort?



20 ft wide Pedestrian Realm

- widened sidewalk
- landscaped buffer

Pedestrian Realm



Eastern Segment Representative Locations

- Alvernon Intersection -
1 mile intersection design concepts



Alvernon Intersection

- Activity 1 - Alignment Design Concepts
 - Size of intersection street section varies
 - Pedestrian crossing distance
 - Impacts to adjacent properties
 - Opportunities to improve:
 - Transit facilities
 - Pedestrian crossings
 - Community open space

Alvernon Intersection

- Activity 2 - Intersection Design Concepts
 - Improve quality and safety of pedestrian and bicycle crossing conditions

ENHANCED TRADITIONAL INTERSECTION DETAIL



INDIRECT INTERSECTION DETAIL



Time to Work!



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Improvement Plan

INSTRUCTIONS

This worksheet allows team members to share and compare their ideas for the intersection of Alvernon Way and Grant Road. The worksheet allows us then to compare our ideas, and consequently their alignment, to our own. It is your group's responsibility to provide feedback on the alignment, the design of the intersection and public space.

WORKSHOP QUESTIONS

Design Concept Questions

Which proposal concept do you favor in Option 1?

From Concept 1: Favor Oppose

From Concept 2: Favor Oppose

From Concept 3: Favor Oppose

From Concept 4: Favor Oppose

From Concept 5: Favor Oppose

From Concept 6: Favor Oppose

From Concept 7: Favor Oppose

From Concept 8: Favor Oppose

From Concept 9: Favor Oppose

From Concept 10: Favor Oppose

From Concept 11: Favor Oppose

From Concept 12: Favor Oppose

From Concept 13: Favor Oppose

From Concept 14: Favor Oppose

From Concept 15: Favor Oppose

From Concept 16: Favor Oppose

From Concept 17: Favor Oppose

From Concept 18: Favor Oppose

From Concept 19: Favor Oppose

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From Concept 49: Favor Oppose

From Concept 50: Favor Oppose

From Concept 51: Favor Oppose

From Concept 52: Favor Oppose

From Concept 53: Favor Oppose

From Concept 54: Favor Oppose

From Concept 55: Favor Oppose

From Concept 56: Favor Oppose

From Concept 57: Favor Oppose

From Concept 58: Favor Oppose

From Concept 59: Favor Oppose

From Concept 60: Favor Oppose

GUIDING PRINCIPLES

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

- 1.2d Improving transit stops and access to them as well as land uses around them
- 1.2e Considering land use and other needs of transit, bicycle and walking-dependent populations
- 1.3c Improving neighborhood access to businesses and other destinations
- 4.7 Coordinate new development and revitalization with new and existing amenities and outdoor infrastructure

CONCEPT 1: ENHANCED TRADITIONAL INTERSECTION

CONCEPT 2: INDIRECT INTERSECTION

ENHANCED TRADITIONAL INTERSECTION DETAIL

INDIRECT INTERSECTION DETAIL

