

# **MARICOPA ASSOCIATION OF GOVERNMENTS**

## **INFORMATION SUMMARY... for your review**

**DATE:**

April 5, 2011

**SUBJECT:**

MAG Complete Streets Guide

**SUMMARY:**

The FY 2009 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2008, included \$75,000 for the development of the MAG Bicycle and Pedestrian Facilities Integration Plan now renamed the MAG Complete Streets Guide. This Guide is a step to ensuring that facilities for bicycles and pedestrians are no longer considered enhancements to institutionalized components of streets, but instead are recognized as integral to a properly designed and functioning street. On January 14, 2009, the Management Committee recommended to the Executive Committee that EDAW, Inc. be awarded the \$75,000 contract to develop the MAG Complete Streets Guide.

The MAG Complete Streets Guide moves toward implementing the March 11, 2010, U.S. Secretary of Transportation Policy Statement on Bicycle and Pedestrian Accommodation. This policy states that walking and bicycling shall be considered equal to other transportation modes and encourages states, local governments, professional associations, community organizations, public transportation agencies, and other government agencies to adopt similar policy statements on bicycle and pedestrian accommodation.

**PUBLIC INPUT:**

The MAG Complete Streets Guide has been presented at public meetings of the MAG Bicycle & Pedestrian Committee, the MAG Streets Committee, and the MAG Transit Committee over the course of three years. The committee considered the public comments while the guide was being developed. Presentations were also provided to the Institute of Traffic Engineers conference and the Arizona Association of Commuter Transportation.

**PROS & CONS:**

**PROS:** The MAG Complete Streets Guide integrates previous goals and objectives from the MAG Bikeway Master Plan and the MAG Pedestrian Plan. It is resource containing goals, strategies, and a planning process for integrating Complete Streets in the region.

**CONS:** There are none.

**TECHNICAL & POLICY IMPLICATIONS:**

**TECHNICAL:** The MAG Complete Streets Guide is a resource containing goals, strategies, and a planning process for integrating Complete Streets in the region.

**POLICY:** This MAG Complete Streets Guide will encourage more people to bicycle because the Guide focuses integrating bicycle and pedestrian facilities on collector and neighborhood streets as well as bike lanes on arterial streets and paths on the canal system.

**ACTION NEEDED:**

Recommend approval of the MAG Complete Streets Guide.

**PRIOR COMMITTEE ACTIONS:**

On March 30, 2011, the Transportation Review Committee recommended to the Management Committee approval of the MAG Complete Streets Guide.

MEMBERS ATTENDING

- Peoria: David Moody
- ADOT: Steve Hull
- \* Avondale: David Fitzhugh
- Buckeye: Jose Heredia for Scott Lowe
- Chandler: Dan Cook for Patrice Kraus
- \* El Mirage: Lance Calvert
- Fountain Hills: Randy Harrel
- Gila Bend: Eric Fitzer
- \* Gila River: Doug Torres
- \* Gilbert: Tami Ryall
- Glendale: Terry Johnson
- Goodyear: Cato Esquivel
- \* Guadalupe: Gino Turrubiarres
- \* Litchfield Park: Woody Scoutten

- Maricopa County: Clem Ligocki for John Hauskins
- Mesa: Jeff Martin for Scott Butler
- Paradise Valley: Bill Mead
- Phoenix: Wylie Bearup for Rick Naimark
- # Queen Creek: Kevin Johnson for Tom Condit
- RPTA: Bob Antilla for Bryan Jungwirth
- Scottsdale: Dave Meinhart
- Surprise: Bob Beckley
- Tempe: Robert Yabes for Chris Salomone
- Valley Metro Rail: John Farry
- \* Wickenburg: Rick Austin
- Youngtown: Grant Anderson for Lloyce Robinson

EX-OFFICIO MEMBERS ATTENDING

- \* Street Committee
- \* ITS Committee: Nicolaas Swart, Maricopa County

- Bicycle/Pedestrian Committee: Katherine Coles, City of Phoenix
- Transportation Safety Committee: Julian Dresang, City of Tempe

- \* Members neither present nor represented by proxy.
- + Attended by Videoconference
- # Attended by Audioconference

On February 15, 2011, the MAG Bicycle and Pedestrian committee recommended to the Transportation Review Committee approval of the MAG Complete Streets Guide.

MEMBERS ATTENDING

- Brandon Forrey, Peoria, Chair of Bicycle and Pedestrian Committee
- Reed Kempton, Scottsdale, Vice-Chair of Bicycle and Pedestrian Committee
- Michael Sanders, ADOT
- Tiffany Halperin, ASLA, Arizona Chapter
- Margaret Boone-Pixley, Avondale
- \* Robert Wisener, Buckeye
- \* D.J. Stapley, Carefree
- ^ Bob Beane, Coalition of Arizona Bicyclists
- \* Jason Crampton, Chandler
- \* Doug Strong, El Mirage

- Ken Maruyama for Tami Ryall, Gilbert
- ^ Steve Hancock, Glendale
- Joe Schmitz, Goodyear
- Paul Ward for Michael Cartsonis, Litchfield Park
- \* Denise Lacey, Maricopa County
- Jim Hash, Mesa
- Katherine Coles, Phoenix
- Lisa Padilla, Queen Creek
- Peggy Rubach, RPTA
- Karen Savage for Hobart Wingard, Surprise
- Eric Iwersen, Tempe

- \*Members neither present nor represented by proxy.
- ^Attended via audio-conference

**CONTACT PERSON:**

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MARICOPA ASSOCIATION OF GOVERNMENTS

# COMPLETE STREETS GUIDE

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2011

# EXECUTIVE SUMMARY



*A complete street in Scottsdale. Photo credit: Sylvia Mousseux.*

# EXECUTIVE SUMMARY

**THE COMPLETE STREETS GUIDE** is a resource ensuring that facilities for bicycles, pedestrians and transit are recognized as integral to a properly designed and functioning street. They are as important to mobility, health, and safety as a vehicular travel lane. With the implementation of Complete Streets, nonmotorized, and public transportation facilities will be considered on the same basis as institutionalized components of streets.

**THIS GUIDE CONTAINS COMPLETE STREETS GOALS, STRATEGIES, AND A PLANNING PROCESS** that could result in every street in the MAG region becoming as complete as possible. In other words, all streets should be safe and include facilities for bicycles, pedestrians, and motorized transportation. Some streets in the region may offer more mobility choices than others, due to funding, adjacent land use, and other opportunities.



*Sidewalk landscaping in Downtown Mesa. Photo credit: Dan Burden.*



*Crosswalk in Peoria. Photo Credit: Brandon Forrey.*

**COMPLETE STREETS CONTRIBUTE** to the overall capacity of a street, an increase in property values, the health of individuals and the environment by creating a sense of place.

## **THE COMPLETE STREETS STRATEGIES**

- Support implementation of the guide
- Encourage quality complete streets design
- Educate the community and transportation professionals about the benefits of Complete Streets.

## THE COMPLETE STREETS PLANNING PROCESS

The process includes six simple steps. The Guide includes best practices and design examples for each step of the planning process. The Complete Streets Planning Process is:

### 1. Determine the Transportation Context

The context of a street is a key factor in determining the number of lanes and transportation facilities (truck, auto, bus, transit) in addition to those for bicycles and pedestrians. Context is directly related to traffic volumes. This Guide identifies six types of Complete Street contexts that exemplify development within the region, described below:

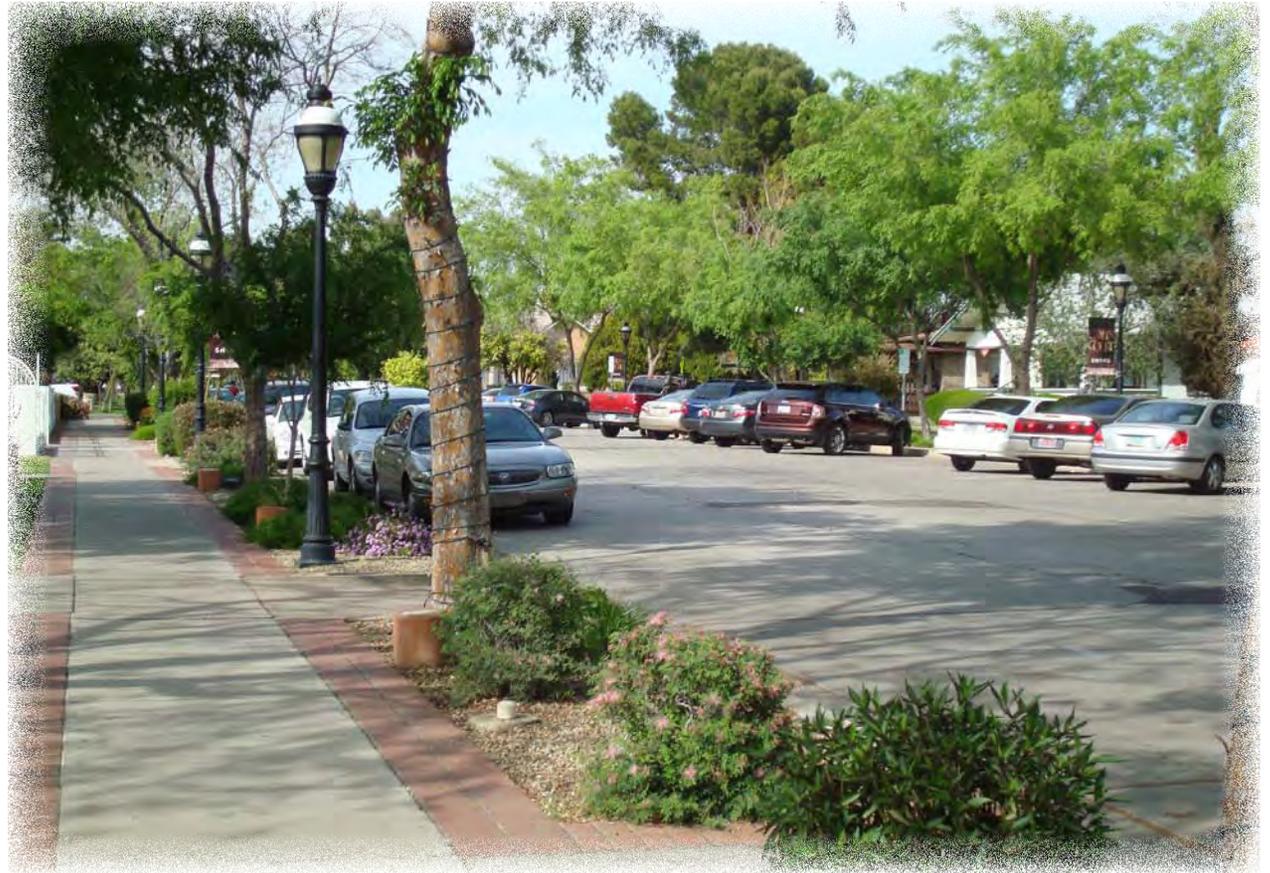
- High Density/High Intensity—Suburban
- High Density/High Intensity—Urban
- Low Density/Low to Medium Intensity—Suburban
- Low to Medium Density/Low Intensity—Residential
- Low Density/Low Intensity—Internal Neighborhood.
- Low Density/Low Intensity—Industrial

### 2. Identify Current Transportation Modes and Facilities

This step includes inventorying existing travel facilities and determining their adequacy.

### 3. Identify the Complete Streets Gaps

Identify and select the facilities necessary for a Complete Street. For example, are the sidewalks



*Generous sidewalks, on-street parking, and shade provide a rich pedestrian environment in Catlin Court Historic District in Glendale. Photo credit: PLAN\*et.*

wide enough to accommodate the pedestrian traffic anticipated in this context? Are the transit and bicycle facilities appropriate to the context? Are mid-block crossings or medians needed to make the area safer?

### 4. Determine Other Priorities

In addition to providing mobility, Complete Streets serve other functions. Retrofitted or new streets also serve as gateways. A rich

pedestrian environment can create and enhance a downtown or neighborhood. In this step, elements that move forward other priorities such as Green Streets, economic development, and historic preservation are identified.

### 5. Determine the Right-of-Way and Number of Lanes

A Complete Street includes many types of traffic and traffic lanes. Bicycle lanes, vehicular lanes,

parking, and pedestrian (e.g. sidewalk) lanes are all possible components of a Complete Street. In this step, the design process is challenged to fit all the necessary components of a Complete Street into an existing right-of-way or a right-of-way appropriate to the context.

## 6. Select Other Complete Street Elements

In addition to roadway or modal elements, Complete Streets include elements and facilities such as lighting, shade, signing, and facilities for people with disabilities. In this step, facilities that

enhance the pedestrian environment and other components are selected and included in the Complete Street Design.

### COMPLETE STREETS EXAMPLE OUTCOMES

are provided for the narrowest rights-of-way generally found in each Complete Streets Context and for an intersection. The rights-of-way were determined based on a facilities study of all MAG region jurisdictions that was completed as part of the process used to develop this Guide. For each outcome, the Guide explains how the

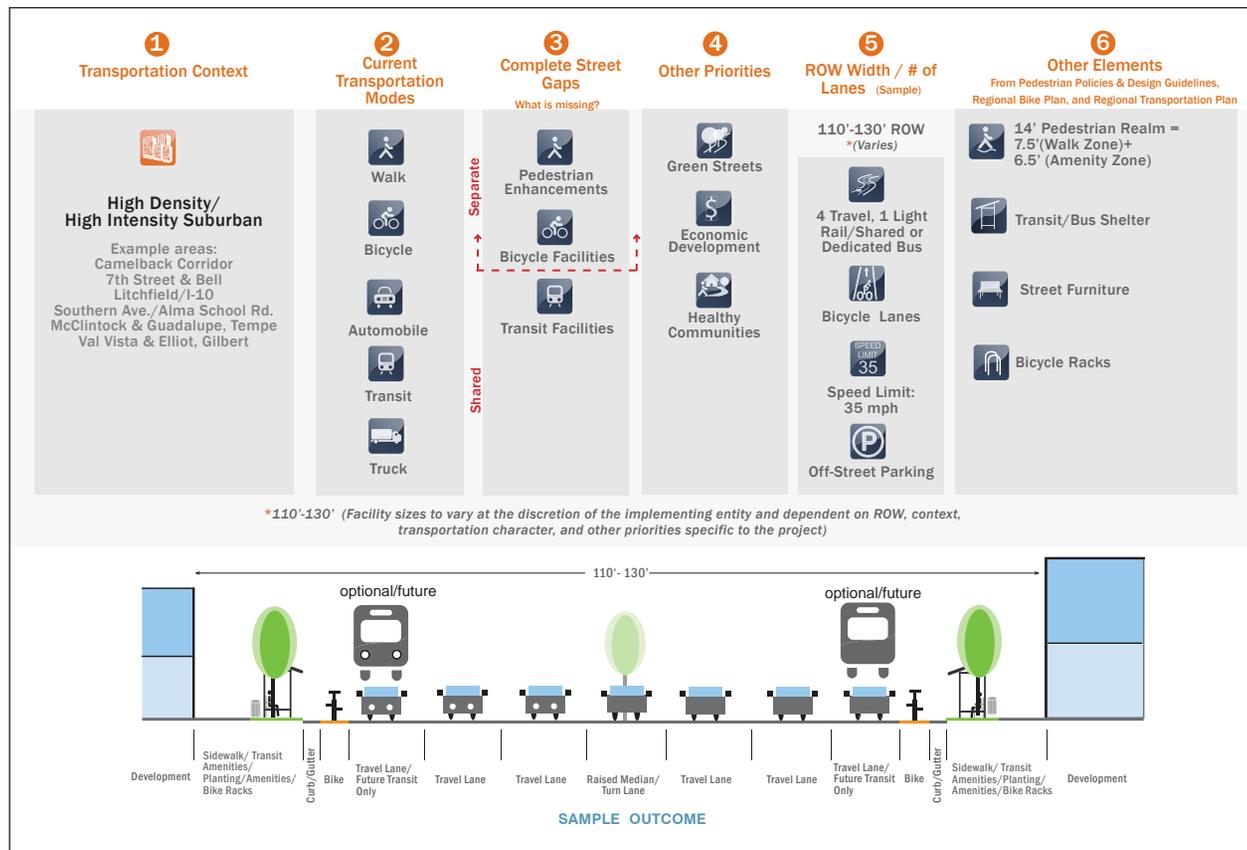
process was applied and why each element of the design solution was selected. Best practices from locations throughout the MAG region relevant to each design solution are also provided.

**PERFORMANCE MEASURES** can evaluate the extent to which Complete Streets are successfully implemented and help the region track its success. This Guide recommends that specific Inventory and Outcome Measures be determined by the MAG Bicycle and Pedestrian Committee for future iterations of the *MAG Performance Measures Framework Study*.

**APPLICATION OF THE GUIDE** is not required, but recommended. The Guide is a model document that provides an approach on how to make streets more complete and details the benefits and potential outcomes when a Complete Streets approach is followed. A variety of strategies for applying the Guide are presented for consideration.

### BEST COMPLETE STREETS PRACTICES AND A SURVEY OF MAG REGION FACILITIES AND COMPLETE STREETS POLICIES

are included in this Guide. The purpose of the best practices survey was to learn about challenges, applicability, and implementation of Complete Streets programs from other jurisdictions throughout the nation. The survey of MAG region jurisdictions provided information that guided the selection of the narrowest right-of-way widths for the Complete Streets Example Outcomes as well as a list of potential local resources for information about Complete Streets policies and practices.



Sample Outcome for a High Density/High Intensity—Suburban context.



Separate bicycle and bus facilities in Tempe.  
Photo credit: Coffman Studio.

Accordingly, transportation agencies should plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit. In addition, the Federal Department of Transportation encourages transportation agencies to go beyond the minimum requirements, pro-actively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate. Transportation programs and facilities should accommodate people of all ages and abilities, including people too young to drive, people who cannot drive, and people who choose not to drive.

## **BENEFITS OF COMPLETE STREETS**

This guide benefits the entire MAG region. Building Complete Streets will result in facilities that:

### **Make Economic Sense**

Complete Streets provide more transportation choices, more accessible and safe connections between residences, shopping destinations, public transportation, parks, offices, restaurants, entertainment, and educational institutions than streets designed primarily for motorized vehicles.

### **Improve Safety**

Designing streets that accommodate pedestrians and bicycles results in facilities that make streets safer for those who walk and bicycle. Some of these facilities include special signals, mid-block crossings, refuge medians, and bicycle lanes.

### **Contribute to a Healthy Community**

By providing facilities that encourage more walking and biking, Complete Streets promote healthier communities. Strategies 17 and 18 of the *Center for Disease Control Recommended Community Strategies and Measurements to Prevent Obesity in the United States* (July 2009) cite enhancing facilities for bicycling and walking as key to reducing obesity in children and adults.

### **Ease Congestion**

Since Complete Streets provide more transportation choices, they can help travelers avoid traffic jams and increase overall capacity of the transportation network.

### **Aid Children**

Complete Streets provide children with

opportunities to safely walk and bicycle to school, giving them a more positive view of their neighborhood and sense of independence. Safe Routes to School Programs will benefit from Complete Streets since they have the same goal of making streets safe places for children to walk or ride their bike.

### **Improve Air Quality**

Providing bike lanes and more options for travel, can decrease the use of the automobile, thereby cutting the carbon dioxide (CO<sub>2</sub>) emissions. Air quality conformity is an important part of the Regional Transportation Plan and reducing the use of the automobile will help in keeping within the emissions standards.

### **Make Fiscal Sense**

Considering the need of all nonmotorized travelers up front and designing the streets to meet these needs can potentially save costs associated with retrofitting the streets later.

### **Aid Travelers with Disabilities**

Making streets accessible to everyone and all modes of travel helps people with disabilities access the transportation system.

### **Aid Older Adults**

Some methods that have proven to be effective to create Complete Streets for seniors include retiming signals for slower walking speed, constructing median refuges to shorten crossing distances, and installing curb ramps, sidewalk seating, and bus shelters with seating. Improved lighting, signage, and pavement markings are among the measures that benefit drivers of any age, particularly older drivers.

## HOW TO USE THIS GUIDE

This guide includes information on the benefits of Complete Streets, what the MAG region is trying to accomplish with this Guide, how to plan a Complete Street in the MAG region, Complete Street plans and policies in other locations, and how to implement this Guide. This summary of each chapter will help you to locate where you can find this and other information contained within this Guide.

### Chapter 1—Introduction

- Defines Complete Streets.
- Provides background on previous MAG bicycle and pedestrian planning efforts.
- Identifies benefits of Complete Streets to the MAG region.
- Summarizes implementation recommendations.

### Chapter 2—Reconnaissance

- Summarizes the inventory of MAG Member entity facilities and policies. The full inventory is included in the Appendix of this Guide.

### Chapter 3—National Best Practice Review

- Summarizes the findings from a national best practices review. The individual interview findings are included in the Appendix of this Guide.

### Chapter 4—Goals and Strategies

- Identifies the goals and strategies for implementation.



*This Complete Streets best practice, from the City of Peoria, demonstrates how a bicycle lane was included by eliminating a vehicle lane. Photo credit: Brandon Forrey.*

### Chapter 5—Complete Streets Planning Process

- Describes the Complete Streets Planning Process.

### Chapter 6—Design Strategies and Sample Outcomes

- Provides sample outcomes of the Complete Streets Planning Process for six different typical street types in the MAG region.

### Chapter 7—Intersections

- Contains suggestions for intersection design based on Complete Streets principles.

### Chapter 8—Assessment Measures

- Describes a methodology to assess the implementation of this Guide.

### Chapter 9—Applying The Guide

- Offers options for implementation of this Guide.

### Chapter 10—Appendices

- Contains the regional inventory of facilities and policies and the individual best practice reviews.