Regional Pedestrian Program Overview

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Introduction

The Maricopa Association of Governments (MAG) is a regional organization that is charged with developing policies and plans in areas such as transportation, land use, air quality, water quality, solid waste and human services. MAG is the council of governments and metropolitan planning organization for the Maricopa region. The region encompasses metropolitan Phoenix and includes the many cities, towns and Indian communities within Maricopa County who work together to ensure a better quality of life for nearly three million residents. Governed by a Regional Council that includes 24 city mayors and other lead elected officials, MAG is the forum for ensuring an effective allocation of regional resources.

MAG is a leader in promoting improvement in the Region's streetside environments to better accommodate and encourage pedestrian travel. Past pedestrian planning efforts conducted by MAG and its member agencies have led to a variety of pedestrian-oriented policies, programs and roadway improvements. Prominent among these pedestrian efforts are the *1993 Pedestrian Plan*, the creation of the MAG Pedestrian Working Group, a region-wide household travel survey, the publication of the 1995 *Pedestrian Area Policies and Design Guidelines*, the Walking and Bicycling into the 21st Century Conference Series, and the Pedestrian Design Assistance Program. In addition, the *Pedestrian Plan 2000* outlines programs and actions to promote better pedestrian accommodation in the regional transportation system.

The Importance of Pedestrians

The Phoenix metropolitan area is one of the largest in the United States with a population of nearly 3 million distributed over approximately 1,000 square miles. Due to the land use uniformity and geographic extent of the metropolitan area, the motor vehicle is the predominant mode of transportation. Traffic congestion is a daily feature of the major roadways throughout the MAG region and its impacts on the community are extensive. As the metropolitan area continues to expand and traffic congestion increases, cities and towns are seeking ways to better serve the mobility needs of the region's population, industry and visitors.

Pedestrian improvements abound in many areas of the MAG region.

Throughout the MAG region, residents are increasingly concerned with how transportation affects their quality of life. The demand for transportation choices is not unique to this region. People are choosing to live in communities that offer transportation choices for all residents – not just those who drive automobiles. Nationwide, the private and public sectors are responding to citizen and consumer demand with new communities that accommodate and even encourage walking. In the MAG region, downtown improvements have recognized the benefits of pedestrians to economic development and

downtown revitalization. New communities include separate pedestrian pathway systems to link neighborhoods with shopping, parks and schools. The region's growth has given a greater appreciation for the way pedestrian facilities help create a sense of community while broadening the transportation choices of the region's residents and visitors. Properly planned pedestrian areas encourage people to walk and socialize, thereby reducing the need for automobile travel. At a minimum, it's very important that people feel they can walk safely on Valley streets. Beyond that, providing walkways that are user-friendly and attractive that encourage people to walk can reduce traffic congestion, improve air quality, and create liveable, sociable communities.

The Beginning of Pedestrian Planning at MAG

In 1993, the MAG Regional Council adopted the *Long Range Transportation Plan Summary and Update* which included the first Pedestrian Plan for the MAG region. This plan identified policies to encourage walking and suggested areas where theses policies might be best implemented. Goals in the Plan include:

- Improve the environment for people who use walking as a transportation mode of necessity.
- Provide economic development benefits from pedestrian areas.
- Strengthen and develop existing connections within the multi-modal system and develop guidance for site and right-of-way design to support walking.
- Encourage local land use planning, zoning and design policies that support walking.
- Encourage local land use planning, zoning and design policies that support the most direct walking routes between destinations and the development of communities where walking is a viable mode of transportation.
- Identify infrastructure to support walking as a transportation mode.

MAG Pedestrian Working Group

In 1993, MAG formed the Pedestrian Working Group to promote increased awareness of walking as an alternative mode of travel and to improve facilities for people who walk. The Working Group consists of appointed staff from MAG

member agencies and representatives from the development and planning community. Key activities and accomplishments of the group are listed below:

- Sponsored a regional pedestrian survey in 1994. This survey led to the development of the MAG *Pedestrian Area Policies and Design Guidelines* in 1995.
- In 1998, successfully lobbied for representation on regional transportation planning and funding committees.
- Initiated development of and provided oversight for the MAG *Pedestrian Plan 2000.*
- Annually reviews and recommends grant recipients for the Pedestrian Design Assistance Program.
- Oversees the organization of the Walking and Bicycling into the 21st Century Conference Series.
- Annually provides input into regional pedestrian facility prioritization through the project selection process for federal transportation funds.

Regional Pedestrian Survey

In its early days, the Pedestrian Working Group envisioned a public participation program to serve as a surrogate for a statistically significant survey to help identify pedestrian needs of MAG member agencies. The purpose of the public outreach program was to identify potential barriers to walking, identify situations where better pedestrian facilities are desired, and increase the awareness of the public about walking and its benefits. The result of this vision was a 1994 survey of pedestrian concerns and needs conducted among residents receiving a Salt River Project bill. Almost 500,000 surveys were distributed and approximately 10,000 responses to the survey were returned. The survey documents reasons for walking and not walking in the MAG region. Questions asked included:

- What destinations do you currently walk to?
- Why do you walk?
- What is the average time it takes you to make a walking trip?

- Please tell us which of the destinations listed below are one mile or less from your home or work.
- What are the reasons that you choose not to walk to nearby destinations?
- Please indicate major cross streets near your home and work.

Comments about pedestrian facilities voiced in the survey provided the basis for the development of the 1995 *Pedestrian Area Policies and Design Guidelines*.

MAG Pedestrian Area Policies and Design Guidelines

The Pedestrian Working Group identified that while in many cases jurisdictions and the private sector provided pedestrian facilities, the facilities were not being used by pedestrians. As a result, the facilities were eliminated from subsequent projects. The Pedestrian Working Group correctly believed that the reason that the facilities didn't get used is because they didn't adequately address pedestrian needs. Building upon the results of the pedestrian survey, development of the *Pedestrian Area Policies and Design Guidelines* began with fifteen local case studies to discover needs and expectations of pedestrians in the MAG region. The data accumulated for each case study included origins and destinations, perceptions of personal safety and security, reasons for walking, pedestrian counts, long range plans for the area, physical measurements and other inventories of the pedestrian area.

The *Pedestrian Area Policies and Design Guidelines* identifies types of pedestrian areas commonly found in the MAG region, and proposes policies and design elements to promote walking. A pedestrian area is any area where a concentration of pedestrians or vehicles is likely, or desired. Twelve varieties of pedestrian areas are described. The twelve areas represent four physical types of land uses (origins and destinations), contrasted to three levels representing a range of qualitative characteristics. Levels refer to a range of qualitative pedestrian area characteristics, including pedestrian intensities and the relationship of pedestrians to other roadway users, especially the automobile. Levels are classified into Level 1, 2 or 3, where 1 is the lowest intensity and 3 is the highest intensity. Types of areas are based on the mix of land uses and development densities adjacent to the pedestrian areas, expressed as Neighborhood (least variety of land use/less dense development), Community, Campus, and District (most variety/most dense).

A Level 1 pedestrian area is used mainly by local pedestrians by necessity, who have an intrinsic sense of security based on their familiarity with and sense of belonging to the area. Level 1 pedestrians are walking to places of required attendance such as school, work, transit, social services, court, doctor's office, or they are obtaining basic necessities at a market, a dry cleaner's, or a drugstore. They may also be walking for recreation or for social interaction. In a Level 1 area, pedestrians and vehicles are of equal importance.

Level 2 pedestrians are both by necessity and by choice. Pedestrians by necessity are people who cannot drive; pedestrians by choice have access to a vehicle and can drive, but choose to walk. These pedestrians are from local and regional areas, and include tourists and visitors. They are found mostly during the day and are moderately numerous through the day. They are walking to places of required attendance, and are shopping for both basic and supplementary items, or are walking for social interaction. To attract pedestrians by choice, a Level 2 area must provide a sense of security with cleanliness and uniformed officers. Pedestrian use is recognized at a minimal level, but facilities and planning for the vehicle is paramount.

A Level 3 pedestrian area should serve pedestrians that have traveled in from outside the region, as well as local and regional visitors, that are mainly pedestrians by choice. They believe the area to be secure based on its reputation. Pedestrian planning and facilities take precedence over vehicular planning, and the pedestrian is supported with a range of full facilities, experiences and access.

General Principles and General Recommendations in the *Guidelines* provide a basic understanding of pedestrian needs and recommendations for overall changes to better accommodate pedestrians in the MAG region. The General Policies and Design Guidelines apply to all pedestrian areas. General policies support the establishment and creation of pedestrian areas, and general guidelines identify types of physical improvements necessary for the creation of safer, more secure and pleasant pedestrian areas. General policies and design guidelines address the areas of security, planning, priority of implementation, community participation and pedestrian education. Furthermore, at each level, each of the four area types have basic design guidelines and policies which also contribute to its success as a pedestrian area. These design guidelines provide specific guidance in the following areas:

- Walkway Width
- Walkway Separation from Traffic
- Intersections
- Adjacent Roadway Width and Traffic
- Calming Techniques
- Walkway Character
- Walkway Furnishings
- Walkway Shade
- Parking
- Lighting
- Signs
- Bicycle Access
- Transit Access

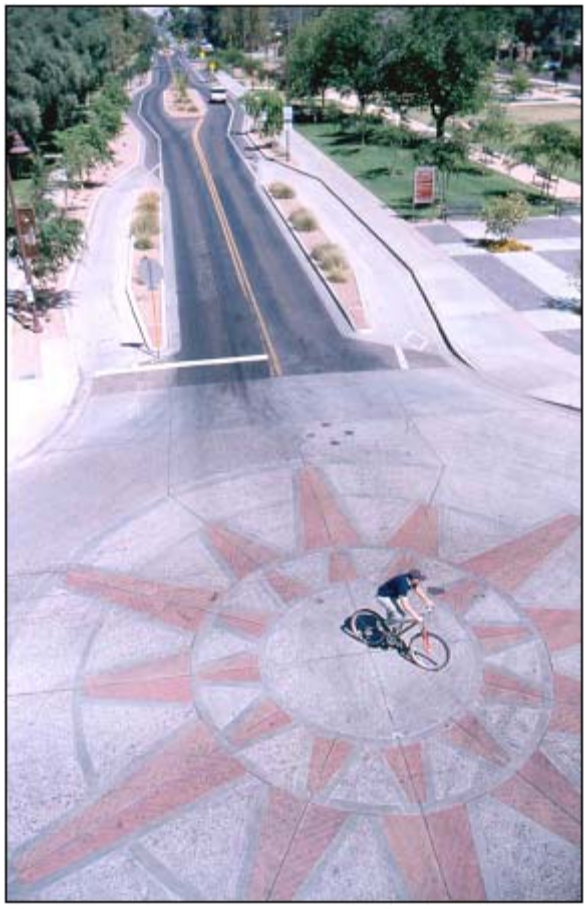
The MAG *Pedestrian Area Policies and Design Guidelines* is a comprehensive manual of pedestrian policies and facility design that creates a regional standard that can be used by community groups, planners and design professionals. The book has been requested by planners nationwide and won the Arizona Planning Association's best ordinance award in 1996. Funding to update the *Guidelines* has been provided as part of the FY 2003 Unified Planning Work Program and Annual Budget using close-out funding from the MAG federally funded Transportation Improvement Program. The update is expected to begin in February, 2004 and take approximately one year. The goal of this update is to enhance the *Guidelines* to incorporate safety, elderly mobility, American with Disabilities Act guidelines, summaries of recent pedestrian projects and their economic impact, lessons learned through the MAG Pedestrian Design Assistance Program, and consideration of the MAG *Pedestrian Plan 2000*.

Pedestrian Design Assistance Program

The MAG Pedestrian Design Assistance Program was initiated in 1996 to encourage the development of designs for pedestrian facilities according to the MAG *Pedestrian Area Policies and Design Guidelines*. The intent of the program was to stimulate integration of pedestrian facilities into the planning and

design of all types of infrastructure and development. That intent has become a reality. Seventeen pedestrian projects have already been initiated with the program, which has leveraged extensive funding for pedestrian facilities. In fact, an investment of $701,000 in 17 projects (three are just beginning) has leveraged nearly $5 million in federal transportation funds for pedestrian areas, which does not include substantial local or private funds used to construct the designs. A summary of the 17 projects funded with the program is provided below.

City of Tempe West Fifth Street Area - This project started with the neighborhood association taking the MAG *Pedestrian Area Policies and Design Guidelines* to the City and asking for improvements to their neighborhood. When the Loop 202 Freeway opened, traffic on West Fifth Street jumped from 3,500 to 10,000 cars daily. With the tested improvements, which included a diverter at Farmer, traffic was reduced to 3,500 cars daily. However, the community chose other traffic calming improvements in place of the diverter, such as medians and raised crosswalks that will serve the same purpose, in their final plan. In 1996, $500,000 in Transportation Enhancement Funds were provided to the City of Tempe to implement improvements originally designed through a $20,000 grant provided by the MAG Pedestrian Design Assistance Program. The improvements included a design for one mile of West Fifth Street in the Riverside/Sunset Neighborhood to make it safer for pedestrians and bicyclists. The neighborhood used the MAG *Guidelines* to help it determine improvements and changes to make a safe pedestrian environment. At this point, with contributions from Tempe, more than $1 million of improvements have made this street and neighborhood a safer place for walking and biking. The neighborhood association provided the match for this grant, which included sidewalk widening, bicycle lanes, landscaping, lighting and public art.



The Tempe West Fifth Street Project incorporated public art as one of the elements to encourage more walking and bicycling.

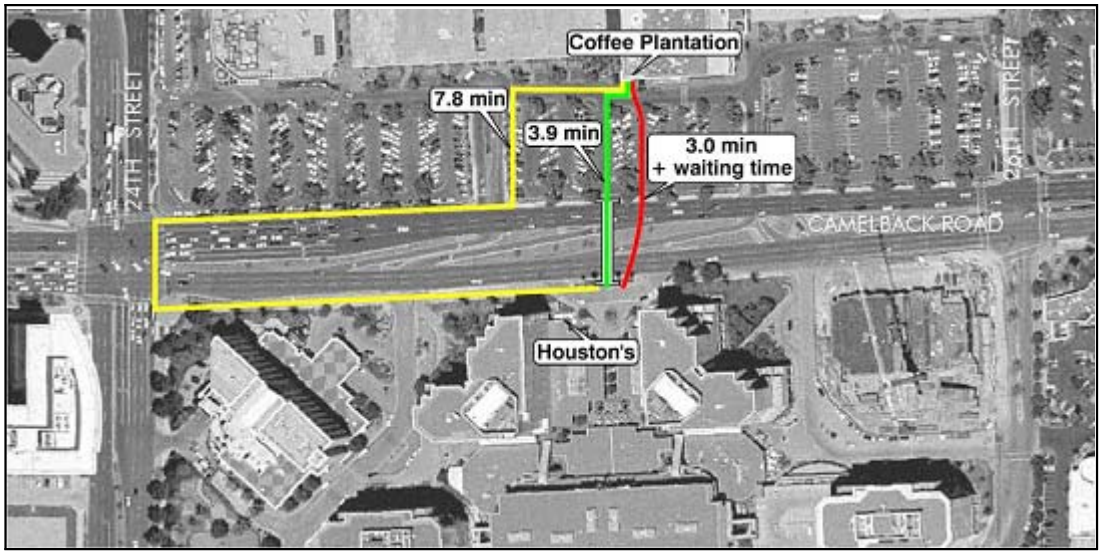
Improved pedestrian environment at the Government Mall are in downtown Phoenix.

Arizona Department of Administration Government Mall - Recognizing that the Capitol Mall is a premier tourist destination in the area, the Arizona Department of Administration requested design assistance to develop a pedestrian plan for this area in downtown Phoenix. Working with the entities around the mall, and people who used it regularly, a plan was developed to make the east entrance to the State Capitol more pedestrian friendly. The plan included improvements to crossings, better signs, shade, lighting, and other facilities to make walking more enjoyable. In 1997, $500,000 was provided to the Arizona Department of Administration in ADOT Transportation Enhancement Funds for pedestrian improvements to the State Capitol area and enhance the entrance to Wesley Bolin Plaza. The project has been designed and construction was completed in April, 2001.

The street was narrowed to one lane in each between Van Buren and Buchanan Streets, walkways were improved, landscaping, signs and signals were added, sidewalks were upgraded, and a raised crosswalk was added mid-block between Wesley Bolin Plaza and the State Capitol. Pedestrian and street lights are also included in the project. The project was dedicated at a public ceremony on May 3, 2001, and the total project construction cost was $1.3 million. In June, 2001, the Arizona State Legislature provided $889,000 to duplicate the style of improvements done with this project between Adams and Washington from 12th Avenue to 17th Avenue. The pedestrian facilities will be created along with the new buildings being constructed in the area.

City of Phoenix Camelback Primary Core Pedestrian Spine - This project is designed to link the many destinations along Camelback Road from 16th Street to the east side of 24th Street. The area has many commercial and residential destinations, and is a typical multi-lane arterial in the region. The solutions identified will have application to other arterials in the region. The design solution includes pedestrian refuge areas, shade structures, colored/textured concrete pavers, and way-finding markers at intersections. Developing the plan for the Spine has helped generate significant community support for the project. The MAG Regional Council approved $1.6 million in federal transportation funds (Surface Transportation Program) for the area, and the City of Phoenix is expected to match this amount with an additional $1.6 million in local funding, for a pedestrian overpass in the core area at 25th Street and Camelback Road. In November 2002, other planned improvements were funded through the ADOT Transportation Enhancement Program. Nearly $400,000 in federal funds, with the city providing

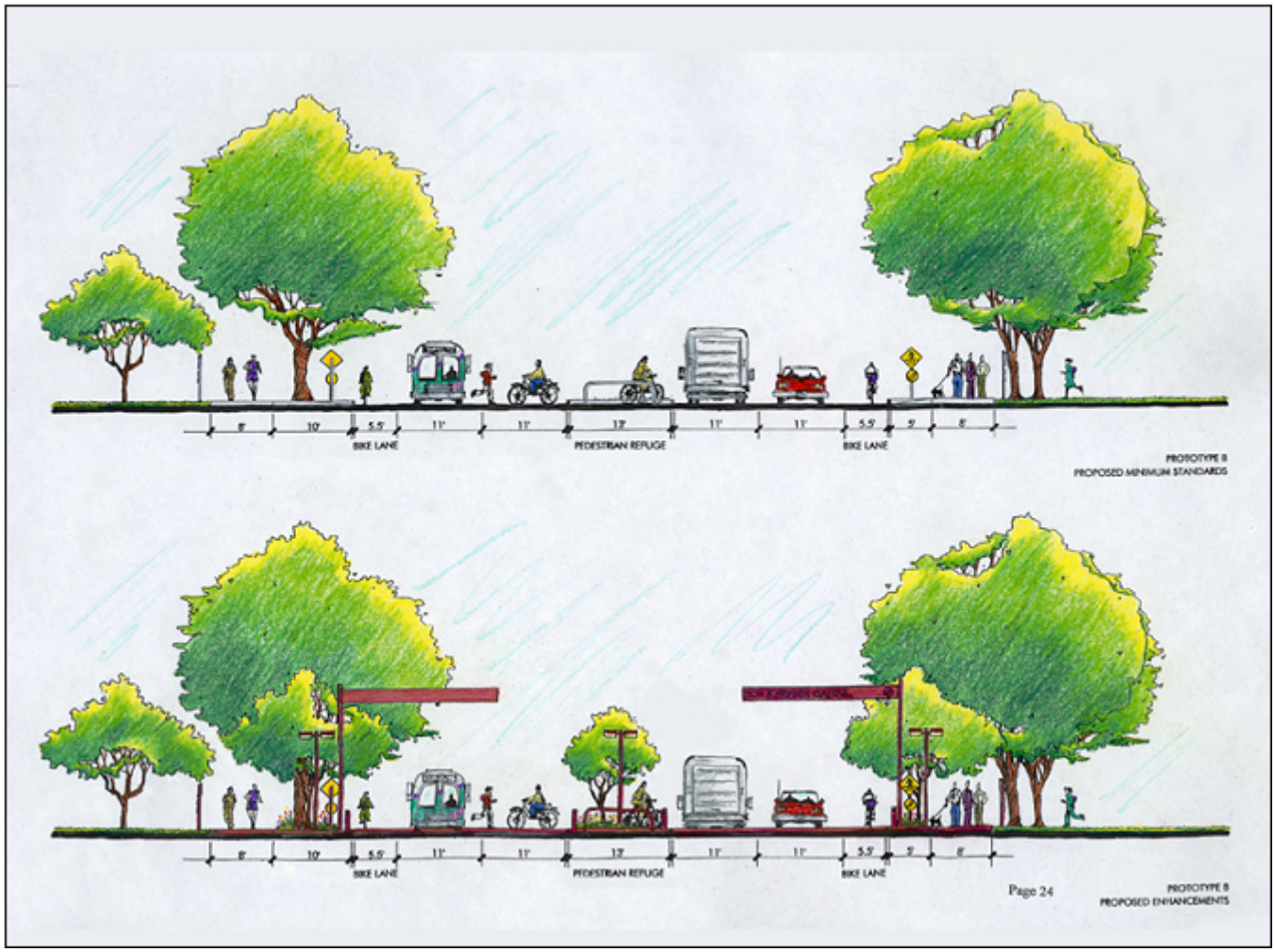
matching funds, will be used to enhance two intersections at 20th Street and 24th Street to promote bike and pedestrian use. The planned enhancements include enlarged pedestrian/ bike refuge areas and ramps to the crosswalks, shade structures, way-finding markers at intersections, and new "pedestrian countdown" traffic signals.



An aerial view of some of the proposed improvements to increase pedestrian comfort and safety that were developed as part of the Camelback Primary Core Pedestrian Spine report.

City of Glendale Bell Road Bridge at Skunk Creek - The bridge is located near 71st Avenue where Bell Road crosses Skunk Creek, just east of Arrowhead Towne Center. The bridge has no pedestrian lanes or sidewalks and is used by people accessing the shops and businesses at Arrowhead Towne Center and along Bell Road. Before the interim solution was developed through the Pedestrian Design Assistance Program, people had to meander down the slope to Skunk Creek since there was no formal pathway. This Plan is for a safe interim low-flow crossing facility through Skunk Creek for pedestrians until the bridge is re-built with adequate pedestrian facilities.

City of Tempe Mid-Block Crossing Demonstration Project - Throughout the Valley, canals used by pedestrians and cyclists intersect busy arterial streets. Due to the inconvenience of traveling up to one-half mile out of their way to cross the street safely, many pedestrians and bicyclists cross the arterial at mid-block. In addition, people using buses that stop mid-block rarely walk back to the nearest marked crosswalk to cross the street. Bus riders tend to walk in front of the stopped bus and cross the street, which is dangerous. The Tempe Mid-Block Crossing Demonstration Project, funded through the MAG Pedestrian Design Assistance Program, developed visual, aural, and sensory aids to alert drivers along arterial streets to mid-block crossings, and identified improvements that can make the mid-block crossings safer for pedestrians and bicyclists. This demonstration project has been included as a component in many pedestrian designs in Tempe and other Valley cities. The concepts identified in the demonstration project are also included as a design guideline in the MAG Regional Off-Street System (ROSS) Plan, a Plan which identifies a region-wide system of paths/trails for non-motorized travel using existing opportunities, such as canal banks, utility line easements and flood control channels.

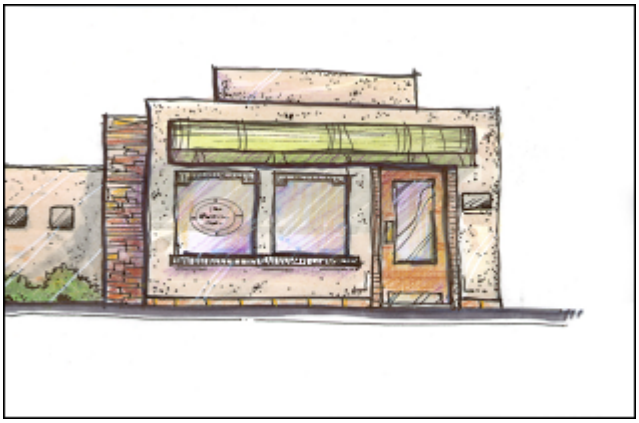


This drawing shows recommended treatments to ensure safe access for pedestrians and bicyclists crossing mid-block. This design has been used in many pedestrian projects in Tempe and other Valley cities.

Town of Gila Bend Central Pedestrian Way - This project in the Town of Gila Bend provides connections between residents and several community destinations, including a school, post office, town library, senior center and parks. Residents, including children and elderly persons, were required to walk in the street with truck traffic since there were no sidewalks. The project provides sidewalks, landscaping, rest areas and safety railing to help improve safety and comfort for pedestrians. The project design was completed in December, 1999. The Town is working to secure funds to construct the project.

City of Avondale Western Avenue Pedestrian Friendly Design Project - This project received $30,000 in pedestrian design assistance by the MAG Regional Council in January, 2001. Western Avenue is currently a typical business area that generates a minimum amount of commercial activity located in downtown Avondale. A number of speciality shops, restaurants and service businesses exist in the area. But, due to the sidewalks design and layout, little foot traffic is encouraged from shop to shop. This project is part of a larger redevelopment plan that completely redesigns Western Avenue to create an area that is safe and comfortable for pedestrians. The MAG funding was used to create design guidelines to modify Western Avenue to a pedestrian-friendly area to increase its potential as a destination point for residents to shop. This document, funded entirely through the Design Assistance Program, received a 2002 Arizona Planning Association award in the master plan/project/special studies category.

Current building along Western Avenue.



This drawing shows possible appearance of the building shown in the photo above, if the if the Western Avenue Design Guidelines are implemented.

City of Phoenix Laveen Watercourse/Greenbelt Pedestrian Trail Project - This project developed a design for an integrated pedestrian system to link various pedestrian areas to reflect agricultural heritage in the community of Laveen. Laveen has been long valued by farmers, equestrians and those seeking a rural lifestyle. The community has been facing increased pressures to urbanize. The intent of the watercourse/greenbelt is to reflect the agricultural heritage of Laveen in both the current and historic use of canals, laterals, and ditches. The watercourse/greenbelt is an interconnected multiple use trail system with nodes or areas of concentrated activity use such as parks and schools. The watercourse/greenbelt connects to transportation features such as transit routes and park and ride lots and acts as a circulation system to move pedestrians, equestrians and bicyclists through and about the core of the community. The area encompassed by the plan includes 47th to 71st Avenues from Baseline to Elliot Roads. Developed with extensive input from the community and key stakeholders, such as Salt River Project and the Arizona Department of Transportation, the plan includes a village core, open space and trails easements. Completed in February, 2001, the concepts outlined in the plan could be applied to any community in the MAG region trying to unify a pedestrian network around a common theme. Due to its remarkable design, this project won a 2002 Professional Design Award in the analysis and planning category from the Arizona Chapter of the American Society of Landscape Architects.

One of the historic canals in the community of Laveen, this one with a view of South Mountain.

City of Peoria Pedestrian Crossing at Grand Avenue/Burlington Northern-Santa Fe - This project creates connections for pedestrians between neighborhoods, community buildings and commercial areas along a busy arterial street bisected by a railroad. The final design includes four pedestrian crossings across Grand Avenue at 83rd Avenue and Peoria Avenue to allow safe pedestrian access from the north and south sides of Grand Avenue. Refuge areas will include landscaping, park benches, decorative brick paving, concrete, and lighting to match the Old Town Peoria landscape. Encompassing an area of approximately 2.5 acres, the concepts and design ideas developed in this project design could be replicated where pedestrian travel may be limited due to wide, busy streets. This project will be constructed with nearly $450,000 of Transportation Enhancements Funds received in Fall, 2000. The design of this project was completed in October, 2001. Designing this project with funding from the Pedestrian Design Assistance Program was key in leveraging funding through the Transportation Enhancement Fund Program.

City of Glendale Creating a More Walkable City One Mile at a Time - Awarded $50,000 in pedestrian design assistance by the MAG Regional Council in January, 2001, this project resulted in recommendations to improve the walking and riding environment. Situated in northern Glendale in a mile-square area, the study analyzes the needs of pedestrians, bicyclists and equestrians and follows with recommendations to improve the mobility of these users. Key recommendations help to eliminate gaps in pedestrian travelways, improve the circulation system for pedestrians, and link neighborhoods to public transportation and other nearby destinations, including four schools, neighborhood shopping and a park. A priority project list and implementation schedule for improving pedestrian access, comfort and safety was created. The project was completed in April, 2002.

Providing recommendations that allows children to safely walk to school was a part of the Glendale "Creating a More Walkable City" project.

City of Phoenix South Mountain to River Multi-Use Trail System - Awarded $50,000 in pedestrian design assistance in January 2001, this project, located in the South Phoenix Village community, is a five mile linear pedestrian trail system along 24th Street from the Rio Salado to the South Mountain Regional Park. The trail connects numerous community amenities, including the Rio Salado Habitat Restoration Project, commercial developments, a proposed master planned community and South Mountain Park. The vision of this project is to create a model for combining the best available urban and natural environments. Completed in April, 2002, funding for the construction is currently being sought by the city.

This graphic shows the vision for the South Mountain to River Multi-Use trail system, this segment along 24th Street.

City of Phoenix 2nd Avenue Pedestrian Enhancements Project – Designated as a pedestrian corridor in the Downtown Phoenix Specific Plan, the area along 2nd Avenue from Adams to Filmore Street has been the focus of a conceptual design and economic development study. Residents and other community groups hope to improve mobility and access to the public along this pedestrian corridor by providing wide setback sidewalks, pedestrian lighting and street furniture, native trees and landscaping to help create a comfortable pedestrian environment that complements the natural environment. There are currently numerous commercial and residential properties in the area, making it an area that is used by hundreds of pedestrians daily. The Regional Council awarded $50,000 in

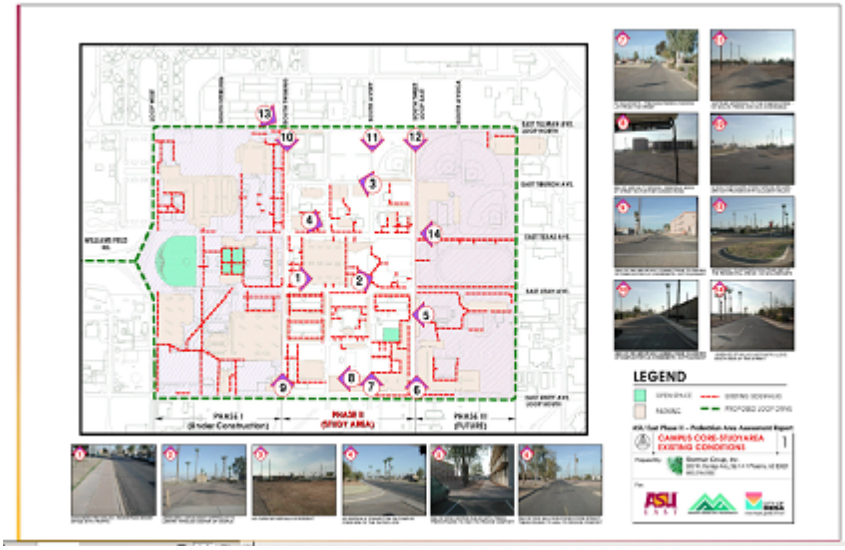
pedestrian design assistance to this project in October, 2001. Funding obtained through the Pedestrian Design Assistance Program helped the project to receive $500,000 from the ADOT Transportation Enhancement Program in Fall, 2001 to construct Phase I of the project from 2nd Avenue from Monroe to Fillmore. This design assistance project is being integrated with the ADOT project development process to help streamline design and construction.

City of Goodyear Litchfield Road, Western Canal, and Yuma Road Pedestrian Path Renovation Project – Currently, the pedestrian walkways in Old Goodyear along Litchfield Road and Western Avenue are inadequate to encourage pedestrian travel. In several places, there are no existing sidewalks and other areas have narrow sidewalks with no landscaping or seating. The sidewalks do not meet accessibility guidelines. The goal of this project is to create a continuous pedestrian travel network, connecting origins and destinations, and integrate proposed improvements with current plans in adjacent areas in the City of Avondale. The Regional Council awarded $25,000 in pedestrian design assistance to this project in October, 2001.

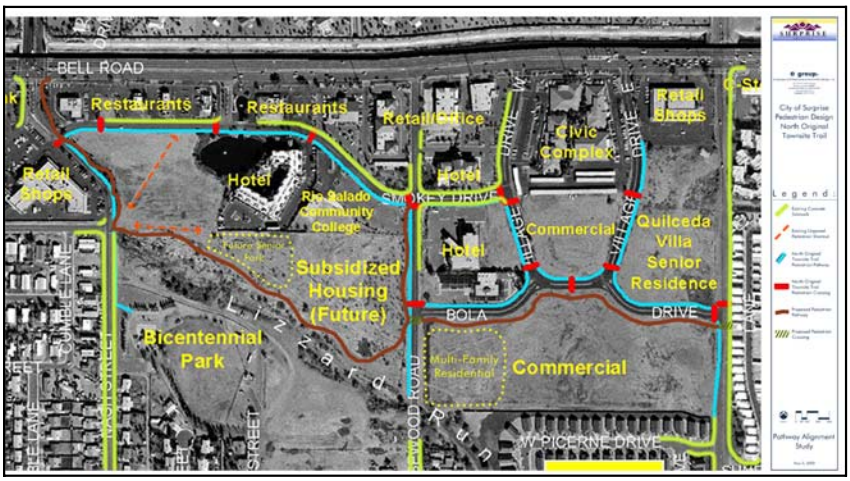
City of Glendale "Old Roma" Pedestrian Alleyway-to-Walkway Pilot Project – This 7,000 square foot alleyway in Glendale's Old Towne is currently used, along with other alleyways in the area, during daylight hours since they provide a more convenient and direct travel route to downtown business and government offices. The goal of this project is to transform the alleyway into a pedestrian walkway and attractive gathering place. Awarded $50,000 in pedestrian design assistance in October, 2001, the results of this study will help create standards for additional downtown alleyway changes that help improve the level of comfort for pedestrians using these areas while enhancing the environment and ambience of Old Towne. These new standards will be incorporated into Glendale's City Center Master Plan and help provide a model for all development in the downtown area. Major project elements include adding a central fountain, low walls to separate parking, and a mural. The design of this project is scheduled for completion in late Summer, 2003.

This conceptual drawing shows possible appearances for the "Old Roma" Alleyway, to make it into a comfortable and attractive setting for pedestrians.

City of Phoenix 32nd/Washington Streets Transit Oriented Pedestrian Link Enhancement Project – This project, approved to receive $65,000 in funding in September, 2002 by the MAG Regional Council, will develop design drawings to improve the pedestrian connections between the planned light rail transit station at 32nd and Washington Streets and the center of the Wilson community located at 32nd and Van Buren Streets. This primarily low-income minority neighborhood is dependent upon public transportation for access to schools, employment and recreational opportunities. Since the neighborhood is approximately ¼ mile from the proposed station, it will be important to improve the pedestrian connections between the neighborhood and the station. Pedestrian improvements could include wider sidewalks, lighting, landscaping and shade. Initiated in January, 2002, the design for this project could serve as a model for providing linkages to light rail transit stations in the metropolitan area.



City of Mesa/Arizona State University East Pedestrian Mall Master Plan Phase II – This project will create design drawings for the second phase of a pedestrian master plan for the ASU East Campus. The campus is located on the former Williams Air Force Base in east Mesa and has access that is dominated by automobiles. Pedestrian walkways, if they exist, are disconnected and unshaded. ASU East has already done extensive work in identifying new transportation, land use and landscape features for the use of this facility. The $36,000 in pedestrian design assistance funds granted to the project in Fall, 2002 will help develop design drawings to remove parking from interior areas of the campus, expand walking areas, enhance landscaping and shading, and provide seating for the pedestrians on the campus. It is hoped that these modifications will allow students and other campus users to walk in safety and comfort. The concepts developed in designing this project, scheduled to be completed by the end of 2003, could be applied to any campus-type environment, such as a business park or hotel/tourist complex, in the MAG region.



City of Surprise North Original Townsite Trail – Awarded $40,000 in pedestrian design assistance in Fall, 2002, the goal of this project is to provide a pedestrian path system to the Original Townsite of Surprise to benefit current and future residents, and area businesses. Much of the area currently lacks sidewalks, and residents who live in nearby high density housing walk in the roadways to reach nearby retail, food, clothing and services. Many residents in the area are low income and there is a large retirement population in the area. The design assistance for this project will help develop an overall pedestrian concept for the area, and specific design drawings for the first phase of the project. This project was initiated in January, 2003 and is expected to be completed in approximately one year.

Walking and Bicycling in the 21st Century Conference Series

Initiated in 1993, the Walking in the 21st Century Conference Series is attended by planners, engineers, design professionals and pedestrian advocates statewide. These periodic seminars, held approximately every 18 months, increase awareness about pedestrian facility design and the benefits of walking. In 1996, the Pedestrian Working Group began collaborating with the Arizona Governors Bicycle Task Force and the series was renamed Walking and Bicycling into the 21st Century. The conference was again renamed in the year 2000 to Walking and Bicycling in the 21st Century. Other partners in sponsoring the conference include the Arizona Department of Transportation (ADOT), the Federal Highway Administration (FHWA) and the Regional Public Transportation Authority (RPTA).

The conferences are designed to increase knowledge about public facilities that encourage people to walk instead of driving in single occupant vehicles. The first conference, held in 1993, featured both national experts in community design and planning for pedestrians, including Peter Calthorpe and Anton C. Nelessen, a representative from the Federal Highway Administration, and Richard Thomas, Public Transit Director for the City of Phoenix. Key topics included pedestrian planning in the MAG region; local, national and federal perspectives on the importance of walking; and successful examples of streets that work for pedestrians.

The 1994 conference focused on implementation of plans and designs that result in successful walking environments. National experts from the fields of planning, design, and real estate development provided their expertise. Approximately 110 persons registered and attended the conference. The

1995 conference extended over three days and featured Alex Sorton of Northwestern University Traffic Institute, a nationally known expert in bicycle and pedestrian planning. Conference attendees participated in lectures, discussions, case studies and group projects, and received a reference manual covering information discussed in the conference.

In 1997, the Walking and Bicycling in the 21st Century Conference Series took a new direction to include neighborhood representatives and focus on specific pedestrian facility design issues, resulting in written recommendations to solve an actual pedestrian facility concern in the region. The recommendations are sent to the neighborhood organization directly affected by the design problem. The 1997 Conference featured the Pedestrian and Bicycle Safety Roadshow. One component of the Roadshow was a case study where participants used what they had learned to solve actual problems for the Papago Trail and the Pueblo Grande Museum. The recommendations from the Roadshow are being implemented by the Pueblo Grande Museum and Papago Salado Association.

The 1998 conference featured Dan Burden from Walkable Communities, Inc., and focused on transforming four-corner suburban commercial districts around arterial intersections into Village Centers. The purpose of the conference was to develop standard recommendations that could be used throughout the region to address pedestrian and bicycle circulation in these types of typical commercial areas. To assist conference participants in making their recommendations, a prototype study area which demonstrated this land use was identified at on the east side of I-10 at its intersection with Elliot Road in the Ahwatukee community in the City of Phoenix. During the conference, participants were encouraged to walk in the study area. Representatives of the Ahwatukee community were invited to attend the conference and participated in the development of recommendations for these types of land uses. The final design recommendations from this conference could be applied to almost any four-corner commercial arterial intersection in the MAG region.

On April 25 and 26, 2000 at the Tempe Mission Palms, the conference objective was to teach attendees new and effective methods to create a viable urban off-street path system. A network of linked paths can help communities reduce traffic congestion, improve the health of residents, and create a more livable community. The two-day conference featured four national and regional experts in pathway planning. The first day was led by Charles A. Flink, President of Greenways Incorporated. He facilitated four workshops addressing the basics of an urban path system, basics of path development, and management, resources and promotion. The focus of the first day was the "nuts and bolts of trails planning."

Participants walk and observe transportation modal linkages at Moeur Park in Tempe, Arizona at the Urban Trails Conference in April, 2000.

The second day built upon the workshops led by Charles Flink by focusing on "creating a linked system."

Day two included presentations on implementation and successful projects led by Bruce Landis and Jennifer Toole from SCI, Inc., and Jim Coffman from Todd and Associates. A detailed description of federal funding opportunities provided guidance on creating viable non-motorized transportation networks. A mobile workshop helped participants identify issues, opportunities and constraints in integrating pathways into the overall transportation infrastructure by observing modal linkages. The day concluded with a work session on creating a multi-modal transportation district and brainstorming on potential implementation strategies.

On October 3, 2001, MAG co-sponsored a "Reclaiming Our Streets" conference with the City of Tempe. David Engwicht, author, artist and community activist from Brisbane, Australia has carved out an international reputation as an innovative thinker and inventor in the area of traffic reduction and traffic calming. The workshop contained a host of practical ideas for reclaiming street space. Historically, streets were not just for traffic. They were the epicenter of community life – a place for socializing, children's play, drama, education, celebrations, social events, and economic activity – functions that have been slowly eroded as car traffic has exerted its dominance. *Street Reclaiming* is a quantum leap beyond traffic calming. It involves psychological reclaiming – a simple technique that can be initiated with immediate results. The workshop focused on ideas and techniques that would convert traffic space into community spaces that enhance the social fabric of the neighborhood.

In 2003, MAG worked with several other sponsors, including the Arizona Governor's Council on Health, Physical Fitness and Sports, ADOT, the City of Mesa, the Arizona Department of Health Services and St. Luke's Health Initiatives to host the "America Moves" conference. Discussion at the conference focused on creating more active, livable communities by forging partnerships and building alliances between the transportation and health industries. Several national experts in transportation and health spoke at the conference, held at the Sheraton Mesa Hotel and Convention Center April 3 - 4, 2003.

MAG Pedestrian Plan 2000

The purpose of the *Pedestrian Plan 2000* is to identify and recommend programs and actions that guide and encourage the development of pedestrian areas and facilities, and ultimately increase walking as a viable mode of transportation throughout the region. The Plan incorporates a unique approach: flexible design tools to assist in creating better walking environments within the existing or new roadway network. The focus of the MAG *Pedestrian Plan 2000* is to establish performance guidelines which allow planners and engineers of implementing jurisdictions flexibility to achieve optimum results through whatever design means they wish. The plan contains goals addressing areas vital to creating a mode shift away from driving and towards walking, and objectives which are linked to an action plan.

A key purpose of the *MAG Pedestrian Plan 2000* is to provide a dynamic action plan to bring about improved walkability, hence a mode shift, and to improve air quality to the entire region. The tools

used in the MAG *Pedestrian Plan 2000* are innovative, technically sound and flexible. One of the key objectives of the MAG *Pedestrian Plan 2000* is to determine the types of pedestrian facilities that are appropriate for differing levels of pedestrian activity. A key factor in designing the roadway environment is assessing the relative amount of pedestrian activity that could potentially occur along the roadway. This process of identification and quantification of potential pedestrian trip activity is travel demand analysis.

In order to perform a travel demand analysis for pedestrians, a methodology must be employed that recognizes the unique impediments to that mode. Unlike automobile travel, pedestrian travel often does not occur due to a number of impediments, such as the lack of a sidewalk or placement of the sidewalk next to a roadway with many high-speed vehicles. Consequently, existing pedestrian counts generally do not indicate the level of potential pedestrian trip activity on a roadway network. Therefore, alternative or surrogate measures of assessing pedestrian trip activity are needed.

In the MAG *Pedestrian Plan 2000*, the latent demand model is used to assess pedestrian trip activity. The model is a gravity-based model predicated upon a theory similar to that used in the prevailing four step Urban Transportation Planning System based travel demand models. The latent demand model is an effective tool for assessing pedestrian travel demand and considers data readily available through most transportation departments. Classifying roadways in the MAG region based upon latent demand helped establish the appropriate performance guidelines for roadways serving differing levels of potential pedestrian activity. For example, higher performing pedestrian facilities should be provided in areas where many people could be induced to use sidewalks and other pedestrian facilities. By considering potential pedestrian usage, MAG member agencies are able to balance the cost of improvements with the benefits generated.

The next step in developing the plan was to establish appropriate roadside design performance guidelines for different categories of pedestrian trip activity. Since walking is primarily a local activity, creating the appropriate role for a regional pedestrian plan can be challenging. By establishing regionwide performance guidelines, as opposed to rigid roadway cross-sections, MAG member agencies have flexibility to design roadways as they choose, with guidance for encouraging pedestrian travel. MAG members have unique goals, challenges, and constraints with respect to their transportation networks. Accordingly, roadway performance guidelines are the best way to achieve these regional goals.

The roadside pedestrian conditions model was used in the MAG *Pedestrian Plan 2000* to determine different categories of pedestrian trip activity. The results of the latent demand modeling were stratified into four categories which match the four classifications in the MAG *Pedestrian Area Policies and Design Guidelines* (district, campus, community and neighborhood). The roadside walking performance guidelines established in the MAG *Pedestrian Plan 2000*, combined with the qualitative guidance in the MAG *Pedestrian Area Policies and Design Guidelines*, provide flexible and innovative tools for improving pedestrian areas throughout the MAG region.

The MAG *Pedestrian Plan 2000* was designed to be implemented. The executive summary of the MAG *Pedestrian Plan 2000* provides step-by-step instructions on how to incorporate the unadjusted lateral separation matrices to improve the traveling environment for the pedestrian. Furthermore, to accomplish the goal of increasing the number of walking trips in the MAG region, the MAG *Pedestrian Plan 2000* includes an action plan with specific short term (one year) mid-term (two to three years) and long term (four to five years) programs and activities. The MAG *Pedestrian Plan 2000* does not duplicate previous regional pedestrian planning efforts. Instead, the MAG *Pedestrian Plan 2000* is designed to be used with the MAG *Pedestrian Area Policies and Design Guidelines* to help create viable pedestrian areas throughout the region.

Providing a sidewalk is only the first step in meeting pedestrian needs. Amenities such as shade, benches and trash receptacles help improve the pedestrians's sense of comfort. The MAG *Pedestrian Plan 2000* provides flexible roadway design guidelines, while the MAG *Pedestrian Area Policies and Design Guidelines* provide guidance for the provision of amenities.

For More Information

For more information on the MAG Regional Pedestrian Program, call Maureen DeCindis, MAG Transportation Planner, or Dawn M. Coomer, MAG Multi-Modal Program Manager, at (602) 254–6300. E-mail can be sent to mdecindis@mag.maricopa.gov Information is also available on the Web at www.mag.maricopa.gov. Click on "Committees" and visit the Pedestrian Working Group page.