SAN ANTONIO COMPLETE STREETS
Paving the way for People!

Texas Chapter - American Planning Association
October 5, 2012
LEARNING OBJECTIVES

• How to coordinate stakeholders and achieve consensus on a Complete Streets Policy that is implementable from a political, administrative, and technical perspective

• How to choose tools to that will facilitate the design and construction of Complete Streets with respect to the land use context, function of the road, and travel mode prioritization

• The importance of developing metrics to track and monitor success of the Policy
LEARNING OBJECTIVES

• How to coordinate stakeholders and achieve consensus on a Complete Streets Policy that is implementable from a political, administrative, and technical perspective.

• How to choose tools to facilitate the design and construction of Complete Streets with respect to the context, function of the road, travel mode prioritization and safety.

• Using multi-modal analysis and safety metrics to track and monitor success of the Policy.
COMPLETE STREETS POLICY

1. San Antonio supports Complete Streets
2. San Antonio promotes healthy living and fitness through Complete Streets
3. San Antonio supports pedestrian-oriented neighborhoods through Complete Streets
4. Commercial Corridors shall be enhanced through the application of Complete Streets
5. San Antonio will maximize benefits of investment in capital projects through the application of Complete Streets.
STAKEHOLDER PROCESS

2010 – CPPW grant award
2011 – SA2020 Vision
2011 – Policy Adopted
2011 – Bond project scoping begins
2012 – Better Block demonstration
2012 – Multi Modal Level of Service (MMLOS) Training
2012 – Establish activity benchmarks
2012 – Final Bond project scoping
2013 – Construction of first Complete Streets
Ongoing – Assess completed projects
2020 – Celebrate milestone achievement!
INTEGRATED PROCESS

Capital Improvements
CIMS
Planning & Community Development
MetroHealth
Office of Environmental Policy
SA River Authority
Parks & Recreation
Center City Development
Public Art
Public Works
TX DOT
VIA metro
Bexar County
SA-BC MPO
LOW IMPACT DEVELOPMENT
PLACEMAKING

Creating a common vision for a public space, starting with asking basic questions about what the community wants. Placemaking focuses on functions, not physical form and is highly collaborative, adaptable, flexible and ultimately transformative.

PLACEMAKING POWER of 10
A great place has at least 10 things for people to do or 10 reasons to be there
70+ volunteers built a Complete Street in ON DAY with “pop-up” businesses, sidewalk cafes, landscape and trees, bike lanes and street parking, public art and signs.
The Complete Streets team has identified 3.2 miles of Complete Streets as the current benchmark.
CURRENT COMPLETE STREETS

Main Avenue in downtown San Antonio
Espada Road – part of the Mission Trail
West Woodlawn near OLLU and St. Mary's
McCullough Avenue
CURRENT PLANNING INITIATIVES
COMPLETE STREETS – coming soon

2012 West Commerce Street  2017
COMPLETE STREETS – coming soon

2012 Main Avenue 2017
MAJOR THOROUGHFARE PLAN ANALYSIS

- Roadway design criteria changes according to land use context
- Compatible with community objectives
- Meets goals of SA2020 for walkable communities
  - Triple the measure of Complete Streets
  - Improve pedestrian connectivity
# MTP Analysis - Land Use Context

## Urban Mixed Use Streets
- **Land Use**: Encompasses a wide range of land uses. Building setback is minimal. Live, work, shop & play within the area. 1-6 stories typical building height.
- **Travelway**: Slower speeds on collector streets. Higher speeds on arterial streets. On-street parking possible.
- **Streetside**: Medium to high pedestrian activity. Wide sidewalks. Pedestrian scaled lighting and street furniture.
- **Transit**: Frequent transit service. Stops spaced no greater than 1/2 mile. High quality, weather protected stops. VTA Prima, urban streetcar.
- **Bicycles**: Shared lanes with bicycles and vehicles. Bike boxes at intersections. Bike lanes possible where ROW is available.

![San Antonio](https://via.placeholder.com/150)

## Urban Neighborhood Streets
- **Land Use**: Streets primarily serve residential uses. Homes can front street on low volume facilities. 1-3 stories typical building height.
- **Travelway**: Slower speeds on collector streets. Higher speeds on arterial streets. On-street parking possible.
- **Streetside**: Moderate pedestrian activity. Wide sidewalks with landscaping buffer. Landscaping and trees important to provide shade for pedestrians.
- **Transit**: Frequent transit service available on arterial streets. Transit stops spaced no greater than 1/2 mile.
- **Bicycles**: Shared lanes with bicycles and vehicles. Bike lanes possible where ROW is available. Bike lanes adjacent to on-street parking.

![San Antonio](https://via.placeholder.com/150)

![Addison, TX](https://via.placeholder.com/150)

## Suburban Commercial Streets
- **Land Use**: Streets primarily serve commercial, industrial and institutional areas. Buildings are set back with surface parking in front. 1-2 stories typical building height.
- **Travelway**: High speeds, high volumes. Access management important. Raised medians desirable to increase safety. 4+ lanes common.
- **Streetside**: Low pedestrian activity. Enhanced sidewalk widths with wide landscaping buffer. Pedestrian access to transit and adjacent land uses.
- **Transit**: Transit service available on arterial streets. Stops spaced no closer than 1/2 mile to increase efficiency. Park & ride facilities more common.
- **Bicycles**: Bike lanes possible on collector facilities. Off-street trails where ROW permits. Bike facilities will require buffer due to speeds and traffic volume.

![Brea, CA](https://via.placeholder.com/150)

![Seattle, WA](https://via.placeholder.com/150)
MTP Analysis for Complete Streets
PRIORITIZING TRAVEL MODE

Cross section prioritizing bicycle travel through corridor

Cross section prioritizing pedestrian travel with transit access
USING MMLOS ANALYSIS

Bikes

• Presence of bike lanes
• Number of travel lanes, outside lane widths
• Traffic volumes
• Vehicle speeds
• On-street parking
• Pavement Quality
• Driveways
Pedestrians

- Sidewalk width
- Number of travel lanes
- Traffic volumes
- Vehicle speeds
- Separation between sidewalk and travel lanes (including on-street parking)
- Driveways
- Medians/Refuge Islands
FACTORS AFFECTING MMLOS

Transit

- Pedestrian LOS
- Service Frequency
- Amenities at transit stops
- Reliability
- Travel Time
DETERMINING PRIORITIES

• Created to evaluate Complete Streets components for City Bond Projects
• Checklist input consists of readily available information
• Ranks need for bike, ped, & transit facilities on scale of 1-10
• Can help prioritize Complete Streets components on a roadway
• Useful during scoping to set up MMLOS analysis for design phase
Complete Streets Components

- Lists enhancements & traffic calming features
- Grouped for pedestrians, bikes, & transit
- Most benefit driver safety as well
BREAKING DOWN THE CHECKLIST

- Scoring Calculations
- Peds
- Bikes
- Transit
BREAKING DOWN THE CHECKLIST

- Input and Scoring
  - Input
  - Scoring
  - ROW Considerations

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- **Input and Scoring**
  
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- **Scoring**
  
- **ROW Considerations**

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- **Input and Scoring**
  
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- **ROW Considerations**
SOUTH ALAMO ST – EXISTING

Graphics courtesy of MIG consultants – Hemisfair Park Area Streets 2012
SOUTH ALAMO ST – PROPOSED

The image depicts a proposed street design for South Alamo St, featuring a multipurpose shade structure, a special event area, landscaped medians in the middle of blocks, and landscaped continuing the park character. The design includes elements such as trees, sidewalks, and parking areas, with a focus on creating a pedestrian-friendly and visually appealing environment. The bottom of the image provides examples of the proposed street design in realistic settings.
### Multi-Modal LOS (Alamo North Bound Peak AM)

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PRIORITIZING MODES for an URBAN NEIGHBORHOOD

Pedestrian-Bikes-Cars-Transit

**PEDESTRIAN**
- Pedestrian refuge islands
- Street trees / landscaping

**TRANSIT**
- Improved transit stops
- Mid-block crossings

**CARS**
- Road markings & signals
- Traffic circles
- On street parking

**CYCLING**
- Bicycle lanes
- Intersection improvements
- Buffers
TRAFFIC CALMING MEASURES

- Roundabouts
- Mini traffic circles
- On street parking
- Reverse angle parking
- Curb bulbouts
- Medians
- Pedestrian signals
- Improved transit stops
- Access management
- Bicycle lanes
- Street trees / landscaping
ROADWAY SAFETY

- Driver education conducted by MPO emphasizes pedestrian and bicycle awareness
- Continuous upgrading of City bike-ped facilities
- Adoption of Sa-BC Pedestrian Safety Action Plan

Bexar County Roadway Fatalities*

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<td>Average</td>
<td>31</td>
<td>153</td>
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*Source: Federal Highway Administration, Fatality Analysis Reporting System
TRAFFIC CALMING = SAFETY BENEFITS

IN-ROADWAY MODIFICATIONS

- Roundabouts
- Mini traffic circles
- Chicanes
- Curb extensions
- Medians
- Crossing islands

CRF Roundabouts  50-75%
CRF Traffic Circles  90%
Pedestrian crashes reduced significantly for mid-block crossings
Safety increases with crosswalk markings
Staggered crosswalks recommended

CRF Medians/Crosswalks 46%
CRF Medians/ 90%
ACCESS MANAGEMENT

- Driveway consolidation
- Right-in right-out driveways
- Minimum distance from intersections
- Medians with allowable U-turns

CRF Right-in right-out 72%
CRF Minimum distance 30%
CRF Medians/ 90%

Images courtesy Kittelson & Associates Inc.
REVERSE (BACK-IN) ANGLE PARKING

- Gives drivers better visibility pulling into traffic
- Reduces collisions with cyclists using adjacent bike lane
- Tested successfully during community event March 2012
- Planned for additional implementation 2013-2017
Thank you!

Trish Wallace AICP
210-207-0217
Trish.wallace@sanantonio.gov