Bicycle and Pedestrian Plan Update

ADOT MPD Task Assignment 21-11
PGTD 0725
Contract # T08-49-U0001

Work Plan

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Prepared for:
ARIZONA DEPARTMENT OF TRANSPORTATION

September 30, 2011
091374045
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1 PROJECT NEED

Introduction

Bicycling and walking are fundamental modes of transportation that, in today’s motorized, vehicle-centric world, are commonly overlooked as options to help manage our mobility needs. According to the 2009 National Household Travel Survey (January 2010), bicycling and walking make up 11.9% of all trips made in the United States. According to the 2002 National Survey of Pedestrian and Bicyclist Attitudes and Behaviors, approximately 57 million people, 27.3% of the population aged 16 or older, rode a bicycle at least once during the summer of 2002.

One of the underlying principles in planning for bicycling and walking is to provide a system that allows users significant mode choices, and makes bicycling and walking more attractive, viable options for transportation. This includes creating a non-motorized network comprised of on-street facilities, off-street facilities, and end-of-trip facilities, integrated with other modes of transportation. Education and enforcement programs are other essential elements.

To this end, in 2003 ADOT completed the Arizona Statewide Bicycle and Pedestrian Plan. This plan offered a long-term vision for a statewide system of interconnected and shared roadways and bicycle and pedestrian facilities to guide ADOT transportation decisions relating to bicycle and pedestrian travel, planning, and facility development.

There have been several implementation phases of the 2003 Plan. ADOT now wants to update the 2003 Plan to reflect and respond to significant changes that have occurred over the past eight years.

Efforts and Accomplishments to Date

The 2003 Statewide Bicycle and Pedestrian Plan was developed in two phases. Phase I reviewed existing conditions, developed a Statewide Bicycle Network, and recommended bicycle and pedestrian programs that improve the accommodation of bicycles and pedestrians on Arizona highways.

Implementation of several of the most critical Phase I recommendations began in Phase II. Phase II included the creation of a Statewide Bicycle User Map, Bicycle Share the Road Guide, Sharing the Road with Pedestrians Guide, Arizona Bicycling Street Smarts, website enhancements, a Grant and Funding Plan, an Education Plan, and a Pedestrian Action Plan.

Implementation of the Plan continued in Phases III, IV, and V. Other ADOT Bicycle and Pedestrian Program accomplishments include the following:

- ADOT is nearing completion of the ADOT Bicycle Safety Action Plan (BSAP). Using the FHWA Pedestrian-Bicycle Crash Analysis Tool and BIKESAFE Countermeasure Selection System, the ADOT BSAP was a comprehensive review of bicycle-motor vehicle crashes on the State Highway System (SHS). The BSAP identified high priority locations to improve bicycling safety as well as education and enforcement programs.
In 2009, ADOT completed the Pedestrian Safety Action Plan (PSAP). The PSAP identified high pedestrian-motor vehicle crash locations and identified countermeasure projects and costs for each location. ADOT developed the PSAP in collaboration with Arizona’s participation as one of 13 “focus states” that received technical assistance to reduce pedestrian crashes, fatalities, and injuries. ADOT led the initiative in coordination with the FHWA Arizona Division Office and the Arizona Governor’s Office of Highway Safety.

In 2009, ADOT sponsored two “Laying the Foundation for Complete Streets” training courses. Representatives from ADOT, local cities, counties, Metropolitan Planning Organizations (MPOs), and councils of government (COGs) participated. A follow-up training course, “Complete Streets Policy Development,” was held in September 2009 with the ADOT leadership team.

In 2009, Arizona earned a Bronze Bicycle Friendly State rating from the League of American Bicyclists (LAB).

In 2006 and 2007, ADOT worked closely with the Statewide Bicycle and Pedestrian Steering Committee and the citizens of Sedona, Cottonwood, and Clarkdale (which served as pilot program communities) to develop a statewide bicycle and pedestrian safety awareness campaign. The main campaign message is “Roll-Models”— safety tips for bicyclists, pedestrians, and motorists. A project identity —“Be a Roll-Model”— was created and integrated in all program materials, including print advertisements, radio commercials, and printed collateral. A follow-up media campaign was conducted in 2009.

2 STUDY OBJECTIVES

The ADOT Statewide Bicycle and Pedestrian Plan Update will address the most critical bicycle and pedestrian transportation planning needs on the state highway system. The Plan Update will respond to significant changes that have occurred over the past eight years in Arizona, including:

- Population growth statewide, including in rural areas and small and large urban areas.
- Significant investment in Arizona’s transportation infrastructure.
- A growing trend, both in Arizona and nationwide, to ensure that bicycling and walking are routinely accommodated on Arizona’s highways.
- Constrained budgets to construct and maintain transportation infrastructure for all modes of travel.
- New opportunities to utilize technologies to communicate with stakeholders, receive their input, and disseminate information about bicycling and walking in Arizona.
- National competitive financial grants to support livability and sustainable communities.
• New infrastructure on SHS such as roundabouts and pedestrian hybrid beacon signals.

The major product of the Plan Update will be the 2012 Statewide Bicycle and Pedestrian Plan (Final Report). Preliminary study objectives that will guide the Plan Update:

• A Plan that incorporates the collaborative efforts of stakeholders to address the most critical elements to improve bicycling and walking in Arizona and specifically on the SHS.

• A Plan that capitalizes on national momentum, including FHWA initiatives on livability, to better integrate and recognize bicycling and walking as key elements of the overall transportation system.

• A Plan that will lead to policies and improvements that ensure the needs of bicyclists and pedestrians are appropriately and adequately accommodated.

• A Plan that outlines activities that will guide the ADOT Bicycle and Pedestrian Program over the short-, mid-, and long-range, incorporating both roadway and off-roadway bicycle and pedestrian transportation facilities.

Completion of the study objectives as identified above will lead to a successful ADOT Bicycle and Pedestrian Plan Update, including the deliverables as outlined in Table 1.

Table 1. Bicycle and Pedestrian Plan Update Deliverables

<table>
<thead>
<tr>
<th>Task</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>Work Plan and Public Involvement Plan</td>
</tr>
<tr>
<td>Task 4</td>
<td>Summary Report 1: First Phase of Public Involvement</td>
</tr>
<tr>
<td>Task 5</td>
<td>Working Paper 3: Identification of Activities Required to Meet Vision and Goals</td>
</tr>
<tr>
<td>Task 6</td>
<td>Summary Report 2: Second Phase of Public Involvement</td>
</tr>
<tr>
<td>Task 7</td>
<td>Draft Final Report</td>
</tr>
<tr>
<td>Task 8</td>
<td>Final Report and Executive Summary</td>
</tr>
</tbody>
</table>

3 PROJECT TEAM

Arizona Department of Transportation, Multimodal Planning Division, will lead the study. Michael Sanders serves as ADOT Project Manager.

Kimley-Horn and Associates serves as the prime consultant for the plan update. The project organization chart is presented in Figure 1. Project Team contact information is listed in Table 2.

The National Advisory Panel, as identified in Figure 1, consists of nationally recognized experts who will provide ideas and insight to the Plan Update based on their national and world-wide experience.
Table 2. Project Team Contact Information

<table>
<thead>
<tr>
<th>Name, Organization</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Sanders, ADOT Multimodal Planning</td>
<td>ADOT Project Manager</td>
<td>ADOT Multimodal Planning Division 206 S. 17th Avenue 310B Phoenix, AZ 85007 <a href="mailto:msanders@azdot.gov">msanders@azdot.gov</a> 602-712-8141</td>
</tr>
<tr>
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<td>Project Advisor, Project Principal, QA/QC</td>
<td><a href="mailto:Mike.colety@kimley-horn.com">Mike.colety@kimley-horn.com</a> 702-862-3609</td>
</tr>
<tr>
<td>Adria Henderson, Kimley-Horn and Associates, Inc.</td>
<td>Project Analyst</td>
<td><a href="mailto:Adria.henderson@kimley-horn.com">Adria.henderson@kimley-horn.com</a> 520-352-8655</td>
</tr>
<tr>
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<td><a href="mailto:Jiaxin.tong@kimley-horn.com">Jiaxin.tong@kimley-horn.com</a> 520-352-8642</td>
</tr>
<tr>
<td>Michael Ronkin, Designing Streets for People</td>
<td>Project Advisor</td>
<td><a href="mailto:michaelronkin@comcast.net">michaelronkin@comcast.net</a></td>
</tr>
</tbody>
</table>
4 STAKEHOLDERS

Stakeholder outreach is a critical element of the plan update process. The stakeholders of this plan include the ADOT Statewide Bicycle and Pedestrian Steering Committee (SC), ADOT, agency and Tribal representatives, and the public.

Having a balance of facility users, planners, and engineers on the SC is critical to the development of an implementable plan. The Kimley-Horn team will actively coordinate with the SC to resolve institutional and technical barriers to implementing a bicycle and pedestrian plan.

SC meetings (approximately two hours) will be held approximately every other month during the course of the study. The purpose of these meetings will be to update the SC on the project status, receive input in the planning process, and discuss project deliverables. Kimley-Horn will prepare and present PowerPoint presentations at each SC meeting. In addition, we will prepare and distribute agendas and meeting minutes via e-mail for each meeting. A user-friendly file transfer protocol (ftp) site will be established to facilitate the transfer of information to and from the SC. Teleconferencing will be made available for all SC meetings.

Five SC meetings are proposed. These will be scheduled to follow major project milestones and report submittals.

The Steering Committee for the study consists of the representatives of the agencies that are listed below. Steering Committee membership may be expanded, as needed, throughout the study. The following is a preliminary list of departments/organizations that will be represented on the SC.

**Arizona Department of Transportation**
- ADOT, Multimodal Planning Division (MPD), Bicycle and Pedestrian Program
- ADOT, MPD, Tribal Transportation
- ADOT, Communication and Community Partnerships Division (CCP)
- ADOT, Intermodal Transportation Division (ITD), Districts
- ADOT, ITD, Roadway Engineering Group
- ADOT, ITD, Statewide Project Management
- ADOT, ITD, Traffic Group
- ADOT, MPD, Public Transportation
- ADOT, MPD, Rail and Sustainability
- ADOT, MPD, Transportation Analysis (GIS)
- ADOT Environmental Planning Group

**Other Arizona State and Federal Government**
- Arizona Department of Health Services
- Arizona Department of Public Safety
- Arizona Governor’s Office of Highway Safety
- Arizona Office of Tourism
- Arizona State Land Department
Arizona State Parks
Federal Highway Administration (FHWA) – Arizona Division

Metropolitan Planning Organizations (MPOs) and Councils of Government (COGs)

- Pima Association of Governments
- Maricopa Association of Governments
- Central Yavapai Metropolitan Planning Organization
- Flagstaff Metropolitan Planning Organization
- Central Arizona Association of Governments
- Northern Arizona Council of Governments
- SouthEastern Arizona Governmental Organization
- Western Arizona Council of Governments

Transit Agencies

- City of Phoenix Public Transit Department
- Valley Metro (Phoenix metropolitan area)
- Sun Tran (Tucson)
- Northern Arizona Intergovernmental Public Transportation Authority
- Other local transit providers

Representatives of users of pedestrian walkways and bicycle transportation facilities

5 PUBLIC OUTREACH

Two rounds of public outreach are proposed for the study.

Public Outreach Phase 1

The purpose of Public Outreach Phase 1 will be to solicit input on Working Paper No. 1 (Vision and Goal Statements, Performance Criteria) and Working Paper No. 2 (Assessment of Current Conditions and Needs).

Public Outreach Phase 2

The purpose of the second phase of public outreach will be to present and obtain input on the content of Working Paper No. 3 (Activities to Achieve the Vision and Goals).

ADOT CCP will lead public outreach efforts. Details of the public outreach effort are included in the Public Involvement Plan prepared by ADOT CCP.
6 PROJECT SCHEDULE

The project will be completed within a 12-month timeframe. The project schedule is presented in Figure 2. Key elements of the project schedule are listed below.

Steering Committee Meetings
- September 2011
- November 2011
- February 2012
- May 2012
- July 2012

Project Deliverables
- Work Plan and Public Involvement Plan
- Working Paper 2: Assessment of Current Conditions and Needs
- Summary Report 1: First Phase of Public Involvement
- Working Paper 3: Identification of Activities Required to Meet Vision and Goals
- Summary Report 2: Second Phase of Public Involvement
- Draft Final Report
- Final Report and Executive Summary

Figure 2. Project Schedule
7 STATUS OF 2003 ADOT BICYCLE AND PEDESTRIAN PLAN RECOMMENDATIONS

Recommendations of the 2003 ADOT Bicycle and Pedestrian Plan are summarized in Table 3. Implementation status of the 2003 recommendations is also identified. This information serves as input to the development of the Work Plan and the development of a draft Vision and Goal Statements (Task 2).

Challenges associated with implementation of 2003 recommendations will be documented in Working Paper No. 1 (Vision and Goals, Performance Criteria) and based on discussions with the ADOT Bicycle and Pedestrian Coordinator, and the Steering Committee.
Table 3. 2003 ADOT Bicycle and Pedestrian Plan Recommendations and Status

<table>
<thead>
<tr>
<th>2003 Bicycle and Pedestrian Plan Chapter</th>
<th>Key Recommendations</th>
<th>Implementing Agency</th>
<th>Implementation Status</th>
<th>Consider in Plan Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. 2002 Current Conditions</td>
<td>Stakeholder Input</td>
<td>ADOT and Local Agencies</td>
<td>Conditions on state highways will be reviewed in the Plan Update.</td>
<td>Review</td>
</tr>
<tr>
<td>6. Bicycle and Pedestrian Committees, Coordinators, Documents, and Maps</td>
<td>All communities within Arizona should consider having Bicycle and Pedestrian Advisory Committees</td>
<td>Local Agencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>ADOT should have the current Bicycle and Pedestrian Coordinator position solely dedicated to bicycle and pedestrian projects and a Bicycle and Pedestrian Coordinator’s Assistant position be developed at ADOT. In addition, it is recommended that ADOT designate one Bicycle and Pedestrian Contact for each district</td>
<td>ADOT</td>
<td>ADOT Bicycle and Pedestrian Coordinator is dedicated full-time to bicycle and pedestrian projects An Assistant Coordinator position has not been developed A Bicycle and Pedestrian contact for each district has not been designated</td>
<td>Review</td>
</tr>
<tr>
<td>6.3</td>
<td>Implementing agencies within Arizona consider having at least one full time Bicycle and/or Pedestrian Coordinator</td>
<td>Local Agencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.4</td>
<td>Implementing agencies put a high priority on implementing proposed local routes that fill a gap between existing bicycle routes</td>
<td>Local Agencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.5</td>
<td>That two adjacent implementing agencies work together to provide bicycle route connectivity across jurisdictional boundaries</td>
<td>ADOT and Local Agencies</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td>6.6</td>
<td>Each organizer of a major event/race to be held on an ADOT facility should contact the ADOT District Engineer, in the district where the race will start within Arizona, as much in advance as possible to confirm the appropriate procedure for attaining a use permit</td>
<td>Local Organizers</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td>2003 Bicycle and Pedestrian Plan Chapter</td>
<td>Key Recommendations</td>
<td>Implementing Agency</td>
<td>Implementation Status</td>
<td>Consider in Plan Update</td>
</tr>
<tr>
<td>----------------------------------------</td>
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<td>---------------------</td>
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</tr>
<tr>
<td>7. Arizona Bicycle Network</td>
<td>7.1 It is recommended that implementation of the Plan include the development, printing, and distribution of a fold-out user map (the following information is the most critical to include on the maps): o Traffic volumes o Right shoulder widths (if available) o Rumble strip locations (if available) o Roads where bicycles are prohibited</td>
<td>ADOT</td>
<td>Cycle Arizona Bicycle Map was last updated in April 2009 Bicycle conditions on state highways will be reviewed in the Plan Update.</td>
<td>Review</td>
</tr>
<tr>
<td>8. Design Guidelines for Consideration</td>
<td>8.1 Suggested design guidelines</td>
<td>ADOT</td>
<td>On-going</td>
<td>Review</td>
</tr>
<tr>
<td>9. Maintenance Guidelines for Consideration</td>
<td>9.1 Suggested maintenance guidelines</td>
<td>ADOT</td>
<td>On-going</td>
<td>Review</td>
</tr>
<tr>
<td>10. Policies, Ordinances, Codes and Standards</td>
<td>10.1 Implementing agencies within Arizona should review the codes and standards included in the report and build upon the codes and standards that currently exist within Arizona and nationally</td>
<td>Local Agencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10.2 Implementation of the Plan should include a task to further review the existing policies and the policy revisions included in the report for consideration</td>
<td>ADOT</td>
<td>On-going</td>
<td>Review</td>
</tr>
<tr>
<td>11. Programs</td>
<td>11.1 Provide planning and design training of bicycle and pedestrian accommodations to other ADOT staff, MPOs, COGs, and city staff</td>
<td>ADOT</td>
<td>Completed - August 2009</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>11.2 Assist in the development of state, regional, and local bicycle maps</td>
<td>ADOT</td>
<td>On-going - For example, a map was included as part of the Sierra Vista Safe Bicycle and Pedestrian Routes Plan – August 2011</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 3. 2003 ADOT Bicycle and Pedestrian Plan Recommendations and Status (continued)

<table>
<thead>
<tr>
<th>2003 Bicycle and Pedestrian Plan Chapter</th>
<th>Key Recommendations</th>
<th>Implementing Agency</th>
<th>Implementation Status</th>
<th>Consider in Plan Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Programs (continued)</td>
<td>Support advertising campaigns and public service announcements that educate the public on the virtues of non-motorized transportation</td>
<td>ADOT</td>
<td>Completed – Developed as part of the Verde Valley Safety Awareness Campaign – September 2009</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Develop basic pedestrian and bicycle education programs for communities and schools</td>
<td>ADOT</td>
<td>Developed educational materials for communities (i.e. “Share the Road” guides). Educational programs for schools are not implemented.</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Develop enforcement strategies and programs aimed at bicyclist and pedestrian law violations that are most likely to result in serious crashes</td>
<td>ADOT</td>
<td>Not implemented</td>
<td>Consider Developing</td>
</tr>
<tr>
<td></td>
<td>Develop enforcement strategies aimed at motorist errors and aggressive behaviors</td>
<td>ADOT</td>
<td>Not implemented</td>
<td>Consider Developing</td>
</tr>
<tr>
<td></td>
<td>Continue to consider additions to driver’s education products that emphasize safe motorist driving when encountering bicyclists and pedestrians on the road</td>
<td>ADOT</td>
<td>On-going – i.e. Share the Road guides</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Assist in promoting bike-to-work days and Safe Routes to School programs</td>
<td>ADOT</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Promote the link between land use and transportation by encouraging smart growth initiatives</td>
<td>ADOT</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td>12. Existing and Potential Funding Sources</td>
<td>Emphasize prioritizing, applying, and politicking for an increased percentage of the funds to be applied to bicycle and pedestrian projects in the future</td>
<td>ADOT</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implement the Plan through a combination of funding sources</td>
<td>ADOT</td>
<td>On-going</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 3. 2003 ADOT Bicycle and Pedestrian Plan Recommendations and Status (continued)

<table>
<thead>
<tr>
<th>2003 Bicycle and Pedestrian Plan Chapter</th>
<th>Key Recommendations</th>
<th>Implementing Agency</th>
<th>Implementation Status</th>
<th>Consider in Plan Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Implementation</td>
<td><strong>Accommodation of Bicyclists and Pedestrians on Roadway Projects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.1</td>
<td>Assure that adequate bicycle and pedestrian facilities are provided as an integral component of all future ADOT projects</td>
<td>ADOT</td>
<td>On-going – Bicycle</td>
<td>Review</td>
</tr>
<tr>
<td>13.2</td>
<td>A tracking system that provides the State Bicycle and Pedestrian Coordinator, and bicycle and pedestrian advocates throughout the state, with a listing of all major roadway projects within the State</td>
<td>ADOT</td>
<td>Phase III task</td>
<td>Review</td>
</tr>
<tr>
<td>13.3</td>
<td>Develop a communication procedure for discussion and resolution of issues between the State Bicycle and Pedestrian Coordinator and District or Regional Engineers</td>
<td>ADOT</td>
<td>Not Implemented</td>
<td>Consider Developing</td>
</tr>
<tr>
<td>13.4</td>
<td>Review the existing policies and the policy revisions included in the Plan</td>
<td>ADOT</td>
<td>See 10.2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Development of Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.5</td>
<td>Provide planning and design training of bicycle and pedestrian accommodations to other ADOT staff, MPOs, COGs, and city staff</td>
<td>ADOT</td>
<td>See 11.1</td>
<td>-</td>
</tr>
<tr>
<td>13.6</td>
<td>Assist in the development of state, regional, and local bicycle maps</td>
<td>ADOT</td>
<td>See 11.2</td>
<td>-</td>
</tr>
<tr>
<td>13.7</td>
<td>Develop basic pedestrian and bicycle education programs for communities and schools</td>
<td>ADOT</td>
<td>See 11.4</td>
<td>-</td>
</tr>
<tr>
<td>13.8</td>
<td>Develop enforcement strategies and programs aimed at bicyclist and pedestrian law violations that are most likely to result in serious crashes</td>
<td>ADOT</td>
<td>See 11.5</td>
<td>-</td>
</tr>
<tr>
<td>13.9</td>
<td>Develop enforcement strategies aimed at motorist errors and aggressive behaviors</td>
<td>ADOT</td>
<td>See 11.6</td>
<td>-</td>
</tr>
</tbody>
</table>
### 2003 ADOT Bicycle and Pedestrian Plan Recommendations and Status (continued)

<table>
<thead>
<tr>
<th>2003 Bicycle and Pedestrian Plan Chapter</th>
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<th>Implementation Status</th>
<th>Consider in Plan Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation (continued)</td>
<td>13.10 Continue to consider additions to driver’s education products that emphasize safe motorist driving when encountering bicyclists and pedestrians on the road</td>
<td>ADOT</td>
<td>See 11.7</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>13.11 Assist in promoting bike-to-work days and safe routes to school programs</td>
<td>ADOT</td>
<td>See 11.8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>13.12 Promote the link between land use and transportation by encouraging smart growth initiatives</td>
<td>ADOT</td>
<td>See 11.9</td>
<td>-</td>
</tr>
<tr>
<td><strong>Construction of Non-ADOT Bicycle Facilities</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>13.13 ADOT should coordinate with relevant implementing agencies to provide a bicycle route into Phoenix that connects SR 88 and SR 79 to the east of Phoenix with other non-ADOT bicycle facilities</td>
<td>ADOT and Local Agencies</td>
<td>Not implemented</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td>13.14 Relevant implementing agencies in the Tucson Metropolitan Area and the Flagstaff area should put a high priority on implementing the regionally significant proposed bicycle facilities</td>
<td>Local Agencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>13.15 Bicycle route continuity between adjacent local jurisdictions should be improved. Two adjacent agencies should work together to provide bicycle route connectivity across city boundaries</td>
<td>ADOT and Local Agencies</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td><strong>Bicycle and Pedestrian Specific Projects</strong></td>
<td></td>
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<tr>
<td></td>
<td>13.16 Work with implementing agency to obtain funding to construct shared-use paths within ADOT right-of-way</td>
<td>ADOT and Local Agencies</td>
<td>On-going</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>13.17 Develop a program to systematically retrofit roadway cattle guards that have gaps greater than one quarter-inch by four inches parallel to the direction of bicycle travel</td>
<td>ADOT</td>
<td>“Bicycle Safety Kit” incorporated into cattle guard design details</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 3. 2003 ADOT Bicycle and Pedestrian Plan Recommendations and Status (continued)

<table>
<thead>
<tr>
<th>2003 Bicycle and Pedestrian Plan Chapter</th>
<th>Key Recommendations</th>
<th>Implementing Agency</th>
<th>Implementation Status</th>
<th>Consider in Plan Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation (continued)</td>
<td>13.18 Widening shoulders that have an effective width of two feet or less</td>
<td>ADOT</td>
<td>On-going; state highway conditions will be reviewed in the Plan Update (Update will identify routes with less than four feet).</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td>ADOT Bicycle and Pedestrian Plan Phase II and III</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13.19 Develop and Distribute a Bicycle User Map</td>
<td>ADOT</td>
<td>Completed - 2009</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13.20 Develop a Statewide Bicycle and Pedestrian Education Program</td>
<td>ADOT</td>
<td>Completed - 2009</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13.21 Develop and Print a Statewide &quot;Share the Road&quot; Guide for Bicyclists, Pedestrians and Motorists</td>
<td>ADOT</td>
<td>Completed - 2011</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13.22 Develop Grant and Funding Plans</td>
<td>ADOT</td>
<td>Completed as part of the Phase II Plan - 2004</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13.23 Develop Bicycle and Pedestrian Facility Action Plans</td>
<td>ADOT</td>
<td>Completed as part of the Phase II Plan - 2004</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>13.24 Create a Maintenance and Facility Request System</td>
<td>ADOT</td>
<td>Completed as part of the Phase II Plan - 2004</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>13.25 Facilitate an Update of ADOT Bicycle and Pedestrian Policy</td>
<td>ADOT</td>
<td>Bicycle Policy was updated in 2007; Pedestrian policy has not been developed</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>13.26 Develop a Statewide Bicycle and Pedestrian Committee</td>
<td>ADOT</td>
<td>A committee is convened on a project-by-project basis</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>13.27 Pursue Statewide Training Opportunities</td>
<td>ADOT</td>
<td>On-going</td>
<td>-</td>
<td></td>
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<tr>
<td>13.28 Create a Rural Specific Design Guideline</td>
<td>ADOT</td>
<td>Not implemented</td>
<td>Consider Developing</td>
<td></td>
</tr>
<tr>
<td>13.29 Create a Pedestrian Focused Action Plan</td>
<td>ADOT</td>
<td>Completed as part of the Phase II Plan - 2009</td>
<td>Review</td>
<td></td>
</tr>
</tbody>
</table>
8 WORK TASKS

The proposed tasks that will lead to the ADOT Bicycle and Pedestrian Plan Update are:

- Task 1: Work Plan
- Task 2: Vision and Goal Statements, Performance Criteria
- Task 3: Assessment of Current Conditions and Needs
- Task 4: First Phase of Public Involvement
- Task 5: Activities to Achieve the Vision and Goals
- Task 6: Second Phase of Public Involvement
- Task 7: Draft Final Report (2012 Statewide Bicycle/Pedestrian Plan)
- Task 8: Final Report (2012 Statewide Bicycle/Pedestrian Plan)

Each of these tasks is described in detail below.

8.1 Task 1 — Work Plan

Purpose

Develop a Work Plan that includes a detailed scope of work, summary review of recommendations of the 2003 Bicycle and Pedestrian Plan, preliminary/draft study goals and objectives, problem statement and need, anticipated key issues and challenges, and project schedule.

Approach

Upon receipt of Notice to Proceed, a meeting will be held with key members of the Kimley-Horn team, ADOT Project Manager, and ADOT CCP representatives to review the Draft Work Plan, including the proposed public involvement strategies and schedule. At this meeting, we will also discuss data items that will be requested such as Highway Performance Monitoring System (HPMS) data, photo log, and Geographic Information System (GIS) shape files.

The draft Work Plan and Schedule will be distributed to the Steering Committee at SC Meeting No. 1. SC perspectives on the Work Plan will be important to ensure that resources are focused to update elements that will be most beneficial to the stakeholders. SC comments will be addressed and a Final Work Plan will be prepared and distributed.

This task will also include monthly project management activities, ongoing communication with ADOT’s project manager, and monitoring all consultant staff and study team progress on completing project tasks and preparing specific reports and milestone documents.

Activities

- Review recommendations from the 2003 Bicycle and Pedestrian Plan; document the status of the recommendations; discuss key challenges associated with recommendations implementation with the ADOT Bicycle and Pedestrian Coordinator and with the Steering Committee Meeting at SC No. 1.
• Prepare for and conduct a kick-off meeting with the ADOT project manager and ADOT CCP to discuss the Work Plan. The Kimley-Horn team will prepare a meeting summary.

• Develop a draft Work Plan. The Work Plan will include a detailed description of work tasks and associated products, schedule, problem and need statement, study goals and objectives.

• Address ADOT’s comments to the Work Plan. Submit a revised Work Plan to the ADOT Project Manager for review and approval for distribution to the SC.

• Schedule, prepare for, and attend SC Meeting No. 1. Present the Work Plan to the SC for review and comment. Key challenges associated with implementation of 2003 recommendations will be discussed. Vision and goal statements will also be discussed at SC Meeting No. 1 to inform Task 2 activities. The Kimley-Horn team will prepare a meeting summary.

• Address SC comments made at SC Meeting No. 1 and prepare the Final Work Plan; submit the Final Work Plan to the ADOT Project Manager for posting on the ADOT website.

• Develop updates for azbikeped.org (Statewide Bicycle and Pedestrian Plan page) to explain the Study purpose and provide a mechanism to the public to submit comments on the plan update. Provide azbikeped.org updates to the ADOT Project Manager for posting. Review other sections of azbikeped.org for updating (e.g., links to outside websites, contacts, calendar of events). Note that an update to azbikeped.org will also be made at the conclusion of the study with the 2012 Statewide Bicycle and Pedestrian Plan.

• Hold bi-monthly meetings to update the SC on the project status, discuss findings, and receive input in the planning process.

• Prepare monthly status reports, update schedule, and identify issues that may impact the project’s schedule and budget.

Deliverables

• Kick-off meeting agenda, presentation materials, and meeting summary.

• Draft and Final Project Work Plan: detailed scope of work, summary table of recommendations of 2003 Bicycle and Pedestrian Plan, key challenges associated with 2003 recommendations (based on SC Meeting No. 1 discussion) preliminary/draft study goals and objectives, problem statement and need, and project schedule.

• SC Meeting No. 1 agenda, presentation materials, and meeting summary.

• Input to the stakeholder and public outreach plan (to be developed by ADOT CCP).

• Updates to azbikeped.org.

• Monthly status report and updated project schedule.
8.2 Task 2 — Vision and Goal Statements, and Performance Criteria

Purpose

Develop a Vision and Goal Statements for the Bicycle and Pedestrian Plan Update. Short-term and long-term objectives for each goal may be identified. Strategies and action items to achieve each goal will be developed in Task 5.

Approach

A vision statement expresses what ADOT and its partners would like to accomplish in the mid-term and long-term, serving as a guide for identifying a course of action. The Plan Update vision statement will guide the identification of goal statements. The vision statement will be developed collaboratively with the SC, and will consider other relevant federal, state, regional, and local studies and plans.

The ADOT Bicycle and Pedestrian Plan goal statements will describe the desired outcome for the activities or services that may be established through statewide cooperation and collaboration. Goal statements established within the Plan will be results-oriented, defining the desired state of bicycle and pedestrian conditions at the end of a specified time frame, and representing what can realistically be achieved through a collaborative effort of local, regional, and statewide agencies and organizations. Goal statements will be “SMART”—Specific, Measurable, Achievable, Realistic, and Time-sensitive.

The vision and goal statements will consider goals and objectives of other existing planning efforts, such as Building a Quality Arizona (bqAZ), What Moves You Arizona, ADOT PSAP, ADOT BSAP, local, regional, and federal plans, and local, state and national bicycling and walking organizations. The FHWA policy statement on bicycling and walking may serve as important input to the ADOT vision and goals. Primary sources, such as SC input, will also serve as input to the vision, goals, and performance measures. Another important input to Vision and Goal Statements is LAB’s recommendation for Arizona to achieve designation as a Silver, Gold, or Platinum state. Currently, LAB designates Arizona as a Bronze state. Recent LAB state rankings gave Arizona high marks for legislation, education, and encouragement, and low marks for policies and programs, infrastructure, and evaluation and planning. LAB feedback may help identify areas that require increased focus as the Plan Update is developed.

Specific strategies, activities and actions needed to achieve the goal statements will be identified in a subsequent task (Task 5). To the extent feasible and applicable, implementing agencies or divisions will be identified for each action item. Network and policy performance criteria will be developed to measure progress and achievement towards the goals and the vision.

Performance criteria may consider safety, accessibility, continuity, and funding. It will be important to develop measures that are realistically calculated from available data sources, or data sources that could be collected at a relatively minimal cost. Consideration may be given to developing an annual ‘State of Bicycle and Pedestrian
Travel’ report of the performance measures. Sample performance measures could include:

- Percentage of trips to work by walking or bicycling.
- Miles (or percentage) of ADOT state highways with sidewalks or shared-use paths.
- Miles (or percentage) of state highways with shoulders that meet ADOT design guidelines.
- Number and rate per one million population of pedestrian and bicycle fatalities and injuries on State highways.
- Funds committed to bicycle and pedestrian projects in the ADOT Five-Year Transportation Facilities Construction Program.

**Activities**

- Inventory and summarize visions and goals identified in other plans and studies such as bqAZ, What Moves You Arizona, ADOT PSAP, ADOT BSAP, and federal, regional, and local agencies and jurisdictions.
- As part of SC Meeting No. 1 (See Task 1), obtain input on vision and goals. Summarize input received at SC Meeting No. 1.
- Submit draft Working Paper No. 1 to the ADOT Project Manager for review and approval for distribution to the SC.
- Schedule, prepare for, and attend SC Meeting No. 2 where we will present Working Paper No. 1. The Kimley-Horn team will prepare a meeting summary.
- Address SC comments and prepare the final Working Paper No. 1 and submit the final Working Paper to the ADOT Project Manager for posting on the ADOT website.

**Deliverables**

- A sample of visions, goal statements, and performance criteria from successful bicycle and pedestrian programs nationally (for discussion at SC Meeting No. 1);
- summary of bicycle and pedestrian goals in other Arizona plans and studies.
- SC Meeting No. 1 input to Draft Working Paper No. 1.
- SC Meeting No. 2 meeting agenda, presentation materials, and meeting summary

### 8.3 Task 3 — Working Paper 2: Assessment of Current Conditions and Needs

**Purpose**

Compile information and data on which to base strategies and actions necessary to achieve the vision and goal statements. This information will serve to determine the
extent to which the existing state highway system programs and policies meet the needs of bicyclists and pedestrians in Arizona.

The review of 2003 recommendations (Table 3) identified several items, related to current conditions and needs that will be reviewed in the Plan Update. These include:

**State Highway Bicycle and Pedestrian Facilities**

- Arizona Bicycle Network (Table 3, 7.1)
- Bicycle and pedestrian facilities are provided as an integral component of all future ADOT projects (Table 3, 13.1)
- Provide a bicycle route into Phoenix that connects SR 88 and SR 79 to other non-ADOT bicycle facilities (Table 3, 13.13)
- Widening shoulders that have an effective shoulder width of two feet or less (Table 3, 13.18)
- Tracking system that provides State Bicycle and Pedestrian Coordinator and local advocates with a listing of all future ADOT projects (Table 3, 13.2)


- Designation of bicycle and pedestrian contacts within each district (Table 3, item 6.2)
- Design guidelines (Table 3, 8.1)
- Maintenance guidelines (Table 3, 9.1)
- Review existing policies and policy revisions included in the report (Table 3, 10.2)
- Develop enforcement strategies and programs (Table 3, item 11.5 and 11.6)
- Communication procedures between ADOT Bicycle and Pedestrian Coordinator and District and Regional Traffic Engineers (Table 3, item 13.4)
- Bicycle and Pedestrian Facility Action Plans (Table 3, 13.24)
- Maintenance and Facility Request System (Table 3, 13.25)
- Statewide Bicycle and Pedestrian Committee (Table 3, item 13.26)
- Rural-specific Design Guidelines (Table 3, 13.28)
- Pedestrian Focused Action Plan (Table 3, 13.29)

**Approach**

Table 4 illustrates areas that will be reviewed, and a preliminary approach and data source. Each of the assessment categories listed below, and identified in Table 4, is discussed in more detail in the following sections. Table 4 reflects 2003 Plan recommendations that will be considered.

- Bicycle and Pedestrian Demand on State Highways
- State Highway Bicycle and Pedestrian Facilities
- Multimodal Connectivity
### Table 4. Update Assessment Categories, Outcomes, and Potential Data Sources

<table>
<thead>
<tr>
<th>Assessment Category</th>
<th>Products/Outcomes</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Bicycle and Pedestrian Demand on State Highways</td>
<td>Summary of available data on current levels of bicycling and walking transportation trips in Arizona</td>
<td>Public Survey of Bicycling and Walking in Arizona</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U.S. Census Data, American Community Survey data</td>
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<tr>
<td></td>
<td></td>
<td>Bicycle Count data collected by PAG, Flagstaff, and other jurisdictions</td>
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<tr>
<td></td>
<td></td>
<td>Bicycle count stations on state highways</td>
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<td></td>
<td>Summary update (to ADOT Bicycle and Pedestrian Safety Action Plans) on the current numbers of injuries and fatalities involving bicyclists and pedestrians on State Highways</td>
<td>Arizona Safety Data Mart (crash data)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADOT Safety Section, Arizona Motor Vehicle Crash Facts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADOT Bicycle Safety Action Plan (2011)</td>
</tr>
<tr>
<td></td>
<td>Map of desired travel corridors for bicycle and pedestrian trips</td>
<td>Public Survey of Bicycling and Walking in Arizona</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steering Committee Input (identification of popular state highway and regional routes)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recreation and land management agencies such as the National Park Service, U.S. Forest Service, Arizona State Parks, Arizona Game and Fish</td>
</tr>
<tr>
<td></td>
<td>Assessment of bicycle and pedestrian demand along state highways, considering land use adjacent to state highways</td>
<td>Pedestrian Demand Index for State Highway Facilities (2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U.S. Census Tract Data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arizona State Land Department Aerial Imagery</td>
</tr>
<tr>
<td>3.2 Existing Bicycle and Pedestrian Facilities</td>
<td>Summary of current conditions of existing bicycle and pedestrian transportation infrastructure (on-road and off-road facilities); identification of gaps or deficiencies</td>
<td>State Highway Photo Log</td>
</tr>
<tr>
<td></td>
<td>Updated Bicycle Conditions Score Map</td>
<td>Highway Performance Management System (HPMS) (shoulder width information)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stakeholder Survey of Bicycle and Pedestrian Conditions on State Highways</td>
</tr>
<tr>
<td>Assessment Category</td>
<td>Products/Outcomes</td>
<td>Data Sources</td>
</tr>
<tr>
<td>---------------------</td>
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</tr>
<tr>
<td><strong>Existing Bicycle and Pedestrian Facilities (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Updated Arizona Bicycle Network Map</td>
<td>• ADOT Bridge Inventory (shoulder width information)</td>
</tr>
<tr>
<td></td>
<td><strong>Specific 2003 Plan Recommendations that will be reviewed:</strong></td>
<td>• ADOT Rumble Strip Inventory (compiled during ADOT Bicycle and Pedestrian Implementation Phase V)</td>
</tr>
<tr>
<td></td>
<td>• Arizona Bicycle Network (Table 3, 7.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bicycle and pedestrian facilities are provided as an integral component of all future ADOT projects (Table 3, 13.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide a bicycle route into Phoenix that connects SR 88 and SR 79 to other non-ADOT bicycle facilities (Table 3, 13.13)</td>
<td></td>
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<tr>
<td></td>
<td>• Widening shoulders that have an effective shoulder width of two feet or less (Table 3, 13.18)</td>
<td></td>
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<tr>
<td></td>
<td>• Tracking system that provides State Bicycle and Pedestrian Coordinator and local advocates with a listing of all future ADOT projects (Table 3, 13.2)</td>
<td></td>
</tr>
<tr>
<td><strong>3.3 Multimodal Connectivity</strong></td>
<td>• Summary of bicycle and pedestrian access to transit: bicycle parking/security, availability of bike-on-bus or bike-on-rail access, including service hours, routes where available, and incentives and barriers to using the service.</td>
<td>• ADOT MPD Transit Division</td>
</tr>
<tr>
<td></td>
<td>• Identification of needs and deficiencies to improve bicycle and pedestrian access to transit</td>
<td>• Local and regional transit agencies: Valley Metro (Phoenix area), Sun Tran (Tucson), NAIPTA (Northern Arizona).</td>
</tr>
</tbody>
</table>
### Table 4. Update Assessment Categories, Outcomes, and Potential Data Sources (continued)

<table>
<thead>
<tr>
<th>Assessment Category</th>
<th>Products/Outcomes</th>
<th>Data Sources</th>
</tr>
</thead>
</table>
- Assessment of consistency of ADOT bicycle and pedestrian policies, design standard drawings, and guidance with AASHTO guidance and criteria  

**Specific 2003 Plan Recommendations that will be reviewed:**  
- Designation of bicycle and pedestrian contacts within each district (Table 3, item 6.2)  
- Design guidelines (Table 3, 8.1)  
- Maintenance guidelines (Table 3, 9.1)  
- Review existing policies and policy revisions included in the report (Table 3, 10.2)  
- Develop enforcement strategies and programs (Table 3, item 11.5 and 11.6)  
- Communication procedure between ADOT Bicycle and Pedestrian Coordinator and District and Regional Traffic Engineers (Table 3, item 13.4)  
- Bicycle and Pedestrian Facility Action Plans (Table 3, 13.24)  
- Maintenance and Facility Request System (Table 3, 13.25)  
- Statewide Bicycle and Pedestrian Committee (Table 3, item 13.26)  
- Rural-specific Design Guidelines (Table 3, 13.28)  
- Pedestrian Focused Action Plan (Table 3, 13.29) | - Arizona Smart Growth Laws and Policies  
- Trip Reduction Laws and Policies  
- Policies or laws regarding expenditure of highway funds on bicycle and pedestrian facilities  
- Arizona Revised Statues  
- ADOT Traffic Engineering Policies, Guidelines, and Procedures  
- ADOT Roadway Design Guidelines  
Bicycle and Pedestrian Demand on State Highways

This subtask will evaluate, based on existing available data, the current demand for bicycling and walking on the state highway system. This assessment will result in the following:

- **Summary of available data on current levels of bicycling and walking transportation trips in Arizona**, as obtained from available data sources such as the U.S. Census Data, American Community Survey, and data programs of Arizona MPOs, COGs, cities, and towns.

- **Summary update (to ADOT’s PSAP and BSAP) on the current numbers of injuries and fatalities involving bicyclists and pedestrians on State Highways.**
  This assessment will incorporate and consider the recently completed ADOT PSAP and the BSAP. This analysis will measure progress toward achieving the goals of the PSAP and the BSAP. Data will be obtained from the ADOT Safety Data Mart and ADOT Traffic Records Section.

- **Assessment of potential bicycle and pedestrian demand along state highways.**
  This assessment will incorporate findings from the Pedestrian Demand Index for State Highway Facilities, completed during Phase IV Bicycle and Pedestrian Plan Implementation Activities (2007). The 2007 assessment reviewed land use density and the local transportation network adjacent to state highways to estimate the propensity for pedestrian travel, if facilities were provided. Stakeholder survey will be another input to this assessment. Survey input provided during the PSAP and the BSAP will be reflected in the assessment.

- **Map of desired travel corridors for bicycle and pedestrian trips.**
  State highway segments with high bicycle usage will be identified through a combination of SC input, public survey input, review of planned U.S. Bicycle Routes and tour company routes, and outreach to recreation and land management agencies such as the National Park Service, U.S. Forest Service, Arizona Game and Fish, and others. This map will update the Arizona Bicycle Network in the 2003 Plan. The map will incorporate work completed for the Cycle Arizona Bicycle Map, most recently updated in July 2009. The 2009 update included rumble strip information.

State Highway Bicycle and Pedestrian Facilities

This subtask will evaluate, based on available data, the current status of bicycle and pedestrian facilities on state highways. This assessment will result in the following:

- **Current conditions of existing bicycle and pedestrian transportation infrastructure** (on-road and off-road facilities) will be summarized utilizing available databases such as HPMS, ADOT Photo Log, and the ADOT Bridge Inventory. This task may include an update to mapping reflecting bicycle infrastructure conditions, such as the 2003 Plan Right Shoulder Width map and Relative Cost of Shoulder Widening mapping. Each of these updated data sets will be compared to those in the 2003 Plan to show progress made.
The 2003 Plan produced the Bicycle Conditions Score. Score development considered data that affects bicycling conditions (e.g., effective right shoulder width, traffic volumes, truck traffic). The Bicycle Conditions Score for all state highway segments will be updated, and the data will be compared to 2003 conditions to demonstrate the change in conditions as compared to the 2003 Plan. Critical segment gaps and deficiencies will be summarized.

An assessment of pedestrian facilities (sidewalks, pathways, wide shoulders in rural areas) along state highways will be performed through a comparison of the previously completed pedestrian demand assessment with existing facilities. The ADOT Photo Log will inform the assessment. Recommendations for improving walking conditions on the significant corridors will be made.

Existing jurisdictional bicycle and pedestrian plans will be inventoried. These will be reviewed to determine recommendations for ADOT facilities as they pertain to bicycling and walking. Recommendations will be made as to how to address any differences between the ADOT plan and a jurisdictional plan.

Stakeholders represent a key input to the identification of bicycle and pedestrian conditions on the state highway system. In collaboration with ADOT CCP, we will develop a web-based survey to be distributed to the public. The 2003 Plan also solicited direct input from the ADOT District Engineers. District Engineer and SC member input will be important and will be obtained through interviews, as appropriate.

The Arizona Bicycle Network (2003 Plan) includes the ADOT State Highway system and regionally significant non-ADOT bicycle facilities from existing local and regional bicycle and pedestrian plans. We will review the 2003 Arizona Bicycle Network and identify additions to the network to reflect improvements that have been made in the last several years. Considerations may include expected connectivity with major destinations within the state and to adjacent states, gaps between bicycle/pedestrian networks of separate jurisdictions, existing usage based on surveys and pedestrian demand assessments, alternatives to the state highway system, and the existing facility inventory. The network review will include significant input from the SC. Mapping will be created that depicts the significant improvements to the Arizona Bicycle Network.

**Multimodal Connectivity**

This subtask will assess accessibility to transit for bicyclists and pedestrians. Assessment areas may include availability of bicycle parking and security and availability of bike-on-bus racks/features. Policies of transit providers will be reviewed and deficiencies identified. State highways with bus routes will be identified; pedestrian and bicycle deficiencies will be identified. For example, the assessment may consider availability of sidewalks leading to and from transit stops that are located on state highways.


This subtask will inventory and summarize existing and emerging bicycle and pedestrian-related policies, plans, maps, and implementation procedures to ensure consistency in the
planning process, and to identify policy or plan elements that are inconsistent with the Bicycle and Pedestrian Plan vision and goal statements. These plans include state, town, city, tribe, county, regional, and MPO/COG bicycle and pedestrian master plans; Arizona statutes; Arizona Growing Smarter statutes; and Arizona Smart Growth Scorecard and associated guidelines and policies. A list of existing plans will be developed for review by the SC.

This task will also review existing ADOT policies, guidelines and standard drawings to identify consistency with existing and emerging national standards and guidelines. We will suggest modifications where appropriate or new standards, sections, and/or maintenance practices that may illustrate how to provide for bicycle or pedestrian travel in areas that are constrained. Based on ADOT project manager direction and SC input, the ADOT Bicycle Policy may also be reviewed. Potential revisions to the Bicycle Policy may be identified.

A statewide pedestrian policy does not exist. A draft pedestrian policy was developed as part of previous 2003 Bicycle and Pedestrian Plan implementation activities. SC and ADOT input will be solicited, and a draft pedestrian policy may be proposed. The pedestrian policy may include guidance and criteria to determine if sidewalks are required, and guidance for consideration of pedestrian crossing treatments (e.g., pedestrian hybrid beacons).

In 2009, ADOT sponsored two “Laying the Foundation for Complete Streets” training courses. A follow-up training course, “Complete Streets Policy Development,” was held in September 2009 with the ADOT leadership team. A Draft Complete Streets Policy was developed. The status of the Complete Streets Policy may be reviewed during the Plan Update.

Activities

Bicycle and Pedestrian Demand on State Highways

- Obtain current-year databases to provide information on bicycling and walking on the state highway system: HPMS, ADOT Highway Log, crash records, ADOT Photo Log, available GIS information from ADOT MPD GIS Team.
- Describe current levels of bicycling and walking transportation trips in Arizona from the following data sources: U.S. Census, American Community Survey, and data programs of Arizona MPOs, COGs, cities, and towns.
- Assess potential bicycle and pedestrian demand along state highways; consider the Pedestrian Demand Assessment completed in 2007.
- Summarize current locations, numbers of injuries and fatalities involving bicyclists and pedestrians on State Highways.

State Highway Bicycle and Pedestrian Facilities

- Update bicycle and pedestrian infrastructure mapping to reflect current conditions: Right Shoulder Width map, Relative Cost of Shoulder Widening map, Bicycle Conditions Score, Map of Desired Travel Corridors map, and the Arizona Bicycle Network.
Inventory and assess pedestrian facilities on state highways.

**Multimodal Connectivity**

- Identify state highways with bus routes.
- Inventory and summarize policies of transit providers.
- Assess accessibility to transit for bicyclists and pedestrians; assessment areas may include availability of bicycle parking and security, and availability of bike-on-bus.


- Inventory existing jurisdictional bicycle and pedestrian plans; summarize recommendations for ADOT facilities as they pertain to bicycling and walking.
- Assess ADOT policies, guidelines, and standard drawings for consistency with existing and emerging national best practices and standards.
- Collaborate with ADOT CCP to develop a web-based stakeholder survey to solicit input on bicycling and walking conditions on the State Highway System. Develop a survey to be distributed to ADOT District Engineers to solicit their input and perspectives on bicycling and walking needs on Arizona’s highways. Follow-up with telephone interviews as appropriate and as required.
- Prepare draft Working Paper No. 2 which will describe current conditions and needs for bicycling and walking on the state highway system.
- Submit draft Working Paper No. 2 to the ADOT Project Manager for review and approval for distribution to the SC.
- Schedule, prepare for, and attend SC Meeting No. 3 where Working Paper No. 2 will be presented. The Kimley-Horn team will prepare a meeting summary.
- Address SC comments and prepare the final Working Paper No. 2 and submit the final Working Paper to the ADOT Project Manager for posting on the ADOT website.

**Deliverables**

- SC Meeting No. 3 meeting agenda, presentation materials, and meeting summary.

### 8.4 Task 4 — First Phase of Public Involvement

**Purpose**

Support ADOT CCP in implementation of the first phase of public involvement and in the development of Public Involvement Summary Report No. 1.

**Approach**

The first phase of public involvement will facilitate public review and input on work tasks completed for the Plan, and specifically the draft vision, goal statements,
performance criteria, and assessment of current conditions and needs. It is anticipated that
the first phase of public involvement will be completed electronically and a mechanism
by which the public can submit their comments via the web will be established. Kimley-
Horn will support ADOT CCP in preparation of informational material. Hard copies of
all materials will be available upon request to accommodate those without internet
access.

ADOT CCP will prepare a comprehensive mailing list for this study and handle all
mailings, prepare and issue a news release, and document the public involvement process
in a summary report.

Activities

- Collaborate with ADOT CCP for the planning and implementation of the first
  phase of public involvement.
- Prepare informational material to support public outreach efforts.
- Upon completion of the first phase of public involvement tasks, review public
  comments received and support ADOT CCP to develop responses as necessary.

Deliverables

- Information material to support the first phase of public involvement.
- Public comment response matrix.

8.5 Task 5 — Working Paper 3: Activities to Achieve the Vision
and Goals

Purpose

Identify activities that are required to achieve the vision and goals.

Approach

This task will recommend specific activities, projects, strategies, tools, resources,
programs, and data that are required to achieve the vision and goal statements. These
activities will establish the need for modifications and improvements to the state highway
system. The recommendations will be based on the needs and deficiencies identified in
Task 3, and on SC and public input received during the first phase of public involvement
activities.

Recommendations will be prioritized and implementing agencies/entities will be
identified. Elements that may be addressed during this task may include the following:

- Activities to Improve Bicycle and Pedestrian Facilities on State Highways
- Activities to Improve Bicycle and Pedestrian Considerations in ADOT Design
guidelines, policies, and procedures
- Activities to Improve ADOT Bicycle and Pedestrian Planning
- Activities to Improve Pedestrian, Bicyclist, Motorist, and Law Enforcement
  Education Activities
- Coordination with Local Agencies and Regional MPOs and COGs
Bicyclist and Pedestrian Safety on State Highways

Bicycle and Pedestrian Facilities on State Highways

A list of critical bicycle and pedestrian deficiencies on state highway segments will be developed. The list of critical segments may inform Transportation Enhancement, Congestion Mitigation and Air Quality (CMAQ), Safe Routes To School (SRTS), and other funding applications or facilitate identification of Projects of Opportunity. The list will be based on the existing conditions analysis, SC input, and public input through the web-based survey. Costs, where available and applicable, may be included.

Recommendations may include development and application of criteria to prioritize and to identify specific facility-related improvements. Potential criteria may include:

- Closure of critical gap or correction of bottleneck in existing system
- Segments that will attract a high use
- Current availability and/or suitability of right-of-way
- Service to previously underserved areas of Arizona
- Cost effectiveness
- Projected reduction in vehicle trips or vehicle miles traveled
- Commuter route
- Integration into the existing regional and statewide bikeway system
- Interface with other modes of transportation
- Local political and community support
- Adopted bicycle touring routes
- Recommendations may also identify policy and planning activities required to improve accessibility to transit on state highways.

Bicycle and Pedestrian Considerations in ADOT Design Standard Drawings and Policies

Recommendations may identify changes to ADOT planning, design, policies, and procedures. This could include revisions to the ADOT Bicycle Policy and a new ADOT Pedestrian Policy, or recommendations to be incorporated into the forthcoming ADOT Multimodal Planning Smart Transportation Guidebook.

ADOT Bicycle and Pedestrian Planning

Recommendations may identify other studies, mapping, and analysis that are needed to achieve the vision and goals. Potential topic areas include:

- Enhanced coordination of transportation and recreational bicycle and pedestrian facilities and programs.
- Development of a mechanism to evaluate the performance of the state highway system containing implemented projects against the performance of the original system.
- Development of specific bicycle and pedestrian planning programs based on League of American Bicyclists (LAB) feedback on Arizona’s Bicycle Friendly State Award Recognition Ranking Application.
Pedestrian, Bicyclist, Motorist, and Law Enforcement Education Activities

Support components including safety, education, enforcement and marketing can have a significant impact on the use and safety of non-motorized transportation.

Over the past several years, the Arizona Bicycle and Pedestrian Program has developed several education materials including Share the Road Guides, Arizona Bicycling Street Smarts, and the Cycle Arizona Bicycle User Map. Other local agencies have also developed bicycle and pedestrian campaigns, and Valley Metro received grant funding for a statewide bicycle and pedestrian education campaign. The Plan Update may recommend actions to improve the coordination of educational activities throughout the state, and investments are maximized through increased coordination.

Plan recommendations may outline education, encouragement, and law enforcement component activities to be conducted by the ADOT Bicycle and Pedestrian Program over the next several years. A key need in the state is a collaborative effort to provide bicycle and pedestrian education to law enforcement.

Coordination with Local Agencies and Regional MPOs and COGs

Activities may be identified to enhance the relationship of ADOT, MPOs, COGs, and local plans for bicyclists and pedestrians, ensuring that such plans are coordinated among the member agencies.

Bicyclist and Pedestrian Safety on State Highways

Recommendations may build upon those of the ADOT BSAP and ADOT PSAP. Bicycle and pedestrian safety may also be enhanced through reviewing the current conditions inventory data and survey input to identify site-specific facilities. These could include grates, railroad tracks, narrow shoulders or outside lane, among other items on the statewide system.

Activities

- Prepare and submit to the ADOT Project Manager an outline of Working Paper No.3. Refine the outline based on ADOT Project Manager input.
- Prepare draft Working Paper No. 3. Working Paper No. 3 will identify activities required to achieve the ADOT Bicycle and Pedestrian Plan vision and goal statements, as identified in Task 2.
- Submit draft Working Paper No. 3 to the ADOT Project Manager for review and approval for distribution to the SC.
- Schedule, prepare for, and attend SC Meeting No. 4 where Working Paper No. 3 will be presented. The Kimley-Horn team will prepare a meeting summary.
- Address SC comments and prepare final Working Paper No. 3 and submit the final Working Paper to the ADOT Project Manager for posting on the ADOT website.
8.6 Task 6 — Second Phase of Public Involvement

Purpose
Support ADOT CCP to implement the second phase of public involvement.

Approach
The purpose of the second phase of public involvement is to facilitate public review and input on work tasks completed for the Plan, and specifically on the identification of activities required to achieve the vision and goals. It is anticipated that the second phase of public involvement will be completed electronically and a mechanism by which the public can submit their comments via the web will be established. Kimley-Horn will support ADOT CCP in preparation of informational material. Hard copies of all materials will be available upon request to accommodate those without internet access.

ADOT CCP will prepare a comprehensive mailing list for this study and handle all mailings, prepare and issue a news release, and document the public involvement process in a summary report.

Activities
- Collaborate with ADOT CCP for the planning and implementation of the second phase of public involvement.
- Prepare informational material to support public outreach efforts.
- Upon completion of the second phase of public involvement tasks, review public comments and support ADOT CCP to develop responses as necessary. ADOT CCP will develop a Public Involvement Summary Report.

Deliverables
- Informational material to support the second phase of public involvement.
- Public comment response matrix.

8.7 Task 7 — Draft Final Report (2012 Statewide Bicycle and Pedestrian Plan)

Purpose

Approach
The Draft Plan will compile findings and recommendations from Working Papers 1, 2, and 3. The Draft Plan (2012 Statewide Bicycle and Pedestrian Plan) will list specific and
prioritized projects and planning activities, and recommend additional policies, tools, resources, programs, or data that are needed to meet the needs of bicyclists and pedestrians on the state highway system. An Executive Summary will describe the key issues within the Plan.

The Draft Plan will be presented at SC Meeting No. 5. The Draft Plan may also be made available for public comment. Comments received from the SC and the public review will be discussed with the SC and addressed in a revised Final Report in Task 8.

Activities

- Prepare an outline for the Final Report and Executive Summary that provides the most relevant information from Working Papers No. 1, 2, and 3. Present to the ADOT Project Manager for approval. Prepare draft Final Report and Executive Summary in conformance with the approved outline.
- Submit the draft Final Report and draft Executive Summary to the ADOT Project Manager for review, approval, and distribution to the SC.
- Schedule, prepare for, and attend SC Meeting No. 5 at which the draft Final Report and Executive Summary will be presented. The Kimley-Horn team will prepare a meeting summary.
- Compile comments received on the draft Final Report and draft Executive Summary and prepare a comment resolution summary.

Deliverables

- Draft Statewide Bicycle/Pedestrian Plan.
- Draft Executive Summary.
- SC Meeting No. 5 agenda, presentation materials, and meeting summary.

8.8 Task 8 — Final Report (2012 Statewide Bicycle and Pedestrian Plan)

Purpose

Prepare a Final Report (2012 Statewide Bicycle and Pedestrian Plan) and Executive Summary.

Activities

- Respond to comments received on the Draft Plan, and prepare the Final 2012 Statewide Bicycle and Pedestrian Plan.
- Distribute to each member of the SC a CD containing the Working Papers, Final Report, and the Executive Summary. Produce and submit to the ADOT Project Manager 10 copies of the Final Report and Executive Summary, and 5 CD copies.

Deliverables

- Final 2012 Statewide Bicycle and Pedestrian Plan.
- Final Executive Summary.
- PowerPoint presentation of the Final Plan.
• Final Plan GIS coverage(s).
• CD containing study documents and deliverables.