## Prescott Pedestrian and Bicycle master Plan Appendices

## **Appendix A**Current Trails and Outdoor Recreation Map in Pocket

http://www.cityofprescott.net/\_d/trailmap\_8th\_print\_web.pdf

**City Of Prescott Sidewalk Locations Map** 

(fold-out to be inserted)

## Appendix B Bicycle and Pedestrian Collision Analysis January 2006 thru June 2008

Transportation Services Division Public Works Department City of Prescott, Arizona

#### **Executive Summary**

Collisions between bicycles, pedestrians and vehicles in the City of Prescott continue at a steady pace on an annual basis. Although efforts have been made over the past several years to reduce the number of collisions, a more complete understanding of these crashes is necessary in order for the City to decrease the number of collisions. This report will analyze collisions between bicycles, pedestrians and vehicles in the City of Prescott that occurred in the years 2006, 2007 and the first six months of 2008. We will attempt to identify any commonalities between these collisions by looking at collision characteristics, traffic characteristics and roadway design characteristics.

Why does this report refer to collisions between motorists and bicycles or pedestrians as collisions and not accidents?

Motor vehicle collisions are predictable, preventable events. Continued use of the word "accident" promotes the concept that these events are outside of human influence or control. In fact, they are predictable results of specific actions.

Since we can identify the causes of crashes, we can take action to alter the effect, and avoid collisions.

#### Introduction

The last bicycle and pedestrian study was conducted by a private firm that encompassed years 2000 through September 30, 2002 and examined 99 collisions. This study is a more detailed analysis that encompasses years 2006 through June 30 of 2008 and 90 collisions. These collisions were cross-referenced by user characteristics: roadway, traffic, and intersection characteristics to determine any outstanding associations. A need exists to develop a better picture between the types of collisions and the physical conditions of a roadway that may have contributed to the collision. It is with a better understanding of this relationship that the City will be properly equipped to analyze and recommend appropriate engineering, education and enforcement measures for the increased safety of bicyclists and pedestrians.

There are a couple of limitations to this study. First, the information analyzed comes from the Arizona Traffic Accident Report that is filled out by the investigating agency. During the review of those reports, it was noted that information fields were often left blank by the investigator. Consequently, a picture of the comparison is slightly shaded. The second limitation is the number of collisions reported. The requirement for reporting a collision is that it either involves injury and/or results in damage exceeding \$1,000.00. Collisions between bicyclists and pedestrians with vehicles usually meet the injury threshold but seldom meet the damage value of \$1,000.00 or more. A pedestrian or bicycle collision may also go unreported because there may be no apparent injury at the time of the collision, with symptoms of injury appearing later.

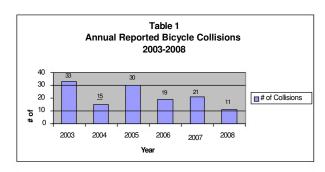
#### **Crash Overview and Trends**

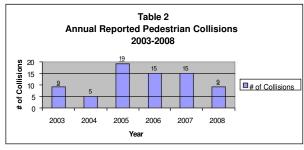
#### **General Characteristics**

Annual bicycle and pedestrian collisions with vehicles and their severity.

The number of bicycle collisions over the past five and a half years have remained fairly steady, averaging 23.3 a year. The projected number of collisions for 2008 is 22. (Note: not all the collisions for 2004 were available for review. Consequently, statistics for that year appear low). No fatalities involving a bicyclist have occurred during this time period. (Table 1)

Pedestrian collisions were low in years 2003 and 2004, averaging 7 a year. For the past 3½ years the average is 16.8, and the projected number for 2008 is 18. One fatality did occur in 2007 in which the pedestrian attempted to cross a fourlane street, mid-block, (not in a crosswalk) at night and was struck by an impaired driver driving without his headlights on. (Table 2)





The severity of collisions is broken down into five categories: 1. Non-Injury; 2. Possible Injury; 3. Non-Incapacitating Injury; 4. Incapacitating Injury; and, 5. Fatality.

During the 2½ year study period for bicycle collisions, the average possible injury was 42.9%, non-incapacitating injury was 50.6%, incapacitating injury was 6.5%, and, no fatalities. Only an average of 17.8% of the bicycle collisions did not involve a reported injury.

Table 3
Annual Reported Collisions 2006-2008

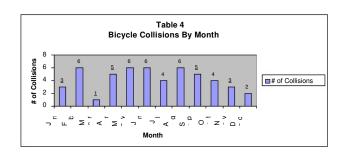
Bicycle Collisions	2006	2007	2008
Total Collisions	19	21	11
Injury Collisions	16	15	10
% of Injury Collisions	84.2	71.4	90.9
% of Non-Injury Collisions	15.8	28.6	9.1
% Possible Injury	18.8	40	70
%Non-Incapacitating Injury	75	46.7	30
% Incapacitating Injury	6.3	13.3	0
Fatal	0	0	0
% Ambulance Used	50	60	20

Pedestrian Collisions	2006	2007	2008
Total Collisions	15	15	9
Injury Collisions	14	14	7
% of Injury Collisions	93.3	93.3	77.8
% of Non-Injury Collisions	6.7	6.7	22.2
% Possible Injury	42.9	42.9	0
% Non-Incapacitating Injury	42.9	35.7	100
% Incapacitating Injury	14.3	14.3	0
<u>Fatal</u>	<u>0</u>	<u>1</u>	<u>0</u>
% Ambulance Used	57.1	42.9	71.4

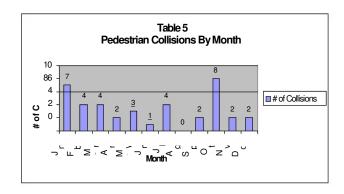
Of the total pedestrian collisions, an average of 28.6% had possible injuries, 59.6% non incapacitating injuries, 9.5 % incapacitating injuries and one fatal. Only 11.9 % did not involve a reported injury.

#### **Collisions by Month**

As was expected, because of the four seasons in Prescott, bicycle collisions were more prevalent in the warm weather months when bicycle use would be at its highest. Except for February, April through September showed the highest numbers of bicycle collisions. (Table 4)

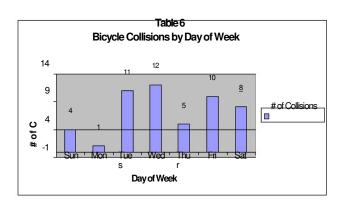


The same cannot be said for pedestrian collisions. Pedestrian collisions jumped dramatically from month to month. It was slightly higher in the colder weather months, possibly due to the fact that the days are shorter and there are more hours of darkness. (Table 5)

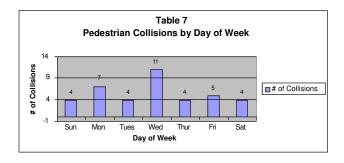


#### Collisions by Day of Week

Although there is no data to identify the purpose of the bicycle riders, it can be assumed the two most common trip types are recreational and commuter. One would suspect that most recreational trips occur on the weekend. However, as Table 5 shows, the top three days of bicycle collisions occurred on weekdays, indicating that a large portion of bicycle use is for commuter trips or that commuter trips occur during peak hour traffic, and as a result, create more vehicular exposure to the bicyclists. (Table 6)



The pedestrian collisions are fairly and equal throughout the week, with the exception of Wednesday which peaked higher than any other day. (Table 7)



#### Collisions by Time of Day

Bicycle/vehicle collisions occurred most frequently in the mid to late afternoon hours of 3:00 pm to 5:00 pm. (23.5%) The AM high was 11:00 am to 1:00 pm. (19.6%). The next two highest times were during the so called rush hours of 5:00 pm to 7:00 pm (8) and 7:00 am to 9:00 am (6). (Table 8)

Pedestrian/vehicle collisions were also the highest during mid to late afternoon of 3:00 pm to 5:00 pm. (23.1%) The AM high was 9:00 am to 11:00 am (15.4%). (Table 9)

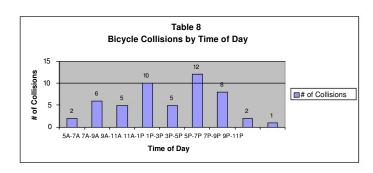


Of all the bicycle/vehicle collisions in the City of Prescott, 80.4% involved male bicycle riders. Of that number, 22% were under the age of 18 and 9.8% were over 55 years of age. The female bicycle riders comprised 19.6% of the collisions. Only 10% were under 18 years of age and 10% over 55 years of age. (Table 10)

When it came to pedestrian/vehicle collisions, the gender gap narrowed somewhat. Males comprised 69.2% with 18.5% under the age of 18 and 33.3% over the age of 55. Females were involved 30.8% of the time with 8.3% under the age of 18 and 41.7% over the age of 55. (Table 11)

#### Collisions by Age

As can be expected the most common age group to be involved in a bicycle/vehicle collision was tied between 10 to 19 years of age and 20 to 29 years of age at 23.5% each. This could be attributed to the large number of school age riders and also those not old enough to have a driver's license or afford a vehicle. (Table 12)



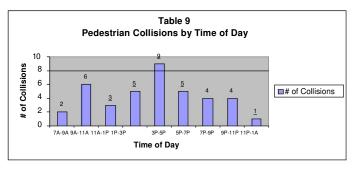


Table 10 - Bicycle Collisions by Gender & Age

	Male	Female
Number of Collisions	41	10
% of Collisions	<u>80.4</u>	<u>19.6</u>
Number Under 18	9	1
% Under 18	<u>22</u>	<u>10</u>
Number Over 55	4	1
% Over 55	9.8	10
All Others	<u>28</u>	<u>8</u>
% All Others	68.3	80

Table 11 - Pedestrian Collisions by Gender & Age

	Male	Female
Number of Collisions	27	12
% of Collisions	<u>69.2</u>	<u>30.8</u>
Number Under 18	5	1
% Under 18	18.5	8.3
Number Over 55	<u>9</u>	<u>5</u>
% Over 55	33.3	41.7
All Others	<u>13</u> 48.2	<u>6</u>
% All Others	48.2	50

Table 12 - Bicycle Collisions by Age

Age	Count	%
0-9 Years	<u>2</u>	<u>3.9</u>
10-19 Years	<u>12</u>	<u>23.5</u>
20-29 Years	<u>12</u>	<u>23.5</u>
30-39 Years	7	13.7
40-49 Years	<u>7</u>	<u>13.7</u>
50-59 Years	<u>8</u>	<u>15.7</u>
60-69 Years	0	02
70-79 Years	1	<u>0</u>
80-89 Years	<u>0</u>	<u>3.9</u>
<u>Unknown</u>	<u>2</u>	

#### **Pedestrian Collisions by Age**

Pedestrians, on the other hand, had four age groups that equaled the highest number involved in a pedestrian/vehicle collision. Ages 10-19, 20-29, 30-39 and 60-69 each had 15.4% of the collisions. (Table 13)

#### **Location Characteristics**

The Arizona Traffic Accident Report lists six categories from which the investigator can choose to describe the location characteristic.

The Intersection is described as the area inside the

The Intersection is described as the area inside the prolongation of the curb lines. The Junction area is the area 30 feet leading up to the intersection. Non-Junction area is the rest of the street that does not fall into the first two categories. Driveway Access, Alley Access and Alley are the remaining three. The most frequent location for bicycle/vehicular collisions is the intersection with 58.8 % occurring there. (Table 14)

The most frequent location for pedestrian/vehicular collisions is the non-junction area 41% with the intersection a close second at 33.3%. This indicates that pedestrians are not taking advantage of crosswalks at intersections. (Table 15)

#### **Roadway Classification**

The City of Prescott listed its streets under five classifications: Major Arterial, Minor Arterial, Major Collector, Minor Collector and Local. The most frequent bicycle/vehicular collisions occurred on minor arterials, 66.7% This could be attributed to the fact that many of the streets in the downtown area and those leading into and out of the City fall under this classification. Traffic is heavy and cars parked on the street are common. (Table 16)

The most frequent pedestrian/vehicular collisions also occur on the minor arterials, 53.9%.

Pedestrian traffic is heavy in the downtown area and many users don't walk to the intersections to use the crosswalk, but rather cross mid-block. (Table 17)

Table 13 - Pedestrian Collisions by Age

Age	Count	%
0-9 Years	<u>1</u>	<u>2.6</u>
10-19 Years	<u>6</u>	<u>15.4</u>
20-29 Years	<u>6</u>	<u>15.4</u>
30-39 Years	6	15.4
40-49 Years	<u>4</u>	<u>10.3</u>
50-59 Years	<u>4</u>	<u>10.3</u>
60-69 Years	<u>6</u>	<u>15.4</u>
70-79 Years	5	12.8
80-89 Years	<u>1</u>	<u>2.6</u>
<u>Unknown</u>	<u>0</u>	<u>0</u>

**Table 14 - Bicycle Collisions** 

Location Characteristic	Count	%
Intersection	30	58.8
Junction Area	<u>2</u>	<u>3.9</u>
Non-Junction	7	13.7
<u>Area</u>		
Driveway Access	<u>12</u>	<u>23.5</u>
Alley Access	0	0
<u>Alley</u>	<u>0</u>	<u>0</u>

**Table 15 - Pedestrian Collisions** 

Location		
<b>Characteristic</b>	Count	<u>%</u>
Intersection	13	33.3
Junction Area	6	15.4
Non-Junction Area	<u>16</u>	<u>41</u>
Driveway Access	3	7.7
Alley Access	<u>1</u>	2.6
Alley	0	0

**Table 16 - Bicycle Collisions** 

Roadway		
Classification	Count	<u>%</u>
Major Arterial	2	3.9
Minor Arterial	34	66.7
Major Collector	3	<u>5.9</u>
Minor Collector	0	0
Local	<u>12</u>	<u>23.5</u>

**Table 17 - Pedestrian Collisions** 

Roadway Classification Major Arterial	Count 2	<u>%</u> 5.1
Minor Arterial	21	53.9
Major Collector Minor Collector	<u>3</u> 0	7.7 0
Local	<u>13</u>	33.3

#### **Light Conditions**

92.2% of Bicycle/vehicle collisions and 69.23% of pedestrian/vehicle collisions occurred during daylight hours, indicating that the lighting condition was not much of a factor. (Tables 18 & 19)

#### **Weather Conditions**

As with the light conditions, the weather appears to have had little affect on the bicycle vehicle and pedestrian/vehicle collisions. It was clear for 86.3% of the bicycle collisions and clear for 76.9% of the pedestrian collisions. (Tables 20 & 21)

**Violation Behavior** 

When examining the 51 bicycle/vehicle collisions during this time period, twelve violation patterns were found. The most common was the bicyclist riding on the sidewalk (25.5%). This is a violation of the Arizona Revised Statutes. The second most common was the vehicle failing to yield to the bicyclist (23.5%). The third most common was the bicyclist riding through the crosswalk (21.6%), which is also a violation of the Arizona Revised Statutes. From this point, the frequency violation drops below 8%, encompassing a variety of violations on the part of both parties. In all, the violation behavior fell on the bicyclist two out of three times (66.7%). Of the 51 collisions, only 16 citations were issued (31.4%), eight to bicyclists and eight to vehicles. (Table 22)

**Table 18 - Bicycle Collisions** 

Light Conditions	Count	%
Daylight	47	92.2
<u>Dawn</u>	<u>0</u>	0
Dusk	1 1	2
Dark	3	5.9

**Table 19 - Pedestrian Collisions** 

Light Conditions	Count	%
<u>Daylight</u>	<u>27</u>	<u>69.2</u>
Dawn	0	0
Dusk	2	5.1
<u>Dark</u>	<u>10</u>	<u>25.6</u>

Table 20 - Bicycle Collisions

Weather Conditions	Count	<u>%</u>
Clear	44	86.3
Cloudy	<u>3</u> 3	<u>5.9</u>
Rain	3	5.9
Snow	1	1

**Table 21 - Pedestrian Collisions** 

Weather Conditions	Count	%
<u>Clear</u>	<u>30</u>	<u>76.9</u>
Cloudy	<u>36</u>	<u>15.4</u>
Rain	2 <u>1</u>	5.1
<u>Snow</u>		<u>2.6</u>

Table 22 - Bicycle Collisions

Violation Behavior	Count	%
	Count	/6
Bicycle Riding on Sidewalk	13	25.5
Vehicle Failed to Yield	12	23.5
Bicycle Riding on Wrong Side of Street	1	2
Bicycle Riding Through Crosswalk	11	21.6
Speed by Bicycle	1	2
Vehicle Open Door Into Bicycle	1	2
Bicycle Ran Red Light	1	2
Bicycle Ran Stop Sign	3	5.9
Bicycle Failed to Yield	4	7.8
Vehicle Ran Red Light	2	3.9
Vehicle Unsafe Passing	1	2
Speed by Vehicle	1	2

Regarding pedestrian/vehicular collisions, nearly half (48.7%) were the result of the vehicle not yielding to the pedestrian. Of the 39 collisions during this period, 15 citations were issued. Twelve (30.8%) to the driver of the vehicle and three to the pedestrian. (Table 23)

Table 23 - Pedestrian Collisions

<u>Violation Behavior</u> Vehicles Failed to Yield	<u>Count</u> 19	<u>%</u> 48.7
Other	7	18
Pedestrian Standing in Roadway	<u>5</u>	<u>12.8</u>
Pedestrian Failed to Yield	1	2.6
Skateboarding in Roadway	1	2.6
Pedestrian Crossing Road - Not in Crosswalk	6	15.4

#### Alcohol as a Factor

In collisions involving bicycles, only one during the study period had the presence of alcohol. The driver had been drinking, but it is unknown if the driver was ever charged.

Pedestrian collisions during the time period showed three collisions in which alcohol was present. In all three, the pedestrian had been drinking; and, in only one collision the driver of the vehicle had been drinking.

In all, alcohol played a small part in the collisions recorded over the study period: less than 2% in bicycle collisions, and less than 8% in pedestrian collisions.

#### **Safety Equipment**

On the State Accident Report, there is a box to record safety equipment; however, 35.3% of the time the box was left blank by the investigator and 52.9% of the time it was marked no safety equipment. In only 7.8% of the bicycle/vehicle collision was a helmet used. Other was marked 3.9% of the time. What exactly "other" refers to is unknown, as the investigator did not expound. (Table 24)

Table 24 - Bicycle Collisions Safety Equipment

Type	Count	<u>%</u>
Unknown	18	35.3
None Helmet Other	<u>27</u> <u>4</u> 2	<u>52.9</u> <u>7.8</u> 3.9

#### Bike Lane

All the roads in the City that recorded a bicycle collision were noted and examined for the presence of bike lanes. Of the twenty roads noted, only six (30%) had bike lanes; and, 33.3% of the bike collisions occurred on those six roads. Most bicycle/vehicle collisions occurred on Gurley St. (21.6%) which has no bike lanes. Most pedestrian/vehicle collisions also occurred on Gurley St. (23.1%).

#### **Direction of Motorist Movement at time of Collision**

The most common movement of vehicles involved in bicycle collisions was right turn (45.1%) followed closely by moving straight ahead (37.3%). Most often the bicycle was in the street (41.2%). (Table 25)

## Direction of Motorist Movement at Table 25 Time of Collision / Bicycle Collisions

Direction	Count	<u>%</u>
<u>Straight</u>	<u>19</u>	<u>37.3</u>
Right Turn	23	45.1
Left Turn	<u>8</u> 1	<u>15.7</u>
Stopped		2

## Direction of Motorist Movement at Time of Collision / Pedestrian Collisions

Direction	Count	%
<u>Straight</u>	<u>20</u>	<u>51.3</u>
Right	5	12.8
<u>Turn</u>		
Left Turn	<u>8</u>	<u>20.5</u>
Stopped	6	154

Pedestrians were most often involved in collisions when the vehicle was traveling straight ahead (51.3%) with the pedestrian either in the street or in a marked crosswalk (30.8% for both locations). (Table 26)

#### Where Was the Bicycle at Time of Collision

Riding in Street

Riding on Wrong Side

Riding in Bike Lane

#### Location Count % Riding in Crosswalk 23.5 12 <u>14</u> 21 Riding on Sidewalk 27.5

#### Table 26

#### Where Was the Pedestrian at Time of Collision

Location	Count	%
Marked Crosswalk	<u>12</u>	30.8
Unmarked Crosswalk	3	7.7
Mid-Block	7	18
Walking in Street	<u>12</u>	30.8
Driveway Access	3	7.7
<u>Other</u>	<u>2</u>	<u>5.1</u>

#### **BICYCLE / VEHICULAR COLLISIONS** 2006

41.2

3.9

<u>3.9</u>

2<u>2</u>

Date	Location	Description
2/12/2006	Gurley St @ McCormick	W/B bike riding on sidewalk on wrong side of road, rides into vehicle and into side of W/B vehicle that turns left onto McCormick
4/13/2006	Sheldon, 30' W. of Mt. Vernon	E/B vehicle attempted a left turn into a private drive but struck the bike who was W/B in street
5/19/2006	Gurley @ Sheldon	Car and bike were both E/B in the street on Gurley. Vehicle attempted a right turn into a private drive and struck the bike who had now caught up to the car and passing on right
5/24/2006	Carleton @ Cortez	The bike was traveling S/B on the sidewalk and on the wrong side of the street. He rode into the crosswalk and into the path of the W/B vehicle
5/26/2006	Willow Creek Rd. @ Country Park	As the vehicle was making a right on red from Country Park he was struck by the bicyclist who was N/B in the S/B lanes of traffic
6/27/2006	Whipple St @ Merritt Ave	The bicyclist was N/B on the east side sidewalk of Whipple and at Merritt he rode into the crosswalk as the W/B vehicle was attempting to make a right on red
7/7/2006	Miller Valley @ Hillside	The vehicle was W/B on Hillside and making a right on red onto Miller Valley Rd. He struck the bicyclist who was riding the bike E/B in the north crosswalk
7/12/2006	Goodwin, 600' W. of McCormick	The vehicle and bike were E/B in the street when the vehicle stopped mid block for a pedestrian. The bike could not stop and struck the rear of the car
7/15/2006	Merritt @ Montezuma	The bike rider was S/B on Whipple on the wrong side of the street and rode into the crosswalk at Merritt as the W/B vehicle was attempting to make a right on red
7/23/2006	Willow Creek , 400' No. of Ainsworth	The vehicle was N/B and attempted to turn left into a private drive and failed to yield to the bike who was S/B in the bike lane
8/25/2006	Willow Creek, 200' No. of Ainsworth	The car was N/B and making a left into a private drive when the S/B bike rode off the sidewalk and into the path of the car
8/30/2006	First St, 200' No. of Hillside	The car had parked facing south. He opened his door into the bicyclist who was S/B
9/9/2006	Willis @ Montezuma	The car was E/B on Willis and the bike E/B on the south sidewalk the car started a right onto Montezuma and struck the bike who was riding across Montezuma in the crosswalk
9/15/2006	Willow Creek @ Willow Lake	The car was S/B on Willow Lake and attempting a left turn onto Willow Lake. She failed to yield to the bicyclist who was N/ B on Willow Creek
10/6/2006	Whipple St @ Merritt Ave	The bicyclist was S/B on the sidewalk of Whipple on the wrong side of the street. He rode into the crosswalk and into the path of the W/B vehicle making a right turn
10/31/2006	Lincoln @ Merritt	The bicyclist was N/B on Lincoln when he was struck by the E/B vehicle on Merritt who failed to yield from a stop sign
11/7/2006	Sheldon @ Marina	The vehicle was W/B on Sheldon and the bike was also W/B but on the sidewalk, (north side). As the car made a right into a private drive the bike rode off the sidewalk and into the side of the vehicle
11/14/2006	Gurley @ Robinson	The bicyclist was riding on the sidewalk and on the wrong side of the street W/B. He rode into Robinson and was struck by the vehicle who was N/B and making a right onto Gurley

## BICYCLE / VEHICULAR COLLISIONS 2007

Date	Location	Description
1/9/2007	Miller Valley, 150' No. of Fair St	The vehicle was exiting a private drive and as she turned right onto Miller Valley she was struck by the bicyclist who was N/B, riding on the sidewalk, on the wrong side of the street
2/8/2007	Gurley St. @ Rush St	The bicyclist rode his bike into the roadway and was struck by the W/B vehicle
2/11/200 7	Montezuma @ Merritt	The vehicle was S/B on Montezuma at Merritt when he struck the bicyclist who was W/B on Merritt. The bicyclist disregarded the traffic signal
2/25/2007	SR 89 @ M.P. 316.5	The E/B bicyclist failed to yield from a private drive and rode into the path of the N/B vehicle
4/7/2007	SR 89, 50' No. of Rosser St	The bicyclist disregarded the red light at Rosser and made a left turn onto SR 89 and was struck by the N/B vehicle
4/11/2007	Miller Valley, 20' S. of Garden St	The bicyclist was riding S/B on the sidewalk and against traffic when he rode into the path of the vehicle who was exiting a private drive
4/14/2007	Iron Springs, 50' W. of Willow Creek	The vehicle was W/B on Iron Springs and attempting to turn into a private drive. At the same time the bicyclist, who was W/B on the sidewalk attempted to ride across the private drive
5/9/2007	Gurley St @ Park Ave	The bicyclist was W/B on Gurley and riding against traffic. At Park he rode into the crosswalk to continue W/B and was struck by the vehicle that was N/B and making a right on red
5/29/2007	Gurley St @ Arizona Ave	The bicyclist was walking S/B across Gurley in a crosswalk when the vehicle failed to yield while turning left from Arizona Ave and struck the bicyclist
8/11/2007	Gurley St @ McCormick St	The bicyclist was E/B on Gurley when the vehicle failed to yield while making a right on red and struck the bicyclist in the intersection of McCormick
8/11/2007	Montezuma @ Willis	The bicyclist was N/B on Montezuma when the vehicle who was W/B on Willis failed to stop for a red light and struck her in the intersection
8/15/2007	Gurley St @ Cortez St	The bicyclist was riding his bike E/B on the sidewalk against traffic on Gurley St. He continued into the crosswalk at Cortez. He noticed an E/B vehicle on Gurley making a left onto Cortez and in an attempt to avoid the car he fell
9/4/2007	Aubrey St 30' W. of Montezuma	The bicyclist had been riding N/B on the sidewalk against traffic on Montezuma when he rode behind a stopped car on Aubrey and cut across Aubrey. He was struck by a car that was W/B on Aubrey
9/12/2007	Washington @ Willis	The vehicle was S/B on Washington and struck a bicyclist who was W/B on Willis and ran a stop sign
9/26/2007	Boardwalk Ave @ Atlantic Ave	The bicyclist was S/B on Atlantic riding against traffic and failed to stop for a stop sign at Boardwalk and was struck by a W/B vehicle
10/3/2007	Sheldon, 300' E. of Alarcon	The bicyclist was W/B on the sidewalk of Sheldon St. At the alley he rode off the sidewalk and into the street and into the path of the vehicle who was also W/B on Sheldon
10/11/2007	Granite St 500' S. of Gurley St	A S/B vehicle on Granite attempted to turn left into a private drive and struck the bicyclist who was N/B on Granite
11/30/2007	Granite St @ Gurley St	The bicyclist was E/B on the sidewalk of Gurley and riding against traffic when he rode into the crosswalk and was struck be a S/B vehicle attempting to make a right on red
12/18/2007	Willow Creek Rd @ Rosser St	The bicyclist was riding N/B on the sidewalk of Rosser against traffic when he rode into the crosswalk and was struck by a W/B vehicle that was attempting to make a right on red
12/20/2007	Division St 170' S. of Whipple St	The vehicle was N/B on Division and attempted to turn left into a private drive. He failed to yield to the bicyclist who was S/B on Division

## BICYCLE / VEHICULAR COLLISIONS 2008

Date	Location	Description
1/12/2008	Montezuma St @ Carleton St	Car and bicycle were N/B on Montezuma. At Carleton the vehicle attempted a right turn and in doing so made contact with the bicyclist who was continuing N/B on his left
1/15/2008	Lincoln Ave @ Hillside Ave	The bicyclist was E/B on Hillside riding against traffic and failed to stop for a stop sign striking the vehicle that had been S/B but making a right turn onto Hillside
2/22/2008	Willow Creek Rd. 100' N. of Green Ln	The vehicle was S/B on Willow Creek and the bike was S/B in the bike lane when the vehicle drifted over and struck the bike
2/29/2008	Miller Valley, 100' S. of Osburn	The vehicle was E/B exiting a private drive when the bicyclist who was riding S/B on the sidewalk rode into his path

3/3/2008	Goodwin St @ Montezuma St	The bicyclist was N/B on Montezuma in the thru lane and on a green light when the vehicle, who was E/B ran the light and struck the bike
4/30/2008	Sheldon St 3' W. of Pleasant St	The bicyclist was E/B on the sidewalk of Sheldon riding against traffic. He rode into the crosswalk at Pleasant as the vehicle who was S/B was attempting a right on red
6/10/2008	Gurley St @ Granite St	The bicyclist was riding on the sidewalk, E/B, against traffic when he rode into the crosswalk he was struck by the S/B vehicle that was attempting a right turn on red
6/11/2008	Iron Springs @ Meadow Ridge	The bicyclist was riding W/B on the sidewalk of Iron Springs and against traffic. The vehicle was N/B on Meadow Ridge and as she attempted to make a right on red, struck the bike as she rode into the crosswalk
6/12/2008	Gail Gardner 370' E. of Iron Springs	The vehicle was N/B and attempting a left turn into a private drive and failed to yield to the bike who was S/B
6/25/2008	Gurley St @ Gail Gardner Way	The vehicle was S/B on a green light when it was struck by the bicyclist who was E/B and failed to stop for a red light
6/28/2008	Rodeo Dr. 70' No. of Schemmer Dr	Both vehicle and bike were going N/B around a stopped vehicle in the roadway when the bike was rear ended be the vehicle

## PEDESTRIAN / VEHICLE COLLISIONS 2006

Date	Location	Description
1/30/2006	Hillside Ave 5' W. of Walnut St	The Ped was walking S/B across Hillside when the S/B vehicle turned right from Walnut and struck the Ped
3/9/2006	Gurley St. @ Montezuma St	The Ped was walking across Gurley on a green light. The vehicle was S/B on Gurley and attempted to make a right turn, failing to yield to the ped in the crosswalk
4/19/2006	Gurley St. 50' W. of Willow St	The Ped was crossing Gurley N/B Mid block when an E/B vehicle struck her
5/6/2006	Miller Valley 80' No. of Brannen Ave	The Ped was crossing the road in a N/E direction, mid clock when he was struck by a N/B vehicle
5/13/2006	Montezuma St. @ Gurley St	The vehicle was E/B on Gurley and attempting a left turn onto Montezuma. He failed to see the Ped walking E/B in the crosswalk and failed to yield
5/22/2006	SR 89 300' No. of Industrial Wy	The vehicle was N/B when a tire come off his trailer and struck the Ped. The Ped was a flagger in a construction zone
7/4/2006	Pioneer Prkwy 432' W. of M.P. 3	The Ped was standing on the edge of the median for the inside lane of W/B traffic. The vehicle was W/B in the inside lane when the mirror struck the Ped. Area is dark with no lights
9/12/2006	Willow Creek, 125' So. of Danita St	Veh #1 was S/B and failed to stop for the vehicle in front of him who had stopped waiting for a Ped to finish crossing a private drive Vehicle #2 was pushed into the Ped
10/4/2006	Middlebrook, 1/4 Mi W. of Highland	The Ped was standing in the road talking to the driver of a stopped vehicle when he was struck by a W/B vehicle passing the stopped vehicle
10/5/2006	Overland Rd. @ Gurley St	The vehicle was N/B and attempting to enter onto Gurley when the Ped started to cross Overland W/B and was struck by the vehicle
10/6/2006	Gurley St @ Park Ave	The vehicle was N/B on Park and attempting a left turn onto Gurley. He failed to yield to the Ped who was S/B in the crosswalk
10/11/2006	Ruth St, 80' So. of Scott Dr	The Ped was riding a skateboard S/B in Ruth. He veered into the path of Veh #1 who was also S/B
10/13/2006	Iron Springs, 300' W. of Miller Valley	the Ped tried to cross the street N/B, mid block and ran into the side of veh #1 who was E/B
10/27/2006 12/2/2006	Lincoln Ave, 75' So. of Merritt Ave Gurley St. @ Park Ave	The Ped was crossing the street, mid block, E/B when she was struck by a N/B vehicle The vehicle was N/B on Park and attempting a left turn onto Gurley He failed to yield to the Ped who was S/B in the crosswalk

## PEDESTRIAN / VEHICLE COLLISIONS 2007

Date	Location	Description
1/3/2007	First St, 50' No. of Vallejo St	The Ped was walking in the street around a parked car when she was struck by a N/B vehicle
1/31/2007	Goodwin St @ Montezuma	The Ped was crossing on a green light and in the crosswalk S/B when the S/B car attempted a right turn and failed to yield to the Ped
2/19/2007	Mt. Vernon St @ Willis St	The Ped was E/B in a crosswalk when a W/B vehicle made a right turn to go S/B on Mt. Vernon and struck the Ped
2/28/2007	Gurley St, 79' E. of Cortez St	The Ped was standing behind his parked car when a W/B vehicle made contact with him.

3/3/2007	Lincoln St 10' No. of Grove Ave	The vehicle was S/B and made a left turn onto Lincoln, loosing control and striking two Peds standing on the side of the street
4/2/2007	Montezuma St, 5' So. of Carleton St	The Ped was crossing E/B in the crosswalk and with the green light when he was struck by Veh #1 who had been E/B and making a right to go S/B
7/2/2007	Sheldon St. @ Pleasant St	Veh #1 was E/B and attempting a left turn when he failed to yield to the Ped who was crossing the street in a crosswalk, W/B
7/10/2007	Cortez St. 250' So. of Gurley St	The Ped attempted to cross the street mid block W/B and was struck by a N/B vehicle driven by an intoxicated driver and operating without head lights
7/13/2007	Cortez St, 75' So. of Sheldon St	The Ped attempted to cross the street mid block E/B when he was struck by a S/B vehicle. The Ped had emerged from between two parked cars
9/12/2007	Granite St, 65' So. of Leroux St	The Ped was walking S/B in or on the edge of the street when the S/B vehicle struck the Ped
10/28/2007	Wagon Trl @ Gail Gardner	the Ped was standing in the street as a result of a previous collision when Veh #1 from that collision backed up to flee and struck the Ped
10/29/2007	Butterfield, 60' E. of Robinson	The driver of Veh #1 was E/B and intentionally ran over the Ped who was walking E/B on the side of the road
11/1/2007	Park Ave @ Country Club Dr	Veh #1 was E/B on Country Club and attempting a left turn onto Park when he failed to yield to the Ped who was crossing Park W/B in a crosswalk
11/28/2007	Sixth St @ Navajo St	The Ped was walking S/B on the edge of the road when he was sideswiped by a S/B vehicle
12/9/2007	Gurley St. @ Montezuma St	The veh was S/B and attempting a left turn when he failed to yield to the two Peds who were walking in the crosswalk S/B and struck each

### PEDESTRIAN / VEHICLE COLLISIONS 2008

Date	Location	Description
1/10/2008	Whipple St. @ Division St	The vehicle was S/B on Division and attempting to turn left to go E/B on Whipple. The Ped was crossing Whipple N/B in a cross-walk and with the light when struck
1/15/2008	Willow Creek, 150' No. of Ainsworth	The vehicle was E/B exiting a private drive when it failed to yield to the Ped who was on the sidewalk and crossing the drive N/B
1/23/2008	Gurley St. @ Marina St	The vehicle was S/B attempting a left turn on a green light. The Ped was N/B in the crosswalk and was struck by the turning vehicle who had failed to yield to the Ped
1/30/2008	Gurley St, 10' W. of Summit	The vehicle was W/B on Gurley and failed to yield to the Ped who was crossing N/B in a crosswalk
2/3/2008	Sheldon St, 25' W. of Arizona Ave	The ped was trying to cross Gurley St N/B mid block when he ran into the path of Veh #2 who was W/B and unable to avoid the ped
2/22/2008	Miller Valley, 50' No. of Rodeo Dr	The vehicle was W/B exiting a private drive when he made contact with the Ped who was walking N/B on the sidewalk
3/9/2008	Middlebrook Rd. 100' So. of Highland	The vehicle was N/B driving around two stopped vehicles in his lane when the Ped ran out from behind them and into his path
3/26/2008	Willow Creek @ Country Park	The Ped was walking N/B on the sidewalk and started across Country Park on a green light and in the crosswalk when the E/B vehicle started to make a right on red and struck the Ped
6/9/2008	Willis St, 150' W. of Virginia St	The vehicle was N/B in an alley and as she exited the alley she made contact with the Ped who was E/B on the sidewalk riding a skateboard

#### **Review of Major Findings**

An analysis of the bicycle/vehicle and pedestrian/vehicle collisions from January 2006 to July 2008 did not identify any significant changes in the trends from the study done from January 2000 to September 2002. According to the earlier study, a bicycle or pedestrian involved collision occurred every 10.2 days. The current study shows that the frequency of the collisions occurred every 10.1 days. However; if the numbers of the first six months of the current year (2008) continue at the same pace, both bicycle and pedestrian collisions will surpass those of each of the last two years.

No fatalities were noted in the previous study. There was one pedestrian fatality during the current study period (2007). There were several mitigating circumstances in that collision. The pedestrian was crossing the street at night and mid block. The driver of the vehicle that struck him was impaired, traveling over the speed limit and had no head lights on at the time.

#### **Bicycle**

- The majority of bicycle/vehicle collisions occurred during the workweek (high on Wednesday) and highest during the PM peak travel hours (3pm 5pm)
- 66.7 % of bicycle/vehicle collisions occurred on minor arterials. (Gurley St the most common) The largest concentration happening in the intersection.
- Male bicyclists were involved in 80.4% of all bicycle/vehicle collisions. The most common age was between 10 to 19 years (23.5%) and 20 to 29 (23.5%)
- Alcohol was associated with one bicycle/vehicle collision.
- Bicyclists were considered most at fault in 68.6% of all collisions involving bicycles and motor vehicles. The leading cause of bicycle/vehicle collisions were due to the bicycle rider riding on the sidewalk or coming off the sidewalk (25.5%). 84.2% of the collisions involved injury of some kind and only 7.8% of the bicycle riders were wearing helmets.

#### Pedestrian

- The majority of pedestrian/vehicle collisions occurred during the workweek (Wednesday was the most active day). As with bicycle collisions, the frequency happening most during PM peak travel times (3pm - 5pm).
- 53.9% of the pedestrian/vehicle collisions occurred on minor arterials (Gurley St. was once again the most common). 41% of the collisions occurred in the non junction area (not in intersection or crosswalk area)
- Males were involved in pedestrian/vehicle collisions 69.2% of the time with the most common age range of 10 to 19 (15.4%), 20 to 29 (15.4%), 30 to 39 (15.4%), and 60 to 69 also 15.4%.
- Alcohol was a factor in three (8%) of the collisions.
- Vehicles were considered most at fault in 66% of all collisions involving pedestrians and motor vehicles. 48.7% of the time, vehicles failed to yield to the pedestrian. The pedestrian received an injury of some kind 93.3% of the time.

Note: This study was last updated in 2008. While the information contained is out of date, and an update is warranted, we feel that it does illustrate some consistent trends that are still important to consider.

#### **APPENDIX C**

## PRESCOTT MILE HIGH TRAIL SYSTEM RECREATIONAL TRAIL PRIORITIES TRAIL STANDARDS

### 2012 RECREATIONAL TRAIL PRIORITIES Current Trail Projects (Miles)

- 1 Hazelwood 35 acres of trails 1.34
- 2 Watson N. boat ramp to Watson Dam Trail 0.49
- 3 Turley Trail construction changes 1.12
- 4 Pioneer Park Race Event Loop 13.94
- 5 Rosser Street Watson Woods Trails 1.47
- 6 Willow Lake Dam to Calvary up canyon to Beurie and Beurie trails 0.29
- 7 Beurie south to Willow Lake Boardwalk Area 0.22

#### **Desired Trails Within 10 Years**

- 8 Willow Lake Trail Dam to Canyons across 89 to Granite Creek 0.69
- 9 Willow Lake Ron James Trail to Constellation Trails 0.65
- 10 Peavine Trail across Granite Creek along Trestle low water culvert crossing 0.06
- 11 Peavine Trail E. Corsair at Equine Ctr. to Melville to Solar Plant 1.86
- 12 Clubhouse Drive at Airport behind Golf Maint Building to Peavine 1.21
- 13 Peavine Trail from South Solar Plant to Chino Valley 35.0
- 14 Glassford Hill connector, multi-use, and specialized trails 1.66
- 15 Sundog Connector from PL Pkwy to PV Multi-use 1.5
- 16 Willow Lake Trail Boardwalk along SE of Lake 0.31
- 17 Peavine Trail S of Prescott Lakes Parkway to Yavapai Block 1.17
- 18 Yavapai Block to Sundog Rd. and Frontier Village Connector Road 1.09
- 19 Rodeo Grounds perimeter trail and exercise course 0.85
- 20 Greenways Trail extension from Lincoln to Rodeo Grounds 0.8
- 21 Prescott Downtown Historical Walking Trails 14.0
- 22 Prescott Circle Trail Turley Trail across P Mountain 3.06
- 23 Prescott Circle Trail thru Commercial Area 1.61
- 24 Prescott Circle Trail connector Storm Ranch re-route (Temporary) 1.97
- 25 Prescott Circle Trail connector Storm Ranch re-route (Permanent) 1.61
- 26 Prescott Circle Trail PL Pkwy at Willow Lake Rd to SR89 roundabout 1.24
- 27 Prescott Circle Trail from Pioneer Parkway past Williamson Valley Rd. 1.29
- 28 Prescott Circle Trail Embry Riddle/Pioneer Park 15.0
- 29 Gateway Mall Neighborhood Trails and Circle Trail Connection 1.82
- 30 Greenways Trail & Rails-to-Trails V.A. complex to Peavine Trail 2.01
- 31 Peavine Trail crossing via culvert under Hanson haul truck road 0.08
- 32 Greenways V.A. to Granite Creek Park 1.29

#### Future "Wish List" of Trails (10 years +)

- 33 Granite Creek E 89 via Cavan to Peavine 1.69
- 34 Hazelwood trails via Wirth and Payne to Peavine 0.9
- 35 Peavine Trail to Glassford Hill via Storm Ranch Road (Seaver) 1.84
- 36 Peavine Trail to Glassford Hill via Boulder Creek left fork 2.39
- 37 Ruger Road/James Ranch re-route and Peavine/Solar connections 25.0
- 38 Peavine Trail Airport Runway Extension Granite Creek re-route 0.5
- 39 Granite Dells Estates W of Peavine Trail to Iron King Trail 0.24
- 40 Granite Dells Estates backbone trail system 2.95
- 41 Iron King Trail to south up Glassford Hill Loop 2.91
- 42 Glassford Hill to Storm/Sundog Ranch to Circle Trail 3.43
- 43 Prescott multi-use trail along SR69 to PV multi-use trail 2.73
- 44 SR69 Multi-use Parallel Trail from Prescott to PV Stoneridge 3.86
- 45 Prescott Circle Trail Williamson Valley Road to Granite Mountain trails 2.13
- 46 Greenways to Butte Creek Trail 1.93

- 47 Rodeo Grounds to Butte Creek 0.47
- 48 Deep Well Trails 12.54

#### **Status and Notes:**

- 1 Trail construction can begin at anytime on this City open space parcel.
- 2 Council-approved Horsley license agreement allowed trail construction to begin will allow encircling lake.
- 3 Trail poorly located in some areas reroutes needed to reduce grades & erosion
- 4 Trail upgrades following transfer of trails to City management will allow large competitive events.
- 5 Watson Woods Riparian Preserve interior trail system in cooperation with Prescott Creeks.
- 6 Long-awaited completion of loop around Willow Lake.
- 7 Long-awaited completion of loop around Willow Lake Trail to be constructed in lake bed until such time an elevated boardwalk can be designed & constructed.
- 8 Access through private parcels needed.
- 9 Access through private parcels needed.
- 10 Will allow opening Peavine Trail to Melville Road.
- 11 Some site preparations needed before opening some railroad grade no longer exists All Cityowned
- 12 Connects neighborhoods west of airport to area east of airport, with benefits to both areas.
- 13 Access needed across one private parcel (Cortez Enterprises) to Chino Valley Road 4 South alignment.
- 14 Rights-of-way needed on State Land parcels.
- 15 Need to incorporate multi-use trail into new roadway design.
- 16 Contributes to loop around lake engineering & funding needed for elevated boardwalk needed when lake is full.
- 17 Railroad grade needs minimal work, but does not currently extend southbound beyond entering private property.
- 18 Requires coordination with Tribe.
- 19 Allows better utilizing City-owned property for trail opportunities awaiting master plan for rodeo grounds.
- 20 Need to resume discussions with property owners, and secure agreements. Time sensitive since some easements expire in 2014 if trail is not constructed.
- 21 This entails using sidewalks in downtown Prescott for more designated interconnectivity.
- 22 Requires purchasing 10-year and 50-year rights-of-way from Arizona State Land Department once funding is available.
- 23 Requires purchasing 10-year and 50-year rights-of-way from Arizona State Land Department once funding is available.
- 24 Requires cooperating with Yavapai County due to right-of-way interim alignment.
- 25 Requires working with developer through development agreement to design and build a high quality trail to serve as the Prescott Circle Trail.
- 26 Need a Prescott Circle Trail connection in this area will require working with property owners and within right-ofway.
- 27 Requires purchase of right-of-way westbound from Williamson Valley Road.
- 28 Requires negotiating new alignment with ERAU for constructing new trail to replace Prescott Circle Trail on primitive road.
- 29 Requires purchase of right-of-way from Arizona State Land Dept., and allows connecting commercial area to Prescott Circle Trail.
- 30 Requires close coordination with Veterans Affairs and Yavapai-Prescott Indian Tribe, potential to be a heavily used trail.
- 31 Opening of this portion of trail impossible until separated grades are accomplished due to danger of haul trucks.
- 32 This segment can be considered Greenways Phase IV and completes the connection between Granite Creek Park and Yavapai College.
- 33 Utilizes existing routes to formalize an alignment eastbound to Peavine Trail from Hazelwood/Granite Gardens.
- 34 Access through private land needed, and allows more interconnectivity between the Peavine Trail and trails within

- Granite Dells.
- 35 Northern portion of Storm Ranch. Need to negotiate access and trail construction through development agreement, and working with ASLD.
- 36 Northern portion of Storm Ranch. Need to negotiate access and trail construction through development agreement, and working with ASLD.
- 37 Integrity of the Peavine Trail needs to be intact through many upcoming road projects near airport.
- 38 Northern portion of Storm Ranch. Need to negotiate access and trail construction through development agreement, and working with ASLD.
- 39 Need to negotiate access and trail construction through development agreement.
- 40 Need to negotiate access and trail construction through development agreement.
- 41 Provides a Glassford Hill summit trail opportunity that originates near the Granite Dells Estates development.
- 42 Requires purchase of right-of-way from Arizona State Land Dept., and allows connecting prominent mountaintop to Prescott Circle Trail.
- 43 Requires close coordination with ADOT, and finding an entity to perform maintenance. Would allow bikes/peds a safer option than being on highway.
- 44 This alignment parallels Lynx Creek where social trails exist, and requires negotiating access with property owners.
- 45 This trail is an option for Prescott Circle Trail that bypasses Stringfield Ranch.
- 46 Will require identifying and securing rights-of-way with many property owners.
- 47 This trail alignment uses a County-owned piece of rodeo grounds for a connection to Butte Creek.
- 48 Need to negotiate access and trail construction through development agreement.

#### TRAIL STANDARDS

#### Prescott Mile-High Trail System Updated Trail Standards, 2008

Trails within City of Prescott's Mile-High Trail System are found in a variety of settings, and standards vary according to types and volume of uses and settings. As per City Council Resolution, all City of Prescott Trails are non-motorized. Some details, such as longitudinal grades, are not provided below and vary greatly due to Prescott's mountainous terrain.

Category #1 Primitive Setting - Minimal and Limited Uses in Primitive Setting

Examples: Lakeview & Cove Trails (primitive spur trails along Prescott Peavine Trail)

Uses: Hiking Only
Clearance Width: 6' wide x 10' high

Tread width: 24"
Tread Surface: Natural
Outslope: Maximum 5%

Drainage: Waterbars, Drain Dips, & Rock Channels Signing: Flexible fiberglass marker at junctions

Maximum Grades: 20%

Information at Trail

Access Point: None or very little

Category #2 Semi-Primitive Setting - Limited Use

Examples: Butte Creek and Aspen Creek Trails

Uses: Hiking/Running/Equestrian

Clearance Width: 6' wide x 10' hlgh

Tread width: 36"

Tread Surface: Natural

Outslope: Maximum 5%

Drainage: Drain Dips & Rock Channels

Signing: Flexible fiberglass marker at junctions

Maximum Grades: 12%

Information at Trail

Access Points: 8" x 12" signs w/important information

Category #3 Multiple-Use - Potential for High Volume Use

Examples: Willow Lake Trail, Lower Granite Creek Discovery Trail

Uses: Hiking/Running/Equestrian/Mountain Bicycling

Clearance Width: 6' wide x 10' high

Tread width: 36" - 48" (6' - 8' in circumstances where heavy use is anticipated)

Tread Surface: Compacted One-Inch Minus Select or similar if needed

Outslope: Maximum 5%

Drainage: Outsloping, rolling drain dips, rock channels Signing: Flexible fiberglass marker at junctions

Maximum Grades: 12%

Information at Trail

Access Point: 8" x 12" Signs w/ Important information

Category #4 Rails-to-Trails Conversions

Examples: Prescott Peavine National Recreation Trail

Uses: Hiking/Running/Equestrian/Mountain Bicycling/Wheelchair/Strollers

Clearance Width: 16' wide x 12' high

Tread width: 10"-16"

Tread Surface: Compacted ballast (ballast over I" in diameter removed)

Compacted One-inch Minus Select in some areas

Outslope: Maximum 2-5%

Drainage: New culverts and original trestles under former railroad bed
Signing: Aluminum signs (black text on green sign) bolted onto steel posts

(threads flattened on bolts to prevent removal), Flexible fiberglass

markers at intervals.

Maximum Grades:

Information at Trail

Access Point: Kiosks with reader board w/ opportunity to change/update information.

Category #5 Greenway Trails

Example: Granite Creek Trail

5%

Clearance Width: 10' wide (for sight distance) x 10, high

Tread width: Varies - determined by width of creek corridor, suitable "shelf" for

placement of trail, and funding sources used. Minimum 6' wide treadway. 8' minimum width required if using Federal funds (as per

AASHTO), and 10' width for heavily used portions

Tread Surface: Reinforcement is needed with rip-rap & gabion structures where trail is

adjacent to creek and bridge approaches. 6" Compacted One-Inch Minus Select on top of 3" leach rock, soil stabilizers (e.g., PolyPavement tm)

used if needed. Maximum 5%.

Outslope: Culverts under trail, trail is crowned.

Drainage: Aluminum signs (black text on green sign) bolted onto steel posts

Signing: threads flattened on bolts to prevent removal), 4"x4" steel square posts

at junctions.

5%

Maximum Grades:

Information at Trail

Access Point:

8" x 12" Sign w/ limited information.

Multi- Use Paths, Alternative Routes along Major Roads

Category #6 Asphalt path connecting Yavapai College and VA areas

Example: 14' wide x 10' high - 6' landscaped buffer between roadway and trail
Clearance Width: Maximum 16' (10' hardened surface and 6' soft surface) where heavy
and multiple uses ore anticipated. Where moderate uses and/or

and multiple uses ore anticipated. Where moderate uses and/or pedestrian uses only are anticipated, narrower tread widths are

acceptable on a case-by-case basis.\*\*

Hardened: asphalt soil cement, or various synthetic: materials

Tread Surface: Soft: One-Inch Minus Select and natural

Maximum 5% (ideally 2%)

Outslope: Culverts and outsloping

Drainage: Flexible fiberglass markers at junctions, & aluminum signs

Signing: 10%

Maximum Grades:

Information at Trail 8" x 12" Sign w/ limited information.

Access Point:

\*\*Some urban trails (e.g., soft trails along Sierry Peaks Drive and Hassayampa Village Lane) were developed prior to these trail standards being established. In these cases, a 4-foot treadway has been established immediately adjacent to the roadways. While this is acceptable in some cases, wider treadways, and treadways separated from roadway are highly encouraged.

## Appendix D Inventory on Right Turn Transitions and Analysis

#### **Field Inventory and Assessment of Right Turn Transitions**

#### RIGHT TURN LANE TREATMENTS ON SHARED ROADWAYS

- 1. Two lanes, right lane turns right. Through lane is well defined, but may be too narrow to share.

  A. Cortez south to Goodwin.
  - B. Goodwin west to Montezuma. C.

Goodwin east to Cortez.

- D. Gurley west to Josephine. Through lane too narrow to share, too long and uphill. Motorists get impatient. Suggest replacing first "Right lane must turn right" sign with "Through traffic merge left" to allow a later merge.
- 2. One lane splits abruptly into through and right turn only, forcing abrupt merge on cyclists. Through lane needs advance definition with dashed line so that cyclists can take the correct lane, motorists can see their intent, and see whether the lane is wide enough to share. A. Montezuma north to Goodwin, B. Montezuma south to Carleton.
  - C. White Spar south to Copper Basin. D.

Gurley west to Park. E. Gurley east to Park.

F. Sheldon west to Park/Miller Valley. G. Iron

Springs east to Miller Valley. H. Willis east to

Montezuma.

- I. Montezuma north to Sheldon.
- J. Walker road north to 4-way stop one block before 69.
- 3. Examples where lane splits are well defined with dashed lines:
  - A. Almost all ADOT roads. B.

Some county roads.

#### RIGHT TURN LANE TREATMENTS WITH BIKE LANES

- 4. Bike lanes do not go through, but lead to a right turn.
  - A. Iron Springs west to Williamson Valley.
  - B. Prescott Lakes Parkway south to unnamed stub on hill down to 89.
  - C. Prescott Lakes Parkway south to 69. OK or drop bike lane since few cyclists go straight.
  - D. Montezuma south to Willis. Drop bike lane since it is type 1 situation, two lanes, right lane turns right.

5. Bike through lanes indicated with two dashed lines in right turn transition area (preferred)

A. Prescott Lakes Parkway north to Walmart entrance. B.

Prescott Lakes Parkway west to 89.

C. Gail Gardner west to Iron Springs, a tricky S-bend, where one lane expands to four. (Photo below)



6. Bike through lanes indicated with one dashed line in transition area, which places cyclists in the left of the right turn lane, which might be confusing to motorists. Suggest standardizing on two dashed lines.

A. Montezuma north to Depot entrance. B.

Whipple west to Four Points.

C. Willow Creek south to Gail Gardner.

D. Willow Creek south to Embry Riddle main entrance. E.

Willow Creek north to Heritage Park entrance.

- F. Iron Springs east to Gail Gardner. Bike lane is in a concrete gutter. White lines are not very visible and flake off.
- 7. Bike through lane is unmarked in transition area. This is a safety hazard needing urgent correction.
  - A. Whipple west to Ruth. Bicycles need to move left in unmarked area to reach next bike lane, (Photo below).



California plan recommends no transition markings and an offset like the Whipple-Ruth example. It places the burden on cyclists to negotiate with right-turning traffic, which has right of way.

AASHTO Guide pp.28-30 recommends two dashed lines and R4-4 sign "BEGIN RIGHT TURN LANE (arrow) YIELD TO BIKES" It also allows dropping the dashed lines if the sign is provided. In complex or narrow intersections it drops the bike lane but retains either the R4-4 sign or the (bicycle symbol) "SHARE THE ROAD" sign.

AASHTO also refers to MUTCD2 (Manual of Uniform Traffic Control Devices) for marking of bike lanes.

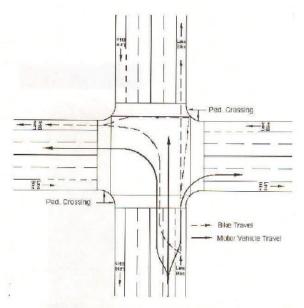
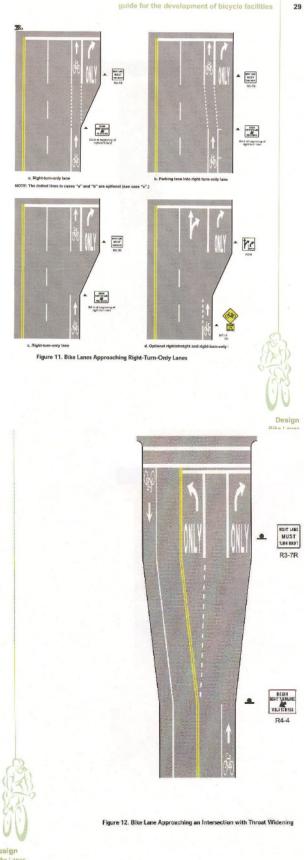


Figure 10. Typical Bicycle and Auto Movements at Major Intersections



#### **APPENDIX E**

# RESULTS OF INVENTORY and PRIORITY TABLES/LISTS FOR BICYCLE FACILITIES AND SIDEWALKS and TRAILS ELEMENT and PRIORITIES From The 2003 PRESCOTT BICYCLE AND PEDESTRIAN PLAN AS UPDATED

The following are the recommendations as provided in the 2003 Prescott Bicycle and Pedestrian Master Plan along with updated information. The inclusion of these recommendations as an Appendix to the 2009 Plan retains the information and provides linkage to the ongoing planning process.

#### **Bicycle Facility Maintenance and Project Recommendations**

#### **HIGH PRIORITY**

To be considered for implementation to the extent feasible and fundable.

	MAJOR THOROUGHFARES	
	WAJOR THOROUGHI ARES	
Iron Springs Road - Gail     Gardner to Williamson Valley     Road	Bicycle lanes and bike route signs	This project is COMPLETE, however the Bike Route markings for the transition from Iron Springs Rd. to Williamson Valley Rd. and to Iron Springs Rd to the west need to be corrected, improved.
Interchange to Josephine and continuing along Thumb Butte Rd. to the Prescott National Forest and Thumb Butte Park.	When the street is resurfaced, consider adding striped shoulders and additional shoulder width on uphill side of streets, if easible.  The eastern end of Gurley Street is currently being improved as part of ADOT's 89/69 Interchange Project.  Additional improvements (phased) to the evest are being proposed for a Fransportation Enhancement Grant Application.	The grid layout of the greater downtown area provides side street opportunities for travel by bicycle; however Gurley Street is the primary east west route for access to business and services.  The area is deficient in terms of bike routes and also includes areas with out sidewalks. Some existing sidewalks are in disrepair.  Portions of Gurley Street have been resurfaced and restriped in recent years without consideration of bike routes.
to National Forest	The Copper Basin Road Improvement Project is under construction and is expected to be completed in 2009.	The project includes a wider shoulder along the west travel lane and a sidewalk along the east travel lane.
White Spar/City Limits  act Lot in  5. Grove/Miller Valley Road - TH  W. Gurley to Whipple re To possible the specific possible in the specific po	Consider upgraded maintenance and addition of signage on this street cong-term recommendation could include mproved shoulders usable for bike travel. This street/area was recently discussed in elation to potential improvements per the fransportation Enhancement Grant process. The project did not have community and/or political support.	Recently resurfaced. Maintenance is especially important in this area due to dirt, gravel and debris washing onto the roadway.  High potential bicycle use with Prescott College and many commercial destinations.  In addition to the need for improved riding surfaces and edge conditions, it was noted that this section of roadway has "lots of turns and some sight distance problems" (e.g. at the Post Office).

6.	Williamson Valley Road -Iron	The City has budgeted funds for the	Transition to striped shoulders (planned)
	Springs Road to City Limits	acquisition of right-of-way in this area.	in County areas.
		Design work is occurring.	Construction scheduled FY08 - 2010.
		The design includes stripped bike lanes.	
		,,	
7.	Sheldon - Gurley to Montezuma	Consider upgraded maintenance and	
		addition of signage on this street	
8.	Pioneer Parkway - Williamson	Consider upgraded maintenance and	Existing wide shoulders adequate.
	Valley Road to Prescott City	addition of signage on this street	Need to protect the rights of bike travel on
	Limits		Airport Connector.
9.	Highway 69 - East City Limits to	Explore access via off-road trail behind	Sidewalk improvements connecting East
	Prescott Lakes Parkway at Mall	Frontier Village and Mall. Need Tribe's	Gurley to Frontier Village are being
	(ADOT)	cooperation. Work with ADOT and Tribe	constructed as part of the 89/69
	,	to get bike lanes and/or striped shoulders +	Interchange Project
		signage and improved maintenance as lanes	,
		are added and other improvement projects	
		occur.	
10.	Montezuma - Sheldon to	Consider upgraded maintenance and	
	Carleton	addition of signage on this street	
		When the street is resurfaced (future),	
		address opportunities for bicycle facilities	
		such as addition of striped shoulders, bike	
		lanes or wide curb lanes, as feasible. This	
		should be developed in the context of an	
		overall downtown bicycle circulation plan and	
		strategy.	
11.	Willow Creek Road - Willow	Add bicycle lanes.	DONE
Lake Rd. to Haas Blvd.			
I			

	Project/Street	Type of Improvements	Comment	
	OTHER COLLECTOR STREETS			
1.	Gail Gardner Way - Willow Creek Road to Iron Springs Road	Add bike lanes.  Consider upgraded maintenance and addition of signage on this street	DONE	
2.	Sixth Street - Moeller to Merritt	Need to add better lighting and directional sign at Granite Creek Trail access. Add a crosswalk at the Granite Creek Trail crossing and increase visibility of the crossing.  Add bicycle lanes and sidewalks.	Reevaluate the addition of bike lanes/route the next time that the street is scheduled for restriping. This project was considered and rejected several years ago.	
3.	Gail Gardner - Iron Springs Road to Gurley Street	Consider upgraded maintenance and addition of signage on this street	Portions of this street have been reconstructed. Gail Gardner is part of the designated and signed Bike route.	
4.	Park Avenue - W. Gurley to Copper Basin Road	Consider prohibiting parking on "uphill" sides of the street to create space for bike lane/route.  Repair pavement as necessary until street is resurfaced.  Consider upgraded maintenance and addition of signage on this street.	Considerable traffic on this important link between major thoroughfares through residential areas and school zones. Pavement in poor condition - a combination of concrete and asphalt materials. Reconstruction is programmed for FY?	
5.	Ruth/Demerse - Whipple to Rosser	Explore possibility of bike lanes or striped shoulders, especially by the High School. Repair pavement as interim measure until street is resurfaced. Consider upgraded maintenance and addition of signage on this street.	Reconstruction is programmed for FY09- 10. Design should address addition of bicycle and pedestrian facilities.	

	e Lane - from east of Cove to Willow Creek	Add striped bike lanes, if feasible.	The section of Smoke Tree from Prescott Lakes to Birchwood was recently striped with bike lanes (no signage).	
7. Delano - Se	equoia to Demerse	Repair pavement. Consider upgraded maintenance and addition of signage on this street		
8. Willis Stree McCormick	et - Arizona Avenue to	Repair pavement and add Bike Route signs.	Pavement repairs along Willis are planned, to be done in segments.	
9. Goodwin - Avenue	Bradshaw Dr. to Park	Repair pavement and add Bike Route signs.		
	e LnGreen Lane on Valley Road	Repair pavement and add Bike Route signs.	Neighborhood route for school access.	
11. Merritt, Sixth	n Street to Division	Repair pavement and add Bike Route signs.		
12. Rosser, Willo Birdsong	ow Creek to	Repair pavement and add Bike Route signs.		
	City Alley along Granite Creek/Trail			
	tween Willis and arehouse (west of eek)	Work with property owners to designate parallel parking along alley.  Provide bike route or other signage indicating Granite Creek Trail access.  Provide shared-use trail connection to Granite Creek Trail, with route and extent of improvements to be determined.  Improve alley surface to accommodate bicycle travel.	Discussion regarding this linkage between on-street and off-street facilities is ongoing.	

#### **MEDIUM PRIORITY**

Bicycle Facility Improvements to Be Considered as Future Projects or Maintenance Activities

Consider upgraded maintenance and addition of signage on these streets. Future street improvements should include bike lanes or striped shoulders if at all feasible.

- 1. Iron Springs Rd. Miller Valley to Gail Gardner
- 2. Iron Springs Rd. to Sierry Peaks
- 3. Pioneer Parkway Hwy 89 to Hwy 69A
- 4. Sequoia Dr., Smoke Tree Ln. to Rosser Ct.
- 5. Meadowridge, Green to Iron Springs
- 6. Green, Willow Creek Rd. to Meadowridge
- 7. Hassayampa Village Ln. Thumb Butte Rd. to Copper Basin Rd.
- 8. Carleton, Mt. Vernon to McCormick
- 9. Washington, Moeller around Roughrider Park
- 10. Moeller, Washington to Sixth Street

#### LONG-RANGE IMPROVEMENTS

As opportunities arise, evaluate feasibility of adding bicycle facilities. Repair/reconstruct pavement as necessary.

1. Thumb Butte Road - Josephine to City Limits 2. Prescott Lakes Blvd.

- 3. Oregon Ave, Gail Gardner to Idylwild Rd.
- 4. Idylwild Rd., Oregon to Thumb Butte Rd.
- 5. Haisley Dr., White Spar Rd. to Senator Highway
- 6. Mt. Vernon, Willis to Aubrey (alignment)
- 7. Mt. Vernon, Aubrey to Haisley
- 8. Vista Dr., Copper Basin to Hemlock
- 9. Hemlock, Vista Dr. to Clubhouse Dr.
- 10. Clubhouse Dr., Hemlock to White Spar Pine
- 11. Knoll Dr., Canyon to Copper Basin
- 12. Highland Ave., Copper Basin to Plaza Dr.
- 13. Highland Ave., Plaza Dr. to Park Ave. Bertrand,
- 14. Montezuma to Park Ave. Country Club Dr., Park
- 15. Ave to Plaza
- 16. Plaza, Country Club to Thumb Butte Rd.
- 17. Penn Ave, Gurley to Carleton (alignment)
- 18. Eastwood, Carleton to McDonald Dr. Nevada
- 19. Dr., McDonald to Devereaux
- 20. Devereaux, Nevada to Autumn Breeze; Autumn Breeze to City Lights
- 21. Canyon Dr., Manzanita to White Spar
- 22. Nathan Ln., City Lights to Senator Hwy.

#### PEDESTRIAN ELEMENT

The Pedestrian Element addresses provision of sidewalks as well as policy, design guidelines and other considerations necessary to develop and maintain them. Of particular note are requirements for accommodation of people with disabilities and creation of "walkable" neighborhoods and districts within Prescott.

#### **Recommended Priorities for Sidewalk Construction**

Priorities shown are for provision of new sidewalks or reconstruction

#### **HIGH PRIORITY**

- Willow Creek Road Commerce to Haas Blvd. DONE
- Rosser Street Willow Creek Road to Campbell DONE
- Campbell Delano to Prescott Heights Drive
- Douglas Willow Creek Road to Demerse
- Green Lane Santa Fe Springs to Meadowridge

Meadowridge Road - Green Lane to White Cloud

- Yavapai Hills Drive Highway 69 to Shadow Mountain Drive
- Sixth Street Moeller to Merritt (reconstruct) DONE
- Gail Gardner Way (formerly Ponderosa Plaza Dr.) Willow Creek Road to Iron Springs Road (reconstruct) DONE
- Iron Springs Road Gail Gardner Way to Williamson Valley Road (reconstruct) DONE
- Copper Basin Road White Spar Road to Mullen Way (reconstruct) IN PROGRESS
- Rush Street Moeller to Sheldon
- Highway 69 Frontier Village (Basha's) to Prescottonian Motel IN PROGRESS, ADOT
- Moeller Street Mt. Vernon Ave. To Rush Street
- Demerse Delano to Douglas
- Willow Lake Road Willow Creek Road to SR89 (future construct, County right-of-way)
- Ruth Along high school parking area (west side)
- Downtown alleys pavement program
- Construct/upgrade sidewalks on both sides of greater downtown area streets (Leroux to Sheldon, Park to Rush)

#### **MEDIUM PRIORITY**

- Meadowridge Road White Cloud to Iron Springs Road
- Ranch Drive Lee Blvd. to Walker
- Merritt Street First Street to Division
- Division Street -Whipple St. To Brannon
- Brannon Avenue Dameron Drive to Short
- Short Street Dameron to Lincoln
- Lincoln Street Short Street to Miller Valley Road DONE

Park Avenue - Country Club Drive to Copper Basin Road •

Prescott Heights Drive - Willow Creek Road to Campbell

#### LONG-RANGE PRIORITY

Note: Sidewalks are to be added along these streets as opportunities arise, or in future plan phases.

- Downtown alleys pavement program
- Douglas Demerse to Kelmo
- Kelmo Douglas to Chaparral
- Sandia Chaparral to Valley Place
- Valley Place Sandia to Tabosa Street
- Tabosa Street small segment from Fox Fire Lane to Smoketree
- Delano Demerse to Campbell
- Iron Springs Road Williamson Valley Road to Sierry Peaks Drive
- Sierry Peaks Drive Ridgewood to Gail Gardner (via Downer Trail)
- Country Club Drive Perry to Plaza Drive
- Plaza Drive Country Club Drive to Thumb Butte Road
- Coronado Avenue Park Avenue to Highland Avenue
- Highland Avenue Coronado to Copper Basin Road
- Thumb Butte Road Idylwild Road to Prescott National Forest
- White Spar Road Copper Basin Road to Haisley Road
- Bradshaw Drive East Gurley Street to McDonald
- McDonald Pauley to Spring Trail
- Robinson Drive E. Gurley to Newport Drive
- Haisley Senator Highway to White Spar Road
- Senator Highway Carleton to Sky Terrace

### Following are the TRAIL recommendations as provided in the 2003 Plan along with updated information.

#### **HIGH PRIORITY - City Initiated**

NOTE: to be considered in the Action Plan for implementation within the next one to three years or

sooner if an opportunity arises to combine with another project. Progress is contingent upon cooperation with affected property owners.

- <u>Rails-to-Trails Phase II</u> old SR 89A to Town of Chino Valley Rood 4S (a.k.a. Prescott Peavine National Recreation Trail)
- All trails associated with Willow and Watson Lakes, specifically trails that are part of the Prescott Circle Trail
- All trails associated with <u>Prescott East Area Plan</u> (PEAP NE Prescott), specifically the Prescott Circle Trail

 Soft trails associated with Prescott Lakes Parkway and Smoketree Lane and Vista Park to 10acre Park to Willow Lake linear corridor (as a part of the Prescott Lakes Master Planned Community) need completion.

#### **HIGH PRIORITY - Multi-Agency Projects**

- The <u>Prescott Circle Trail</u> is a multi-agency project with each entity assuming responsibility and implementation for its respective segments.
- Rails-to-Trails on Tribal lands
- Improve recreational trail system within proposed <u>Badger "P" Mountain</u> preserve as recommended within the Badger "P" Mountain Coordination Plan
- Assist <u>Town of Prescott Valley with Rails-to-Trails</u> (former Prescott & Eastern Railroad) with assurances trail will be in perpetuity.

#### HIGH PRIORITY - Public/Private Partnership

- Entire first phases of the <u>Greenway Multi-Use Trail System</u> are a high priority, and include all
  of Granite Creek upstream of Tribal Lands to Aubrey Street, and Miller Creek east
  (downstream) of rodeo grounds
- Willow Creek Trail from Heritage Park through Willow Creek to area of former 89/89A intersection
- Prescott Circle Trail within Embry-Riddle Aeronautical University
- <u>PEAP Trail</u> connection from Prescott Lakes Parkway to Yavapai Hills at Bar Circle A Road Pursue trail from Peavine Trail to Glassford Hill when Storm Ranch is sold/developed.

#### **MEDIUM PRIORITY - City-Initiated**

NOTE: to be considered in the Action Plan for implementation within the next three to five years, or sooner if an opportunity arises to combine with another project. Progress is contingent upon cooperation of affected property owners.

- Granite Dells Trail connection from Prescott Peavine Trail NW to Granite Dells Road
- Trails in <u>Prescott East Area Plan</u> that are south of Highway 69, and paralleling utility corridors south of Glassford Hill

#### **MEDIUM PRIORITY - Multi-Agency Projects**

- Trail paralleling new SR 89A (City/County/ADOT endeavor)
- Multi-agency partnering to improve Rails-to-Trails west of Prescott

#### **MEDIUM PRIORITY - Public/Private Partnership**

- Trail along Butte Creek from Prescott College campus to West Gurley
- Trail north of Idylwild area to Prescott National Forest
- Trail from Mountain Club/Skyview area to Prescott National Forest
- Westbound trail additions to Aspen Creek Trail

#### Safety Concerns associated with Trail - Street Intersections

The following geographic locations are where City trails will intersect City/County streets and local highways. Safety provisions are needed for pedestrians and bicyclists. Implementation shall be a joint venture, and closely coordinated between the City Public Works and Parks and Recreation Departments,

Road crossings to include standard crosswalk and bike/ped warning signs for motorists (installed by Public Works, and budgeted by Trails Division - Parks and Recreation Department, with Transportation Coordination Committee input), and installation of trail stop signs and bollards on trail (budgeted and installed by Trails Division - Parks and Recreation Department) such as currently found along Greenway Trail System. In addition to road crossings, other improvements are identified below.

#### **Greenway Locations**

Road crossing at north end of Granite Street (near APS entrance)

Installation of "No Parking" signs along east side of City alleyway between McCormick and Granite Streets, and north of Willis Street to accommodate pedestrian travel.

Road crossing on Willis Street for Granite Creek Trail (re-paint existing crosswalk west of creek bridge, and slightly modify bridge railing for safety purposes)

Utilize Gurley Street Bridge as trail underpass

Install lighting near/under Gurley Street bridge for Granite Creek Trail

Utilize Goodwin Street Bridge as trail underpass

Install lighting near/under Goodwin Street bridge for Granite Creek Trail

Road crossing on Carleton Street for Granite Creek Trail

Road crossing on Aubrey Street for Granite Creek Trail

Installation of "No Parking" signs east side of Granite Street (between Aubrey and Leroux) to accommodate pedestrian travel

Road crossing on Leroux Street for Granite Creek Trail

Road crossing on White Spar Road for Granite Creek Trail Road crossing on Forest Highlands Road for Granite Creek Trail

Road crossing (move and repaint crosswalk south of existing crosswalk) on Miller Valley Road (at Brannon) for Miller Creek Trail

Road crossing on Lincoln Avenue north of wet road crossing for westbound Miller Creek Trail

Road crossing on Sixth Street for Granite Creek Trail

Road crossing on EZ Street for Granite Creek Trail

#### Other City-Wide Locations

Former railroad bridge on former SR89A to remain intact for safe overpass for Prescott Peavine National Recreation Trail (bridge was purchased with Federal Transportation Enhancement Funds for trail)

Utilize, existing box culvert under new SR89A (east of Side Road - IGA with ADOT) for Railsto phase II/Prescott Peavine National Recreation Trail

Road crossing on McCormick Street for east-west pedestrian route (near Beach Street)

Road crossing on Granite Street for east-west pedestrian route (near parking garage location)

Road crossing on Hassayampa Village Lane (connection from Aspen Creek Trail to

Hassayampa Village Lane soft trail)

Road crossing on Sierry Peaks Drive (crossing for soft trail)

Utilize existing box culvert under SR69 (west of Prescott Lakes Parkway) for Prescott Circle Trail

Road crossing on Sun Dog Ranch Road of north boundary of Yavapai Block for Prescott Peavine National Recreation Trail.

Utilize existing box culvert under Prescott Lakes Parkway for Prescott Circle Trail

Install box culvert under Willow Creek Road for Prescott Circle Trail

Road crossing at Willow Lake Road at Prescott Lakes Parkway (for connecting Prescott Lakes' system to Willow Lake Trail/Prescott Circle Trail)

Continue crosswalk at signalized intersection of SR89/Willow Lake Road/Watson Lake Park.

Explore use of existing box culvert under Willow Lake Road (west of Prescott Lakes Parkway) for trail underpass

Right-of-way needed along north side of Willow Lake Road (when improved in the future) for Prescott Circle Trail

Continued access on former 89A (Bicycle/Pedestrian at minimum) to former highway/railroad bridge area of Peavine Trail

#### APPENDIX F

#### SAMPLE PEDESTRIAN AND BICYCLE COORDINATOR POSITION

Elements of the following sample job description were copied or adapted from actual full time job postings from cities that included Davis, CA. Milwaukee, WI. Portland. ME. Brownsville, TX., Bozeman, MT. and Pittsburgh, PA.

#### **DEFINITION**

Coordinate the development and implementation of a City-wide pedestrian and bicycle program; promotes pedestrian/bicycle mobility and safety. Review projects for compliance with City plans for non-motorized transportation. Plan, design, and assess facilities; review and recommend policies and programs. Compile and analyze planning and design data. Prepare and distribute educational information and promotional activities to the public. Require knowledge of the principles and practices of planning and design related to pedestrian and bicycle facilities.

#### **DISTINGUISHING CHARACTERISTICS**

This is an independent classification in the transportation planning/engineering function. Positions at this level are distinguished from the planning and engineering classes by the performance of less complex technical tasks and projects within the work unit and a greater focus on public outreach and education. Successful performance of the work requires a broad background in either transportation planning or engineering with a focus on walking and bicycling for transportation and skill in coordinating the needs of the community with that of other City departments and public agencies. Incumbents at this level may serve as staff to various boards and committees as assigned, including commission and citizen committees, and are responsible for making and presenting pedestrian/bicycle related recommendations. Positions are expected to exercise judgment on issues not specifically addressed in local regulations or guidelines. Positions at this level provide training and guidance to less experienced staff.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from higher level management positions.

May exercise direct supervision over lower level positions and community volunteers.

#### **Examples of Duties:**

**EXAMPLES OF ESSENTIAL FUNCTIONS** - Essential functions may include, but are not limited to, the following:

Serve as the City's subject and technical matter expert on walking and bicycling while leveraging and increasing the City's internal and external knowledge base; this includes staying current on new developments and trends by attending conferences and workshops.

Successfully coordinate across division, departmental and agency organizations to form multidisciplinary teams of managers, engineers, planners, technicians, analysts, aides, SWOTN law officers and consultants to advance programs and projects.

Identify data needs and coordinate data collection as it applies to the pedestrian/bicycle program. Analyze reports, studies, and related information and make recommendations for improving the

accessibility and safety of pedestrian and bicycle facilities, including bike path and bike lane design improvements for safety and access.

Manage short and long term pedestrian/bicycle issues to address and improve the transportation system.

Identify opportunities, develop and recommend updates and changes to the Master Plans and to improve other city transportation planning efforts through recommendations to management.

Assist in the implementation of pedestrian and bicycle projects by assisting project managers/engineers to develop projects from concept to final design including managing community input/outreach, pursuing funding resources, etc.

Develop, update and promote the city's pedestrian/bicycle program. Prepare and update pedestrian and bicycle plans.

Make recommendations and provide assistance to city commissions and council regarding safe and efficient pedestrian/ bicycle transportation.

Administer and implement guidelines for bicycle parking.

Prepare and/or coordinate the production of work orders for signing, striping and pavement marking for sidewalk, pathway, and bike route/lane improvement projects.

Prepare informational material to educate the community and to promote pedestrian and bicycle programs, including updates and improvements to the bicycle map. Answer questions from the public and various media outlets on the pedestrian/bicycle program and Prescott's bicycle system.

Work with schools and community groups to improve safe walking and bicycle riding techniques, pedestrian/bicycle routes and to increase walking and bicycling to school.

Meet with public groups, clubs, organizations and agencies to explain, promote, and receive input on the objectives of the city pedestrian/bicycle program.

Plan and coordinate special events related to the city's pedestrian/bicycle program. Provide support to local, state and national groups holding pedestrian and bicycle related special events in Prescott.

Assist in the design of standards for greenways, pathways, at-grade and separated grade crossings, placement of bike lanes, signing and traffic signal features related to pedestrians/bicycles.

Act as liaison with other city departments, commissions and other agencies to ensure provision of bicycle facilities and amenities consistent with established policy.

Coordinate with Police Department on bike enforcement program.

Build and maintain positive working relationships with co-workers, other city employees and the public using principles of good customer service.

**NON-ESSENTIAL FUNCTIONS** - Non-essential functions may include, but are not limited to, the following:

Perform related duties as assigned.

#### **Typical Qualifications:**

#### **MINIMUM QUALIFICATIONS**

#### Knowledge of:

Considerable knowledge, understanding and use of pedestrian and bicycle transportation design standards and principles.

Strong program development, project management, team leadership experience and skills.

Considerable knowledge of all modes of transportation planning at the Federal, State, Regional and Local levels.

Knowledge of Urban Planning and Design, transportation systems and their relationships to land use.

Knowledge of City planning and local government comprehensive planning and understanding of government processes.

Knowledge and application of methods/techniques for community outreach and engagement.

Broad base knowledge of technology, computer usage, hardware and software applications

Grant Writing techniques.

#### Ability to:

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures. Prepare and present clear and concise reports and recommendations, both written and oral.

Demonstrate public speaking skills.

Ability to develop and maintain effective working relationships and to deal resourcefully with media, agencies, department & public.

Ability to evaluate complex technical documents and explain in non-technical terms

Work independently, work under pressure, multi-task, meet deadlines and carry out tasks through to completion.

Ability to analyze and interpret complex data, problems and issues.

Ability to ride a bicycle safely and willingness to ride a bicycle for most transportation purposes is desirable; has firsthand knowledge of riding bicycles on city streets and trails.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

#### **Experience and Training**

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

#### Experience:

Two years of increasingly responsible experience in such fields as planning, engineering, or bicycle transportation. Demonstrated at least one year of involvement in pedestrian /bicycle related issues either through employment experience, or in volunteer / non-profit capacity.

#### Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in planning, engineering, transportation or a related field.

#### License or Certificate:

Possession of, or shall obtain within one month of hire, an appropriate Arizona driver's license.

#### Appendix G

Appendix G Links, references, and resources

City of Prescott General Plan

http://www.cityofprescott.net/services/planning/general\_plan.php

City of Prescott, 2007 Parks and recreation Master Plan http://www.cityofprescott.net/ d/mp final.pdf

City of Prescott Trails

http://cityofprescott.net/services/parks/trails/

Prescott Alternative Transportation http://www.prescottbikeped.org

Central Yavapai Metropolitan Planning Organization http://www.cympo.com/

Open Space Alliance of Central Yavapai County http://www.yavapaiosa.org/

Yavapai Trails Association <a href="http://yavapai-trails.org/">http://yavapai-trails.org/</a>

League of American Bicyclists Bicycle Friendly Communities Program <a href="http://www.bikeleague.org/">http://www.bikeleague.org/</a>

http://www.pedbikeinfo.org/ Many resources and home of the "Walk Friendly Communities" program

AZ Dept. of Transportation bicycle and pedestrian program http://www.azbikeped.org/

National Center for Safe Routes to Schools http://www.saferoutesinfo.org/

Bikes Belong http://www.bikesbelong.org/

Association of Pedestrian and Bicycle Professionals <a href="http://www.bikesbelong.org/">http://www.bikesbelong.org/</a>

International Mountain Bike association <a href="http://www.imba.com/">http://www.imba.com/</a>

Bike Prescott http://www.bikeprescott.com/ Prescott Mountain Bike Alliance http://www.prescottmtb.com/

Alliance for Biking and Walking http://www.peoplepoweredmovement.org/

One Street for International Bicycle Advocacy <a href="http://www.onestreet.org/">http://www.onestreet.org/</a>

Coalition of Arizona Bicyclists <a href="http://www.cazbike.org/">http://www.cazbike.org/</a>