Designing Complete Streets:

Arizona Avenue, Downtown Tolleson & Fiesta District Improvements

Presenting Today:

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2014 ASCE-ASHE Conference
Desert Willow Conference Center
September 11, 2014
How streets were built in the 20th Century

How cities should be designed
GRAND AVENUE: BEFORE SEPTEMBER 3, 2013
1ST STREET, CITY OF PHOENIX
1ST STREET, CITY OF PHOENIX
What are “Complete Streets”? 
They are streets designed with all users in mind:

- Vehicles
- Bicyclists
- Mass Transit
- Walkers
- ADA-accessibility / Wheelchairs
- People of All Ages

2013 ASCE-ASHE Conference
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What is the “Complete Streets” Movement?

It is the movement to Achieve Balance for all Users.
It is the movement to “Complete the Streets”.

• Build roads that are safer, more livable, and welcoming
• Challenge engineers, planners, and designers to think ‘Beyond the Curb’
  • Increase destination placemaking – live, work, shop, dine, play
• Achieve more sustainable communities (environmental, economic, cultural)
The Arizona Avenue Improvement Project

Streetscape and Downtown Redevelopment Improvements

Building More than ‘Just a Road’
Downtown Chandler

Arizona Avenue Improvement Project
Chandler, Arizona

State Route 87

1941 AZ Ave Relocation

Strip Commercial and Industrial Development Follows
Arizona Avenue - Before

Arizona Avenue Improvement Project
Chandler, Arizona
Elements of the Arizona Avenue Streetscape
Declining Businesses

Arizona Avenue Improvement Project
Chandler, Arizona
Conceptual Options

Arizona Avenue Improvement Project
Chandler, Arizona
Arizona Avenue – Selected Option

4 Travel Lanes, Bike Lanes, Parallel On-Street Parking
(Future Room for Light Rail)
Dimensions: “Metrics” of the Streetscape

- Reduced Pedestrian Crossings from the 88’ to 90’ Range Down to the 58’ Range
- Reduced Asphalt Width
- Reduced Lane Widths from the 14’ range to 10.5’ (maintained 35 mph speeds)
- Added Bike Lanes
- Increased Sidewalk / Pedestrian Zone from the 5’ to 8’ Range to the 15’ to 20’ Range to Allow for a Variety of Uses
- Designed “Bulb-outs” at Corners to Reduce Crosswalk Width, Enhance Aesthetics, and Visually Reduce Street Width for Vehicular Traffic
Bulb-out Example

Arizona Avenue Improvement Project
Chandler, Arizona
Designing for Pedestrian Scale & Vehicular Scale

Arizona Avenue Improvement Project
Chandler, Arizona
Complete Streets & Placemaking

ADA Accessibility / Design for All Ages / Multi-Modal

Memorable Environment / Signage Wayfinding / Places to Rest

Arizona Avenue Improvement Project
Chandler, Arizona
A Road in Balance is a ‘Place’

Arizona Avenue Improvement Project
Chandler, Arizona
ROW Encroachment

Before

After

Arizona Avenue Improvement Project
Chandler, Arizona
Develop a True Sense of Place
For a Variety of Users

Arizona Avenue Improvement Project
Chandler, Arizona
Design Affects Speed

<table>
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<tr>
<th>Date</th>
<th>Average Speed</th>
<th>85th Percentile</th>
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<tr>
<td>June 2008</td>
<td>36.7</td>
<td>40.4</td>
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<td>February 2011</td>
<td>29.2</td>
<td>33.6</td>
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Lighting (Before Improvements)

Arizona Avenue Improvement Project
Chandler, Arizona
Custom Lighting (After Improvements)
Integration of Art

Arizona Avenue Improvement Project
Chandler, Arizona
Enhanced Paving and Utilities

Arizona Avenue Improvement Project
Chandler, Arizona
Variety of Seating Options

Arizona Avenue Improvement Project
Chandler, Arizona
Landscape / Utilize Existing Materials

Arizona Avenue Improvement Project
Chandler, Arizona
Accommodate Festivals

Arizona Avenue Improvement Project
Chandler, Arizona
The Power of Place

• Civic pride
• U of A and ASU Downtown campuses
• 625 new jobs
• Double digit Sales Tax Growth
• 2% Retail vacancy
• Positive press – over 100 major spots
• Growing Special Events
• International, National and Local Awards
• 20 new businesses
• Multiple residential developments being planned
Designing for All Users:

Vehicles, Pedestrians, Bicyclists, & Mass Transit

Arizona Avenue Improvement Project
Chandler, Arizona
Downtown Tolleson Redevelopment Project

Van Buren Street – Developing A True Sense of Place

‘Build on a Proud Heritage’
Elements of the Van Buren Streetscape
Existing Conditions Looking East
Van Buren Streetscape –
Existing Cross Section

Van Buren Street Improvement Project
Tolleson, Arizona
Project Limits for Conceptual Planning

Van Buren Street Improvement Project
Tolleson, Arizona
Development Zones

1st Stage Improvement Project

91st to 99th Avenue

Zone 1

Zone 2

Zone 3

Zone 4

Van Buren Street Improvement Project
Tolleson, Arizona
Van Buren Street

- New Curb & Gutter Reconstruction
- Striping to Include Bike Lanes & On-street Parking
- Pedestrian Zone Improvements
- Lighting Improvement

Zone 1: 91st to 94th Avenue

- Landscape Improvements
- Art Elements
- Signage & Wayfinding Elements
Project Overview

“Build Upon Existing Downtown Assets”

- Street Width / Right-of-Way / Speed Limit (25 mph)
- Available Open Space
- Community Ownership: Residents, Stakeholders & Businesses
- “Activity on the Street”: City Hall, Arizona Desert Elementary, Tolleson Union High School, and Post Office
- Existing Buildings on the Right-of-Way / Urban Flavor
Downtown Open Space Assets

Van Buren Street Improvement Project
Tolleson, Arizona
Intersection Improvements & Gateway Opportunities

Van Buren Street Improvement Project
Tolleson, Arizona
Define The Vision:
Transition to a Vibrant Downtown
that is a Long-term Economic Engine

- Outstanding Opportunity to “Set the Table” for Downtown
- Develop a Destination Environment with a True Sense of Place
- Pay Tribute to Tolleson’s Community, Heritage, & Culture
- Develop a multi-modal Downtown that balances vehicular, pedestrian, bicycle, and mass transit traffic
Van Buren Street
Proposed Cross Section

• 15’ to 18’ Pedestrian Zone
• Shade Trees, Seating Opportunities, & Planting Buffer
• Successful Mix of Vehicular, Pedestrian, Bicycle, & Mass Transit Traffic
• Provide Outstanding Opportunity for Private Development to Invest in Downtown

Aesthetic Lighting, Banners, Signage/Wayfinding, Art & Cultural Amenities, and On-Street Dining
Design and Operate Entire Right-of-Way

Van Buren Street Improvement Project
Tolleson, Arizona
Pedestrian & Crosswalk Paving

Van Buren Street Improvement Project
Tolleson, Arizona
Schematic Parking Plan

Intent: to Provide Approximately 740 Clearly Marked Parking Spaces in the Downtown Area

Van Buren Street Improvement Project
Tolleson, Arizona
Gateway Entry Monuments, Pedestrian Wayfinding, and Art Kiosk Opportunities

Gateway Entry Monument

Wayfinding Element

Art Kiosk Element
Upcoming Enhancements

Before

Façade Renovation Concepts for Future Restaurant
Fiesta District Improvements
Southern Avenue Streetscape Project
District Revitalization / Economic Development / Sustainability
Fiesta District Improvements

District Area: Tempe Canal to Extension Road
Fiesta District Improvements
Implement Design Program Based on Established Handbook
Fiesta District Vision

“The District Vision creates a uniquely identifiable area for Mesa that is economically vibrant, pedestrian friendly, and an active, urban destination. Revitalization of the Fiesta District will again transform this major City employment center to a place of destination…”

- Pedestrian friendly with integrated mix of uses
- Diversity of entertainment and evening uses
- Unique branding and sense of place
- Urban Atmosphere and activated street scene
- Supported by an improved public transit system
- A place where businesses are eager to locate
- A place to live, work, shop, learn and do business
Traffic: Southern Ave Travel Lanes

Dobson Rd

Country Club Dr

5 LANES
(3 WEST, 2 EAST)

6 LANES

4 LANES

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Traffic: Southern Ave Historical Data

<table>
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<tr>
<th></th>
<th>Lanes</th>
<th>ADT</th>
<th>Volume/Lane</th>
<th>Difference from Peak</th>
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<td>1987 Peak</td>
<td>6</td>
<td>47,800</td>
<td>7,967</td>
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<tr>
<td>2008/09 Counts</td>
<td>6</td>
<td>34,700</td>
<td>5,783</td>
<td>-27.4%</td>
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<td>2030 w/ 6 Lanes</td>
<td>6</td>
<td>38,597</td>
<td>6,433</td>
<td>-19.3%</td>
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<tr>
<td>2030 w/ 4 Lanes</td>
<td>4</td>
<td>30,031</td>
<td>7,508</td>
<td>-5.8%</td>
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Traffic Results Summary

- Southern Avenue traffic volumes have decreased nearly 30% since their peak in the late 1980’s.
- Transition of Southern from 6 to 4 lanes will not significantly degrade existing traffic Levels of Service along the corridor.
- Existing “pass through” traffic will generally seek other routes.
- Into the future (2030), congestion will be similar to the historical peak condition with less overall traffic volume.
Southern Avenue – Existing Cross Section
(Looking East)

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Southern Cross Section

(Looking East)

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Stormwater Harvesting
(Bioswale)
Stormwater Harvesting
(Bioswale)

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Primary Intersection Paving Treatment
(Reflective Coating)
Secondary Intersection Paving Treatment
(Reflective Coating)

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Bus Shelters
Pole Wraps

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Pole Wraps

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Median Monuments

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Southern Avenue
Gateway Monumentation

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Southern Avenue
Gateway Monumentation

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Southern Avenue
Corner Treatments

Fiesta District / Southern Avenue Streetscape
Mesa, Arizona
Fiesta Paseo Nodes
(5 Southern Avenue Pocket Parks)
Fiesta Paseo Nodes
(5 Southern Avenue Pocket Parks)
Fiesta Paseo Nodes
(5 Southern Avenue Pocket Parks)
Fiesta Paseo Nodes

(Adjacent Private Development in Progress)
Thank You

Questions & Answers

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September 11, 2014
Thank You

Questions & Answers

For More Information on Complete Streets:

www.smartgrowthamerica.org
www.planning.org/research/streets