

Maricopa Association of Governments
Pedestrian Plan 2000

Final Report



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 **MARICOPA
ASSOCIATION of
GOVERNMENTS**

Maricopa Association of Governments

Pedestrian Plan 2000

Final Report

Prepared for the

Maricopa Association of Governments

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MAG Pedestrian Working Group

The MAG Pedestrian Working Group consists of representatives of MAG member agencies, the development, architecture and landscape architecture communities. The Working Group will annually review and update the *MAG Pedestrian Plan 2000* and develop activities to educate the region about the benefits of walking.

Chairman, Michael Branham, Surprise

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DEFINITION OF TERMS

- ADA – the federal Americans with Disabilities Act
- Barriers – vertical screening placed in buffers, commonly trees and shrubs, concrete (jersey) barriers, etc.
- Buffer – the distance between the edge of the pavement and the edge of a sidewalk, commonly used for landscaping
- Districts – potential pedestrian activity level areas; districts are stratified into four levels representing the four general classifications of pedestrian intensity areas outlined in the 1995 *MAG Pedestrian Area Policies and Design Guidelines*.
- *Latent Demand Model* – a travel demand model that estimates the level of potential pedestrian activity that could occur along a roadway corridor if conditions throughout the transportation network were ideal for walking
- Linked Trips – trips that either start or finish with walking, but also have a non-walking component to the trip (i.e., bicycle, car, or transit)
- MAG – the Maricopa Association of Governments
- Non-linked Trips – trips that occur entirely by walking
- *Pedestrian Area Policies and Design Guidelines* – adopted by MAG in 1995 to help identify general pedestrian principles and recommendations as well as pedestrian area types and associated design guidelines
- Pedestrian Design Assistance Program – a MAG sponsored competitive funding program initiated in 1996 which implements MAG's *Pedestrian Area Policies and Design Guidelines*
- Pedestrian Level of Service – the "grade" calculated by the *RPC Model* ("A" is the best, "F" is the worst); the Level of Service Category reflects the quality of the walking environment, from a pedestrian's perception of safety or comfort.
- Stakeholders Group – a volunteer group assisting the MAG Pedestrian Working Group in developing the *MAG Pedestrian Plan 2000*





- Pedestrian Working Group – principle group working on the *Pedestrian Plan 2000*, comprised of staff from member jurisdictions representing planning, transportation, transit, engineering, landscape architecture, bicycle and trail planning
- *Roadside Pedestrian Conditions (RPC) Model* – a statistically calibrated pedestrian model that measures the perceived safety or comfort of pedestrians walking alongside the roadway
- TAZ – Traffic Analysis Zone; a geometric area used in aggregating socio-economic data used in travel demand modeling.
- TEA-21 – the *Transportation Equity Act for the 21st Century*, federal transportation and planning legislation
- TIP – Transportation Improvement Plan; a five-year plan for transportation improvements compiled from MAG's member agencies transportation needs
- Trip Generators and Attractors – trip origins (e.g., residences) and destinations (e.g., business, schools, parks, trailheads, etc.) respectively.
- Unadjusted Lateral Separation – the minimum distance, between the centerline of the right-most motor vehicle travel way and the centerline of a sidewalk, required to achieve a particular Pedestrian Level of Service





TABLE OF CONTENTS

Definition of Terms

Executive Summary1-20

Section 1: Introduction 21-26

Section 2: Existing Conditions and Trends..... 27-30

Section 3: Plan Goals and Objectives 31-34

Section 4: Potential Pedestrian Trip Activity Identification 35-50

Section 5: Roadside Facility Performance Guidelines 51-66

Section 6: The Action Plan67

Appendix

Technical Appendix (separately bound)





List of Tables

Table ES-1: RPC Model Levels of Service 10

Table ES5-1A: Unadjusted Lateral Separation - Pedestrian "District" 13

Table ES5-1B: Unadjusted Lateral Separation - Pedestrian "Campus" 14

Table ES5-1C: Unadjusted Lateral Separation - Pedestrian "Community" 15

Table ES5-2: Alternate Buffer Widths 16

Table ES6-1: Action Plan and Timeframe 19-20

Table 4.1: Example *Latent Demand Model* analysis printout 39

Table 5.1: RPC Model Levels of Service 54

Table 5-1A: Unadjusted Lateral Separation - Pedestrian "District" 58

Table 5-1B: Unadjusted Lateral Separation - Pedestrian "Campus" 59

Table 5-1C: Unadjusted Lateral Separation - Pedestrian "Community" 60

Table 5-2: Alternate Buffer Widths 61

Table 6-1: Action Plan and Timeframe 69-70

List of Figures

Figure ES-1: Final Levels of "Composite" Pedestrian Trip Activity 7

Figure ES-2: Roadside Pedestrian Level of Service Thresholds 12

Figure 4-1: Existing Levels of Potential "Non-Linked" Pedestrian Trip Activity ... 43

Figure 4-2: Existing Levels of Potential "Linked" Pedestrian Trip Activity 44

Figure 4-3: "Captive" Pedestrian Activity Levels 45

Figure 4-4: Existing Levels of "Composite" Pedestrian Trip Activity 46

Figure 4-5: Year 2020 Levels of Potential "Non-Linked" Ped. Trip Activity 47

Figure 4-6: Year 2020 Levels of Potential "Linked" Pedestrian Trip Activity 48

Figure 4-7: Year 2020 Levels of "Composite" Pedestrian Trip Activity 49

Figure 4-8: Final Levels of "Composite" Pedestrian Trip Activity 50

Figure 5.2: Applications of the RPC Model 54

Figure 5.3: Roadside Pedestrian Level of Service Thresholds 55

Figure 5.4: Example Roadway Redesign: Sonoran Blvd. Exist. Ped LOS "E" 62

Figure 5.5: Sonoran Central Blvd. Redevelopment Example-Determining unadjusted lateral separation 63

Figure 5.6: Sonoran Central Blvd. Redevelopment Example-Determining unadjusted lateral separation 63

Figure 5.7: Example of Alternative Buffer within Sonoran Central Blvd. Ped Level of Service "B" 64





Executive Summary

INTRODUCTION

The Phoenix metropolitan area is one of the largest in the United States with a population of nearly 3 million distributed over approximately 1000 square miles. Due to the low density, land use uniformity, and geographic extents of the metropolitan area, the motor vehicle is the predominant mode of transportation in the Valley. Traffic congestion is a daily feature of the major roadways and its impacts

to the metropolitan community are extensive. As the metropolitan area continues to expand and traffic congestion increases, Maricopa Association of Governments (MAG) and its member agencies are seeking ways to better serve the mobility needs of the Region's population, industry, and visitors. A greater focus on multi-modal solutions is occurring with numerous initiatives underway to better use the existing transportation infrastructure.

Simultaneously, the Region's tremendous growth has given the metropolitan community a greater appreciation for the way pedestrian facilities help create a sense of community while broadening the transportation choices of the Region's residents and visitors. As a result, there are now a number of

high-quality pedestrian facilities in a variety of settings. The Maricopa Region has a topography that is conducive to walking and for a significant part of the year, walking is pleasant. However, to a large extent the existing transportation system provides minimal accommodation. While the vast majority of roadways with significant traffic have sidewalks, many sidewalks are located immediately adjacent to motor vehicle travel lanes carrying significant volumes of high speed traffic resulting in uninviting walking conditions.

MAG is a leader in promoting improvement in the Valley's streetside environments to better accommodate pedestrian travel. Past pedestrian planning efforts conducted by MAG and its member agencies have led to a variety of pedestrian-oriented policies, programs, and roadway improvements. Prominent among these are the *1993 Pedestrian Plan*, the creation of the MAG Pedestrian Working Group, a region-wide household travel survey, the publication of the *1995 Pedestrian Area Policies and Design Guidelines*, the "Walking and Bicycling Into the 21st Century" Conference Series, and the Pedestrian Design Assistance Program. Evidence is plentiful throughout the Region of the increasing trend of planning and building more pedestrian-accommodating roadways.



*Pedestrian improvements
abound in many areas within
the Region*



Plan Purpose

In 1998, the MAG Regional Council adopted a work program that specifically directed the production of an update to the *1993 Pedestrian Plan*. This update, identified as the *Pedestrian Plan 2000*, outlines programs and actions to promote better pedestrian accommodation throughout the Region's transportation system. It incorporates a unique approach: it provides flexible design tools, specifically road-side Performance Guidelines, to assist MAG member agencies in creating better walking environments within the existing or new roadway network. Following the *Plan Goals and Objectives* section these new planning & design tools are outlined.

PLAN GOALS AND OBJECTIVES

Goals and objectives are an integral part of any plan because they provide direction and focus to an overall vision. For the *Maricopa Association of Governments (MAG) Pedestrian Plan 2000*, they are the result of community input and translation of this input into tasks that address where MAG can take specific actions, or support and encourage actions on the part of their member jurisdictions and agencies. Whether through action or support, the MAG Plan can play an integral part in increasing and enhancing the pedestrian experience in the MAG Region.

Definitions

Goal: A "Goal" is a long-term end toward which programs or activities are ultimately directed. It broadly addresses a desired outcome that supports the Plan Purpose.

Objective: An "Objective" is a specific, measurable, intermediate end that is achievable and allows measurement of progress towards a goal.

Plan Purpose

The purpose of the *MAG Pedestrian Plan 2000* is to identify and recommend programs and actions that guide and encourage the development of pedestrian areas and facilities and ultimately increase walking as a viable mode of transportation throughout the Region. The Pedestrian Working Group developed five broad goal categories as follows:

Land Use

Goal I Promote and guide land use that is conducive to pedestrians and results in a mode shift away from automobiles and towards pedestrians.





Objective 1.1. Provide and maintain a safe, convenient and enjoyable walking environment that responds to the varied needs of a diverse walking population.

Objective 1.2. Incorporate the *MAG Pedestrian Area Policies and Design Guidelines* into policies, street and development standards to provide safe, convenient and enjoyable walking.

Objective 1.3. Promote and foster coordination between jurisdictions in the planning and implementation of bicycle, trails, transit, pedestrian and other alternative transportation modes.

Public Awareness

Goal II Develop a variety of educational programs to promote the benefits of pedestrian-oriented design. Initiate demonstration projects to illustrate these benefits using potential pedestrian demand and pedestrian design techniques.

Objective 2.1. Construct facilities that demonstrate successful pedestrian design.

Objective 2.2. Conduct public education and involvement campaigns to assist and encourage people to walk.

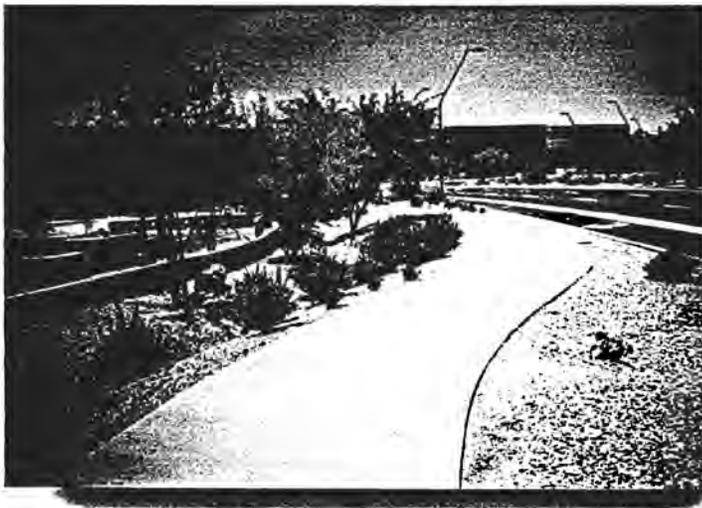
Objective 2.3. Promote workplace walking incentive programs.

Objective 2.4. Distribute the *MAG Pedestrian Area Policies and Design Guidelines* to a broader audience.

Objective 2.5. Improve motorists' understanding of the need to share the roadway with non-motorized travelers, especially at intersections and crosswalks.

Objective 2.6. Implement pedestrian safety education programs to improve observance of traffic laws, and to promote safety for pedestrians of all ages.

Objective 2.7. Distribute the *Pedestrian Plan 2000* to a broad audience.



Incorporating pedestrian facilities into new development is an objective for the Region.

Funding

Goal III Provide funding for pedestrian facility development that results in walking as a key form of transportation in the region.

Objective 3.1. Provide dedicated and on-going pedestrian funding sources to ensure the construction of pedestrian areas and facilities.



Executive Summary

Objective 3.2. Identify and encourage funding to fully integrate pedestrian projects and programs in all transportation and development projects.

Objective 3.3. Provide a staff position at the local level to oversee pedestrian programs and facilities to maximize pedestrian potential in all planning and development projects.

Objective 3.4. Evaluate proposed pedestrian projects using the objective criteria developed in this Plan (e.g. the *Latent Demand* and the *Roadside Pedestrian Conditions Models*) to help gauge how the projects will meet potential pedestrian travel demand and to what extent the proposed projects will improve walking conditions.

Objective 3.5. Promote the benefits of pedestrian projects and remove barriers to their acceptance through the funding of demonstration projects.

Objective 3.6. Publicize and market successful existing pedestrian areas and projects in order to support increased funding.

Design for People

Goal IV Develop, build and maintain a diversity of pedestrian facilities that recognize the region's character, variety and intensity of land use patterns, and is responsive to the region's diverse population.

Objective 4.1. Build new pedestrian facilities that accommodate the needs of all types of pedestrians in new developments and retrofit existing areas to accommodate pedestrians.

Linkage

Goal V Provide a regional pedestrian network that identifies and safely links on- and off-street transportation modes with pedestrian areas and destinations.

Objective 5.1. Integrate appropriate pedestrian facilities into all levels of planning, design, construction and maintenance activities relative to transportation as defined by design performance guidelines in the *MAG Pedestrian Plan 2000*.

Objective 5.2. Link primarily transportation related pedestrian facilities to other pedestrian support facilities, such as urban trails, bicycle facilities, pathways, etc.

Objective 5.3. Include pedestrian needs in regional and local trail and bicycle plans.

Objective 5.4. Use pedestrian linkages to transit to maximize connec-





tions between origins and destinations.

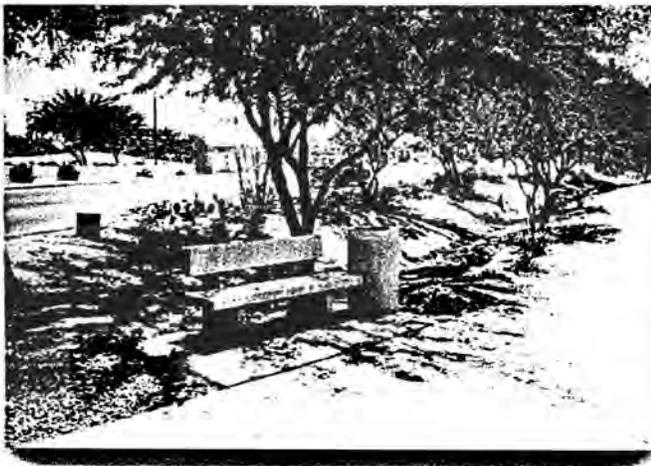
Objective 5.5. Include a pedestrian element in all local General Plans.

THE ROADWAY DESIGN PERFORMANCE GUIDELINES

One of the major regional initiatives reflected throughout the goals and objectives of the *MAG Pedestrian Plan 2000* is to establish performance guidelines for pedestrian facilities within road right-of-ways. Establishing regionwide performance guidelines, as opposed to rigid roadway cross-sections, gives design flexibility to MAG's member agencies. Providing this flexibility within performance guidelines, as opposed to prescriptive cross-sectional standards, will ensure that roadways will meet the needs of other travel modes while simultaneously encouraging pedestrian travel

throughout the MAG Region. The Maricopa Association of Governments recognizes that its constituent members have unique goals, challenges, and constraints with respect to their transportation networks and right-of-ways. Accordingly, roadway performance guidelines are the best way to achieve these regional goals.

Cross-sectional design flexibility is a central approach in the MAG Pedestrian Plan 2000.



There are two major steps to creating these performance guidelines. First, geographic areas, as defined by roadway corridors, within the MAG Region are classified, or mapped, into the differing categories of potential pedestrian activity they represent. This classification is necessary to establish the appropriate performance guidelines for roadways serving differing levels of potential pedestrian activity in the Valley. For example, higher performing pedestrian facilities should be provided in areas where many people could be induced to use sidewalks and other pedestrian facilities.

In areas where there would be relatively few travelers inclined to use walking to get to their destination(s), the guidelines for pedestrian facility performance should not be as high. By considering potential pedestrian usage, MAG member agencies will be better able to balance the cost of improvements with the benefits generated.





The second step in the process is to establish appropriate roadside design performance guidelines for the categories of pedestrian trip activity. These performance guidelines establish the lateral separation between the roadway travel lanes and the roadside sidewalk area based upon factors such as traffic volume, speed, and vehicle mix as well as geometric cross-sectional features of the roadway. These performance guidelines are outlined below following an overview of the first step in the process.

Potential Pedestrian Trip Activity: The Latent Demand Model

The geographic identification, mapping, and classification of potential pedestrian trip activity areas in the Region was accomplished using a travel demand modeling analysis called the *Latent Demand Model*. It applies a travel demand theory similar to that used in motor vehicle and transit travel forecasting, but with adjustments based on specific travel characteristics of the pedestrian. The *Latent Demand Model* uses much of the same socio-economic data as is used in MAG's transportation forecasting model.

The *Model* estimates potential pedestrian activity in the corridor area of individual roadway network segments, based upon the frequency and proximity of adjacent trip attractors and generators. The *Model* assumes that there are no inhibitions to pedestrian travel other than distance - it reflects the travel market *potential* of every study network corridor area with no constraints due to current walking conditions.

Approximately 1000 miles of major roadways in the MAG Region were selected to provide a regional coverage. Two planning horizons were analyzed: existing land use and future land use. Data inputs for the existing conditions analysis were: existing public schools & universities; public parks & urban trails; population density, income levels, and employment values within MAG's traffic analysis zonal data. For the future land use planning scenario, existing urban features (e.g., public schools, parks, trails, etc.) were analyzed along with future population and employment projections as anticipated in MAG's 2020 land use zonal data sets.

The study corridor areas were analyzed and ranked regionally according to their latent travel demand, or potential pedestrian activity. The regional ranking results (on a zero to one hundred percent scale) are reflected in the map, Figure ES-1.¹

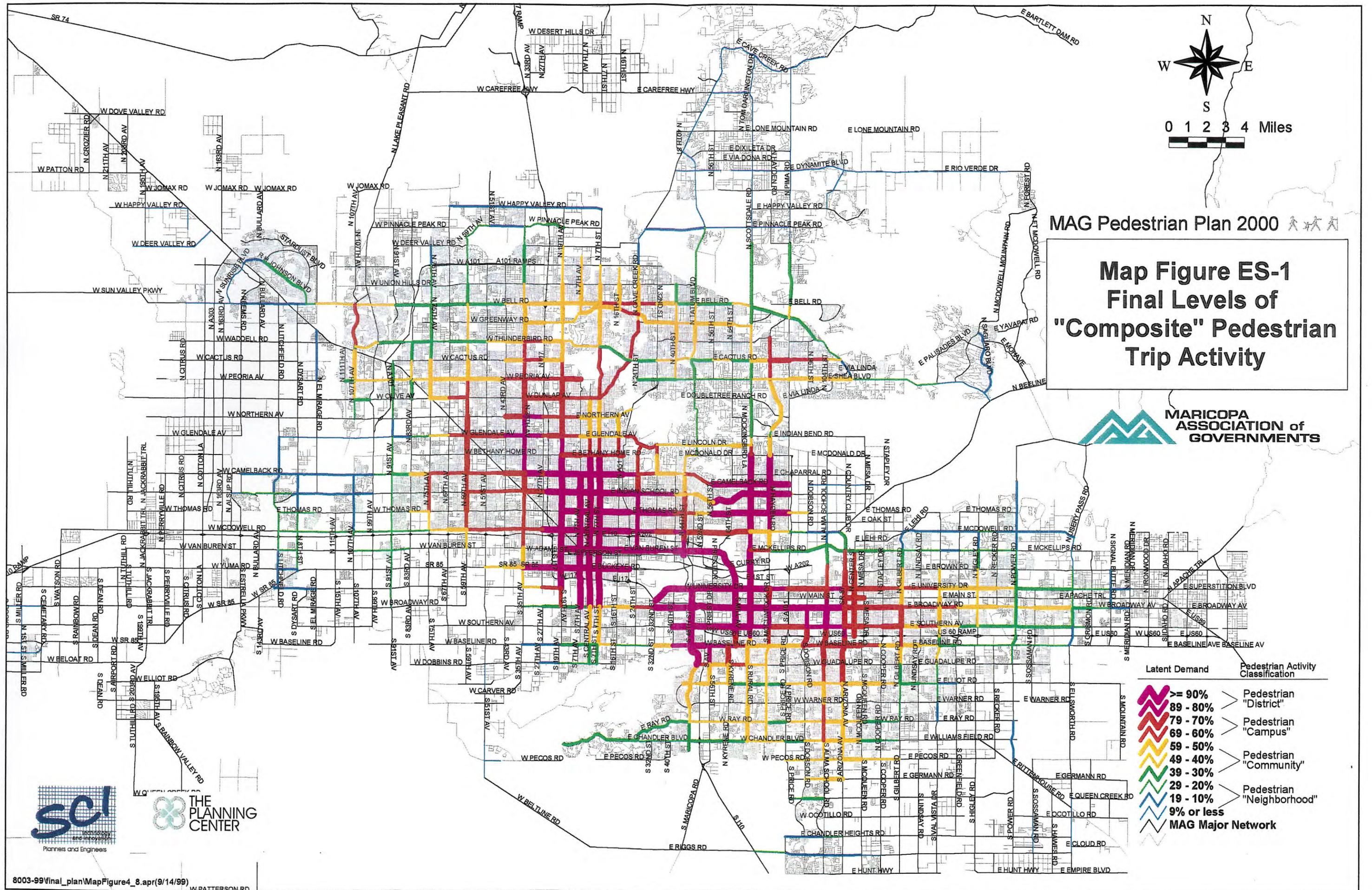
¹ Note: If the ranking of a roadway corridor not included in the study corridor network is desired, one may interpolate the rankings of the surrounding network to determine the approximate ranking for the roadway corridor of interest.





MAG Pedestrian Plan 2000

**Map Figure ES-1
Final Levels of
"Composite" Pedestrian
Trip Activity**



Latent Demand	Pedestrian Activity Classification
≥ 90%	Pedestrian "District"
89 - 80%	Pedestrian "Campus"
79 - 70%	
69 - 60%	
59 - 50%	Pedestrian "Community"
49 - 40%	
39 - 30%	Pedestrian "Neighborhood"
19 - 10%	
9% or less	MAG Major Network





Pedestrian Activity District Classifications

The *Latent Demand* modeling results are stratified into groups approximately representing the four general classifications of pedestrian (activity intensity) areas outlined in the *1995 MAG Pedestrian Area Policies and Design Guidelines*. The stratification schedule of the Latent Demand Scores into the four general pedestrian (activity) area types is:

- Latent Demand 100% to 80% = **Highest potential** for pedestrian activity. Represents the "**District**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of high intensity with a wide variety of land uses with a regional appeal..."
- Latent Demand 79% to 60% = **Second highest potential** for pedestrian activity. Represents the "**Campus**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...high intensity areas with a single or limited mix of land uses..."
- Latent Demand 59% to 30% = **Third highest potential** for pedestrian activity. Represents the "**Community**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of low to medium intensity..."
- Latent Demand 29% to 0% = **Fourth highest potential** for pedestrian activity. Represents the "**Neighborhood**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of low intensity with a limited mix of land uses..."

This classification then permits the establishment of appropriate roadside walking environment performance guidelines in the Region.

Performance Guidelines: The Roadside Pedestrian Conditions Model

Depending on roadway and traffic conditions, providing a sidewalk is the first step in better accommodating and encouraging pedestrian travel. However, the amount of separation (or buffering) between the pedestrian travel way and moving traffic





Executive Summary

stream is a major factor in how pedestrians perceive the safety of their environment.

The *1995 Pedestrian Area Design Guidelines* listed many factors that affect pedestrians' sense of safety, or accommodation, alongside the roadway. These include:

...on-street parking as a buffer for pedestrians from moving vehicles... (Principle #9); ...the intensity and speed of traffic... which is adjacent to the sidewalk (Principle #10); ... separate (the walkways) from the curb whenever possible... provide a bikelane or on-street parking as a buffer... (Recommendation #13); and ...use traffic calming to limit the speed of vehicles... (Recommendation #15) among others.

These are the some of the factors affecting the perceptions of the Region's pedestrians. Accordingly, an objective, reliable scientific method that reflects the pedestrians' sense of comfort while walking along a given roadway was selected to help produce the performance guidelines. The method, or measure, is the *Roadside Pedestrian Conditions (RPC) Model*. The *Model* was developed in 1998 and has already been adopted by several metropolitan areas and state departments of transportation across the United States. It uses measurable traffic and roadway variables such as:

- Lateral separation between pedestrians and motor vehicle traffic (including the presence, and width of sidewalks)
- Amount and speed of motor vehicle traffic
- Percentage of heavy vehicles (trucks)
- Number of travel lanes
- Presence of a paved shoulder, bikelane, or on-street parking
- Width of buffer between sidewalk and roadway
- Trees or other "protective" barriers in the buffer

Based upon these factors, the *RPC Model* produces statistically calibrated results that are stratified into six grades, or levels of service (see Table ES-1). Level "A" reflects the best conditions for pedestrians and Level "F" represents the worst conditions. The *RPC Model* was used to develop the tables and matrices of the performance guidelines for roadside design.

TABLE ES-1 *RPC Model Levels of Service*

LEVEL OF SERVICE CATEGORIES	
Level-of-Service	RPC Score
A	≤ 1.5
B	> 1.5 and ≤ 2.5
C	> 2.5 and ≤ 3.5
D	> 3.5 and ≤ 4.5
E	> 4.5 and ≤ 5.5
F	> 5.5





Pedestrian Facility Performance Guidelines: Using the Matrices

Following a decision to incorporate a sidewalk in a roadway design, perhaps the single most important design consideration is determining the appropriate amount and type of lateral separation and buffering between the sidewalk and the motor vehicle travel lanes. Mentioned in the *1995 Design Guidelines*, the appropriate amount and type of separation and buffering depends on traffic and geometric conditions – simple cross-section standards do not allow roadway designers the flexibility to provide the *target quality* walking environment, particularly with regard to the sense of safety or comfort afforded to pedestrians. While the *1995 Pedestrian Area Policies and Design Guidelines* can be referenced for shade canopy and other pedestrian facility environment aspects, this *Plan* focuses on guidelines for lateral separation and buffering.



The 1995 Pedestrian Area Policies and Design Guidelines provide guidance on the location of amenities within the pedestrian environment.

Accordingly, such design guidance, in the form of performance standards rather than prescriptive roadway cross-sections, is developed as the major component of this *Plan*. The format of these performance guidelines allows roadway designers to consider various design options in achieving the minimum walking environment quality according to the roadway's classification of potential pedestrian activity, or district.

Accordingly, minimum walking environment quality thresholds (or pedestrian levels of service) are established in Figure ES-2. These performance thresholds establish that roadways within areas with the highest potential to serve pedestrian trip activity (or a mode shift) in the MAG Region should provide the highest quality walking environment with respect to pedestrians' sense of safety. Tables ES5-1A through C and Table ES5-2 have been developed using the *RPC Model* to determine the roadway cross-sectional geometry necessary to meet these performance thresholds. These tables provide planners and engineers with design information to achieve the performance guidelines for roadways. Step-by-step instructions for using these tables are provided below.

Step 1: Establish the target pedestrian level of service.

Based on the results of the *Latent Demand Score* analysis, the roadway corridors shown on the *Final Composite Levels of Pedestrian Trip Activity* (Figure ES-1) were





Executive Summary

classified into different categories. Roadways that are within the first regional category, the "District" (bright purple on Figure ES-1), have the highest level of potential trip activity, and should therefore provide the best quality of service to pedestrians – Pedestrian Level of Service "A". Roadways in the second highest category, the "Campus" (red-orange corridor areas on the map) should, at the minimum, meet Level of Service "B" walking conditions. Roadways in the third and fourth highest regional categories (yellow, green, and blue corridors on the map) should, at the minimum, meet Level of Service "C" walking conditions. Local jurisdictions may choose to meet a higher quality of service for pedestrians along a particular route due to other mitigating factors.

<u>Pedestrian Level of Service "A"</u>	
Latent Demand 100 to 80 =	Highest potential for pedestrian activity. Represents the "District" area type from the 1995 Guidelines.
<u>Pedestrian Level of Service "B"</u>	
Latent Demand 79 to 60 =	Second highest potential for pedestrian activity. Represents the "Campus" area type from the 1995 Guidelines.
<u>Pedestrian Level of Service "C"</u>	
Latent Demand 59 to 30 =	Third highest potential for pedestrian activity. Represents the "Community" area type from the 1995 Guidelines.
Latent Demand 29 to 0 =	Fourth highest potential for pedestrian activity. Represents the "Neighborhood" area type from the 1995 Guidelines.

FIGURE ES-2. Roadside Pedestrian Level of Service Thresholds

Step 2: Determine the *unadjusted* lateral separation needed to achieve the target level of service.

After determining the roadway's Pedestrian District, the roadway designer should reference one of the following tables:

- Table ES5-1A: Pedestrian "District" (Level of Service "A" conditions)
- Table ES5-1B: Pedestrian "Campus" (Level of Service "B" conditions)
- Table ES5-1C: Pedestrian "Community" and "Neighborhood" (Level of Service "C" conditions)

Based on the existing roadway traffic conditions (or anticipated ultimate conditions, if conditions are expected to change significantly), find the corresponding *unadjusted* lateral separation necessary to achieve the target walking condition for pedestrians. This *unadjusted* lateral separation is the amount of separation needed between the sidewalk and the roadway, given no other protective design features such as street trees, on-street parking, or other parallel protective barriers.





Table ES5-1A Unadjusted Lateral Separation* - Pedestrian "District" (Latent Demand: 100-80)

All values below produce Pedestrian (safety) Level of Service "A" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																											
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000	
		6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L	6L	2L
Speed > 55 mph	> 4%	120	113	104	120	94	108	102	88	70	64	83	120	89	115	108	94	102	84	73	56	39							
	2 - 4%	83	78	71	83	64	75	60	70	64	83	61	79	75	64	57	49	37	24										
	0 - 2%	60	56	51	60	46	53	42	50	46	60	43	57	53	46	40	34	25	16										
Speed 41 - 50 mph	> 4%	92	87	80	92	72	83	67	78	72	92	68	88	83	78	64	55	42	28										
	2 - 4%	68	63	58	68	52	61	48	57	52	68	49	64	61	52	46	39	29	19										
	0 - 2%	51	48	44	51	39	46	36	43	39	51	37	49	46	39	34	29	21	13										
Speed 30 - 40 mph	> 4%	71	66	60	71	54	63	50	59	54	71	51	67	63	59	48	41	30	20										
	2 - 4%	55	51	47	55	42	49	39	46	42	55	39	52	49	46	37	31	23	14										
	0 - 2%	44	41	37	44	33	39	30	36	33	44	31	42	39	36	29	24	17	10										
Speed < 30 mph	> 4%	53	50	45	53	40	47	37	44	40	53	38	51	47	44	36	30	22	13										
	2 - 4%	44	41	37	44	33	39	30	36	33	44	31	42	39	36	29	24	17	10										
	0 - 2%	38	35	31	38	28	33	25	31	28	38	26	36	33	31	24	20	14	7										

* Includes all space between outside edge of travel lane to inside edge of sidewalk

Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.



Table ES5-1B Unadjusted Lateral Separation* - Pedestrian "Campus" (Latent Demand: 79-60)

All values below produce Pedestrian (safety) Level of Service "B" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																														
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000				
		6L	6L	6L	4L	6L	4L	6L	4L	6L	4L	6L	4L																			
Speed > 55 mph	> 4%	67	63	58	67	52	60	48	56	52	67	45	34	45	32	43	40	60	56	52	46	39	29	19	10	5	12	7	3	7		
	2 - 4%	45	42	38	45	34	40	31	37	34	45	32	43	40	37	25	23	20	16	11	8	3	7	3	7	3	7	3	7	3		
	0 - 2%	31	29	26	31	23	27	21	25	23	31	21	30	27	25	23	20	16	11	8	3	7	3	7	3	7	3	7	3	7	3	
Speed 41 - 50 mph	> 4%	51	47	43	51	38	45	35	42	38	51	36	48	45	42	38	34	28	20	12	7	3	7	3	7	3	7	3	7	3	7	
	2 - 4%	36	33	30	36	27	32	24	29	27	36	25	34	32	29	27	23	19	13	7	3	7	3	7	3	7	3	7	3	7	3	
	0 - 2%	26	24	22	26	19	23	17	21	19	26	17	25	23	21	19	16	13	8	3	7	3	7	3	7	3	7	3	7	3	7	3
Speed 30 - 40 mph	> 4%	38	35	32	38	28	33	26	31	28	38	26	36	33	31	28	24	20	14	7	3	7	3	7	3	7	3	7	3	7	3	
	2 - 4%	28	26	23	28	20	25	19	23	20	28	19	27	25	23	20	18	14	9	4	7	3	7	3	7	3	7	3	7	3	7	3
	0 - 2%	22	20	18	22	15	19	14	17	15	22	14	21	19	17	15	13	10	6	1	7	3	7	3	7	3	7	3	7	3	7	3
Speed < 30 mph	> 4%	27	25	23	27	20	24	18	22	20	27	18	26	24	22	20	17	13	9	3	7	3	7	3	7	3	7	3	7	3	7	3
	2 - 4%	22	20	18	22	15	19	14	17	15	22	14	21	19	17	15	13	10	6	1	7	3	7	3	7	3	7	3	7	3	7	3
	0 - 2%	18	16	14	18	12	15	11	14	12	18	11	17	15	14	12	10	7	4	NS	7	3	7	3	7	3	7	3	7	3	7	3

* Includes all space between outside edge of travel lane to inside edge of sidewalk

"NS" Indicates that a sidewalk is not necessary to achieve the designated Pedestrian Safety Comfort Level

Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.



Table ES5-1C Unadjusted Lateral Separation* - Pedestrian "Community" (Latent Demand: 59-30) and "Neighborhood" (Latent Demand: 29-0)

All values below produce Pedestrian (safety) Level of Service "C" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																														
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000				
		6L	6L	6L	4L	4L	6L	4L	4L	6L	6L	4L	4L	6L	4L	4L	6L	6L	4L	4L	6L	4L	4L	6L	4L	4L	6L	4L	4L	6L	4L	
Speed > 55 mph	> 4%	36	33	30	36	32	26	36	32	24	29	26	36	32	25	34	32	29	26	26	23	19	13	7								
	2 - 4%	23	21	18	23	20	16	23	20	14	18	16	23	20	15	21	20	18	16	13	10	6	2									
	0 - 2%	14	13	11	14	12	9	14	12	8	11	9	14	12	8	13	12	11	9	7	5	2	NS									
Speed 41 - 50 mph	> 4%	26	24	21	26	23	18	26	23	17	21	18	26	23	17	24	23	21	18	16	12	8	3									
	2 - 4%	17	15	14	17	15	11	17	15	10	13	11	17	15	10	16	15	13	11	9	7	3	NS									
	0 - 2%	11	10	8	11	9	7	11	9	6	8	7	11	9	6	10	9	8	7	5	3	NS	NS									
Speed 30 - 40 mph	> 4%	18	16	14	18	15	12	18	15	11	14	12	18	15	11	17	15	14	12	10	8	4	NS									
	2 - 4%	13	11	10	13	10	8	13	10	7	9	8	13	10	7	12	10	9	8	6	4	1	NS									
	0 - 2%	9	8	6	9	7	5	9	7	4	6	5	9	7	4	8	7	6	5	3	1	NS	NS									
Speed < 30 mph	> 4%	12	11	9	12	10	7	12	10	6	9	7	12	10	7	11	10	9	7	6	4	1	NS									
	2 - 4%	9	8	6	9	7	5	9	7	4	6	5	9	7	4	8	7	6	5	3	2	NS	NS									
	0 - 2%	6	5	4	6	5	3	6	5	2	4	3	6	5	2	6	5	4	3	2	NS	NS	NS									

* Includes all space between outside edge of travel lane to inside edge of sidewalk
 "NS" indicates that a sidewalk is not necessary to achieve the designated Pedestrian Safety Comfort Level
 Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.

Table ES5-2 Alternative Buffer Widths¹ (in feet)

Un-adjusted Separation in feet (from Table 1)	Planted Buffer ² - Tree Spacing (feet on center)					
	200 o.c.	100 o.c.	60 o.c.	40 o.c.	20 o.c.	10 o.c.
	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width
125	109	67	47	36	23	15
120	105	64	45	35	22	14
115	100	62	43	33	21	14
110	96	59	41	32	20	13
105	91	56	39	30	19	13
100	86	53	37	29	18	12
95	82	50	35	27	17	11
90	77	48	33	26	17	11
85	73	45	31	24	16	10
80	68	42	29	23	15	10
75	64	39	28	21	14	9
70	59	37	26	20	13	8
65	55	34	24	18	12	8
60	50	31	22	17	11	7
55	46	28	20	15	10	7
50	41	25	18	14	9	6
45	36	23	16	12	8	6
40	32	20	14	11	7	5
35	27	17	12	10	6	4
30	23	14	10	8	5	4
25	18	12	8	7	5	4*
20	14	9	6	5	4	4*
15	9	6	4	4	4*	4*
10	5	4*	4*	4*	4*	4*

1. Includes all space between outside edge of travel lane to inside edge of sidewalk

2. Parking has a tremendous effect on providing a greater sense of safety to the pedestrians alongside the roadway, but it has limited application (on-street parking is not a viable option on roadways with higher operating speeds)

* Buffer limited by practical planting width



Step 3: (Optional) Explore options to reduce the unadjusted lateral separation (or buffer) width.

In many cases, there will not be sufficient right-of-way width to provide the recommended unbuffered area between the sidewalk and roadway. For these reasons, or aesthetic considerations, the roadway designer may choose other methods to achieve the same level of service for pedestrians, but with a reduced lateral separation, or buffer width. There are numerous alternatives to reduce buffer width depending on the roadway, traffic, and adjoining land use conditions:

- **On-Street Parking:** On-street parking can provide a protective “wall of steel” between the pedestrian and the traffic stream. Depending on the percentage of anticipated occupied parking spaces, this type of “buffer” can reduce the amount of unadjusted lateral separation by up to 50 feet. This measure, however, often is limited by the function of the roadway, types of adjoining land uses, and local jurisdictional parking management policies.
- **Bicycle Lanes or Undesignated Shoulders:** Roadway cross-sectional elements such as wide curb lanes, striped bicycle lanes, and undesignated paved shoulders provide a sense of separation between the pedestrian way and the traffic stream. As such, they contribute to lateral separation by an amount equal to their actual cross-sectional width.
- **Vertical Barriers:** Vertical barriers are often used in constrained cross-sections where no space is available for other protective measures. Barrier walls can drastically reduce the amount of unadjusted separation, however they are an expensive solution recommended only for the most severely constrained conditions.
- **Street Trees and Landscaped Buffers:** Shade trees and landscaping between the sidewalk and the roadway are very effective buffering techniques that can be achieved at relatively low cost. With due consideration for clear recovery areas and minimum planting widths, the lateral separation, or buffer, can be reduced dramatically to meet right-of-way constraints while achieving the minimum target pedestrian level of service in the roadside environment.

Table ES5-2 shows *Alternative Buffer Widths* that can be provided if street trees are used to reduce the unadjusted lateral separation between the sidewalk and the roadway. It is reflective of the positive effect of tree spacing on pedestrians’ sense of safety with respect to motor vehicle traffic. As with Tables ES5-1A through C, this table was derived using the *RPC Model* in conjunction with direct observations and roadway evaluations throughout the MAG region.



Executive Summary

In summary, this section of the *MAG Pedestrian Plan 2000* provides roadside design performance guidelines primarily focused on pedestrians' perception of personal safety and comfort in the roadside environment. While this is an important ingredient in improving the regional pedestrian environment, other parts of the pedestrian transportation system must be enhanced as well to achieve the overall objectives of the Maricopa Association of Governments. These include: meeting ADA accessibility standards, improved pedestrian accommodation & safety at intersections and mid-block crossings, and providing the shade canopy and street furniture and other pedestrian travel amenities covered in the *1995 MAG Pedestrian Area Policies and Design Guidelines* and applicable local, state, and national roadway and traffic design guidelines. Objectives such as these along with minimizing pedestrian-vehicle conflicts and street crossing distances at intersections are integral to the overall improvement in the Region and should be pursued with equal vigor as improving the roadside walking environment.

*Thomas Road "Before":
Lack of sidewalk buffering
results in a walking condition
(level of service) "E" under these
roadway conditions.*



ACTION PLAN

This section provides a summary of necessary actions and programs to meet the Regional goals and objectives outlined in Section 2 of this *MAG Pedestrian Plan 2000*. This Action Plan was developed through interaction among the standing MAG Pedestrian Working Group, the Public Stakeholders Group, the consultant team, and MAG staff. It consists of specific short term (one year), mid-term (2-3 years) and long-term (4-5 years) programs and activities that are necessary to bring about an increase in walking trips in the Region and a corresponding decrease in traffic congestion. Table ES6-1 presents the Action Plan in a tabular matrix form.



*Thomas Road "After":
A buffered lateral separation
provides a better ("Level of
Service "B") walking environment
under the same traffic conditions.*



Action Plan and Timeframe

MAG Role*	Action (Task or Program)	Year 1	Year 2	Year 3	Year 4	Year 5	On-going
	LAND USE						
Action	1. Supplement MAG Pedestrian Area Policies and Design Guidelines with recent pedestrian design and ADA standards.						
Action	2. Revise MAG specifications and details to incorporate MAG Pedestrian Design Guidelines.						
Action	3. Broaden membership of the MAG Pedestrian Working Group (PWG) to ensure representation of various jurisdictions and multi-modal planners.						
Action	4. Create an Advisory Membership category to the MAG PWG to broaden representation to business groups, homebuilders, special interest groups, etc.						
	PUBLIC AWARENESS						
Action	5. Expand the scope and financial support of the MAG Design Assistance Program.						
Action	6. Develop Public Service Announcements on the benefits of walking and/or other MAG Pedestrian programs.						
Action	7. Develop a pedestrian-oriented educational session to present at regional planning, bicycle, trail, and/or transportation conferences.						√
Support	8. Encourage regional planning, design, and environmental awards programs to include a Pedestrian Project award category.						
Action	9. Continue to present the Walking and Bicycling into the 21 st Century Pedestrian Conference.						
Action	10. Develop a MAG Pedestrian Awards Program and tie into the Walking and Bicycling into the 21 st Century Conference.						√
Action	11. Develop an audio/visual program on the MAG Pedestrian Program or on pedestrian oriented design for presentations to community organizations.						
Action	12. Host a National Pedestrian Conference in the Phoenix metropolitan region.						
Support	13. Support and expand Rideshare programs to implement pedestrian specific programs.						
Action	14. Develop an annual budget for the continued publication of the <i>MAG Pedestrian Plan 2000</i> document and supplements.						√
Action	15. Develop a brochure of the <i>MAG Pedestrian Plan 2000</i> document for easy distribution, and specifically target Planning and Zoning departments of member agencies.						
Action	16. Develop a supplement to the original <i>MAG Pedestrian Plan 2000</i> document that includes summaries of recent regional pedestrian projects and their economic benefits.						
	FUNDING						
Support	17. Support the interpretation and revision of state legislation and policies to allow use of state transportation funds for pedestrian facilities.						
Action	18. Recommend changes to the Congestion Management rating system based on the <i>Latent Demand</i> and <i>Roadside Pedestrian Conditions</i> models and their associated tables.						
Action	19. Continue funding for a MAG pedestrian planner to provide support to pedestrians as a vital component of a region-wide multi-modal transportation system.						√
Support	20. Encourage all MAG jurisdictions to establish a pedestrian planner position to ensure that pedestrian needs are integrated into all projects.						√
Action	21. Use MAG's <i>Latent Demand</i> and <i>Roadside Pedestrian Conditions</i> models as evaluation tools to select federally funded transportation projects.						√

***MAG Role:**

Action: A "MAG Action" is a specific course of action designed to achieve an objective implemented by MAG staff or by the Pedestrian Working Group. This is the "who" of the Goals and Objectives.

Support: A "MAG Support" is a specific course of action designed to achieve an objective that is implemented by MAG member agencies, and which can be supported by MAG staff and/or the Pedestrian Working Group.

MAG Role	Action (Task or Program)	Year 1	Year 2	Year 3	Year 4	Year 5	On-going
Support	22. Encourage the use of the Pedestrian <i>Latent Demand Model</i> and the <i>Roadside Pedestrian Condition Model</i> in project evaluations at the local level.						√
Action	23. Continue funding for the MAG design assistance program.						√
Action	24. Continue MAG staff and Pedestrian Working Group participation in the Long Range Transportation Plan update process and in the development of the Transportation Improvement Program.						
	DESIGN FOR PEOPLE						
Action	25. Use MAG's <i>Roadside Pedestrian Conditions Model</i> to determine the degree to which projects provide appropriate pedestrian design.						√
Action	26. Develop a model ordinance for the inclusion of pedestrian oriented design as an integral part of infrastructure development in all plan review processes.						
Support	27. Encourage jurisdictions to use the <i>Roadside Pedestrian Conditions Model</i> to promote more pedestrian-oriented design.						
	LINKAGE						
Action	28. Demonstrate that appropriate pedestrian accommodations are occurring when evaluating Federally funded projects including the Congestion Management Rating System.						√
Support	29. Encourage the inclusion of pedestrian design in the transit design guidelines being prepared by RPTA, and in other local design standards and guidelines.						√
Support	30. Encourage inclusion of the RPC and PLD Models in rating pedestrian projects.						√
Support	31. Encourage jurisdictions to maintain connectivity between transportation related pedestrian facilities and other transportation modes such as transit and bicycles.						√
Support	32. Provide coordination between member jurisdictions on open space and multi-modal transportation planning.						√

***MAG Role:**

Action: A "MAG Action" is a specific course of action designed to achieve an objective that is implemented either by MAG staff or by the Pedestrian Working Group. This is the "who" of the Goals and Objectives.

Support: A "MAG Support" is a specific course of action designed to achieve an objective that is implemented by MAG's member jurisdictions or agencies, and which can be supported by MAG staff and its policies and/or the Pedestrian Working Group.



SECTION I : INTRODUCTION

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

pedestrians to economic development and downtown revitalization. New communities such as Anthem and McDowell Mountain Ranch include separate pedestrian pathway systems that link shopping centers, parks, and schools with residential neighborhoods. Irrigation canals have been reinvented as alternative transportation routes, and riverbeds are eyed for their potential as alternative transportation links between open spaces, neighborhoods and communities. Specific pedestrian improvements in downtowns throughout the region have included wider sidewalks, angled parking, plentiful shade trees, benches and drinking fountains.

This plan was developed to ensure that pedestrian sensitive design becomes commonplace throughout the Region and that pedestrian facilities are included in all projects, specifically transportation facilities as they continue to be planned, developed and/or retrofitted.



*Pedestrian improvements
abound in many areas within
the Region*

Purpose of the Plan

In May 1998, the Maricopa Association of Governments (MAG) Regional Council adopted the fiscal year 1999 Pedestrian Work Program that included a pedestrian component, and specifically identified development of an update to the MAG Regional Pedestrian Plan.

This Plan is intended to assist the MAG Pedestrian Working Group and therefore MAG's member agencies by:

1. Providing guidance for future targeted activities and programs that will result in increasing the number of people in the Region who walk instead of drive single-occupancy vehicles.
2. Identifying potential capital investment projects that will contribute to an expanded, safer, and improved environment for walking in the region.



3. Identifying actions and policies that will help the group use existing and potential opportunities and bypass existing and potential constraints to increasing the number of people who walk instead of drive single-occupancy vehicles in the region.
4. Providing guidance for evaluating potential projects on a regional basis.

The *MAG Pedestrian Plan 2000* identifies and recommends programs and actions to encourage the development of pedestrian areas. These will help reduce congestion by increasing the number and percentage of walking trips throughout the Region.

Background

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

Transportation is one of the major components of regional planning performed by MAG. Mandates or direction for this planning often comes from the Federal level. The Federal Transportation Equity Act for the 21st Century (TEA-21) states that "The plans and programs for each metropolitan area shall provide for the development and integrated management and operation of transportation systems and facilities (including pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the State and the United States." TEA-21 also states that "The process for developing the plans and programs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed." The *Pedestrian Plan 2000* is one way in which MAG is responding to this legislation, though their pedestrian planning efforts precede TEA-21.

The Maricopa Association of Governments has been a leader in promoting the many benefits of making the regional street-side environments more conducive to safe pedestrian travel. The *Pedestrian Plan 2000* exemplifies a commitment to





continuing this significant improvement in the overall environment of the region.

In July 1993, the MAG Regional Council adopted its Long Range Transportation Plan Summary and Update which included the first *Pedestrian Plan for the MAG Region*. This plan identified policies to encourage walking, and suggested areas where these policies might be best implemented.

The *1993 Plan* goals included:

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

MAG initiated a variety of projects and programs to implement the *1993 Plan* and encourage walking in the region. They are described below:

The Maricopa Association of Governments Pedestrian Working Group

- Established in 1994 to promote increased awareness of walking as an alternative mode of travel and improve facilities for people who walk
- Appointed staff from member jurisdictions representing planning, transportation, transit, engineering, landscape architecture, bicycle and trail planning and representatives from the development and planning communities.
- Principle group working on the *Pedestrian Plan 2000*
- Represented on the MAG Enhancement Fund Working Group
- Reviews and makes recommendations on Design Assistance Grants (see below)
- Oversees the organization of the "Walking and Bicycling Into the 21st Century Conference" Series
- Successfully lobbied for representation on regional transportation planning and funding committees
- Provides input into regional pedestrian facility prioritization through the project selection process





1994 Pedestrian Survey

- Pedestrian Working Group-sponsored survey of approximately 10,000 area residents, documented reasons for walking and not walking in the MAG Region
- Concerns about pedestrian facilities voiced in the survey provided the basis for the development of the 1995 *MAG Pedestrian Area Policies and Design Guidelines*

1995 Pedestrian Area Policies and Design Guidelines

- Enhanced the adopted 1993 MAG Plan (incorporated into the Long Range Transportation Plan by reference)
- Identifies general pedestrian principals and recommendations
- Identifies pedestrian area types found in the MAG Region, and proposes policies and design guidelines to promote walking
- Intended for use by professional planners, engineers and MAG member agencies
- Award recognition by Arizona Chapter of the American Society of Landscape Architects, and the Arizona Chapter of American Planning Association

"Walking and Bicycling Into the 21st Century" Conference Series

- Co-Sponsorship by the MAG Pedestrian Working Group, the Arizona Department of Transportation, the Regional Public Transportation Authority, the Federal Highway Administration and the Governor's Arizona Bicycle Task Force
- Five annual conferences starting in 1994 as the "Walking into the 21st Century" conference to increase local awareness about pedestrian facility design and the benefits of walking
- 1996 Pedestrian Working Group collaboration with the Arizona Governors Bicycle Task Force resulted in renaming the series "Walking and Bicycling into the 21st Century"
- Since 1997, professionals from throughout the United States focus on a specific pedestrian facility design issue which represents a common pedestrian challenge in the region, and provides written recommendations to resolve the challenge
- Nationally known speakers, interactive workshops, site tours and experiential simulations
- Attended by planners, engineers, design professionals and pedestrian ad-





vocates statewide

Pedestrian Design Assistance Program

- A competitive funding program initiated in 1996 to implement the *MAG Pedestrian Area Policies and Design Guidelines*
- The Maricopa Association of Governments has provided \$290,000 in design assistance to develop pedestrian plans and limited construction documents for eight areas in the region, leveraging over \$3million in pedestrian facility enhancements
- Pedestrian facilities projects include prototypical designs such as mid-block crossings, neighborhood traffic calming, wash crossings, ADA accessibility, etc.

Pedestrian Plan 2000 Stakeholders Group

- Volunteer group assisting the Pedestrian Working Group on *Pedestrian Plan 2000*
- Input, analysis and feedback from a broader spectrum of viewpoints
- Representatives from other professional expertise within municipalities, homeowners associations, planning associations, etc.

These MAG programs, policies and funding opportunities continue to increase awareness about the need for safer, more enjoyable and usable pedestrian areas throughout the Region. This awareness is demonstrated throughout the region through the construction of locally funded facilities for pedestrians, changes in land use that support walking, and the incorporation of pedestrian sensitive design standards into locally adopted design guidelines and ordinances.





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SECTION 2: EXISTING CONDITIONS AND TRENDS

The Maricopa region has a topography that is conducive to walking. The mountains throughout the metropolitan area provide a stunning backdrop to the flat terrain of the central Valley which is excellent for both walking and bicycling. The numerous public parks, irrigation canals, and utility corridors represent opportunities for an increasing number of urban trails to provide Valley residents and visitors with choices for alternative transportation and recreation. For a significant part of the year, the Sonoran desert climate allows people to walk and bicycle to destinations throughout the Region.



The flat terrain of the Salt River Valley is conducive to walking.



The Phoenix metropolitan area is one of the largest in the United States with a population of nearly 3 million distributed over approximately 1000 square miles. The developed urbanized area is extensive, demonstrated by the 60 mile distance across the east-west extent of the metropolitan area. Urbanization of the Valley continues in all directions largely unchecked by any natural barriers. While there are some areas with a high density and mix of land use, the urban form is predominately composed of relatively homogenous, low-density land uses.

A grid patterned roadway and street network is the primary characteristic of the transportation system. Due to the low density, land use uniformity, and geographic extents of the metropolitan area, the motor vehicle is the predominant mode of travel in the Valley. Traffic congestion is a daily feature

of the major roadways and its impacts to the metropolitan community are extensive, one of which is the degradation of air quality to a federal Environmental Protection Agency classification of "non-attainment".

As the metropolitan area continues its outward expansion and the existing transportation network's capacity is exceeded, MAG and many of its member agencies

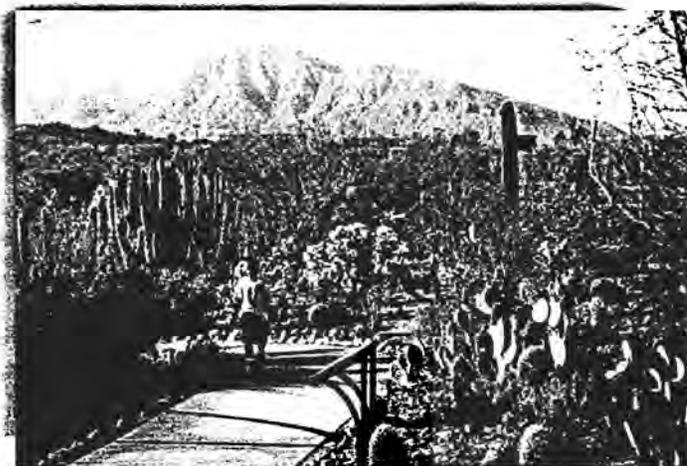




are seeking ways to better serve the mobility needs of the Region's population and industry. A greater focus on multi-modal solutions is occurring with numerous initiatives underway to use the existing transportation infrastructure. These initiatives include: the expansion of public transit (with both fixed and flexible routes); the provision of bikeways (both on-road and off-road facilities); the creation of a regional system of urban trails for its recreation, health, and alternative transportation benefits; and the improvement of the pedestrian environment within the existing streetscape.

The tremendous growth in the MAG region has given the larger community a greater appreciation of the type of pedestrian facilities that help create a sense of community and broaden the transportation choices of the Valley's residents and visitors. As a result, there are now a number of high quality pedestrian facilities in a variety of settings. Primarily downtown improvement initiatives have embraced the need to create comfortable and inviting environments. Examples are throughout the Valley and are evident in Phoenix, Tempe, Glendale, Mesa, Peoria, Guadalupe, Scottsdale, and other jurisdictions. Sidewalks are being added, better street lighting provided, and amenities such as benches and drinking fountains, shade trees, artist-designed bus shelters have made pedestrian settings more enjoyable. Retrofitting existing sidewalks for ADA compliance is taking place. New development guidelines enacted by MAG member agencies have led to a substantial level of private investment in public walkways, traffic calming and street redesign.

MAG has been a leader in promoting improvement in the Valley's streetside environments to better accommodate pedestrian travel. Past pedestrian planning efforts conducted by MAG and its member agencies have led to a variety of pedestrian-oriented policies, programs and roadway improvements. In the 1990's several MAG studies have focused on



The Region's parks, trails and canals offer numerous transportation and recreational choices.



pedestrian issues, including the *1993 Pedestrian Plan*, which was an update to the MAG Long Range Transportation Plan (adopted by the MAG Regional Council that same year). In 1994, MAG established its Pedestrian Working Group, which in 1995 helped develop the *Pedestrian Area Policies and Design Guidelines*. The *Design Guidelines* recommend a broad framework of pedestrian-oriented planning and land use policies, as well as specific design principles aimed at improving the safety and comfort of walking environments. In addition to developing the *Design Guidelines*, the Pedestrian Working Group cosponsors the annual *Walking into the 21st Century* conferences.

Through the Pedestrian Design Assistance Program, a competitive program that funds designs which implement the regional design guidelines, MAG has leveraged more than three million dollars in pedestrian facility enhancements throughout the Region. The best practice methods of pedestrian design implemented through the Pedestrian Design Assistance Program are available to all MAG member agencies to help improve the environment for walking throughout the Region.

In May of 1998, the MAG Regional Council adopted the fiscal year 1999 Pedestrian Work Program that included a pedestrian component, and specifically directed the production of an update to the MAG *1993 Pedestrian Plan*. This update, now identified as the *MAG Pedestrian Plan 2000*, outlines programs and actions to encourage the development of pedestrian areas.





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SECTION 3: PLAN GOALS AND OBJECTIVES

Goals and objectives are an integral part of any plan because they provide direction and focus to an overall vision. For the *Maricopa Association of Governments (MAG) Pedestrian Plan 2000*, they are the result of community input and translation of this input into tasks that address where MAG can take specific actions or support and encourage actions on the part of their member jurisdictions and agencies. Whether through action or support, the MAG Plan can play an integral part in increasing and enhancing the pedestrian experience in the MAG Region.

Definitions

Goal: A "Goal" is a long-term end toward which programs or activities are ultimately directed. It broadly addresses a desired outcome that supports the Plan Purpose.

Objective: An "Objective" is a specific, measurable, intermediate end that is achievable and allows measurement of progress towards a goal.

Plan Purpose

The purpose of the *MAG Pedestrian Plan 2000* is to identify and recommend programs and actions that guide and encourage the development of pedestrian areas and facilities and ultimately increase walking as a viable mode of transportation throughout the region. The Pedestrian Working Group developed five broad goal categories as follows:

Land Use

Goal I **Promote and guide land use that is conducive to pedestrians and results in a mode shift away from automobiles and towards pedestrians.**

Objective 1.1. Provide and maintain a safe, convenient and enjoyable walking environment that responds to the varied needs of a diverse walking population.

Objective 1.2. Incorporate the *MAG Pedestrian Area Policies and Design Guidelines* into policies, street and development standards to provide safe, convenient and enjoyable walking.

Objective 1.3. Promote and foster coordination between jurisdictions in





the planning and implementation of bicycle, trails, transit, pedestrian and other alternative transportation modes.

Public Awareness

Goal II Develop a variety of educational programs to promote the benefits of pedestrian-oriented design. Initiate demonstration projects to illustrate these benefits using potential pedestrian demand and pedestrian design techniques.

Objective 2.1. Construct facilities that demonstrate successful pedestrian design.

Objective 2.2. Conduct public education and involvement campaigns to assist and encourage people to walk.

Objective 2.3. Promote workplace walking incentive programs.

Objective 2.4. Distribute the *MAG Pedestrian Area Policies and Design Guidelines* to a broader audience.

Objective 2.5. Improve motorists' understanding of the need to share the roadway with non-motorized travelers, especially at intersections and crosswalks.

Objective 2.6. Implement pedestrian safety education programs to improve observance of traffic laws, and to promote safety for pedestrians of all ages.

Objective 2.7. Distribute the *MAG Pedestrian Plan 2000* to a broad audience.

Funding

Goal III Provide funding for pedestrian facility development that results in walking as a key form of transportation in the region.

Objective 3.1. Provide dedicated and on-going pedestrian funding sources to ensure the construction of pedestrian areas and facilities.

Objective 3.2. Identify and encourage funding to fully integrate pedestrian projects and programs in all transportation and development projects.

Objective 3.3. Provide staff positions at the local level to oversee pedestrian programs and facilities to maximize pedestrian potential in all planning and development projects.

Objective 3.4. Evaluate proposed pedestrian projects using the objective criteria developed in this Plan (e.g. the *Latent Demand* and the





Roadside Pedestrian Conditions Models) to help gauge how the projects will meet potential pedestrian travel demand and to what extent the proposed projects will improve walking conditions.

Objective 3.5. Promote the benefits of pedestrian projects and remove barriers to their acceptance through the funding of demonstration projects.

Objective 3.6. Publicize and market successful existing pedestrian areas and projects in order to support increased funding.

Design for People

Goal IV Develop, build and maintain a diversity of pedestrian facilities that recognize the region's character, variety and intensity of land use patterns, and is responsive to the region's diverse population.

Objective 4.1. Build new pedestrian facilities that accommodate the needs of all types of pedestrians in new developments and retrofit existing areas to accommodate pedestrians.

Linkage

Goal V Provide a regional pedestrian network that identifies and safely links on and off-street transportation modes with pedestrian areas and destinations.

Incorporating pedestrian facilities into new development is an important objective for the Region.



Objective 5.1. Integrate appropriate pedestrian facilities into all levels of planning, design, construction and maintenance activities relative to transportation as defined by design performance guidelines in the *MAG Pedestrian Plan 2000*.

Objective 5.2. Link primarily transportation related pedestrian facilities to other pedestrian support facilities, such as urban trails, bicycle facilities, pathways, etc.

Objective 5.3. Include pedestrian needs in regional and local trail and bicycle plans.

Objective 5.4. Use pedestrian linkages to transit to maximize connections between origins and destinations.

Objective 5.5. Include a pedestrian element in all local General Plans.





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SECTION 4: POTENTIAL PEDESTRIAN TRIP ACTIVITY IDENTIFICATION - LATENT DEMAND

One of the major regional initiatives reflected throughout the goals and objectives of the *Maricopa Association of Governments (MAG) Pedestrian Plan 2000* is to establish performance guidelines for pedestrian facilities. Establishing regionwide performance guidelines, as opposed to rigid roadway cross-sections, gives the planners and engineers of MAG member agencies design flexibility. Providing flexibility within the performance guidelines ensures that roadways will be designed to meet local needs while simultaneously encouraging pedestrian activity throughout the MAG Region.

There are two basic steps to creating these performance guidelines. First, areas, or roadway corridors, within the MAG region are classified, or mapped, into the differ-

ing categories of potential pedestrian activity they represent. This classification is necessary to establish the appropriate performance guidelines for roadways serving differing levels of potential pedestrian activity in the Valley. For example, the highest performing pedestrian facilities should be provided in areas where many people could be induced to use sidewalks and other pedestrian facilities. In

areas where there would be relatively few travelers inclined to walk to their destination(s), the guidelines for pedestrian facility performance should be less stringent. By considering potential pedestrian usage, MAG member agencies will be better able to balance the cost of improvements with the benefits generated.

As previously mentioned, the focus of the *Pedestrian Plan 2000* is to establish performance guidelines which allow planners and engineers of the implementing jurisdictions flexibility to achieve optimum results through whatever design

means they wish. The Maricopa Association of Governments recognizes that its constituent members have unique goals, challenges, and constraints with respect to their transportation networks and rights-of-way. The purpose of the *MAG Pedestrian Plan 2000* is to provide a dynamic action plan to bring about improved

Cross-sectional design flexibility is a central approach in the MAG Pedestrian Plan 2000.



walkability, hence a mode shift and improved air quality to the Region. Accordingly, roadway performance guidelines are the best way to achieve these regional goals. Section 5 covers the development and recommended use of the performance guidelines.

Identifying and Classifying the Areas of Potential Pedestrian Activity

Identifying and classifying areas of potential pedestrian activity within the Region has been an activity conducted by MAG staff in the past, beginning with the *1993 MAG Pedestrian Plan* to help:

- Establish roadway design performance guidelines for pedestrian travel
- Provide guidance for targeted activities and programs to promote walking
- Identify capital investment projects
- Assist the MAG Pedestrian Working Group in guiding institutional programs to increase the number of people who walk in the Region
- Provide guidance for evaluating regional projects

In the *1993 MAG Pedestrian Plan*, areas representing a high potential for pedestrian activity associated with traveling to work were identified. The *1995 MAG Pedestrian Area Policies and Design Guidelines* established four general classifications of pedestrian (activity intensity) area types with corresponding recommended design guidelines. However, the document neither identified these areas nor provided an objective method to identify these areas geographically now or in the future. Accordingly, a major aspect of this Plan update is the geographic identification and classification of potential pedestrian trip activity areas. The process used to accomplish this was a unique travel demand modeling analysis. It is outlined below.

The Latent Demand Model: Methodology

In order to perform a travel demand analysis for the walking mode, a methodology was employed that recognizes the unique impediments to that mode. Unlike automobile travel, pedestrian travel often does not occur due to a number of obstacles, one of which is relatively poor accommodation of pedestrians within the existing transportation network. Depending on traffic conditions, examples of poor accommodation include lack of sidewalks, lack of separation between the sidewalk and the traffic stream, or lack of "protective" buffering between the sidewalk and the





motor vehicle travel way. Consequently, existing pedestrian counts generally do not indicate the level of potential pedestrian trip activity on a roadway. Therefore, alternative or surrogate measures are needed to estimate the potential amount of pedestrian activity along roadway corridors.

The method used for the *MAG Pedestrian Plan 2000* is the *Latent Demand Model*. It applies a travel demand theory similar to that used in motor vehicle and transit travel forecasting, but with adjustments based on specific travel characteristics of the pedestrian. The *Latent Demand Model* uses similar socio-economic data as is used in MAG's regional transportation model.

The *Latent Demand Model* provides planners with the ability to quantify the level of pedestrian activity that would occur if conditions were ideal for walking. It is a method that estimates pedestrian travel potential in the vicinity of a roadway corridor, based on the proximity of surrounding attractors. This method is used to estimate the potential walking activity for four general trip types:

- Work trips
- School trips
- Shopping trips
- Recreational trips

The *Model* quantifies the influence of existing schools and parks on pedestrian trip activity. It also is used to identify potential pedestrian trip activity areas affected by auto-ownership, or lack thereof, of the existing population.

The *Latent Demand Model* estimates potential pedestrian activity within a roadway corridor, based upon the frequency and proximity of adjacent trip attractors and generators. The *Latent Demand Model* also considers the amount of pedestrian travel that a trip destination is likely to attract - for example, a shopping center near high density housing would potentially attract much higher numbers of pedestrians than a similar center in an area of lower density housing. The *Model* assumes that there are no inhibitions to pedestrian travel other than distance - it reflects the travel market *potential* of every analyzed road corridor with no constraints due to walking conditions.

The *Latent Demand Model* compiles and aggregates latent pedestrian demand for each corridor segment, so that planners can view the cumulative effects of all nearby trip attractors and generators. The *Model* is applied in a Geographic Infor-





mation System (GIS) format, therefore it can be updated as development occurs and demographics change. The technical aspects of the *Latent Demand Model* are outlined in the separately-bound "Technical Appendix".

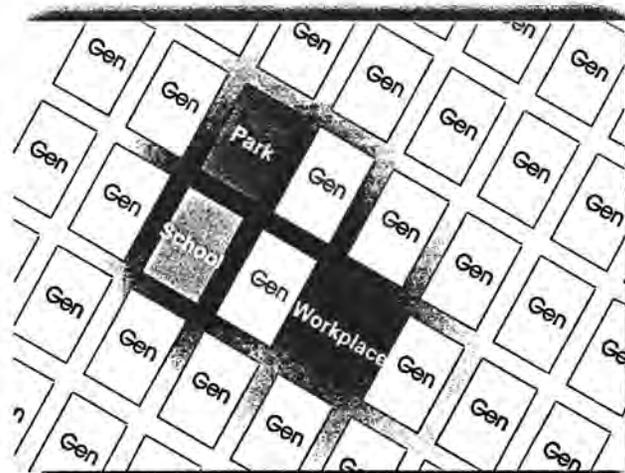
Results of the Latent Demand Model Analysis

The *Latent Demand Model* was used to identify the latent, or potential, pedestrian activity for all geographic areas defined in the MAG traffic analysis zone map. The areas represented around major roadway corridor segments in the MAG region were the focus of the latent demand analysis; accordingly, approximately 1,000 miles of major roadways in the MAG region were selected to provide regional coverage. The raw scores and data results of the analysis for the MAG region are tabulated in spreadsheet (Excel 4.0) formats. Tables showing the scores of each roadway study segment, arranged by roadway name (in alphabetical order), are in the appendix of this document. An example (excerpt) is shown in Table 4.1. The ranking results are reflected in the maps at the end of this section. The roadway segments are also ranked within each jurisdiction for individual jurisdictional use (see the separately-bound Technical Appendix)

Two planning horizons were analyzed: existing land use patterns and future land use patterns. Existing land development patterns in the region were first analyzed to determine and rank the study network's segments for their latent travel demand, or potential pedestrian activity. Inputs for this planning horizon are: existing public schools and universities; public parks and urban trails; population density, income levels, and employment values within MAG's traffic analysis zonal data. For the future land use planning scenario, existing urban features (e.g., public schools, parks, trails, etc.) were analyzed along with future population and employment projections as anticipated in MAG's Year 2020 land use zonal data sets. The following sections describe the mapped analysis results.

Mapped Latent Demand Analysis Results - Existing Land Use

For the purpose of identifying and classifying the Region's geographic areas, potential pedestrian trip activity is separated into two groups: non-linked trips and linked trips. In brief, non-linked trips are those that occur entirely by walking. In



The darker shading indicates the relative amount of latent pedestrian activity on a street network based on the cumulative effects of trip generators and attractors.





TABLE 4.1 Example Latent Demand Model analysis printout

Seg_ID	Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Compo- site Activity Level	Compo- site Activity Level
				Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			
				max 17365	max 36445	max 28480	max 46037	max 22560	max 100			max 14351	max 43996	max 34050	max 52293	max 25560	max 100			
381	E Baseline Rd	S 40th Street	S 48th Street	3,555	307	9,264	15,167	2,940	28	27	32	6,668	307	14,383	15,167	2,940	32	87	87	9
405	E Baseline Rd	N McQueen Rd	S Stapley Dr	3,887	46	10,448	24,572	2,168	37	32	36	7,692	46	17,503	29,786	2,168	46	63	63	7
406	E Baseline Rd	S Lindsay Rd	S Val Vista Dr	1,450	-	8,872	37,209	7,396	49	11	36	3,274	-	14,383	37,209	7,396	50	26	50	5
407	E Baseline Rd	S Gilbert Rd	S Lindsay Rd	2,265	-	9,932	39,559	9,868	55	19	40	4,008	-	14,516	39,559	9,868	54	34	55	6
408	E Baseline Rd	S Stapley Dr	S Gilbert Rd	3,694	-	10,336	39,137	10,192	56	25	39	6,886	-	15,658	39,137	10,192	58	49	58	6
408	E Baseline Rd	S Val Vista DR	N Greenfield RD	912	-	5,941	25,897	6,087	35	7	25	3,170	-	12,703	25,897	6,087	38	22	38	4
410	E Baseline Rd	N Greenfield Rd	S Higley Rd	853	-	4,287	13,338	4,692	21	6	17	3,900	-	12,881	13,664	4,692	28	25	28	3
411	E Baseline Rd	S Higley Rd	N Recker RD	659	17	2,844	3,952	3,163	10	7	11	3,574	17	10,735	3,952	3,163	17	29	29	3
441	E Baseline Rd	S McDintock Dr	S Price Rd	5,196	2,949	13,974	12,654	12,159	42	40	49	5,949	2,949	15,096	12,654	12,159	39	57	57	8
792	E Baseline Rd	S 10th Avenue	S 7th Avenue	1,076	69	5,025	19,487	12,304	34	8	22	1,563	69	8,044	19,487	12,304	33	13	34	4
793	E Baseline Rd	S 7th Avenue	S Central Avenue	1,312	69	5,775	17,835	15,145	36	10	25	1,898	69	8,723	17,835	15,145	35	15	36	4

the *Latent Demand Model*, potential non-linked trips represent *latent* trip activity. Figure 4-1 in this document's appendix reflects the regional ranking of the study segments corridors serving this type of latent, or potential pedestrian activity under existing land use conditions.

Linked trips are the walking portions of trips whose origins and destinations are so far apart that travel by a way other than walking (e.g. automobile, bicycling or riding the bus) is required to arrive in the general vicinity of the destination. Once in the vicinity of the destination, the remainder of the trip is made afoot. One example of a linked trip is a person who takes transit to a downtown area and then walks to different destinations within that area. The *Model* estimates, and then ranks roadway corridor areas wherein the walking portion of the linked trip is likely to be made (see Map Figure 4-2). The *Model* estimates linked trip potential also in an environment in which adverse walking conditions are not a deterrent to pedestrian trip activity.

Figure 4-3 (in this document's appendix) displays the mapped results of the *Latent Demand* estimation and subsequent segments' ranking to potentially serve "captive" pedestrian activity. These are the corridor areas around which there is relatively low-income population who tend to have lower auto ownership and hence are more "captive" to the walking mode of transportation. The estimation and ranking was made using a similar gravity relationship, or modeling, as used to estimate the linked and non-linked pedestrian activity levels.

A composite map of the combined *maximum* ranking of the roadway corridor areas for latent pedestrian activity based on existing land use patterns is shown in Figure 4-4 in the Appendix of this document.

Mapped Latent Demand Analysis Results - Future Land Use

The potential, or latent, pedestrian activity levels were analyzed for future land



development in a manner similar to that for existing land use patterns. Social and demographic projections for the Year 2020 (stratified by traffic analysis zone) served as revised inputs to this analysis. Figures 4-5 and 4-6 in the appendix display the results of the latent demand modeling of non-linked and linked potential pedestrian activity levels, respectively. A composite map in the appendix of this document, Figure 4-7, depicts the combined ranking of the major roadway corridors for Figures 4-5 & -6. The color coding of the segments represents each study roadway's, or corridor area, ranking on a zero to one hundred percent scale, relative to all other regional roadways.

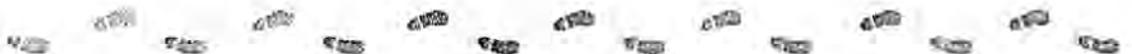
Pedestrian Activity District Classifications

The ranked results of the *Latent Demand* modeling provide the opportunity to classify roadway corridors within the MAG Region into their potential pedestrian activity area types, or districts. This classification permits the establishment of appropriate roadside walking environment performance guidelines in the Valley. The *Latent Demand* results (on a zero to one hundred percentage scale) are stratified into four groups to represent the four general classifications of pedestrian (activity intensity) areas outlined in the *1995 MAG Pedestrian Area Policies and Design Guidelines*. For the purposes of determining the potential activity district classification for a specific roadway corridor area, a composite map, combining the rankings of the roadway corridors for both existing and future year scenarios is shown on Figure 4-8, Final Composite Ranking at the end of this Section. If the ranking of a roadway or street not included in the study network is desired, one may interpolate the rankings of the surrounding network to determine the approximate ranking for the roadway of interest.

The stratification schedule of the *Latent Demand* results into the four general pedestrian (activity) area types or districts is:

Latent Demand 100% to 80% = **Highest potential** for pedestrian activity. Represents the "**District**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of high intensity with a wide variety of land uses with a regional appeal..."

Latent Demand 79% to 60% = **Second highest potential** for pedestrian activity. Represents the "**Campus**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which





are "...high intensity areas with a single or limited mix of land uses..."

Latent Demand 59% to 30% =

Third highest potential for pedestrian activity. Represents the "**Community**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of low to medium intensity..."

Latent Demand 29% to 0% =

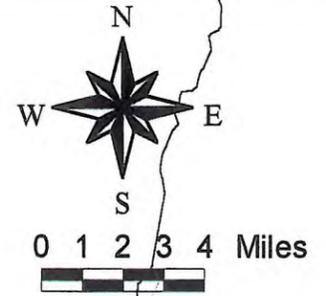
Fourth highest potential for pedestrian activity. Represents the "**Neighborhood**" area type from the *1995 MAG Pedestrian Area Policies and Design Guidelines* which are "...areas of low intensity with a limited mix of land uses..."





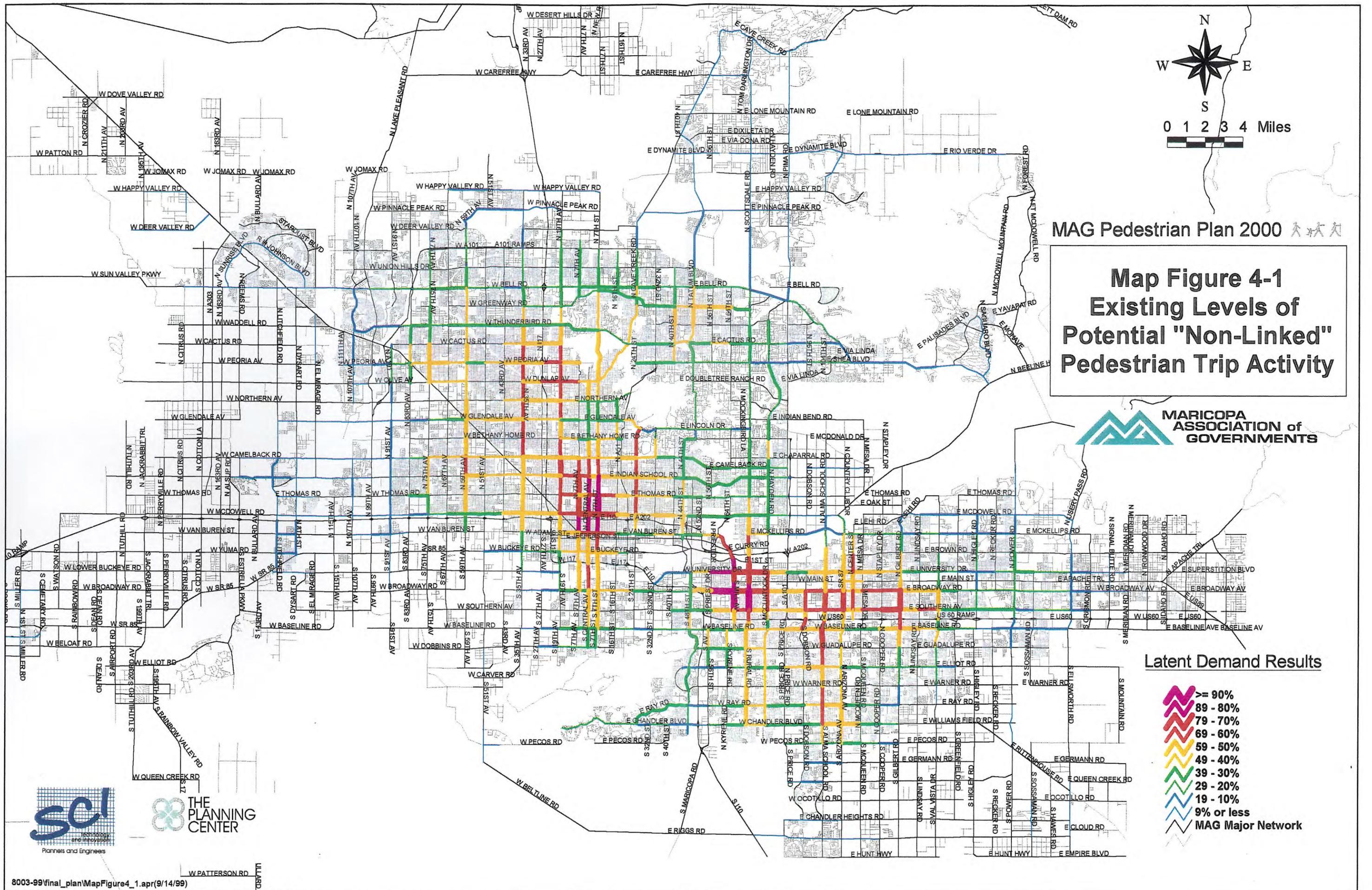
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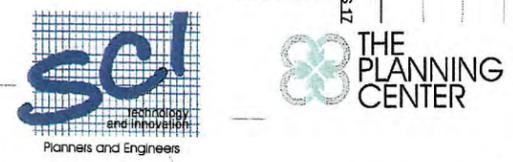
MAG Pedestrian Plan 2000

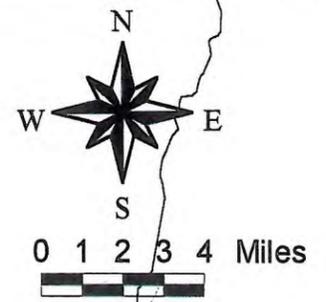
**Map Figure 4-1
Existing Levels of
Potential "Non-Linked"
Pedestrian Trip Activity**



Latent Demand Results

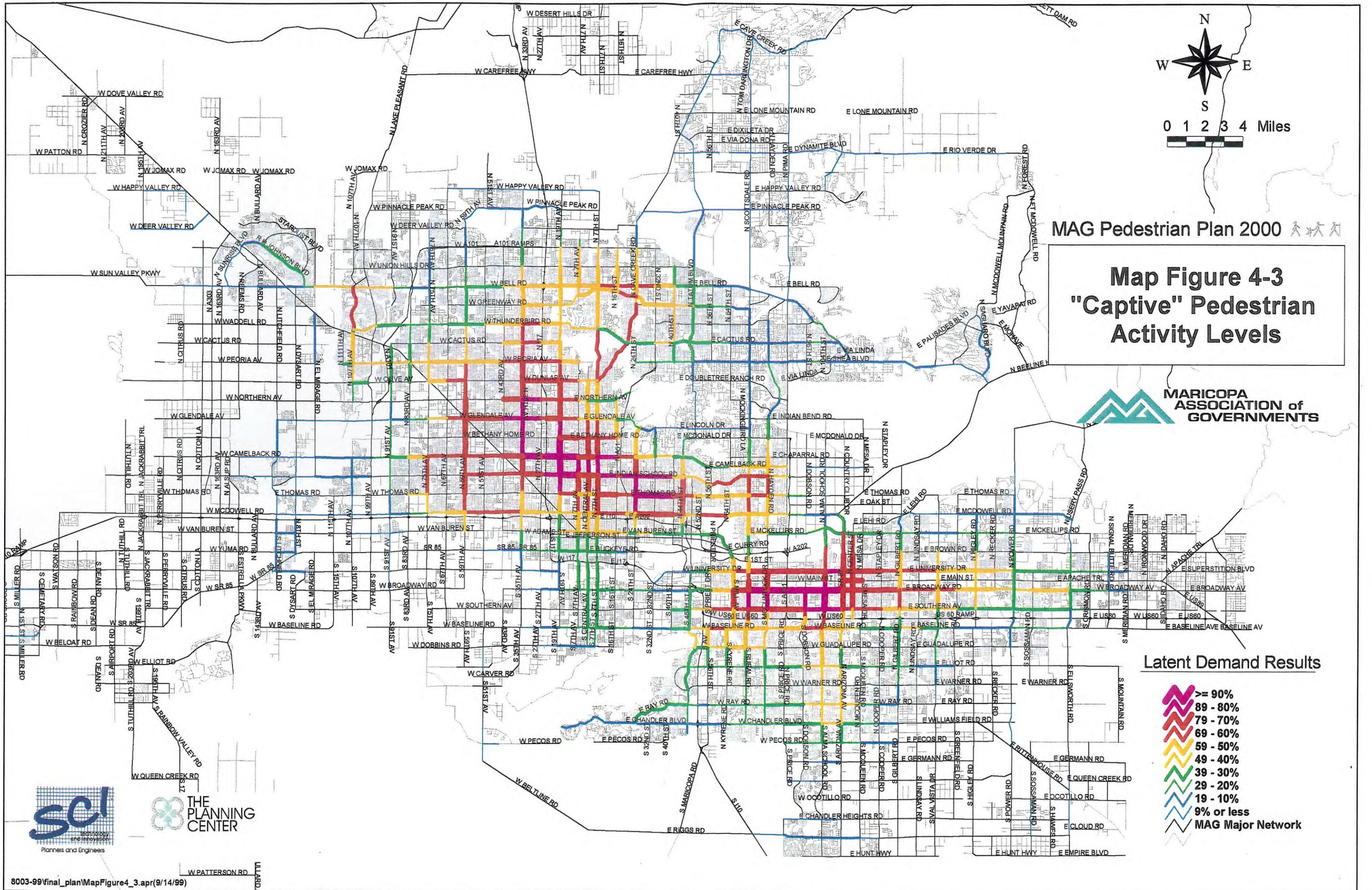
- >= 90%
- 89 - 80%
- 79 - 70%
- 69 - 60%
- 59 - 50%
- 49 - 40%
- 39 - 30%
- 29 - 20%
- 19 - 10%
- 9% or less
- MAG Major Network





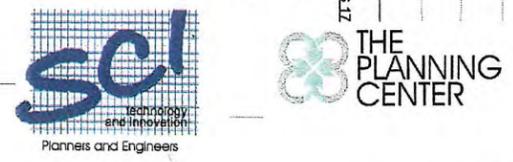
MAG Pedestrian Plan 2000

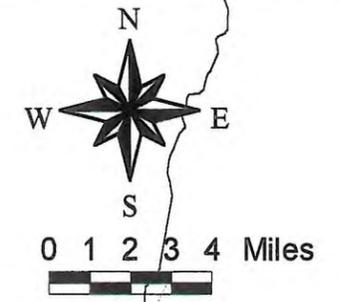
**Map Figure 4-3
"Captive" Pedestrian
Activity Levels**



Latent Demand Results

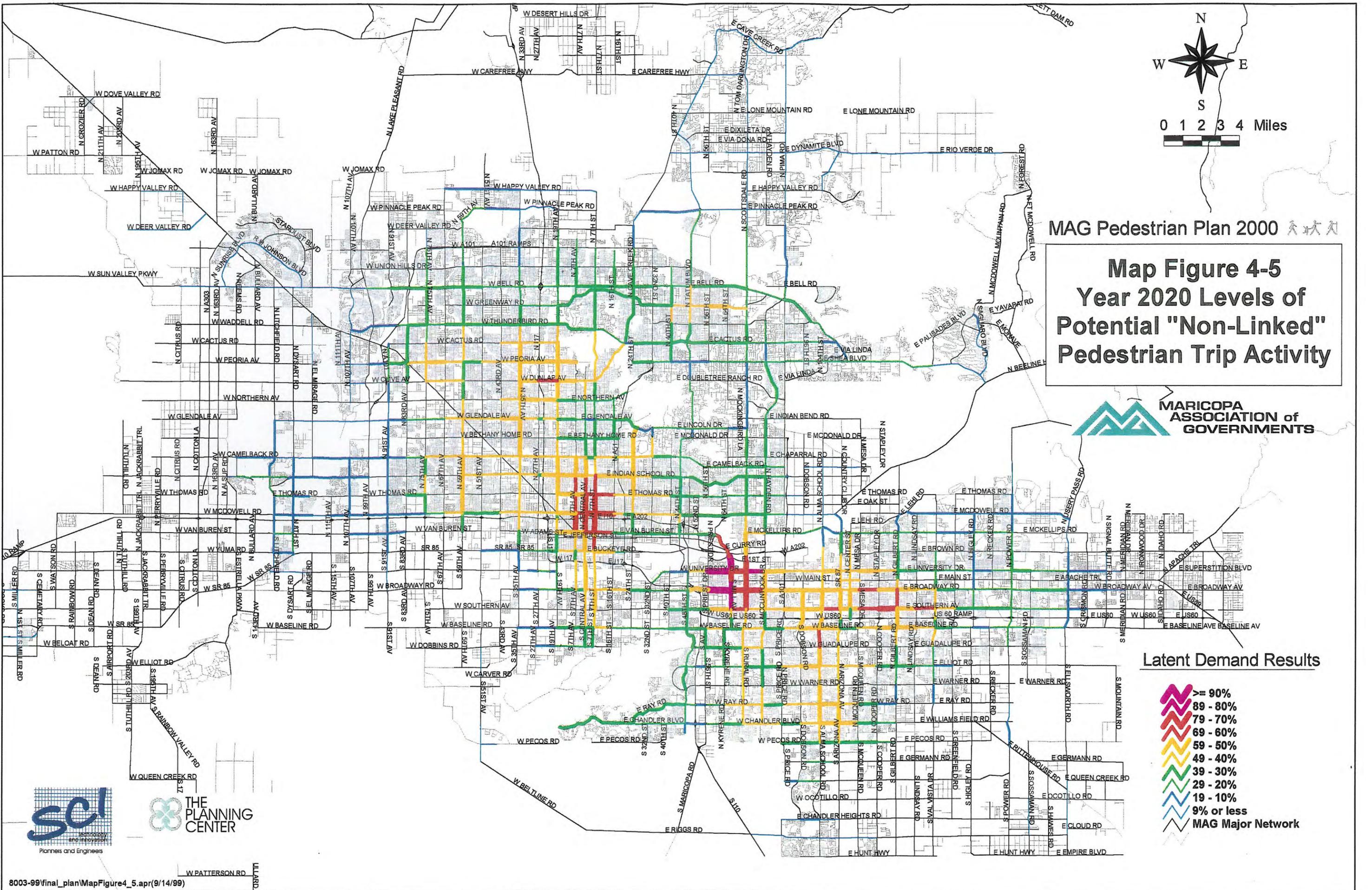
- >= 90%
- 89 - 80%
- 79 - 70%
- 69 - 60%
- 59 - 50%
- 49 - 40%
- 39 - 30%
- 29 - 20%
- 19 - 10%
- 9% or less
- MAG Major Network



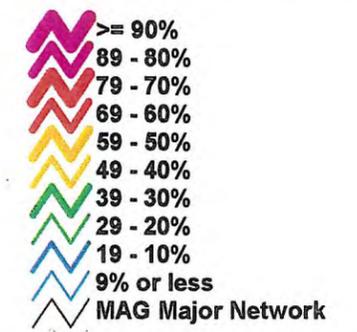


MAG Pedestrian Plan 2000

**Map Figure 4-5
Year 2020 Levels of
Potential "Non-Linked"
Pedestrian Trip Activity**



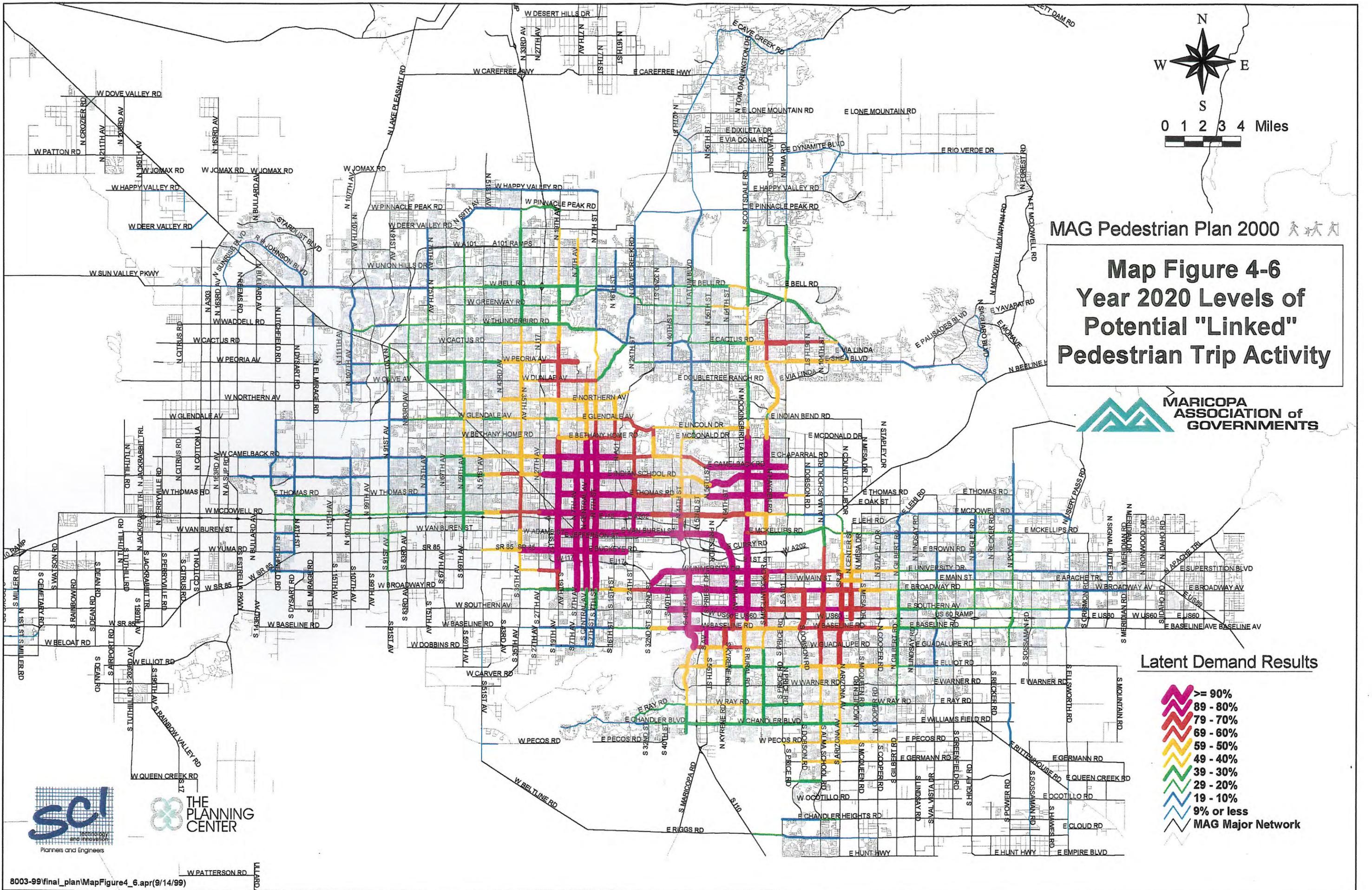
Latent Demand Results



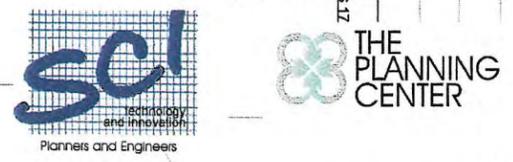
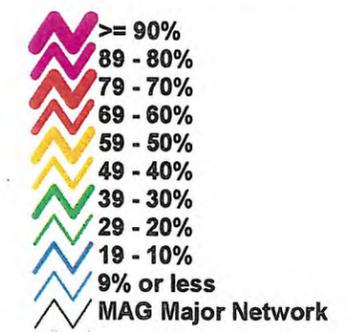


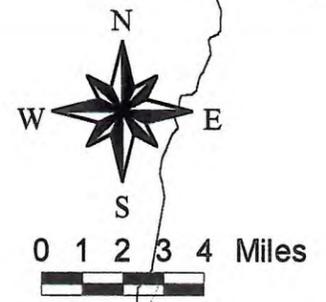
MAG Pedestrian Plan 2000

**Map Figure 4-6
Year 2020 Levels of
Potential "Linked"
Pedestrian Trip Activity**



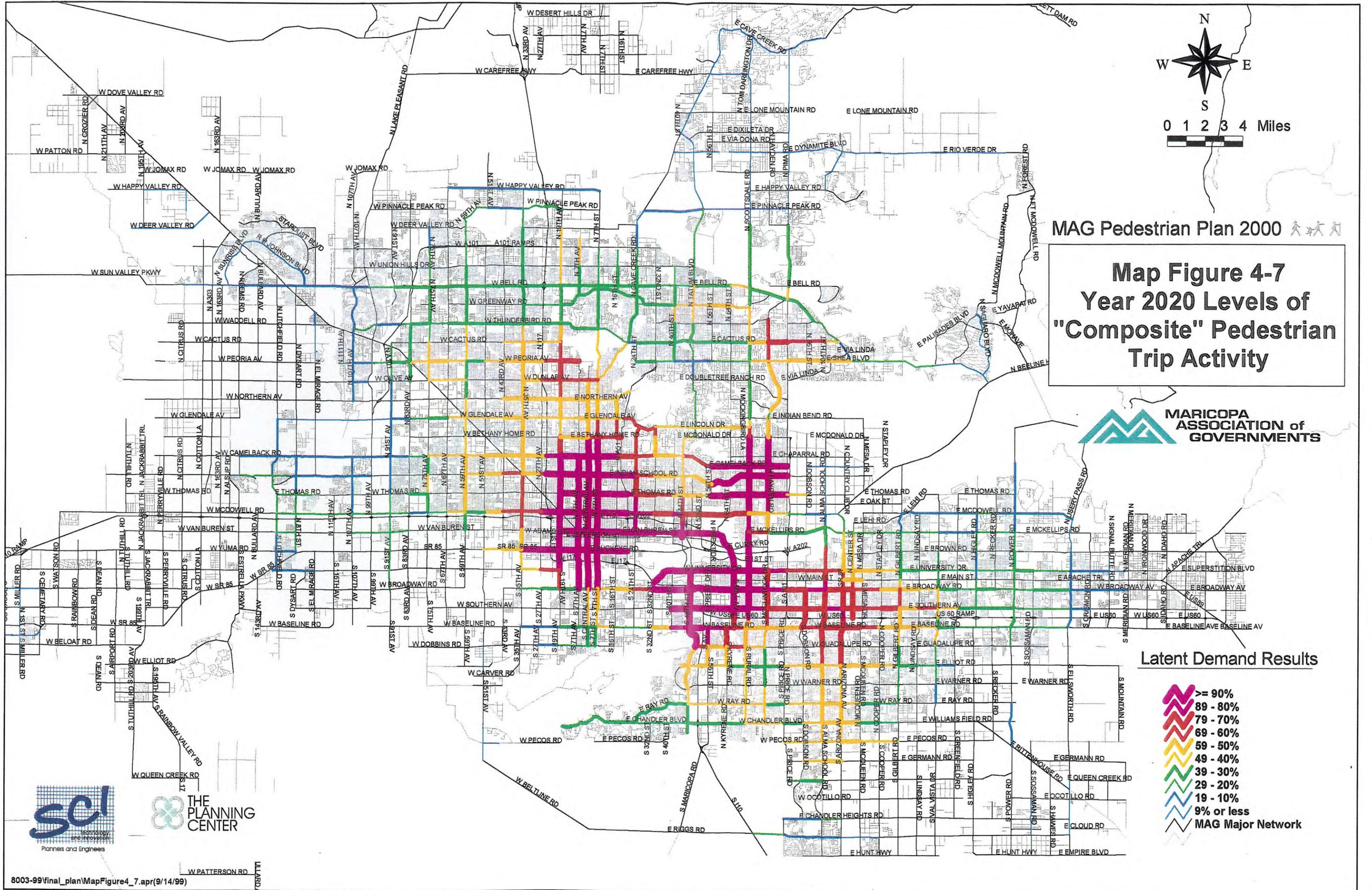
Latent Demand Results





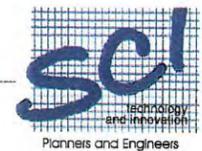
MAG Pedestrian Plan 2000

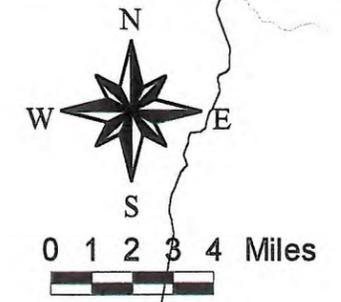
**Map Figure 4-7
Year 2020 Levels of
"Composite" Pedestrian
Trip Activity**



Latent Demand Results

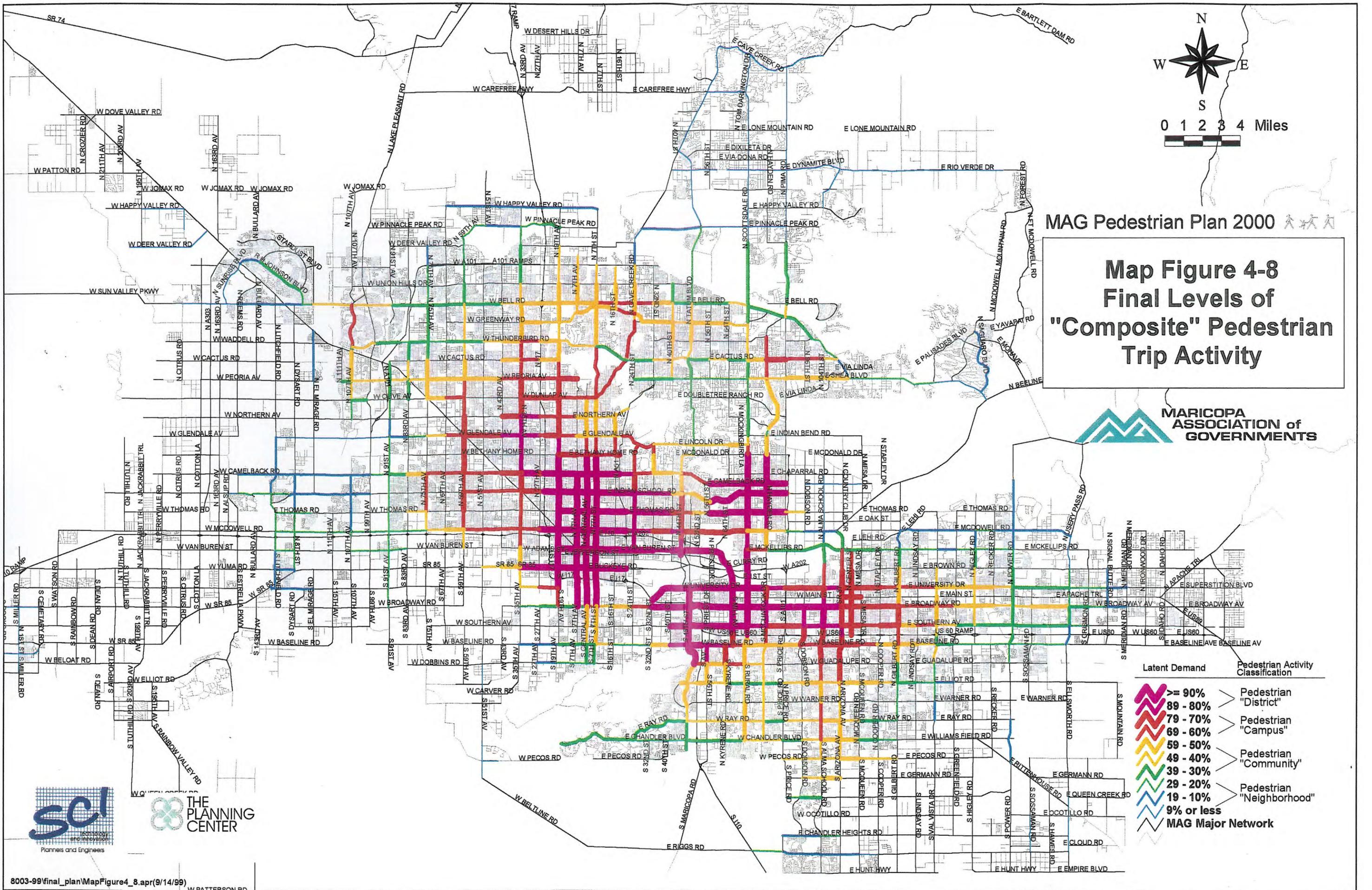
- >= 90%
- 89 - 80%
- 79 - 70%
- 69 - 60%
- 59 - 50%
- 49 - 40%
- 39 - 30%
- 29 - 20%
- 19 - 10%
- 9% or less
- MAG Major Network



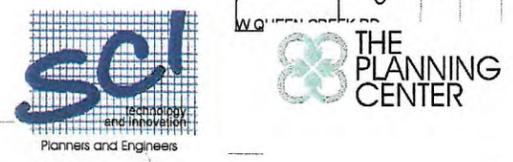


MAG Pedestrian Plan 2000 

**Map Figure 4-8
Final Levels of
"Composite" Pedestrian
Trip Activity**



Latent Demand	Pedestrian Activity Classification
 >= 90%	Pedestrian "District"
 89 - 80%	Pedestrian "Campus"
 79 - 70%	
 69 - 60%	
 59 - 50%	Pedestrian "Community"
 49 - 40%	
 39 - 30%	
 29 - 20%	Pedestrian "Neighborhood"
 19 - 10%	
 9% or less	MAG Major Network





SECTION 5: ROADSIDE FACILITY PERFORMANCE GUIDELINES

A central objective of the *Maricopa Association of Governments (MAG) Pedestrian Plan 2000* is to establish performance guidelines for pedestrian facilities within road rights-of-way. This is a continuation of the initiative begun earlier in the 1990's by the Pedestrian Working Group. While the *MAG 1995 Pedestrian Area Policies and Design Guidelines* established characteristics of pedestrian areas and desired general roadway cross-sections, its influence on roadway design throughout the Valley has been limited due, in part, to the prescriptive nature of its roadway cross sections. Therefore, recasting the *1995 Design Guidelines* by instead establishing regionwide *performance* guidelines, as opposed to rigid roadway cross-sections, will give the designers and engineers of MAG member agencies the design flexibility that will ensure the future transportation facilities will better accommodate walking in the MAG region. It is from this perspective that the *MAG Pedestrian Plan 2000's* roadside design performance guidelines have been developed.

As briefly introduced in the preceding Section, there are several important steps to establishing these performance guidelines for roadways within the MAG region. First, areas within the MAG region are classified, or mapped, into levels of potential pedestrian activity. This has been accomplished using the *Latent Demand Model* as documented in the previous Section. Second, roadway (or roadside pedestrian facility) environment quality or "performance" is defined, and methods or measures are established that best reflect the walking experience of residents and visitors in the metropolitan area. An objective measure selected to accurately reflect the pedestrians' response to motor vehicle traffic allows the development of roadway (or roadside) cross-sectional performance guidelines appropriate for the levels of potential pedestrian activity in the Region. This objective measure is used to determine the quality of the walking environment for the various levels of potential pedestrian activity, particularly with regard to the sense of safety or comfort experienced by pedestrians. For example, areas, or roadways within the Region where there would be many pedestrians using sidewalks and other pedestrian facilities should have the highest performing pedestrian facilities with respect to pedestrians' sense of safety. Conversely, areas, or roadway corridors, where there would be relatively few people walking should certainly accommodate pedestrians, but perhaps with a lesser quality walking environment (i.e., lesser buffering of the pedestrian facility with respect to adjacent motor vehicle traffic). The following subsections detail the last two of the aforementioned steps in the creation of the MAG roadway (or roadside) performance guidelines.





Defining the Pedestrian Environment

In addition to the effects of distance between trip beginning and ending points, the condition of the walking environment has a tremendous effect on pedestrians and their mode choice. Unlike operators of motor vehicles, pedestrians are directly exposed to the effects of motor vehicle traffic as well as a host of other environmental conditions. Accordingly, the walking environment, *as perceived by pedestrians*, is an important consideration in shaping the emerging transportation system of the Region.

Pedestrians' perception of the walking environment can be classified into two broad categories:

- 1) safety, or comfort with respect to other users of the roadway, and
- 2) enjoyment of the travel environment (visual quality, pedestrian amenities, etc.).



The enjoyment aspect, or quality of the pedestrian environment is discussed in detail in MAG's *1995 Pedestrian Area Policies and Design Guidelines*, and the reader should reference those guidelines for information on recommended shade canopy, architectural lighting, street furnishings and fountains, sidewalk paving materials, courtyard design, sign design, and building orientation.

The 1995 MAG Pedestrian Area Policies and Design Guidelines provide guidance on the location of amenities within the pedestrian environment.

This section of the report dwells primarily on pedestrians' perception of personal safety and comfort while walking along the roadway. While pedestrian safety at intersections and mid-block crossings is an important aspect of the walking environment, design treatments are covered in the *1995 Pedestrian Area Policies and Design Guidelines* as well as in numerous local, state, and national roadway and traffic design guidelines. Objectives such as minimizing pedestrian-vehicle conflicts and street crossing distances at intersections are integral to the overall improvement for pedestrians in the Region and should be pursued with equal vigor as improving the roadside walking environment. The *MAG Pedestrian Plan 2000* provides guidance for the design of roadway cross sections, particularly the roadside portions, which better accommodate and encourage pedestrian travel. Accordingly, the following methods focus on influencing the roadside design *between* intersections.





Measuring the Performance of the Roadside Environment: *The Roadside Pedestrian Condition (RPC) Model*

Depending on roadway and traffic conditions, providing a sidewalk is the first step in better accommodating and encouraging pedestrian travel. However, the amount of separation (or buffering) between the pedestrian travel way and the traffic stream is a major factor in how pedestrians perceive the safety of their environment.

The *MAG 1995 Pedestrian Area Design Guidelines* listed many factors which affect the pedestrians' sense of safety, or accommodation, along the roadway. These include: ...*on-street parking as a buffer for pedestrians from moving vehicles...*(Principle #9); ...*the intensity and speed of traffic...which is adjacent to the sidewalk* (Principle #10); ... *separate* (the walkways) *from the curb whenever possible...provide a bikelane or on-street parking as a buffer...*(Recommendation #13); and ...*use traffic calming to limit the speed of vehicles...*(Recommendation #15) among others. These are some of the factors

affecting the perceptions of the Region's pedestrians. Accordingly, an objective, reliable scientific method that reflects the pedestrians' sense of comfort while walking along a given roadway was selected to help produce the performance guidelines. The method, or measure, is the *Roadside Pedestrian Conditions (RPC) Model*. The *Model* was developed in 1998 and has been adopted by several metropolitan areas and state departments of transportation across the United States. It uses measurable and readily available traffic and roadway variables such as:



Sidewalk in the Valley - but are pedestrians comfortable walking here?

- Lateral separation between pedestrians and motor vehicle traffic (including the presence and width of sidewalks and buffers)
- Amount and speed of motor vehicle traffic
- Percentage of heavy vehicles
- Number of travel lanes
- Presence of a paved shoulder, bikelane, or on-street parking
- Trees or other "protective" barriers in the buffer

Based upon these factors, the *RPC Model* produces statistically calibrated results that are stratified into six grades, or levels of service (see Table 5-1). Level "A"





reflects the best conditions for pedestrians and Level "F" represents the worst conditions. For details on how the *RPC Model* was developed and calculated, see the Technical Appendix (a separate document).

As part of the study effort in developing this Plan, a sampling of arterial roadways from across the Region were evaluated using the *RPC Model* to demonstrate the applicability and results of this model. The roadways evaluated were selected from various portions of the MAG Region representing various walking conditions. The roadway characteristics, data input, and results of the evaluation are shown in the Technical Appendix, separately bound. While the *RPC Model* is being used for a number of planning and design applications across the United States (see Figure 5-2), in the MAG Region it is specifically used to develop the tables and matrices of the performance guidelines for roadside design.

Pedestrian Facility Performance Guidelines: Using the Matrices

One of the single most important cross-section design considerations, besides the decision of when to incorporate a sidewalk, is the appropriate amount of lateral separation and buffering between the sidewalk and the motor vehicle travel way. Lateral separation and buffering is essential in providing an appropriate sense of safety and comfort to pedestrians. Mentioned in the *1995 MAG Pedestrian Area Design Guidelines*, the appropriate amount and type of separation and buffering depends on traffic and geometric conditions. Simple cross-section standards do not allow roadway designers the flexibility to provide the *target quality* walking environment, particularly with regard to the sense of safety or comfort afforded to pedestrians.

Accordingly, such design guidance, in the form of performance standards rather than prescriptive roadway cross-sections, is developed as the major component of this *Plan*. The format of these performance guidelines allows roadway designers to consider various design options in achieving the minimum walking environment quality according to the roadway corridor's classification of potential pedestrian activity.

TABLE 5-1 *RPC Model Levels of Service*

LEVEL OF SERVICE CATEGORIES	
Level-of-Service	RPC Score
A	≤ 1.5
B	> 1.5 and ≤ 2.5
C	> 2.5 and ≤ 3.5
D	> 3.5 and ≤ 4.5
E	> 4.5 and ≤ 5.5
F	> 5.5

Applications of RPC Model Throughout the United States

- Network evaluation
- Sidewalk project prioritization
- Traffic calming
- Roadway design
- Mainstream pedestrian planning

FIGURE 5-2



Minimum walking environment quality thresholds (or pedestrian levels of service) are established in Figure 5-3. These performance thresholds establish that roadways within areas with the highest potential to serve pedestrian trip activity (or a mode shift) in the MAG Region should provide the highest quality walking environment with respect to pedestrians' sense of safety. While the actual mathematical *RPC Model* can be used in an iterative design mode to determine the roadway cross-sectional geometry necessary to meet these performance thresholds, for design convenience, Tables 5-1A through C and Table 5-2 have been developed. These tables provide planners and engineers with design information to achieve the performance guidelines for roadways. Step-by-step instructions for using these tables are provided below.

Based on the results of the *Latent Demand Score* analysis, the roadway corridors shown on the *Final Composite Levels of Pedestrian Trip Activity* (Figure 4-8) were classified into different categories. Roadways that are within the first regional category, the "District"

Step 1: Establish the target pedestrian level of service.

(bright purple on Figure 4-8), have the highest level of potential trip activity, and should therefore provide the best quality of service to pedestrians – Pedestrian Level of Service "A". Roadways in the second highest category, the "Campus" (red-orange corridor areas on the map) should, at the minimum, meet Level of Service "B" walking conditions. Roadways in the third and fourth highest regional categories (yellow, green, and blue corridors on the map) should, at the minimum, meet Level of Service "C" walking conditions.

<u>Pedestrian Level of Service "A"</u>	
Latent Demand 100 to 80 =	Highest potential for pedestrian activity. Represents the "District" area type from the <i>1995 Guidelines</i> .
<u>Pedestrian Level of Service "B"</u>	
Latent Demand 79 to 60 =	Second highest potential for pedestrian activity. Represents the "Campus" area type from the <i>1995 Guidelines</i> .
<u>Pedestrian Level of Service "C"</u>	
Latent Demand 59 to 30 =	Third highest potential for pedestrian activity. Represents the "Community" area type from the <i>1995 Guidelines</i> .
Latent Demand 29 to 0 =	Fourth highest potential for pedestrian activity. Represents the "Neighborhood" area type from the <i>1995 Guidelines</i> .

FIGURE 5-3. Roadside Pedestrian Level of Service Thresholds

Local jurisdictions may choose to meet a higher quality of service for pedestrians





along a particular route due to other mitigating factors. For example, if a roadway within a "Community" category has the potential to make many important connections within a low income area, the local jurisdiction may decide to provide a better walking condition, Level of Service "B" or "A", for the planned pedestrian facility. Another example could be when a "Campus" category roadway corridor has many wide intersections that are difficult for pedestrians to cross comfortably; the local jurisdiction may decide to provide a higher roadside pedestrian level of service to improve the corridors' overall walking environment.

Step 2: Determine the *unadjusted* lateral separation needed to achieve the target level of service.

After determining the roadway's pedestrian category, the roadway designer should reference one of the following tables:

- Table 5-1A: Pedestrian "District" (Level of Service "A" conditions)
- Table 5-1B: Pedestrian "Campus" (Level of Service "B" conditions)
- Table 5-1C: Pedestrian "Community" or "Neighborhood" (Level of Service "C" conditions)

Based on the existing roadway traffic conditions (or anticipated ultimate conditions, if conditions are expected to change significantly), find the corresponding *unadjusted* lateral separation necessary to achieve the target walking condition for pedestrians. This *unadjusted* lateral separation is the amount of separation needed between the sidewalk and the roadway, given no other protective design features such as street trees, on-street parking, or other parallel protective barriers.

Step 3: (Optional) Explore options to reduce the *unadjusted* lateral separation (or buffer) width.

In many cases, there will not be sufficient right-of-way width to provide the recommended unbuffered area between the sidewalk and roadway. For these reasons, or aesthetic considerations, the roadway designer may choose other methods to achieve the same level of service for pedestrians, but with a reduced lateral separation, or buffer width. Depending on the roadway, traffic, and adjoining land use conditions there are numerous buffer width reduction alternatives:

- **On-Street Parking:** On-street parking can provide a protective "wall of steel" between the pedestrian and the traffic stream. Depending on the percentage of anticipated occupied parking spaces, this type of "buffer"





can reduce the amount of unadjusted lateral separation by up to 50 feet. This measure, however, often is limited by the function of the roadway, types of adjoining land uses, and local jurisdictional parking management policies.

- **Bicycle Lanes or Undesignated Shoulders:** Roadway cross-sectional elements such as wide curb lanes, striped bicycle lanes, and undesignated paved shoulders provide a sense of separation between the pedestrian way and the traffic stream. As such, they contribute to lateral separation by an amount equal to their actual cross-sectional width.
- **Vertical Barriers:** Vertical barriers are often used in constrained cross-sections where no space is available for other protective measures. Barrier walls can drastically reduce the amount of unadjusted separation, however they are an expensive solution recommended only for the most severely constrained conditions.
- **Street Trees and Landscaped Buffers:** Street trees and landscaping between the sidewalk and the roadway are very effective buffering techniques that can be achieved at relatively low cost. With due consideration for clear recovery areas and minimum planting widths, the lateral separation, or buffer, can be reduced dramatically to meet right-of-way constraints while achieving the minimum target pedestrian level of service in the road-side environment.

Table 5-2 shows *Alternative Buffer Widths* that can be used if street trees are implemented to reduce the unadjusted lateral separation between the sidewalk and the roadway. It is reflective of the positive effect of *tree spacing* on pedestrians' sense of safety with respect to motor vehicle traffic. As with Tables 5-1A through C, this table was derived using the *RPC Model* in conjunction with direct observations and roadway evaluations throughout the MAG region.





Table 5-1A Unadjusted Lateral Separation* - Pedestrian "District" (Latent Demand: 100-80)

All values below produce Pedestrian (safety) Level of Service "A" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																																						
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000												
		6L	2L	6L	2L	6L	4L	6L	4L	6L	4L	6L	4L	6L	4L	6L	4L	6L	4L	6L	4L																			
Speed > 55 mph	> 4%	120	113	104	120	94	108	88	102	94	120	89	115	108	102	94	84	73	56	39	83	78	71	83	64	75	60	70	64	83	61	79	75	53	50	46	40	34	25	16
	2 - 4%	83	78	71	83	64	75	60	70	64	83	61	79	75	70	64	57	49	37	24	60	56	51	60	46	53	42	50	43	57	43	46	39	34	29	21	13			
	0 - 2%	60	56	51	60	46	53	42	50	46	60	43	57	53	50	46	40	34	25	16	92	87	80	92	72	83	67	78	68	83	61	79	75	53	50	46	40	34	25	16
Speed 41 - 50 mph	> 4%	92	87	80	92	72	83	67	78	72	92	68	88	83	78	72	64	55	42	28	68	63	58	68	52	61	48	57	43	51	37	49	46	39	34	29	21	13		
	2 - 4%	68	63	58	68	52	61	48	57	52	68	49	64	61	57	52	46	39	29	19	51	48	44	51	39	46	36	43	31	37	34	29	21	13						
	0 - 2%	51	48	44	51	39	46	36	43	39	51	37	49	46	43	39	34	29	21	13	71	66	60	71	54	63	50	59	43	51	37	49	46	39	34	29	21	13		
Speed 30 - 40 mph	> 4%	71	66	60	71	54	63	50	59	54	71	51	67	63	59	54	48	41	30	20	55	51	47	55	42	49	39	46	33	44	31	42	39	36	33	29	24	17	10	
	2 - 4%	55	51	47	55	42	49	39	46	42	55	39	52	49	46	42	37	31	23	14	44	41	37	44	33	39	30	36	26	33	30	29	24	17	10					
	0 - 2%	44	41	37	44	33	39	30	36	33	44	31	42	39	36	33	29	24	17	10	44	41	37	44	33	39	30	36	26	33	30	29	24	17	10					
Speed < 30 mph	> 4%	53	50	45	53	40	47	37	44	40	53	38	51	47	44	40	36	30	22	13	38	35	31	38	28	33	25	31	26	33	30	29	24	17	10					
	2 - 4%	44	41	37	44	33	39	30	36	33	44	31	42	39	36	33	29	24	17	10	38	35	31	38	28	33	25	31	26	33	30	29	24	17	10					
	0 - 2%	38	35	31	38	28	33	25	31	28	38	26	36	33	31	28	24	20	14	7	38	35	31	38	28	33	25	31	26	33	30	29	24	17	10					

* Includes all space between outside edge of travel lane to inside edge of sidewalk
 Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.



Table 5-1B Unadjusted Lateral Separation* - Pedestrian "Campus" (Latent Demand: 79-60)

All values below produce Pedestrian (safety) Level of Service "B" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																											
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000	
		6L	6L	6L	6L	6L	6L	4L	4L	4L	2L	2L	2L	2L	2L	2L	2L	2L	2L										
Speed > 55 mph	> 4%	67	63	58	58	67	67	52	52	60	48	56	52	52	67	49	64	60	56	56	60	46	39	29	19	19	19	19	19
	2-4%	45	42	38	38	45	37	34	34	40	31	37	34	34	45	32	43	40	37	37	40	30	25	18	10	10	10	10	10
	0-2%	31	29	26	26	31	21	23	23	27	21	25	23	23	31	21	30	27	25	25	27	20	16	11	5	5	5	5	5
Speed 41 - 50 mph	> 4%	51	47	43	43	51	35	38	45	35	42	38	38	38	51	36	48	45	42	42	45	34	28	20	12	12	12	12	12
	2-4%	36	33	30	30	36	24	27	32	24	29	27	27	27	36	25	34	32	29	29	32	23	19	13	7	7	7	7	7
	0-2%	26	24	22	22	26	17	19	23	17	21	19	19	19	26	17	25	23	21	21	23	16	13	8	3	3	3	3	3
Speed 30 - 40 mph	> 4%	38	35	32	32	38	26	28	33	26	31	28	28	28	38	26	36	33	31	31	33	24	20	14	7	7	7	7	7
	2-4%	28	26	23	23	28	19	20	25	19	23	20	20	20	28	19	27	25	23	23	25	18	14	9	4	4	4	4	4
	0-2%	22	20	18	18	22	14	15	19	14	17	15	15	15	22	14	21	19	17	17	19	13	10	6	1	1	1	1	1
Speed < 30 mph	> 4%	27	25	23	23	27	18	20	24	18	22	20	20	20	27	18	26	24	22	22	24	17	13	9	3	3	3	3	3
	2-4%	22	20	18	18	22	14	15	19	14	17	15	15	15	22	14	21	19	17	17	19	13	10	6	1	1	1	1	1
	0-2%	18	16	14	14	18	11	12	15	11	14	12	12	12	18	11	17	15	14	14	15	10	7	4	NS	NS	NS	NS	NS

* Includes all space between outside edge of travel lane to inside edge of sidewalk
 "NS" indicates that a sidewalk is not necessary to achieve the designated Pedestrian Safety Comfort Level
 Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.



Table 5-1C Unadjusted Lateral Separation* - Pedestrian "Community" (Latent Demand: 59-30) and "Neighborhood" (Latent Demand: 29-0)

All values below produce Pedestrian (safety) Level of Service "C" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage															
		60,000 6L	50,000 6L	40,000 4L	30,000 6L	25,000 4L	20,000 4L	17,500 4L	15,000 2L	12,500 2L	10,000 2L	7,500 2L	5,000 2L	2,500 2L	1,000 2L		
Speed > 55 mph	> 4%	36	33	30	36	32	26	36	25	34	32	29	26	23	19	13	7
	2 - 4%	23	21	18	23	20	16	23	15	21	20	18	16	13	10	6	2
	0 - 2%	14	13	11	14	12	9	14	8	13	12	11	9	7	5	2	NS
Speed 41 - 50 mph	> 4%	26	24	21	26	23	18	26	17	24	23	21	18	16	12	8	3
	2 - 4%	17	15	14	17	15	11	17	10	16	15	13	11	9	7	3	NS
	0 - 2%	11	10	8	11	9	7	11	6	10	9	8	7	5	3	NS	NS
Speed 30 - 40 mph	> 4%	18	16	14	18	15	12	18	11	17	15	14	12	10	8	4	NS
	2 - 4%	13	11	10	13	10	8	13	7	12	10	9	8	6	4	1	NS
	0 - 2%	9	8	6	9	7	5	9	4	8	7	6	5	3	1	NS	NS
Speed < 30 mph	> 4%	12	11	9	12	10	7	12	9	11	10	9	7	6	4	1	NS
	2 - 4%	9	8	6	9	7	5	9	4	8	7	6	5	3	2	NS	NS
	0 - 2%	6	5	4	6	5	3	6	2	6	5	4	3	2	NS	NS	NS

* Includes all space between outside edge of travel lane to inside edge of sidewalk
 "NS" indicates that a sidewalk is not necessary to achieve the designated Pedestrian Safety Comfort Level

Note: The above table was developed with the assumption that all roadways have raised curbing along the travel lane edge. For roadways with an open-shoulder cross section, refer to the RPC Model equation in the Technical Appendix.



Table 5-2 Alternative Buffer Widths¹ (in feet)

Un-adjusted Separation in feet (from Table 1)	Planted Buffer ² - Tree Spacing (feet on center)					
	200 o.c.	100 o.c.	60 o.c.	40 o.c.	20 o.c.	10 o.c.
	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width
125	109	67	47	36	23	15
120	105	64	45	35	22	14
115	100	62	43	33	21	14
110	96	59	41	32	20	13
105	91	56	39	30	19	13
100	86	53	37	29	18	12
95	82	50	35	27	17	11
90	77	48	33	26	17	11
85	73	45	31	24	16	10
80	68	42	29	23	15	10
75	64	39	28	21	14	9
70	59	37	26	20	13	8
65	55	34	24	18	12	8
60	50	31	22	17	11	7
55	46	28	20	15	10	7
50	41	25	18	14	9	6
45	36	23	16	12	8	6
40	32	20	14	11	7	5
35	27	17	12	10	6	4
30	23	14	10	8	5	4
25	18	12	8	7	5	4*
20	14	9	6	5	4	4*
15	9	6	4	4	4*	4*
10	5	4*	4*	4*	4*	4*

1. Includes all space between outside edge of travel lane to inside edge of sidewalk

2. Parking has a tremendous effect on providing a greater sense of safety to the pedestrians alongside the roadway, but it has limited application (on-street parking is not a viable option on roadways with higher operating speeds)

* Buffer limited by practical planting width





Example Application of the Roadside Performance Guidelines

An example of the application of guidelines portrayed in these tables in achieving pedestrian facility performance standards is illustrated below. Sonoran Central Boulevard is a typical (but fictional) roadway in the MAG region. According to Figure 4-8, this roadway is (hypothetically) in the second highest potential pedestrian activity category, "Campus". Accordingly, the minimum performance of its roadside environment should be a Pedestrian Level of Service "B", as determined in Figure 5-3. Sonoran Central Boulevard is a six-lane, 40 mph-posted arterial carrying 33,000 vehicles per day with approximately three percent trucks. It is in a completely developed area in the Region and the traffic volume is not expected to increase beyond approximately 35,000 vehicles per day. Like many of the roadways in the MAG region, it has sidewalks behind the curb. See Figure 5-4 for its existing (half) cross-section. Current roadside conditions of Sonoran Central Boulevard are relatively poor: Pedestrian Level of Service "E" (4.65) as determined by

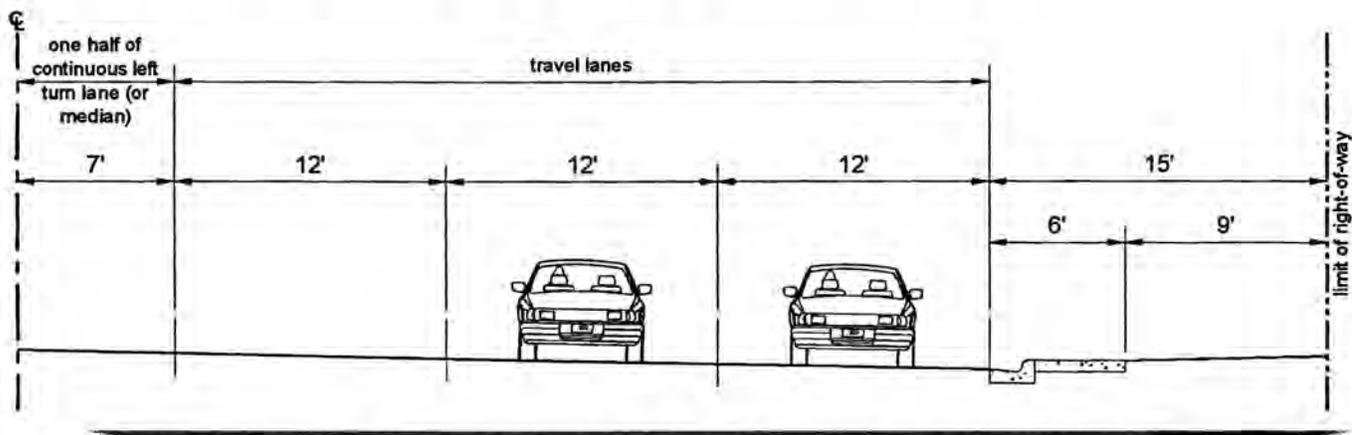


FIGURE 5-4. Example Roadway Redesign: Sonoran Central Blvd. - Existing - Pedestrian Level of Service "E"

the *RPC Model*. It is desired, due to the potential for adjoining land redevelopment, that the roadway be "redeveloped" with a much-improved pedestrian environment.

There are several ways that an improved roadside walking environment (to at least the target Pedestrian Level of Service "B") can be achieved for this example roadway. The roadway designer would first use Table 5-1B to determine the required unadjusted lateral separation. The designer would find that for the design conditions, 23 feet of unadjusted lateral separation is needed to achieve a Level "B" walking condition (see Figure 5-5). However, the designer does not have 23 feet of right-of-way available behind the curb (plus whatever sidewalk width is desired),





All values below produce Pedestrian (safety) Level of Service "B" in unscreened conditions

Posted Speed	Truck %	Average Daily Traffic (ADT) and Laneage																											
		60,000		50,000		40,000		30,000		25,000		20,000		17,500		15,000		12,500		10,000		7,500		5,000		2,500		1,000	
		6L	6L	6L	4L	6L	4L	6L	4L	4L	2L	4L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	2L	
Speed > 55 mph	> 4%	67	63	58	57	52	60	48	56	52	57	49	64	60	56	52	46	39	29	19									
	2 - 4%	45	42	38	45	34	40	31	37	34	45	32	43	40	37	34	30	25	18	10									
	0 - 2%	31	29	26	31	23	27	21	25	23	31	21	30	27	25	23	20	16	11	5									
Speed 41 - 50 mph	> 4%	51	47	43	51	38	45	35	42	38	51	36	48	45	42	38	34	28	20	12									
	2 - 4%	36	33	30	36	27	32	24	29	27	36	25	34	32	29	27	23	19	13	7									
	0 - 2%	26	24	22	26	19	23	17	21	19	26	17	23	23	21	19	16	13	8	3									
Speed 30 - 40 mph	> 4%	38	35	32	36	28	33	26	31	28	38	26	38	33	31	28	24	20	14	7									
	2 - 4%	28	26	23	28	20	25	19	23	20	28	19	27	25	23	20	18	14	9	4									
	0 - 2%	22	20	18	22	15	19	14	17	15	22	14	21	19	17	15	13	10	6	1									
Speed < 30 mph	> 4%	27	25	23	27	20	24	18	22	20	27	18	26	24	22	20	17	13	9	3									
	2 - 4%	22	20	18	22	15	19	14	17	15	22	14	21	19	17	15	13	10	6	1									
	0 - 2%	18	16	14	18	12	15	11	14	12	18	11	17	15	14	12	10	7	4	NS									

* Includes all space between outside edge of travel lane to inside edge of sidewalk
 "NS" indicates that a sidewalk is not necessary to achieve the designated Pedestrian Safety Comfort Level

FIGURE 5-6. Sonoran Central Boulevard Redevelopment Example: Determining unadjusted lateral separation.

nor does she want to (initially) consider taking motor vehicle laneage away (more on that alternative later). Therefore, the designer would investigate options to reduce this "unbuffered" lateral separation using street trees and landscaped sidewalk buffers. Accordingly, the roadway designer would locate the first value greater than 23 feet in the first left-hand column of *Table 2 Alternative Buffer Widths*. By scanning across the "25" foot row, several buffer width options are shown for various tree spacings. For example, by placing street trees 40 feet on center (o.c.) along Sonoran Central Boulevard, only 7 feet of buffer is needed between the sidewalk and the outside edge of the travel lane, see Figure 5-6. If the right-of-way width couldn't accommodate 7 feet of buffer space (plus sidewalk widths) on both sides of the street, street trees could be spaced even closer together - 20' o.c. - resulting in a buffer width need of only 5 feet (assuming the clear recovery area is maintained for motor vehicles). Figure 5-7 illustrates the resulting cross-section of the roadway that will achieve a pedestrian level of service "B" using the tree buffered alternative.

There are numerous other design alternatives that can be considered in this example to achieve a relatively high quality pedestrian level of service. For example, up to two traffic lanes could be converted to a variety of combinations of bicycle lanes, buffer, and sidewalk widths. In this particular case, a four-lane configuration could still serve the travel needs of the motor vehicle traffic (motor vehicle LOS is "B" for the six lane configuration; motor vehicle LOS would be "D" for a 4-lane configuration) and greatly enhanced conditions for bicycling and walking within the



Un-adjusted Separation in feet (from Table 1)	Planted Buffer ² - Tree Spacing (feet on center)					
	200 o.c.	100 o.c.	60 o.c.	40 o.c.	20 o.c.	10 o.c.
	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width	Buffer Width
125	108	67	47	36	23	15
120	105	64	45	35	22	14
115	100	62	43	33	21	14
110	98	59	41	32	20	13
105	91	56	38	30	18	13
100	88	53	37	29	18	12
95	82	50	35	27	17	11
90	77	48	33	26	17	11
85	73	45	31	24	16	10
80	68	42	29	23	15	10
75	64	39	28	21	14	9
70	59	37	26	20	13	8
65	55	34	24	18	12	8
60	50	31	22	17	11	7
55	48	29	20	15	10	7
50	41	25	18	14	9	6
45	38	23	18	12	8	6
40	32	20	14	11	7	5
35	27	17	12	10	6	4
30	23	14	10	8	5	4
25	18	12	8	7	5	4*
20	14	8	6	5	4	4*
15	9	8	4	4	4*	4*
10	5	4*	4*	4*	4*	4*

1 Includes all space between outside edge of travel lane to inside edge of sidewalk
 2 Parking has a tremendous effect on providing a greater sense of safety to the pedestrians alongside the roadway, but it has limited application (on-street parking is not a viable option on roadways with higher operating speeds)
 * Buffer limited by practical planting width

MAG Pedestrian Plan 2000

roadway corridor.

In summary, this section of the *MAG Pedestrian Plan 2000* provides roadside design performance guidelines primarily focused on pedestrians' perception of personal safety and comfort in the roadside environment. While this is an important ingredient in improving the regional pedestrian environment, other parts of the pedestrian transportation system must be enhanced as well to achieve the overall objectives of the Maricopa Association of Governments. These include: meeting ADA accessibility standards, improved pedestrian accommodation & safety at intersections and mid-block

FIGURE 5-6. Sonoran Central Boulevard Redevelopment Example: Determining unadjusted lateral separation.

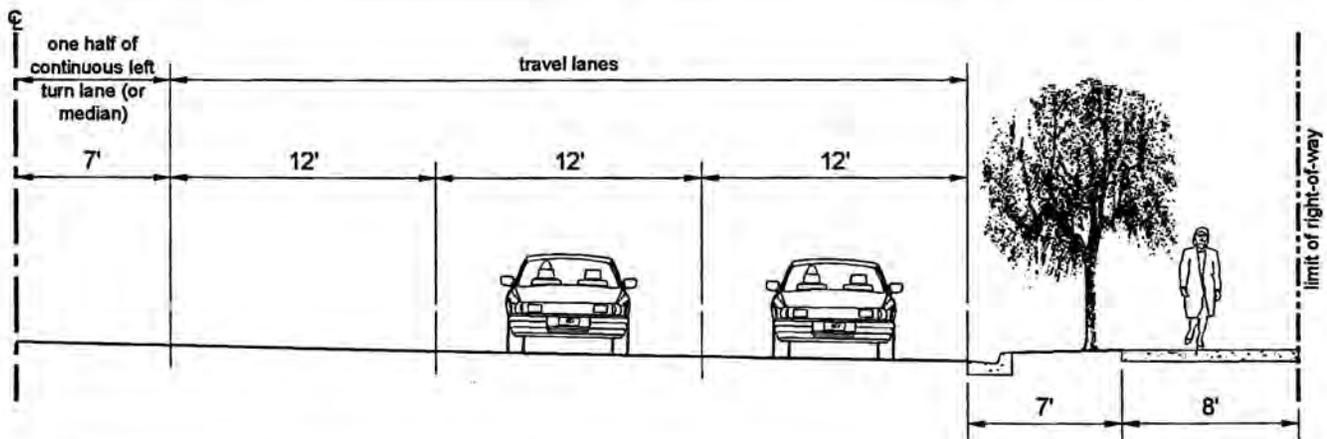


FIGURE 5-7. Example of Alternative Buffer within Sonoran Central Blvd. - Pedestrian Level of Service "B"





crossings, and providing the shade canopy and street furniture and other pedestrian travel amenities covered in the 1995 MAG Pedestrian Area Policies and Design Guidelines and applicable local, state, and national roadway and traffic design guidelines. Objectives such as these along with minimizing pedestrian-vehicle conflicts and street crossing distances at intersections are integral to the overall improvement in the Region and should be pursued with equal vigor as improving the roadside walking environment.

conflicts and street crossing distances at intersections are integral to the overall improvement in the Region and should be pursued with equal vigor as improving the roadside walking environment.



*Thomas Road "Before":
Lack of sidewalk buffering
results in a walking condition
(level of service) "E" under
these roadway conditions.*



*Thomas Road "After":
A buffered lateral separation
provides a better ("Level of
Service "B") walking
environment under the same
traffic conditions.*





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SECTION 6: ACTION PLAN

This section provides a summary of necessary actions and programs to meet the Regional goals and objectives outlined in Section 3 of this *MAG Pedestrian Plan 2000*. This Action Plan was developed through interaction among the standing MAG Pedestrian Working Group, the Public Stakeholders Group, and the consultant team & MAG staff. It consists of specific short term (one year), mid-term (2-3 years) and long-term (4-5 years) programs and activities that are necessary to bring about an increase in walking trips in the Region and a corresponding decrease in traffic congestion. Table 6-1 presents the Action Plan in a tabular matrix form.



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Action Plan and Timeframe

MAG Role*	Action (Task or Program)	Year 1	Year 2	Year 3	Year 4	Year 5	On-going
	LAND USE						
Action	1. Supplement MAG Pedestrian Area Policies and Design Guidelines with recent pedestrian design and ADA standards.	█					
Action	2. Revise MAG specifications and details to incorporate MAG Pedestrian Design Guidelines.	█					
Action	3. Broaden membership of the MAG Pedestrian Working Group (PWG) to ensure representation of various jurisdictions and multi-modal planners.		█	█			
Action	4. Create an Advisory Membership category to the MAG PWG to broaden representation to business groups, homebuilders, special interest groups, etc.				█	█	
	PUBLIC AWARENESS						
Action	5. Expand the scope and financial support of the MAG Design Assistance Program.	█					
Action	6. Develop Public Service Announcements on the benefits of walking and/or other MAG Pedestrian programs.	█			█	█	
Action	7. Develop a pedestrian-oriented educational session to present at regional planning, bicycle, trail, and/or transportation conferences.	█					√
Support	8. Encourage regional planning, design, and environmental awards programs to include a Pedestrian Project award category.	█					
Action	9. Continue to present the Walking and Bicycling into the 21 st Century Pedestrian Conference.		█	█			
Action	10. Develop a MAG Pedestrian Awards Program and tie into the Walking and Bicycling into the 21 st Century Conference.		█	█			√
Action	11. Develop an audio/visual program on the MAG Pedestrian Program or on pedestrian oriented design for presentations to community organizations.		█	█			
Action	12. Host a National Pedestrian Conference in the Phoenix metropolitan region.				█	█	
Support	13. Support and expand Rideshare programs to implement pedestrian specific programs.		█	█			
Action	14. Develop an annual budget for the continued publication of the <i>MAG Pedestrian Plan 2000</i> document and supplements.	█					√
Action	15. Develop a brochure of the <i>MAG Pedestrian Plan 2000</i> document for easy distribution, and specifically target Planning and Zoning departments of member agencies.		█	█			
Action	16. Develop a supplement to the original <i>MAG Pedestrian Plan 2000</i> document that includes summaries of recent regional pedestrian projects and their economic benefits.				█	█	
	FUNDING						
Support	17. Support the interpretation and revision of state legislation and policies to allow use of state transportation funds for pedestrian facilities.		█	█			
Action	18. Recommend changes to the Congestion Management rating system based on the <i>Latent Demand</i> and <i>Roadside Pedestrian Conditions</i> models and their associated tables.	█					
Action	19. Continue funding for a MAG pedestrian planner to provide support to pedestrians as a vital component of a region-wide multi-modal transportation system.	█					√
Support	20. Encourage all MAG jurisdictions to establish a pedestrian planner position to ensure that pedestrian needs are integrated into all projects.		█	█			√
Action	21. Use MAG's <i>Latent Demand</i> and <i>Roadside Pedestrian Conditions</i> models as evaluation tools to select federally funded transportation projects.	█					√

***MAG Role:**

Action: A "MAG Action" is a specific course of action designed to achieve an objective implemented by MAG staff or by the Pedestrian Working Group. This is the "who" of the Goals and Objectives.

Support: A "MAG Support" is a specific course of action designed to achieve an objective that is implemented by MAG member agencies, and which can be supported by MAG staff and/or the Pedestrian Working Group.



MAG Role	Action (Task or Program)	Year 1	Year 2	Year 3	Year 4	Year 5	On-going
Support	22. Encourage the use of the Pedestrian <i>Latent Demand Model</i> and the <i>Roadside Pedestrian Condition Model</i> in project evaluations at the local level.						√
Action	23. Continue funding for the MAG design assistance program.						√
Action	24. Continue MAG staff and Pedestrian Working Group participation in the Long Range Transportation Plan update process and in the development of the Transportation Improvement Program.						
	DESIGN FOR PEOPLE						
Action	25. Use MAG's <i>Roadside Pedestrian Conditions Model</i> to determine the degree to which projects provide appropriate pedestrian design.						√
Action	26. Develop a model ordinance for the inclusion of pedestrian oriented design as an integral part of infrastructure development in all plan review processes.						
Support	27. Encourage jurisdictions to use the <i>Roadside Pedestrian Conditions Model</i> to promote more pedestrian-oriented design.						
	LINKAGE						
Action	28. Demonstrate that appropriate pedestrian accommodations are occurring when evaluating Federally funded projects including the Congestion Management Rating System.						√
Support	29. Encourage the inclusion of pedestrian design in the transit design guidelines being prepared by RPTA, and in other local design standards and guidelines.						√
Support	30. Encourage inclusion of the RPC and PLD Models in rating pedestrian projects.						√
Support	31. Encourage jurisdictions to maintain connectivity between transportation related pedestrian facilities and other transportation modes such as transit and bicycles.						√
Support	32. Provide coordination between member jurisdictions on open space and multi-modal transportation planning.						√

***MAG Role:**

Action: A "MAG Action" is a specific course of action designed to achieve an objective that is implemented either by MAG staff or by the Pedestrian Working Group. This is the "who" of the Goals and Objectives.

Support: A "MAG Support" is a specific course of action designed to achieve an objective that is implemented by MAG's member jurisdictions or agencies, and which can be supported by MAG staff and its policies and/or the Pedestrian Working Group.



Appendix



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Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	
E Baseline Rd	S 40th Street	S 48th Street	3,555	307	9,264	15,167	2,940	28	27	32	6,668	307	14,383	15,167	2,940	32	87	87
E Baseline Rd	N McQueen Rd	S Stapley Dr	3,897	46	10,446	24,572	2,166	37	32	36	7,692	46	17,503	29,786	2,166	46	63	63
E Baseline Rd	S Lindsay Rd	S Val Vista Dr	1,450	-	8,672	37,209	7,396	49	11	36	3,274	-	14,383	37,209	7,396	50	26	50
E Baseline Rd	S Gilbert Rd	S Lindsay Rd	2,285	-	9,932	39,559	9,868	55	18	40	4,008	-	14,516	39,559	9,868	54	34	55
E Baseline Rd	S Stapley Dr	S Gilbert Rd	3,694	-	10,336	39,137	10,192	56	25	39	6,886	-	15,658	39,137	10,192	58	49	58
E Baseline Rd	S Val Vista DR	N Greenfield RD	912	-	5,941	25,897	6,087	35	7	25	3,170	-	12,703	25,897	6,087	38	22	38
E Baseline Rd	N Greenfield Rd	S Higley Rd	853	-	4,287	13,338	4,692	21	6	17	3,900	-	12,881	13,664	4,692	28	25	28
E Baseline Rd	S Higley Rd	N Recker RD	859	17	2,844	3,952	3,163	10	7	11	3,574	17	10,735	3,952	3,163	17	29	29
E Baseline Rd	S McClintock Dr	S Price Rd	5,196	2,949	13,974	12,654	12,159	42	40	49	5,949	2,949	15,096	12,654	12,159	39	57	57
E Baseline Rd	S 19th Avenue	S 7th Avenue	1,076	69	5,025	19,497	12,304	34	8	22	1,563	69	8,044	19,497	12,304	33	13	34
E Baseline Rd	S 7th Avenue	S Central Avenue	1,312	69	5,775	17,835	15,145	36	10	25	1,898	69	8,723	17,835	15,145	35	15	36
E Baseline Rd	S central Avenue	S 7th Street	1,422	664	6,240	16,598	16,906	37	11	27	2,139	664	9,595	16,598	16,906	37	12	37
E Baseline Rd	S 7th Street	S 16th Street	1,510	682	6,885	19,869	16,413	40	10	30	2,443	682	11,243	19,869	16,413	41	16	41
E Baseline Rd	S 16th Street	S 24th Street	1,224	841	5,106	12,872	10,151	27	10	21	2,219	841	9,640	12,872	10,151	29	29	29
E Baseline Rd	S 24th street	S 32nd street	1,562	756	4,325	14,321	1,819	20	13	16	2,444	756	8,541	14,321	1,819	22	26	26
E Baseline Rd	S 32nd Street	S 40th Street	2,235	318	5,521	16,229	383	22	19	18	3,514	318	9,379	16,229	383	24	56	56
E Baseline Rd	S 48th Street	I 10 ramp	4,017	666	11,423	12,257	4,700	29	33	44	8,347	666	16,737	12,257	4,700	34	91	91
E Baseline Rd	I 10 ramp	S 56th Street	4,360	804	11,221	7,844	7,310	28	44	44	8,125	804	16,066	7,844	7,310	32	86	86
E Baseline Rd	S 56th Street	S Kyrene Rd	6,797	776	15,934	11,097	10,798	40	51	61	10,918	776	20,910	11,097	10,798	44	81	81
E Baseline Rd	S Kyrene	S mill Avenue	5,798	589	13,512	7,203	13,696	36	50	53	8,224	589	16,152	7,203	13,696	37	86	86
E Baseline Rd	S Mill Avenue	N Scottsdale Road	6,138	370	14,638	7,241	15,523	39	45	57	7,882	370	16,596	7,241	15,523	38	67	67
E Baseline Rd	N Scottsdale Road	S McClintock Dr	6,485	25	16,159	7,381	19,917	44	41	59	7,530	25	17,573	7,381	19,917	42	53	59
E Baseline Rd	S Price Rd	S Dobson rd	5,136	15,063	14,010	14,936	8,701	51	39	50	5,937	15,257	15,174	14,936	8,701	48	54	54
E Baseline Rd	S Dobson rd	S Alma School Road	5,877	10,911	15,961	21,910	11,792	59	40	60	7,314	11,093	18,143	21,910	11,792	56	68	68
E Baseline Rd	S Alma School Road	S County Club DR	6,704	9,886	15,612	20,470	6,044	52	46	57	10,940	10,483	20,637	20,470	6,044	55	72	72
E Baseline Rd	S County Club Dr	N McQueen RD	4,940	976	11,608	20,731	554	34	39	40	8,825	976	18,240	20,731	554	39	70	70
E Baseline Rd	S Sossaman Rd	S Ellsworth Rd	588	8	4,132	11,801	-	15	4	22	4,293	8	17,808	11,801	-	27	24	27
E Baseline Rd	N Power RD	S Sossaman Rd	1,072	350	4,624	9,191	-	14	7	21	4,013	350	14,467	9,191	-	22	27	27
E Baseline Rd	N Recker RD	N Power RD	1,092	201	3,513	9,559	4,051	16	7	13	3,880	201	12,142	9,559	4,051	24	27	27
E Bell Road	N 117	N 19th Avenue	4,384	1,108	12,821	3,959	4,144	23	31	54	5,994	1,108	16,447	3,959	4,144	25	33	54
E Bell Road	N 19th Avenue	N 7th Avenue	3,683	-	12,717	8,083	7,750	29	27	55	5,091	-	16,464	8,083	7,750	30	34	55
E Bell Road	N 7th Avenue	N 7th Street	2,565	-	12,767	11,387	8,140	31	18	59	3,603	-	16,472	11,387	8,140	32	28	59
E Bell Road	N 7th Street	N 16th Street	2,228	-	12,754	17,211	3,355	32	15	62	2,985	-	16,213	17,211	3,355	32	19	62
E Bell Road	N 16th Street	N Cave Creek Road	2,234	-	12,576	11,912	11,230	34	16	65	3,044	-	15,994	11,912	11,230	34	19	65
E Bell Road	N Cave Creek Road	N 32rd Street	2,307	-	11,949	14,044	11,844	36	16	61	3,199	-	15,261	14,044	11,844	36	19	61
E Bell Road	N 32rd Street	N 40th Street	2,263	-	11,095	4,476	8,042	23	15	52	3,054	-	14,300	4,476	8,042	24	20	52
E Bell Road	N 40th Street	N Tatum Blvd	1,903	-	9,333	12,304	8,780	29	13	37	2,847	-	13,303	12,304	8,780	30	21	37
E Bell Road	N Tatum Blvd	N 56th Street	1,259	-	7,501	20,965	6,264	32	9	26	2,767	-	12,593	20,965	6,264	34	24	34
E Bell Road	N 56th Street	N 64th Street	870	-	5,564	19,013	6,644	29	7	18	3,462	-	12,471	19,013	6,644	33	32	33
E Bell Road	N 64th Street	N Scottsdale Road	1,904	-	4,803	17,998	1,764	24	17	12	5,869	-	12,836	17,998	1,764	31	42	42
E Bethany home road	S 19th Avenue	N 7th Avenue	6,727	628	16,896	15,026	8,392	42	48	79	7,055	628	18,027	15,026	8,392	39	54	79

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17385	max 38448	max 38460	max 48037	max 25580	max 100	max 100	max 100	max 14351	max 43098	max 34050	max 52283	max 25580	max 100	max 100	
E Bethany home road	N Central Avenue	N 7th Street	6,430	81	13,841	6,261	4,737	28	55	62	6,669	81	14,576	6,261	4,737	26	65	65
E Bethany home road	N 7th Avenue	N central Avenue	6,116	76	13,736	11,626	5,900	33	53	61	6,340	76	14,495	11,626	5,900	31	60	61
E Bethany home road	N 7th street	S 16th Street	8,355	72	16,137	14,114	7,016	41	60	65	8,741	72	17,071	14,114	7,016	38	67	67
E Bethany home road	S 16th Street	N A 51	5,813	3,190	11,533	11,202	6,723	34	68	46	6,339	3,190	12,323	11,202	6,723	32	70	70
E Broadway Road	N Ellsworth RD	S Crismon Rd	295	-	4,899	7,039	3,956	14	2	33	1,467	-	9,262	7,039	3,956	17	12	33
E Broadway Road	S Rooks Rd	Miller Rd	86	-	212	-	-	0	1	1	686	-	1,696	-	-	2	8	8
E Broadway Road	Miller Rd	Cementary Rd	93	-	338	-	-	0	1	2	1,293	-	2,315	-	-	3	10	10
E Broadway Road	S 35th Avenue	S 27th Avenue	1,796	-	3,358	5,204	876	10	15	7	3,178	-	6,090	5,204	876	12	30	30
E Broadway Road	S 27th Avenue	S 19th Avenue	2,068	-	4,204	12,345	1,639	18	15	11	3,555	-	6,915	13,710	1,639	21	31	31
E Broadway Road	S 19th Avenue	S 7th Avenue	2,817	-	6,441	27,384	5,258	37	20	22	4,225	-	8,907	27,384	5,258	37	36	37
E Broadway Road	S 7th Avenue	S Central Avenue	2,871	-	6,679	25,548	7,973	38	24	24	3,813	-	8,621	25,548	7,973	37	37	38
E Broadway Road	S central Avenue	S 7th Street	3,130	-	7,050	29,275	10,512	44	27	26	3,969	-	8,900	29,275	10,512	42	39	44
E Broadway Road	S 7th Street	S 16th Street	4,015	99	8,467	29,265	9,943	46	29	30	5,314	99	10,810	29,265	9,943	44	47	47
E Broadway Road	S 16th Street	S 24th Street	4,373	367	8,461	28,806	9,066	45	37	26	6,212	367	11,518	28,806	9,066	45	59	59
E Broadway Road	S 24th street	S 32nd street	3,810	791	9,379	15,114	8,602	34	48	20	4,959	791	12,936	15,114	8,602	34	65	65
E Broadway Road	S 32nd Street	S 40th Street	3,684	748	11,129	10,352	3,215	26	62	17	4,604	748	14,989	10,352	3,215	27	94	94
E Broadway Road	S 40th Street	48th Street	4,041	2,314	14,348	5,211	114	23	84	19	4,910	2,314	18,962	5,211	114	25	100	100
E Broadway Road	S Priest Dr	S mill Avenue	9,514	36,448	22,568	26,714	13,244	96	100	57	11,551	43,096	28,058	28,932	13,244	100	100	100
E Broadway Road	S Mill Avenue	N Scottsdale Road	9,855	18,891	20,458	24,804	16,653	80	88	75	12,149	21,364	24,465	24,604	16,653	79	100	100
E Broadway Road	N Scottsdale Road	N Hayden Road	9,922	19,019	20,953	22,329	15,517	78	75	90	12,554	22,608	25,277	22,329	15,517	79	100	100
E Broadway Road	N Hayden Road	S A101 Ramp	8,191	9,622	19,721	10,518	16,045	57	59	100	10,973	11,113	23,629	10,518	16,045	58	89	100
E Broadway Road	S Dodson rd	S Alma School Road	8,932	17,950	20,779	11,972	8,741	61	62	100	11,009	17,950	23,530	11,972	8,741	59	82	100
E Broadway Road	S Alma School Road	S County Club DR	9,161	13,771	20,572	18,835	9,616	64	65	95	10,483	13,771	22,701	18,835	9,616	60	79	95
E Broadway Road	S County Club Dr	S Center Street	7,140	-	16,507	18,772	12,054	48	56	74	7,874	-	17,893	18,772	12,054	45	74	74
E Broadway Road	S Center Street	N Mesa Dr	6,604	-	15,968	24,893	16,152	57	52	70	7,025	-	17,162	24,893	16,152	52	70	70
E Broadway Road	N mesa Dr	S Stapley Dr	6,399	-	17,343	32,499	19,017	67	46	75	6,938	-	19,053	32,499	19,017	62	56	75
E Broadway Road	S Stapley Dr	S Gilbert Rd	4,067	-	15,687	29,204	22,613	64	30	73	4,544	-	17,243	29,204	22,613	59	47	73
E Broadway Road	S Gilbert Rd	S lindsay Rd	2,835	79	14,307	35,142	11,366	57	20	68	3,405	79	16,579	35,142	11,366	53	24	68
E Broadway Road	S lindsay Rd	S Val Vista Dr	2,051	212	13,101	33,793	8,853	52	15	66	2,895	212	16,191	33,793	8,853	50	25	66
E Broadway Road	S Val Vista DR	S Greenfield Rd	1,730	233	11,835	20,029	5,992	35	12	64	2,715	233	15,113	20,029	5,992	35	23	64
E Broadway Road	S Greenfield Rd	N Higley Rd	1,731	110	10,447	11,306	3,639	24	12	59	2,661	110	13,341	11,306	3,639	25	29	59
E Broadway Road	N Higley Rd	S Recker Rd	2,265	365	9,456	7,608	3,439	21	16	52	3,123	365	12,163	7,608	3,439	21	31	52
E Broadway Road	S Recker Rd	S Power RD	2,430	733	8,195	12,718	2,666	24	16	43	3,590	733	11,304	12,718	2,666	25	28	43
E Broadway Road	S Power Rd	S Sossaman Rd	2,079	779	7,422	14,078	3,847	25	14	40	3,398	779	11,217	14,078	3,847	27	26	40
E Broadway Road	S Sossaman Rd	N Ellsworth RD	1,249	245	8,152	21,118	1,093	28	7	50	3,136	245	13,550	21,118	1,093	31	22	50
E Broadway Road	S Crismon Rd	S Signal Butte Rd	179	-	3,956	5,176	1,316	9	1	26	1,320	-	8,194	5,176	1,316	13	13	26
E Broadway Road	S Signal Butte Rd	S Meridian	60	-	2,425	-	-	2	1	15	947	-	5,611	-	-	5	10	15
E Broadway Road	S A101 Ramp	S Dobson rd	7,502	10,060	18,405	12,845	10,164	52	55	93	10,121	10,060	21,767	12,845	10,164	52	72	93
E Broadway Road	48th Street	S Priest Dr	6,182	15,014	17,939	18,939	4,330	55	93	33	7,023	17,690	23,047	18,939	4,330	57	100	100
E Cactus Road	N Cave Creek Road	N 24th Street	3,054	-	11,619	6,708	8,026	26	15	28	1,936	-	8,350	6,708	8,026	20	16	28
E Cactus Road	N 24th Street	N 32nd Street	2,528	-	9,782	17,970	12,628	38	18	39	2,637	-	10,821	17,970	12,628	35	19	39

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level		
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale
			max 17365	max 36448	max 36460	max 46037	max 25580	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25580	max 100
E Cactus Road	N 32rd Street	N 40th Street	3,302	-	11,594	19,992	10,196	40	23	44	3,456	-	12,212	19,992	10,196	37	21	44		
E Cactus Road	N 40th Street	N Tatum Blvd	3,656	-	11,512	25,247	5,288	41	24	39	3,839	-	12,096	25,247	5,288	37	19	41		
E Cactus Road	N Tatum Blvd	N 56th Street	3,757	-	10,820	26,859	3,398	40	23	32	3,981	-	11,472	26,859	3,398	37	22	40		
E Cactus Road	N 56th Street	N 64th Street	3,197	-	8,047	26,612	11,358	44	22	20	3,612	-	8,858	26,612	11,358	40	35	44		
E Cactus Road	N 64th Street	N Scottsdale Road	3,148	-	6,776	19,911	9,223	35	23	14	3,929	-	7,874	19,911	9,223	33	39	39		
E Cactus Road	N Scottsdale Road	N Hayden Road	3,301	-	6,488	12,872	3,912	24	26	13	4,392	-	8,256	12,872	3,912	24	55	55		
E Cactus Road	N Hayden Road	N Pima Road	2,722	-	6,827	14,522	629	22	28	15	3,988	-	9,699	14,522	629	23	79	79		
E Cactus Road	N Pima North	N 96th Street	2,374	-	6,867	10,970	438	18	19	18	4,369	-	10,152	10,970	438	21	64	64		
E Cactus Road	N 96th Street	N 104th Street	1,709	-	6,553	15,141	1,907	22	14	21	4,262	-	9,485	15,141	1,907	25	62	62		
E Cactus Road	N 104th St	E frank Lloyd wright blv	626	-	4,392	10,379	3,097	16	5	17	2,025	-	6,413	10,379	3,097	18	47	47		
E Camelback RD	N 56th Street	N Invergordon Road	5,840	-	10,920	13,058	5,878	32	53	24	6,419	-	12,351	13,058	5,878	30	100	100		
E Camelback Rd	N Central Avenue	N 7th street	10,362	110	18,647	8,846	9,113	42	95	74	11,220	110	19,863	8,846	9,113	39	100	100		
E Camelback RD	N 7th Street	N 18th Street	11,805	103	22,399	10,389	11,167	50	92	81	12,682	103	23,984	10,389	11,167	47	100	100		
E Camelback RD	N A51	N 24th Street	9,354	2,759	19,508	15,824	12,832	54	85	68	10,127	2,759	21,058	15,824	12,832	50	75	85		
E Camelback RD	N 24th Street	N 32nd street	8,387	2,748	17,462	12,634	9,706	45	69	57	9,054	2,748	18,919	12,634	9,706	42	67	69		
E Camelback RD	N 32nd Street	N 40th Street	7,628	2,853	14,070	14,757	4,421	39	58	46	8,055	2,853	15,010	14,757	4,421	36	52	58		
E Camelback RD	N 44th Street	N 56th Street	5,684	240	11,285	13,196	5,110	32	34	32	6,054	240	11,890	13,196	5,110	29	64	64		
E Camelback RD	N Invergordon Road	N Scottsdale Road	6,381	-	15,386	8,147	2,828	29	53	40	7,133	-	17,696	8,147	2,828	29	100	100		
E Camelback RD	N Scottsdale Road	N Hayden Road	8,495	2,257	17,101	4,399	3,557	32	50	54	9,504	2,257	19,657	4,399	3,557	32	95	95		
E Camelback RD	N Hayden Road	N Pima Road	5,116	5,509	12,504	455	8,129	28	43	47	6,303	5,509	14,303	455	8,129	28	98	98		
E Camelback RD	N Dobson Road	N Alma School Road	304	1,137	1,075	-	-	2	3	6	485	1,356	1,367	-	-	3	9	9		
E Camelback RD	N Alma School Road	N Country Club Drive	118	18	396	-	-	0	1	2	206	19	476	-	-	1	3	3		
E Camelback RD	N Country Club Drive	N Mesa Drive	82	-	311	-	-	0	1	2	98	-	330	-	-	0	2	2		
E Camelback RD	N 40th Street	N 44th Street	5,393	1,715	9,544	9,597	1,031	24	45	30	5,618	1,715	9,992	9,597	1,031	22	44	45		
E Camelback RD	N 16th Street	N A51	8,264	81	15,852	10,389	12,395	42	93	57	8,931	81	17,074	10,389	12,395	39	82	93		
E Carefree Hwy	N Cave Creek Rd	N Tomdarlington Dr	591	-	1,620	-	3,696	5	1	2	1,149	-	4,113	-	3,696	7	5	7		
E Cave Creek Road	N Pima	End	155	-	327	-	-	0	1	0	486	-	1,414	-	-	2	3	3		
E Cave Creek Road	E Lone Mountain Rd	E Dove Vally Road	186	-	1,394	28	-	1	1	2	239	-	3,974	28	-	3	5	5		
E Cave Creek Road	N 40th street	E Lone Mountain Rd	105	-	1,270	38	-	1	1	3	376	-	5,904	38	-	5	2	5		
E Cave Creek Road	E Dove Vally Road	E Carefree Hwy	529	-	1,797	-	7,280	9	1	2	449	-	2,454	-	7,280	8	5	9		
E Cave Creek Road	E Carefree Hwy	E New River Road	517	-	1,393	-	2,021	3	1	2	547	-	1,987	-	2,021	4	6	6		
E Cave Creek Road	E New River Road	N Scottsdale Road	327	-	1,067	38	2,396	3	1	3	680	-	2,969	38	2,396	5	7	7		
E Cave Creek Road	N Scottsdale Road	N Pima Road	271	-	662	38	-	1	1	1	575	-	1,849	38	-	2	3	3		
E Chandler Blvd	I 10 ramp	S 56th Street	2,443	26	5,299	3,358	-	10	21	13	5,095	26	9,799	3,358	-	15	37	37		
E Chandler Blvd	End	E Ray Road	441	18	5,686	19,594	6,530	29	1	13	3,005	18	16,999	19,594	6,530	37	10	37		
E Chandler Blvd	E Ray Road	S 32nd street	365	105	5,289	10,352	6,456	20	3	13	1,712	105	11,247	10,352	6,456	24	13	24		
E Chandler Blvd	S 32nd Street	S 40th Street	464	252	6,447	14,078	6,395	25	3	18	2,300	252	12,916	14,078	6,395	29	23	29		
E Chandler Blvd	S 40th Street	48th Street	1,374	122	6,657	10,352	3,611	20	11	19	3,991	122	13,075	10,352	3,611	25	25	25		
E Chandler Blvd	48th Street	I 10 ramp	2,028	55	5,247	5,211	1,048	12	17	14	4,680	55	10,263	5,211	1,048	17	36	36		
E Chandler Blvd	S 56th Street	N Kyrene Rd	3,323	-	7,325	13,306	1,348	22	23	16	6,178	-	11,931	13,306	1,348	26	36	36		
E Chandler Blvd	N Kyrene Rd	N rural rd	3,160	-	8,009	22,236	9,955	39	21	20	5,549	-	12,075	22,236	9,955	40	40	40		

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17385	max 38448	max 38460	max 46037	max 25580	max 100	max 100	max 100	max 14351	max 43098	max 34050	max 52283	max 25580	max 100	max 100	
E Chandler Blvd	N rural Rd	N McClintock Dr	2,008	-	8,056	24,089	11,818	41	15	25	5,745	-	13,295	24,089	11,818	44	35	44
E Chandler Blvd	N McClintock Dr	N Price Rd	1,553	-	7,260	27,402	5,578	37	11	25	6,471	-	13,696	27,402	5,578	43	35	43
E Chandler Blvd	N Price Rd	S Dobson rd	2,031	-	8,186	24,099	2,058	32	13	30	6,785	-	15,212	24,099	2,058	39	32	39
E Chandler Blvd	S Dobson rd	S Alma School Road	2,641	-	9,679	22,723	5,900	36	17	37	6,450	-	15,848	22,723	5,900	41	35	41
E Chandler Blvd	S Alma School Road	N Arizona Avenue	2,615	-	10,824	27,911	17,247	52	17	43	4,999	-	16,591	27,911	17,247	53	32	53
E Chandler Blvd	N Arizona Avenue	N McQueen RD	1,860	-	9,350	29,322	17,072	51	12	39	3,526	-	15,626	29,322	17,072	52	25	52
E Chandler Blvd	N McQueen Rd	N Cooper Rd	1,121	-	6,886	22,640	9,821	36	8	28	2,712	-	14,491	22,640	9,821	40	20	40
E Chandler Blvd	N Cooper Rd	N Gilbert Rd.	498	-	3,997	15,528	4,335	22	4	16	1,855	-	12,361	15,528	4,335	27	13	27
E Chandler Heights Rd	S Price Rd	S Dobson rd	285	-	1,750	-	-	2	7	5	3,495	-	9,009	-	-	10	18	18
E Chandler Heights Rd	S Dobson rd	S Alma School Road	653	-	2,057	-	-	2	7	7	3,151	-	10,734	-	-	11	20	20
E Dydamite Blvd	N Pima Rd	N alma School Pkwy	91	-	403	-	-	0	1	1	322	-	1,589	-	-	2	2	2
E Dydamite Blvd	N Cave Creek Rd	N Tatum Blvd	37	-	614	-	-	1	0	2	391	-	6,156	-	-	5	2	5
E Dydamite Blvd	56th St	End	84	-	525	-	-	1	1	1	183	-	3,411	-	-	3	2	3
E Dydamite Blvd	N Scottsdale Road	N Hayden Road	107	-	519	-	-	1	1	1	263	-	1,426	-	-	1	2	2
E Dydamite Blvd	N Pima Road	N Alma School Road	128	-	516	-	-	1	1	1	635	-	3,618	-	-	3	3	3
E Dynamite Blvd	N Tatum Blvd	N 56th Street	76	-	735	-	-	1	1	2	333	-	5,533	-	-	5	2	5
E Dynamite Blvd	End	N Scottsdale Road	126	-	642	-	-	1	1	2	239	-	2,414	-	-	2	2	2
E Elliot Rd	I 10 ACC	S 56th Street	3,213	-	7,859	5,852	-	15	25	28	5,155	-	10,788	5,852	-	17	50	50
E Glendale Av	N 7th Street	N 16th Street	4,727	-	11,916	12,787	6,625	32	33	46	5,046	-	13,034	12,787	6,625	30	48	48
E Glendale Av	N 16th Street	N A 51	3,804	412	8,442	18,103	6,318	33	33	32	4,088	412	9,366	18,103	6,318	31	49	49
E Glendale Av	N A 51	N 24th Street	4,921	2,237	9,145	27,549	3,841	42	35	29	5,225	2,237	10,258	27,549	3,841	39	61	61
E Greenway Pkwy	N Cave Creek Rd	E Greenway Road	3,406	-	15,681	16,285	9,473	40	17	52	2,807	-	12,763	16,285	9,473	33	20	52
E Guadalupe Rd	48th St	S I10	2,896	351	8,629	12,273	3,068	24	25	33	5,519	351	11,762	12,273	3,068	26	64	64
E Guadalupe Rd	S I10	S 56th Street	3,154	351	9,173	10,889	7,005	27	28	35	5,995	351	12,416	10,889	7,005	29	64	64
E Guadalupe Rd	S 56th Street	S Kyrene Rd	4,701	351	12,504	10,727	10,291	34	34	47	7,780	351	16,059	10,727	10,291	36	59	59
E Guadalupe Rd	S Kyrene	S rural Rd	4,935	147	13,183	12,389	11,480	37	35	50	6,791	147	15,676	12,389	11,480	37	63	63
E Guadalupe Rd	S Rural Rd	S McClintock Dr	5,048	-	12,829	15,812	19,705	47	35	43	6,090	-	14,599	15,812	19,705	45	43	47
E Indian School RD	N 19th Avenue	N 7th Avenue	12,683	10,152	24,854	6,625	14,209	61	100	93	13,586	10,152	26,421	6,625	14,209	57	100	100
E Indian School RD	N Central Avenue	N 7th Street	10,795	5,882	23,634	8,488	10,120	52	100	71	11,733	5,882	25,175	8,488	10,120	49	100	100
E Indian School RD	N 7th Street	N 16th Street	12,847	1,560	27,012	10,369	12,574	57	100	85	14,172	1,560	29,089	10,369	12,574	54	100	100
E Indian School RD	A 51	N 24th Street	11,623	27	20,520	17,409	16,968	59	86	82	12,511	27	22,344	17,409	16,968	55	100	100
E Indian School RD	N 24th Street	N 32nd street	10,270	-	20,324	15,545	14,237	54	73	89	10,986	-	21,855	15,545	14,237	50	65	89
E Indian School RD	N 32nd Street	N 40th Street	7,639	-	17,305	14,057	8,667	42	57	81	8,071	-	18,236	14,057	8,667	39	58	81
E Indian School RD	N 40th Street	N 44th Street	5,062	68	12,297	10,802	9,204	33	45	59	5,251	68	12,885	10,802	9,204	31	47	59
E Indian School RD	N 56th Street	N Scottsdale Road	9,469	22	21,183	6,367	5,199	38	50	67	11,301	22	24,381	6,367	5,199	38	97	97
E Indian School RD	N Pima Road	N A101	1,276	3,060	4,901	45	4,688	12	13	26	1,627	3,063	5,418	45	4,688	12	49	49
E Indian School RD	N Hayden Road	N Pima Road	5,982	4,044	12,983	214	8,440	28	43	49	7,219	4,044	14,711	214	8,440	28	100	100
E Indian School RD	N Scottsdale Road	N Hayden Road	7,813	1,369	18,228	4,299	6,233	34	52	60	9,128	1,369	20,829	4,299	6,233	34	93	93
E Indian School RD	N 44th Street	N 48th Street	4,426	124	10,680	7,751	12,609	32	39	49	4,591	124	11,268	7,751	12,609	29	44	49
E Indian School RD	N 7th Avenue	N Central Avenue	11,230	11,570	23,566	13,250	13,478	65	100	76	11,923	11,570	25,000	13,250	13,478	60	100	100
E Indian School RD	N 16th Street	A 51	9,273	48	16,839	10,369	15,890	47	100	63	10,204	48	18,479	10,369	15,890	44	100	100

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec		
			max 17365	max 36448	max 38460	max 48037	max 25580	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	max 100
E Indian School RD	N 48th Street	N 56th Street	4,665	124	11,358	7,779	14,623	34	33	48	5,407	124	12,441	7,779	14,623	32	56	56
E Lincoln Dr	N 24th Street	N 32nd street	3,435	1,292	6,170	6,198	707	16	32	15	4,054	1,717	6,999	8,237	707	17	66	66
E Lincoln Dr	N 32nd Street	N Tatum Blvd	2,880	1,672	5,992	16,162	-	24	23	9	3,405	1,902	6,642	17,523	-	24	46	46
E Lincoln Dr	N Invergordon Road	N Mockingbird Lane	2,336	196	4,157	6,561	3,083	15	21	6	2,690	196	4,883	7,169	3,083	14	53	53
E Lincoln Dr	N Mockingbird Lane	N Scottsdale Road	2,684	278	5,667	6,638	3,496	17	24	12	3,157	278	6,664	7,567	3,496	17	48	48
E Lincoln Dr	N Tatum Blvd	N Invergordon Road	2,819	30	5,230	20,547	363	26	20	6	3,082	30	5,842	20,703	363	24	42	42
E McDowell RD	N 32nd Street	N 40th Street	7,856	5,999	18,193	14,078	11,705	51	62	73	9,320	5,999	20,288	14,078	11,705	49	76	76
E McDowell RD	N Hohokam Frwy	N 48th Street	5,198	4,098	11,155	7,039	14,498	37	45	48	6,702	4,098	13,052	7,039	14,498	36	76	76
E McDowell RD	N 48th Street	N 52 ND Street	5,237	2,619	11,047	7,039	13,618	35	42	46	7,181	2,619	13,436	7,039	13,618	35	79	79
E McDowell RD	N 52 ND Street	N 64th Street	6,393	1,386	13,738	11,233	4,093	33	40	60	8,745	1,386	16,858	11,233	4,093	34	70	70
E McDowell RD	N 64th Street	N Scottsdale Road	5,046	11	11,332	9,525	9,014	31	37	50	6,779	11	13,320	9,525	9,014	31	76	76
E McDowell RD	N Scottsdale Road	N Hayden Road	5,955	-	13,581	6,854	12,550	35	38	57	6,819	-	14,729	6,854	12,550	33	60	60
E McDowell RD	N Hayden Road	N Pima Road	4,558	-	10,289	3,383	7,895	23	30	42	5,088	-	11,073	3,383	7,895	22	49	49
E McDowell RD	N Alma School Road	N Beeline Highway	359	-	1,914	3,313	2,365	7	3	10	594	-	2,481	3,313	2,365	7	9	10
E McDowell RD	N Lindsay	N Val Vista DR	754	-	2,955	3,378	8,865	14	6	7	1,953	-	6,911	3,378	8,865	17	15	17
E McDowell RD	N Val Vista DR	N Greenfield RD	1,247	-	2,769	5,735	3,048	11	9	6	3,138	-	6,481	5,735	3,048	15	17	17
E McDowell RD	N Greenfield Rd	N Higley Rd	1,216	-	3,294	6,008	-	9	10	11	2,841	-	6,960	6,008	-	13	18	18
E McDowell RD	N Higley Rd	N Recker RD	1,426	-	3,965	860	-	6	9	17	3,495	-	8,047	860	-	10	21	21
E McDowell RD	N Recker RD	N Power RD	597	-	3,303	3,862	496	7	5	17	2,539	-	8,698	3,862	496	12	20	20
E McDowell RD	S A101 Ramp	N Dobson rd	2,080	-	4,981	18	2,609	9	15	20	2,509	-	5,478	18	2,609	8	27	27
E McDowell RD	E Lehi Rd	N Lindsay Rd	467	-	2,829	83	8,343	10	4	8	1,071	-	5,890	83	8,343	12	9	12
E McDowell RD	N Dobson Road	N Alma School Road	782	-	2,286	-	4,191	6	7	11	1,089	-	2,775	-	4,191	6	18	18
E McDowell RD	N 40th Street	N 44th Street	6,006	5,686	13,884	10,352	13,073	44	51	61	7,461	5,686	15,749	10,352	13,073	42	84	84
E McDowell RD	N Power RD	N Ellsworth RD	164	-	2,092	6,653	19	8	1	11	1,907	-	8,849	6,653	19	14	11	14
E McDowell RD	N Gilbert Rd	E Lehi RD	825	-	4,748	83	4,658	9	3	8	876	-	5,593	83	4,658	9	11	11
E McDowell RD	N 44th Street	N Hohokam frwy	7,751	4,098	16,590	7,039	12,924	43	45	52	6,841	4,098	13,731	7,039	12,924	36	78	78
E McDowell RD	N Pima Road	S A101 Ramp	2,263	-	5,313	18	3,879	10	21	21	2,649	-	5,775	18	3,879	10	31	31
E Mickellips Road	N Recker RD	N Power RD	559	-	5,575	8,897	4,435	17	4	28	2,361	-	10,835	8,897	4,435	21	22	28
E Mickellips Road	N Higley Rd	N Recker RD	960	-	5,949	8,594	4,798	18	7	29	2,869	-	10,766	8,594	4,798	22	22	29
E Mickellips Road	N Greenfield Rd	N Higley Rd	1,059	-	4,598	9,000	211	13	8	20	2,971	-	9,471	9,000	211	17	19	20
E Mickellips Road	N Val Vista DR	N Greenfield RD	1,016	85	3,871	9,813	1,525	14	8	13	2,774	85	8,999	11,250	1,525	20	19	20
E Mickellips Road	N Lindsay	N Val Vista DR	947	63	4,946	10,984	7,176	21	7	14	2,133	63	10,331	10,984	7,176	25	17	25
E Mickellips Road	N Gilbert Rd	N Lindsay Rd	1,199	-	6,552	7,259	7,799	20	8	20	1,878	-	11,722	7,259	7,799	23	13	23
E Mickellips Road	N Stapley Dr	N Gilbert Rd	1,364	-	7,996	7,681	7,066	21	10	28	1,923	-	12,514	7,681	7,066	23	16	28
E Mickellips Road	N mesa Dr	N Stapley Dr	1,458	-	8,825	16,094	5,791	29	11	39	1,985	-	12,410	16,094	5,791	29	22	39
E Mickellips Road	N center Street	N Mesa Dr	1,423	-	7,585	17,426	7,227	30	14	37	1,866	-	9,809	17,426	7,227	29	25	37
E Mickellips Road	N County Club Dr	N Center Street	1,579	-	7,116	15,528	7,589	28	15	35	2,101	-	9,006	15,528	7,589	27	23	35
E Mickellips Road	N Alma School Road	N County Club Dr	1,553	-	6,306	10,352	3,202	19	12	31	2,240	-	8,067	10,352	3,202	19	23	31
E Mickellips Road	N Hayden Road	S A101 Ramp	4,222	-	8,506	13,710	4,463	27	28	33	5,394	-	10,223	13,710	4,463	27	36	36
E Mickellips Road	N Scottsdale Road	N Hayden Road	4,872	-	10,343	24,505	10,770	45	33	42	6,287	-	12,758	24,505	10,770	43	68	68
E Mickellips Road	S A101 Ramp	N Alma School Road	2,887	-	6,752	11,801	954	20	17	28	4,377	-	8,792	11,801	954	21	31	31

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/University	Shop/Errands	Social/Rec	School	100% Scale			100% Scale	100% Scale	Work	College/University	Shop/Errands	Social/Rec			School	100% Scale	100% Scale
			max 17365	max 36446	max 38480	max 49037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
E Northern Avenue	N 43rd Avenue	S 35th Av	4,261	-	15,675	17,575	14,804	46	33	75	4,817	-	17,464	17,575	14,804	44	51	75			
E Northern Avenue	S 35th Av	S 27th Avenue	6,214	1,283	17,616	25,538	10,375	54	47	80	6,882	1,283	19,336	25,538	10,375	51	49	80			
E Northern Avenue	I 10 ramp	N 19th Avenue	6,430	1,929	16,147	22,933	13,773	54	51	69	7,165	1,929	17,970	22,933	13,773	51	51	69			
E Northern Avenue	N 19th Avenue	N 7th Avenue	6,261	1,547	15,605	15,130	7,823	41	47	62	6,889	1,547	17,286	15,130	7,823	39	58	62			
E Northern Avenue	N 7th Avenue	N central Avenue	4,069	794	10,998	11,273	4,635	28	40	42	4,415	794	12,154	11,273	4,635	27	59	59			
E Northern Avenue	N Central Avenue	N 7th Street	3,697	-	10,320	9,997	6,355	27	34	37	3,983	-	11,485	9,997	6,355	25	49	49			
E Northern Avenue	N 16th Street	N A 51	2,940	-	7,780	14,311	438	23	21	27	3,185	-	9,001	14,311	438	22	40	40			
E Northern Avenue	S 27th Avenue	I 10 Ramp	5,780	1,929	14,441	22,180	11,532	50	54	64	6,454	1,929	16,044	22,180	11,532	47	54	64			
E Northern Avenue	N 7th street	N 16th Street	4,225	-	11,282	9,655	4,044	26	29	39	4,516	-	12,682	9,655	4,044	25	44	44			
E Pecos Rd	S 51th Avenue	S 43rd Avenue	-	-	54	-	-	0	0	0	80	-	214	-	-	0	2	2			
E Pecos Rd	N Price Rd	N Alma School Road	2,139	-	6,993	22,667	363	29	11	26	8,209	-	16,784	22,667	363	38	45	45			
E Pecos Rd	S Alma School Road	S Arizona Avenue	1,753	-	6,617	19,373	4,218	28	12	27	5,888	-	14,993	19,373	4,218	36	46	46			
E Pecos Rd	S Arivone Avenue	N McQueen RD	1,307	-	5,641	20,501	7,863	31	8	24	6,380	-	14,834	20,774	7,863	40	51	51			
E Pecos Rd	N Mcqueen Rd	S Cooper Rd	876	786	4,179	17,963	5,040	26	6	17	7,041	786	15,033	20,721	5,040	39	42	42			
E Pecos Rd	S Cooper Rd	N Gilbert Rd.	385	1,716	2,555	13,664	2,819	19	3	11	5,921	1,716	13,186	13,664	2,819	30	41	41			
E Pinnacle Peak Rd	N Hayden Rd	N Pima Rd	432	-	1,163	-	-	1	3	2	802	-	3,806	-	-	4	5	5			
E Pinnacle Peak Rd	N Cave Creek Rd	N Tatum Blvd	71	-	504	1,783	-	2	0	2	1,095	-	10,534	3,313	-	12	5	12			
E Pinnacle Peak Rd	N Tatum Blvd	N Scottsdale Road	241	-	541	-	-	1	1	1	1,166	-	8,567	-	-	8	6	8			
E Pinnacle Peak Rd	N Scottsdale Road	N Hayden Rd	419	-	913	-	-	1	3	2	1,056	-	5,250	-	-	5	4	5			
E Ray Rd	N Cooper Rd	N Gilbert Rd.	527	-	4,521	8,506	1,450	13	4	17	2,294	-	13,278	8,506	1,450	20	28	28			
E Ray Rd	N Mcqueen Rd	N Cooper Rd	1,060	-	7,415	13,710	9,059	28	9	29	3,405	-	15,129	13,710	9,059	33	32	33			
E Ray Rd	N Arizona Avenue	N McQueen RD	2,010	-	10,130	20,814	12,493	40	15	41	4,039	-	16,109	20,814	12,493	43	38	43			
E Ray Rd	S Alma School Road	N Arizona Avenue	2,838	-	11,957	28,926	15,277	52	20	47	4,343	-	16,127	28,926	15,277	52	47	52			
E Ray Rd	S Dobson rd	S Alma School Road	2,682	-	11,425	29,303	13,268	50	19	44	4,355	-	15,329	29,303	13,268	50	44	50			
E Ray Rd	S Price Rd	S Dobson rd	1,960	-	10,098	22,253	9,355	39	15	36	4,488	-	14,724	22,253	9,355	41	37	41			
E Riggs Rd	S I10	S Price Rd	616	-	1,325	-	-	2	4	7	1,838	-	4,809	-	-	5	23	23			
E Riggs Rd	S Price Rd	S Alma School Road	925	-	3,371	-	-	4	5	18	2,172	-	10,726	-	-	10	15	18			
E Riggs Rd	S Alma School Road	S Arizona Avenue	426	-	2,470	-	-	3	3	14	819	-	7,803	-	-	7	15	15			
E Riggs Rd	S Arivone Avenue	S Mcqueen Rd	266	-	1,725	-	-	2	2	10	607	-	5,622	-	-	5	5	10			
E Riggs Rd	S Mcqueen	S Cooper Rd	214	-	888	-	-	1	1	5	525	-	3,908	-	-	4	3	5			
E Shea Blvd.	Saguaro Blvd	N Beeline Highway	253	-	628	-	-	1	2	2	792	-	2,436	-	-	3	7	7			
E Shea Blvd.	N Fountain Hills Blvd	Saguaro Blvd	420	-	1,322	-	-	2	2	4	1,418	-	6,205	-	-	6	9	9			
E Shea Blvd.	N Frank Lloyd Wright	N Paliades Blvd	890	-	4,785	13,702	1,690	19	3	16	3,432	-	12,802	13,702	1,690	25	11	25			
E Shea Blvd.	E Via Linda	N Frank Lloyd Wright B	1,035	-	5,660	14,078	5,882	24	8	19	2,751	-	8,452	14,078	5,882	25	56	56			
E Shea Blvd.	N 96th Street	N 104th Street	3,382	-	8,519	12,633	3,377	25	21	23	7,074	-	13,424	12,633	3,377	29	53	53			
E Shea Blvd.	N Pima North	N 96th Street	3,921	-	9,023	7,027	915	19	26	19	6,561	-	14,966	7,027	915	24	53	53			
E Shea Blvd.	N Hayden Road	N Pima Road	4,551	-	8,846	5,462	3,020	19	31	17	6,501	-	14,079	5,462	3,020	23	48	48			
E Shea Blvd.	N Scottsdale Road	N Hayden Road	3,720	-	7,475	8,120	3,278	20	26	15	5,727	-	9,847	8,120	3,278	22	47	47			
E Shea Blvd.	N 64th Street	N Scottsdale Road	2,843	-	6,479	7,543	8,639	23	19	13	3,443	-	7,317	7,543	8,639	22	22	23			
E Shea Blvd.	N 56th Street	N 64th Street	2,480	-	6,273	14,516	4,587	25	17	14	2,696	-	6,811	14,516	4,587	23	21	25			
E Shea Blvd.	N Tatum Blvd	N 56th Street	2,255	-	6,726	14,348	230	21	17	17	2,433	-	7,338	14,348	230	19	19	21			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38460	max 48037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
E Shea Blvd.	N 32nd Street	N 40th Street	1,991	-	7,581	14,753	12,088	32	14	26	2,105	-	8,094	14,753	12,088	30	18	32			
E Shea Blvd.	N 24th Street	N 32nd street	1,834	-	7,589	12,751	17,386	35	13	29	1,919	-	8,301	12,751	17,386	32	20	35			
E Shea Blvd.	N 40th Street	N Tatum Blvd	2,283	-	7,530	12,335	1,816	21	17	23	2,438	-	8,103	12,335	1,816	20	17	23			
E Shea Blvd.	N 104th Street	E Via Linda	1,330	-	5,221	12,215	6,382	22	14	17	3,023	-	7,402	12,215	6,382	23	64	64			
E Shea Blvd.	N Palisades Blvd	N Fountain Hills Blvd	353	-	1,049	-	-	1	3	3	1,329	-	6,137	-	-	6	10	10			
E Southern Avenue	S Stapley Dr	S Gilbert Rd	3,803	-	13,094	46,037	21,425	75	27	57	5,236	-	15,535	47,419	21,425	72	44	75			
E Southern Avenue	S Gilbert Rd	S lindsay Rd	2,522	-	11,776	34,903	14,176	56	18	54	3,539	-	14,500	39,026	14,176	57	35	57			
E Southern Avenue	N Country Club Dr	S Mesa Dr	7,531	6,808	16,911	23,444	7,813	56	53	69	10,168	6,808	20,365	23,444	7,813	55	72	72			
E Southern Avenue	S Mesa Dr	S Stapley Dr	5,795	-	14,807	37,522	15,335	65	41	61	8,058	-	17,972	37,522	15,335	63	65	65			
E Southern Avenue	S Alma School Road	S County Club DR	8,702	20,047	19,317	11,979	9,201	62	59	81	11,231	21,140	22,599	11,979	9,201	61	83	83			
E Southern Avenue	S Dodson rd	S Alma School Road	8,676	18,236	20,028	10,457	11,037	61	57	85	10,349	18,878	22,667	10,457	11,037	59	79	85			
E Southern Avenue	N Ellsworth RD	S Crismon Rd	134	-	2,943	7,039	2,527	11	1	20	2,262	-	8,724	7,039	2,527	16	13	20			
E Southern Avenue	S Sossaman Rd	N Ellsworth RD	899	251	6,493	17,391	363	23	5	39	3,583	251	14,103	17,391	363	29	21	39			
E Southern Avenue	S Power Rd	S Sossaman Rd	1,669	1,076	6,042	12,429	-	19	11	30	3,648	1,076	11,458	12,429	-	23	26	30			
E Southern Avenue	N Higley Rd	S Power RD	2,281	715	7,718	21,691	3,142	32	12	39	5,145	715	14,254	21,691	3,142	36	30	39			
E Southern Avenue	S Greenfield Rd	N Higley Rd	1,232	-	6,311	21,580	6,529	32	9	34	3,654	-	11,406	21,580	6,529	35	29	35			
E Southern Avenue	S Val Vista DR	S Greenfield Rd	1,308	-	8,148	29,169	6,654	40	10	43	3,342	-	12,945	35,898	6,654	47	25	47			
E Southern Avenue	S lindsay Rd	S Val Vista Dr	1,755	-	10,136	44,561	11,957	61	13	49	3,241	-	14,027	46,781	11,957	61	27	61			
E Southern Avenue	S Price Rd	S Dobson rd	7,634	15,799	18,123	11,131	10,945	57	54	78	9,586	16,320	20,512	11,131	10,945	55	75	78			
E Southern Avenue	S McClintock Dr	S Price rd	6,585	5,490	16,607	6,902	16,960	47	50	75	8,345	5,521	18,849	6,902	16,960	45	73	75			
E Southern Avenue	S Rural Rd	S McClintock Dr	6,962	6,722	16,684	5,443	21,110	51	52	71	8,982	6,722	19,079	5,443	21,110	49	87	87			
E Southern Avenue	S Mill Avenue	S rural Rd	8,492	22,335	16,991	13,893	15,918	69	66	65	11,062	26,404	19,950	13,893	15,918	70	100	100			
E Southern Avenue	S Priest Dr	S mill Avenue	9,960	10,337	19,465	13,893	3,639	51	70	62	11,976	11,287	25,413	13,893	3,639	53	100	100			
E Southern Avenue	S 48th Street	S Priest Dr	9,444	1,486	16,923	10,068	1,827	35	70	47	11,005	1,486	23,669	10,068	1,827	38	100	100			
E Southern Avenue	S 40th Street	S 48th Street	5,856	1,454	12,887	10,885	3,627	31	60	31	8,467	1,454	18,892	10,885	3,627	35	96	96			
E Thomas RD	S 16th Street	N A51	8,533	-	18,186	20,289	12,337	53	99	69	9,215	-	19,726	20,289	12,337	49	100	100			
E Thomas RD	N A51	S 24th Street	6,868	-	15,675	16,977	11,712	46	62	69	7,376	-	17,013	16,977	11,712	43	80	80			
E Thomas RD	S 24th street	N 32nd street	7,003	-	18,737	15,528	11,356	47	50	90	7,593	-	20,215	15,528	11,356	44	73	90			
E Thomas RD	N 32nd Street	N 40th Street	5,974	95	17,769	17,391	8,383	44	42	91	6,435	95	18,951	17,391	8,383	41	64	91			
E Thomas RD	N 40th Street	N 44th Street	4,809	208	13,742	13,682	10,529	38	40	71	5,230	208	14,711	13,682	10,529	36	53	71			
E Thomas RD	N 48th Street	N 52 ND Street	4,081	284	10,875	7,844	15,895	35	35	51	4,902	284	12,137	7,844	15,895	33	58	58			
E Thomas RD	N 52 ND Street	N 56th Street	3,728	210	9,713	6,008	11,669	28	33	44	4,813	210	11,170	6,008	11,669	27	44	44			
E Thomas RD	N 56th Street	N 64th Street	5,605	134	12,551	4,193	4,433	24	43	51	7,279	134	14,558	4,193	4,433	25	100	100			
E Thomas RD	N Scottsdale Road	N Hayden Road	8,006	-	16,387	131	8,457	29	56	63	9,379	-	18,089	131	8,457	29	97	97			
E Thomas RD	N Hayden Road	N Pima Road	5,331	-	11,531	93	8,416	23	41	47	6,266	-	12,725	93	8,416	22	95	95			
E Thomas RD	N Pima Road	Dobson Road	1,714	-	5,010	55	2,001	8	14	24	2,055	-	5,394	55	2,001	8	41	41			
E Thomas RD	44th ST	48th ST	4,508	257	12,465	7,630	14,095	35	37	63	5,090	257	13,561	7,630	14,095	33	58	63			
E Thomas RD	N 64th Street	N Scottsdale Road	7,662	-	15,292	908	5,757	26	53	56	9,221	-	17,463	908	5,757	27	100	100			
E University Dr	S H Expy	S Hohokam frwy	1,889	565	10,374	3,313	-	14	85	10	2,291	624	12,478	3,313	-	15	100	100			
E University Dr	N A 101	S Dobson rd	6,226	590	14,641	17,912	5,608	40	44	74	8,165	590	18,418	17,912	5,608	41	61	74			
E University Dr	S 32nd Street	S 40th Street	2,017	3,333	10,695	5,176	1,153	20	72	9	2,404	3,587	13,476	5,176	1,153	21	100	100			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38480	max 48037	max 25580	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25580	max 100	max 100
E University Dr	S 40th Street	S H Expy	1,205	2,316	9,631	-	-	12	87	5	1,426	2,731	11,484	-	-	13	100	100			
E University Dr	S hohokam frwy	S Priest Dr	4,636	5,714	15,707	20,749	5,291	46	95	30	6,147	7,948	19,960	20,749	5,291	48	100	100			
E University Dr	S Priest Dr	S mill Avenue	8,154	21,021	20,846	40,033	9,852	89	96	51	11,671	29,913	27,122	40,033	9,852	95	100	100			
E University Dr	S Mill Avenue	N Scottsdale Road	7,054	10,266	19,088	45,227	2,689	75	77	65	10,257	16,924	25,020	45,227	2,689	80	100	100			
E University Dr	N Scottsdale Road	N Hayden Road	9,504	16,374	19,231	39,238	1,031	76	68	74	13,428	22,942	25,155	39,238	1,031	82	100	100			
E University Dr	N Hayden Road	N A101	7,927	5,743	15,953	25,511	3,606	52	58	76	10,856	7,631	20,711	25,511	3,606	55	82	82			
E University Dr	S Dodson rd	S Alma School Road	6,831	3,407	16,005	18,965	13,099	52	50	78	8,496	3,407	18,958	18,965	13,099	50	68	78			
E University Dr	S Alma School Road	S County Club DR	7,496	-	17,646	21,882	15,857	56	51	81	8,718	-	19,812	21,882	15,857	53	60	81			
E University Dr	S County Club Dr	N Center Street	6,716	-	15,932	20,663	14,053	51	51	71	7,092	-	17,263	20,663	14,053	47	57	71			
E University Dr	N center Street	N Mesa Dr	6,457	-	15,899	22,809	13,539	52	51	70	6,666	-	17,117	22,809	13,539	48	52	70			
E University Dr	N mesa Dr	N Stapley Dr	6,225	-	17,743	22,333	17,254	56	41	78	6,502	-	19,562	22,333	17,254	53	47	78			
E University Dr	N Stapley Dr	N Gilbert Rd	4,033	-	15,418	22,714	13,244	49	28	69	4,492	-	18,213	22,714	13,244	47	41	69			
E University Dr	N Gilbert Rd	N Lindsay Rd	2,782	154	13,839	12,017	11,581	36	19	62	3,371	154	17,806	12,017	11,581	36	24	62			
E University Dr	N Lindsay	N Val Vista DR	2,043	301	12,677	8,762	6,509	27	15	60	2,819	301	17,303	8,762	6,509	29	22	60			
E University Dr	N Val Vista DR	N Greenfield RD	1,710	318	11,706	9,644	4,659	25	12	58	2,512	318	15,880	9,644	4,659	26	18	58			
E University Dr	N Greenfield Rd	N Higley Rd	1,716	186	11,188	3,927	4,839	19	12	58	2,487	186	14,467	3,927	4,839	21	19	58			
E University Dr	N Higley Rd	N Recker RD	1,992	298	10,583	4,383	1,053	16	14	55	2,871	298	13,451	4,383	1,053	18	21	55			
E University Dr	N Recker RD	N Power RD	2,031	496	8,839	6,504	5,690	21	13	47	3,470	496	12,511	6,504	5,690	23	22	47			
E University Dr	N Power RD	N Sossama Road	1,685	554	6,672	15,928	11,503	32	11	36	3,951	554	11,553	15,928	11,503	35	18	36			
E University Dr	N Sossama Road	N Ellsworth RD	1,167	126	6,584	19,231	973	25	6	39	3,897	126	13,763	19,231	973	30	15	39			
E University Dr	N Ellsworth RD	N Crismon	291	-	4,344	6,625	3,749	13	2	27	1,421	-	9,149	6,625	3,749	17	8	27			
E University Dr	N Crismon	N Signal Butte Road	181	-	3,737	3,313	3,677	10	1	23	708	-	7,562	3,313	3,677	12	8	23			
E University Dr	N Signal Butte Road	N Meridian Road	65	-	2,396	-	3,721	5	1	14	392	-	5,056	-	3,721	7	5	14			
E Van Buren Street	N 52 ND Street	N Galvin Pkwy	8,741	5,626	15,627	21,287	1,902	47	49	32	7,066	5,626	14,274	21,287	1,902	40	97	97			
E Van Buren Street	N 48th Street	N 52 ND Street	7,525	8,533	14,406	3,770	4,904	35	49	26	5,842	9,963	13,136	3,770	4,904	30	91	91			
E Van Buren Street	N 40th Street	N 44th Street	5,694	5,197	11,725	3,313	6,839	29	67	30	6,607	5,312	14,253	3,313	6,839	29	96	96			
E Van Buren Street	N Hohokam Frwy	N 48th Street	7,061	7,717	13,933	3,313	5,931	34	53	25	5,402	8,247	12,281	3,313	5,931	28	96	96			
E Van Buren Street	N 44th Street	N Hohokam frwy	8,578	7,560	15,899	3,313	6,603	37	55	26	5,488	7,699	12,400	3,313	6,603	28	90	90			
E Western Aw	N Litchfield Road	N Dysart Road	1,155	-	4,646	-	14,574	18	7	19	2,239	-	6,968	-	14,574	19	17	19			
N 107th Avenue	W Northern Avenue	W Olive Avenue	954	6	5,530	-	-	6	4	25	1,317	6	6,511	-	-	6	10	25			
N 107th Avenue	W Thomas Rd	W Indian School Rd	373	-	3,515	-	8,358	11	1	11	2,313	-	12,811	-	8,358	19	13	19			
N 107th Avenue	I 10 ramp	E McDowell RD	526	-	1,595	-	-	2	3	2	2,768	-	8,219	-	-	9	21	21			
N 107th Avenue	W Bell Rd	W Thunderbird Rd	2,847	-	11,743	-	-	13	9	64	2,630	-	10,128	-	-	10	13	64			
N 107th Avenue	Grand Avenue	W Thunderbird Rd	2,312	-	8,551	-	-	10	11	36	1,712	-	5,491	-	-	6	19	36			
N 107th Avenue	W Peoria Avenue	I 10	2,399	-	10,354	-	-	11	8	57	2,166	-	8,683	-	-	9	13	57			
N 107th Avenue	W Olive Avenue	W Peoria Avenue	1,746	-	8,595	-	-	9	7	41	1,209	-	7,225	-	-	7	11	41			
N 107th Avenue	W Indian School Rd	W Camelback Rd	324	37	3,428	-	7,495	10	1	12	1,571	37	11,186	-	7,495	16	12	16			
N 107th Avenue	E McDowell RD	E Thomas RD	639	-	2,925	-	1,686	5	3	6	3,181	-	12,079	-	1,686	14	19	19			
N 19th Avenue	W I17	W Buckeye Rd	8,595	-	15,561	3,403	11,864	35	58	22	6,712	-	13,718	3,403	11,864	29	100	100			
N 19th Avenue	W Lower BuckeyeRD	W I17	7,192	-	12,073	6,680	7,446	30	46	17	5,192	-	9,926	6,680	7,446	23	97	97			
N 19th Avenue	W Greenway rd	W Bell Rd	5,514	1,557	17,678	6,228	4,302	31	25	51	5,033	1,557	14,923	6,228	4,302	26	36	51			

Road Name	From	To	Existing Non-Linked Pedestrian Activity							Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level		
			Work	College/University	Shop/Errands	Social/Rec	School	100% Scale	100% Scale			100% Scale	Work	College/University	Shop/Errands	Social/Rec	School			100% Scale	100% Scale
			max 17365	max 38448	max 38480	max 48037	max 25560	max 100	max 100			max 100	max 14351	max 43096	max 34050	max 52283	max 25560			max 100	max 100
N 19th Avenue	E Broadway Rd	W Lower Buckeye RD	5,324	-	10,328	13,936	2,909	29	29	18	4,439	-	9,027	15,654	2,909	26	60	60			
N 19th Avenue	W Beardsley rd	W deer vally rd	5,835	55	13,946	7,057	2,394	26	27	29	6,263	55	13,131	7,057	2,394	23	46	46			
N 19th Avenue	W Union Hills Dr	W Beardsley rd	8,000	55	17,824	7,077	7,511	36	32	47	7,808	55	16,907	7,077	7,511	32	47	47			
N 19th Avenue	W Bell RD	W Union Hills dr	7,114	19	18,802	11,051	7,426	39	30	53	6,842	19	17,181	11,051	7,426	34	45	53			
N 19th Avenue	W Thunderdird Rd	W Greenway rd	5,429	2,810	17,332	11,458	9,987	42	27	44	4,106	2,810	12,075	11,458	9,987	32	37	44			
N 19th Avenue	W Cactus Rd	W Thunderbird Rd	8,008	4,694	18,568	21,233	11,777	57	39	48	5,151	4,694	12,661	21,233	11,777	44	54	57			
N 19th Avenue	W Peoria Avenue	W Cactus Rd	10,104	10,468	21,401	31,483	5,296	70	44	55	8,830	10,468	16,621	31,483	5,296	58	62	70			
N 19th Avenue	Dunlap Ave	W Peoria Avenue	11,280	4,616	24,115	30,712	7,661	70	50	64	10,106	4,616	20,298	30,712	7,661	59	73	73			
N 19th Avenue	W Northern Avenue	Dunlap Ave	12,035	3,084	25,561	26,062	11,973	70	52	70	10,238	3,084	20,821	26,062	11,973	58	67	70			
N 19th Avenue	W Glendale Avenue	W Northern Avenue	10,507	1,157	24,693	21,802	11,727	62	51	73	7,473	1,157	18,983	21,802	11,727	49	52	73			
N 19th Avenue	W Bethany home rd	W Glendale Av	8,795	242	25,011	18,269	13,076	58	40	82	6,525	242	18,750	18,269	13,076	46	45	82			
N 19th Avenue	W Camelback Rd	W Bethany home rd	9,905	1,002	25,519	17,439	14,226	61	46	98	7,026	1,002	20,416	17,439	14,226	48	70	98			
N 19th Avenue	W Indian School Rd	W Camelback Rd	13,411	11,974	29,044	13,664	11,646	71	81	97	9,224	11,974	21,682	13,664	11,646	55	100	100			
N 19th Avenue	W thomas Rd	W Indian School Rd	12,324	10,646	26,917	10,352	15,019	67	90	82	8,787	10,646	21,383	10,352	15,019	53	100	100			
N 19th Avenue	W McDowell Rd	W thomas Rd	13,730	7,533	26,921	10,369	9,583	61	100	56	9,466	7,583	19,576	10,369	9,583	45	100	100			
N 19th Avenue	I 10 ramp	W McDowell	9,851	3,958	20,619	12,260	7,265	48	100	33	7,324	4,204	13,933	12,260	7,265	36	100	100			
N 19th Avenue	W Van Buren Street	I 10 ramp	11,856	5,948	22,710	10,450	8,197	53	76	36	9,271	5,948	17,938	10,450	8,197	41	100	100			
N 19th Avenue	W Adam Street	W Van Buren Street	9,710	78	19,464	6,724	8,949	40	75	28	7,913	78	15,446	6,724	8,949	31	100	100			
N 19th Avenue	W Buckeye Rd	W Jefferson Street	10,166	65	20,348	6,744	13,706	45	75	31	8,904	65	17,624	6,744	13,706	38	100	100			
N 19th Avenue	W Jefferson Street	W Adam Street	9,620	78	19,313	10,046	11,147	45	76	28	7,629	78	15,586	10,046	11,147	36	100	100			
N 1st St	W Beloat Rd	SR 85	405	-	1,135	-	5,403	6	0	4	804	-	1,572	-	5,403	6	7	7			
N 1st St	SR 85	W SR 85	435	-	1,249	-	5,150	6	2	5	971	-	1,911	-	5,150	6	8	8			
N 32nd St	E Camel Back Rd	E Lincoln Dr	8,828	2,832	16,706	25,100	3,167	50	37	36	6,435	3,239	12,639	25,100	3,167	41	57	57			
N 32nd St	E Bethany Home Roa	E Glendale Av	5,986	1,034	10,862	13,572	-	28	36	10	3,298	1,364	6,416	15,162	-	21	62	62			
N 35th Avenue	E I10	E McDowell RD	9,371	125	19,375	23,983	11,087	57	74	26	7,453	125	16,792	24,519	11,087	48	100	100			
N 40th Street	E Bell RD	E Union Hills Dr	2,464	-	12,235	6,506	8,018	26	10	36	2,687	-	12,321	6,506	8,018	24	20	36			
N 40th Street	E Greenway Rd	E Bell Rd	4,107	-	16,362	11,225	10,381	37	17	46	3,305	-	13,843	11,225	10,381	31	24	46			
N 40th Street	W Thunderdird Rd	E Greenway rd	5,253	-	19,254	21,609	11,178	51	20	49	3,960	-	14,134	21,609	11,178	41	25	51			
N 40th Street	W Cactus Rd	W Thunderbird Rd	5,322	-	18,615	23,467	9,190	50	21	47	3,849	-	13,474	23,467	9,190	40	24	50			
N 40th Street	E shea Blvd	W Cactus Rd	4,279	-	14,734	21,584	7,631	43	13	36	3,130	-	10,610	21,584	7,631	34	18	43			
N 44th Street	E McDowell RD	E Thomas RD	9,389	3,223	21,036	7,039	13,317	48	42	74	7,903	3,223	17,720	7,039	13,317	39	68	74			
N 44th Street	E A202	E McDowell RD	11,145	9,634	19,454	7,039	13,049	54	51	51	8,419	9,634	15,202	7,039	13,049	43	78	78			
N 44th Street	E Van Buren Street	E A202	9,998	7,351	17,788	5,176	10,338	45	56	37	7,343	7,412	14,259	5,176	10,338	36	89	89			
N 44th Street	E Thomas RD	e Indian School road	9,357	163	21,810	11,093	12,360	49	36	72	6,270	163	15,957	11,093	12,360	37	53	72			
N 44th Street	E Washington St	E Van Buren St	7,489	6,089	14,762	3,313	6,943	34	58	24	5,067	6,158	11,817	3,313	6,943	27	91	91			
N 44th Street	E Camel Back	E Mcdonald dr	7,047	3,155	13,323	14,368	-	34	23	25	4,632	3,155	9,494	14,368	-	25	40	40			
N 44th Street	E Indian School Road	E camel Back Rd	9,224	717	18,655	9,597	6,112	39	37	50	6,220	717	13,242	9,597	6,112	29	44	50			
N 51th Street	W Carver Road	W Elliot Dr	58	-	739	-	629	1	0	1	130	-	2,316	-	629	2	1	2			
N 51th Street	W Bellline Road	W Pecos Rd	-	-	303	-	-	0	0	0	41	-	105	-	-	0	2	2			
N 51th Street	W Pecos Road	1 mile North	32	-	565	-	-	1	0	0	50	-	202	-	-	0	2	2			
N 51th Street	W Elliot dr	W Dobbins Rd	83	-	986	-	3,613	4	0	1	233	-	3,999	-	3,613	6	2	6			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	
N 59th Avenue	W Union Hills Dr	A 101 Ramps	1,992	-	7,195	14,749	895	22	8	13	3,388	-	9,376	15,638	895	23	23	23
N 59th Avenue	W Glendale Avenue	W Northern Avenue	6,436	4,738	20,904	13,667	15,050	54	28	72	6,915	4,738	18,927	13,667	15,050	47	42	72
N 59th Avenue	A 101 Ramps	W deer vally rd	1,540	-	6,434	19,189	247	24	7	10	2,250	-	8,490	22,685	247	27	17	27
N 59th Avenue	W Van Buren Street	I 10 ramp	4,996	-	15,084	8,488	9,528	34	22	42	5,020	-	16,513	8,488	9,528	32	38	42
N 59th Avenue	W Union Hills Dr	A 101 Ramps	2,129	106	7,127	4,179	4,654	16	11	13	3,506	106	8,343	8,578	4,654	20	25	25
N 59th Avenue	W Bell Rd	W union hills dr	3,073	639	10,397	14,280	8,483	33	12	25	5,218	639	12,086	14,280	8,483	33	26	33
N 59th Avenue	W Greenway rd	W Bell Rd	3,922	1,100	12,703	16,023	13,221	42	17	34	5,497	1,100	12,996	16,023	13,221	39	30	42
N 59th Avenue	W Thunderbird Rd	W Greenway rd	4,185	1,044	14,616	14,938	14,058	43	18	39	5,371	1,044	13,912	14,938	14,058	39	30	43
N 59th Avenue	W Cactus Rd	W Thunderbird Rd	4,141	4,630	16,081	15,042	14,701	49	17	42	4,990	4,630	14,585	15,042	14,701	43	27	49
N 59th Avenue	W Peoria Avenue	W Cactus Rd	4,382	6,686	17,538	14,610	13,992	51	19	47	4,694	6,944	15,123	14,610	13,992	44	28	51
N 59th Avenue	W Olive Avenue	W Peoria Avenue	4,981	7,081	18,795	10,709	9,129	45	24	60	4,868	7,946	16,823	10,709	9,129	40	34	60
N 59th Avenue	W Northern Avenue	W Olive Avenue	5,381	7,888	20,018	10,737	7,009	45	25	65	5,795	9,070	17,754	10,737	7,009	40	39	65
N 59th Avenue	E Glendale Ave	W Bethany home rd	6,645	-	21,192	17,745	13,511	53	28	72	7,219	-	18,451	17,745	13,511	46	44	72
N 59th Avenue	E Bethany Home Roa	E camel Back Rd	6,339	-	21,996	28,029	7,123	56	27	70	6,444	-	17,880	28,029	7,123	48	41	70
N 59th Avenue	E Thomas RD	W Indian School Rd	5,167	-	23,590	29,724	13,287	64	22	68	5,184	-	17,440	29,724	13,287	53	35	68
N 59th Avenue	W McDowell Rd	E Thomas RD	3,872	-	20,255	22,630	21,184	60	19	71	3,840	-	18,261	22,630	21,184	53	34	71
N 59th Avenue	I 10 ramp	W McDowell	4,597	-	18,912	22,584	21,102	60	22	62	3,897	-	18,064	22,584	21,102	53	35	62
N 75th avenue	W Olive Avenue	W Peoria Avenue	3,434	5,065	13,744	26,006	9,317	51	15	43	4,031	5,065	13,896	26,006	9,317	47	31	51
N 75th avenue	A 101 Ramps	W deer vally rd	775	-	4,870	176	934	8	4	8	1,503	-	9,572	176	934	10	13	13
N 75th avenue	W Union Hills Dr	A 101 Ramps	1,155	-	6,570	13,848	3,390	22	5	11	2,434	-	10,776	13,848	3,390	24	17	24
N 75th avenue	W Bell RD	W Union Hills dr	1,310	-	6,799	15,634	3,574	24	6	15	3,082	-	10,180	18,782	3,574	29	19	29
N 75th avenue	Greenway Rd	W Bell Rd	1,514	322	7,638	17,257	3,878	27	7	17	3,139	322	9,077	24,373	3,878	33	18	33
N 75th avenue	W Thunderbird Rd	Greenway Rd	1,803	197	9,363	20,578	8,140	36	9	22	2,615	197	9,760	20,578	8,140	33	23	36
N 75th avenue	W Cactus Rd	W Thunderbird Rd	2,344	-	12,398	13,843	10,025	34	11	32	2,242	-	11,735	13,843	10,025	30	28	34
N 75th avenue	W Peoria Avenue	W Cactus Rd	2,748	1,064	14,033	26,071	15,122	52	12	40	3,033	1,064	13,507	26,071	15,122	47	28	52
N 75th avenue	W Indian School Rd	W Camelback Rd	2,323	-	19,300	13,747	14,731	45	10	62	2,304	-	17,724	13,747	14,731	39	18	62
N 75th avenue	W thomas Rd	W Indian School Rd	2,278	-	17,751	13,702	16,612	45	9	60	2,940	-	17,840	13,702	16,612	41	16	60
N 75th avenue	W McDowell Rd	W thomas Rd	2,833	-	14,396	12,243	7,968	33	12	44	3,162	-	15,127	12,243	7,968	31	19	44
N 7th Street	W thomas Rd	W Indian School Rd	16,386	11,022	35,164	20,731	9,280	82	100	78	13,223	11,480	30,523	20,731	9,280	68	100	100
N 7th Street	W Bell Rd	W union hills dr	3,642	-	16,247	12,663	3,520	32	16	57	2,855	-	15,492	12,663	3,520	28	25	57
N 7th Street	W Jefferson St	E Washington St	9,883	178	21,731	18,720	14,620	58	100	36	9,570	178	21,403	18,720	14,620	52	100	100
N 7th Street	W Greenway rd	W Bell Rd	2,397	-	13,152	9,348	5,374	27	13	42	2,211	-	11,567	9,348	5,374	23	18	42
N 7th Street	W Union Hills Dr	W Beardsley rd	3,286	-	13,447	5,895	4,589	24	16	48	3,148	-	13,320	5,895	4,589	22	27	48
N 7th Street	W Thunderbird Rd	W Greenway rd	3,327	-	16,657	24,190	3,473	42	12	53	3,206	-	15,916	24,190	3,473	37	17	53
N 7th Street	Dunlap Ave	W Thunderbird Rd	6,748	-	21,356	29,506	3,347	54	20	62	4,963	-	17,808	29,506	3,347	45	40	62
N 7th Street	W Northern Avenue	W Duni RD	6,251	-	17,991	19,876	9,059	47	16	51	4,939	-	14,663	19,876	9,059	39	43	51
N 7th Street	W Glendale Avenue	W Northern Avenue	7,008	-	18,148	4,381	6,207	32	28	52	5,178	-	14,209	4,381	6,207	24	52	52
N 7th Street	W Bethany home rd	W Glendale Av	11,307	53	23,062	8,035	7,493	44	53	62	7,170	53	16,144	8,035	7,493	31	62	62
N 7th Street	W Camelback Rd	W Bethany home rd	16,231	104	28,367	9,200	7,542	55	81	79	11,422	104	21,120	9,200	7,542	40	100	100
N 7th Street	W Indian School Rd	W Camelback Rd	16,083	1,972	31,006	8,516	11,200	61	100	82	13,485	1,972	27,456	8,516	11,200	50	100	100
N 7th Street	W McDowell Rd	W thomas Rd	17,365	7,871	38,460	25,998	16,414	94	100	71	13,714	7,871	32,680	25,998	16,414	77	100	100

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	
N 7th Street	W Van Buren Street	W McDowell Rd	14,905	1,454	34,104	31,332	19,287	90	100	59	13,552	1,454	31,670	31,332	19,287	78	100	100
N 7th Street	W Washington St	W Van Buren Street	10,779	178	24,071	20,594	14,536	62	100	40	10,313	178	22,977	20,594	14,536	55	100	100
N 7th Street	W Buckeye Rd	W Jefferson Street	10,470	178	23,957	27,663	14,101	68	90	39	10,337	178	23,522	27,663	14,101	61	100	100
N 7th Street	W Broadway RD	W I17	10,572	29	19,012	19,248	8,381	51	52	34	8,370	29	16,155	22,046	8,381	44	100	100
N 7th Street	W Southern Avenue	W Broadway Rd	5,213	136	12,544	32,992	15,182	59	23	35	4,379	136	11,939	32,992	15,182	52	36	59
N Alma School Road	W Pecos Road	W Chandler lvd	3,219	-	12,296	22,733	7,554	41	14	35	4,998	-	15,299	22,733	7,554	41	43	43
N Alma School Road	W Chandler Blvb	W Ray Road	4,634	-	16,813	31,213	15,610	61	19	46	5,060	-	16,242	31,213	15,610	55	34	61
N Alma School Road	W Ray Road	E Warner Road	5,071	-	18,244	33,029	12,037	61	21	48	4,683	-	15,760	33,029	12,037	52	45	61
N Alma School Road	E Elliot Road	E Guadalupe rd	6,075	709	19,399	34,157	14,849	67	28	51	5,721	709	15,981	34,157	14,849	57	68	68
N Alma School Road	E Guadalupe rd	E baseline rd	8,349	10,711	23,058	27,005	13,440	73	38	58	7,817	10,893	18,144	27,005	13,440	62	72	73
N Alma School Road	E Baseline Rd	Us 60 Ramp	8,904	12,100	22,280	18,890	8,825	63	42	63	7,877	12,411	17,578	18,890	8,825	53	78	78
N Alma School Road	Us 60 Ranp	E Southern Avenue	9,646	11,007	22,069	13,722	9,349	58	53	68	8,563	11,554	18,290	13,722	9,349	49	80	80
N Alma School Road	E Southern Avenue	E Broadway Road	12,145	20,508	27,539	9,170	10,150	71	50	91	11,021	20,637	22,987	9,170	10,150	59	79	91
N Alma School Road	E Broadway Rd	W Main Street	10,055	10,897	22,778	12,493	11,182	60	53	83	8,903	10,988	19,244	12,493	11,182	50	81	83
N Alma School Road	W Main Street	E University Dr	8,610	4,128	19,495	12,210	14,185	52	53	70	7,250	4,128	16,246	12,210	14,185	43	76	76
N Alma School Road	W Brown Rd	W Mckellips Road	3,211	-	9,748	10,856	1,525	23	10	35	3,380	-	9,065	10,856	1,525	20	35	35
N Alma School Road	W Mckellips Road	W McDowell Rd	1,281	-	4,863	3,313	3,160	11	5	12	1,193	-	3,327	3,313	3,160	9	18	18
N Alma School Road	E Thomas RD	e Indian School road	464	-	1,642	-	58	2	1	2	148	-	480	-	58	1	3	3
N Alma School Road	E Warner Road	E Elliot Road	5,136	-	19,624	27,788	10,459	56	19	48	5,033	-	15,577	27,788	10,459	47	55	56
N Alma School Road	W McDowell Rd	E Oak Street	506	-	2,784	-	3,496	6	2	5	417	-	1,437	-	3,496	4	8	8
N Alma School Road	E Oak Street	E Thomas RD	435	-	2,272	-	2,115	4	2	3	183	-	721	-	2,115	2	8	8
N Alma School Road	E Indian School Road	E camel Back Rd	327	202	691	-	-	1	1	2	195	90	439	-	-	1	3	3
N Alma School Road	E Camel Back	E Chaparral Road	375	641	698	-	-	2	1	1	272	243	496	-	-	1	3	3
N Alma School Road	Joe Max Rd	E Rio Verde Dr	135	-	613	-	-	1	0	1	570	-	2,966	-	-	3	2	3
N Alma School Road	E Happy Vally Roadd	Joe Max Rd	158	-	776	-	-	1	0	1	600	-	3,344	-	-	3	2	3
N Arizona Avenue	W Pecos Road	W Chandler lvd	2,698	-	11,456	24,147	14,018	46	11	35	5,123	-	15,434	24,147	14,018	47	42	47
N Arizona Avenue	W Chandler Blvb	W Ray Road	4,031	-	17,022	29,340	17,231	60	15	45	4,361	-	16,229	29,340	17,231	54	43	60
N Arizona Avenue	W Ray Road	E Warner Road	4,209	-	16,625	24,127	8,207	47	17	44	6,276	-	17,020	24,127	8,207	45	48	48
N Arizona Avenue	E Warner Road	E Elliot Road	4,684	-	16,735	24,051	5,270	45	18	40	8,715	-	17,815	24,051	5,270	45	50	50
N Arizona Avenue	E Elliot Road	E Guadalupe rd	6,047	425	16,915	24,044	2,282	44	26	38	10,085	425	18,777	24,044	2,282	45	73	73
N Arizona Avenue	E Guadalupe rd	E baseline rd	7,779	1,211	19,166	18,868	3,129	45	36	44	11,183	1,211	19,643	18,868	3,129	43	79	79
N Cave Creek Road	E Deer Vally Road	E Pinna Peak Rd	413	-	2,456	3,340	-	6	2	3	733	-	4,722	3,340	-	7	8	8
N Cave Creek Road	E Beardsley	E Deer Vally Road	1,061	-	6,350	8,747	-	14	5	18	1,295	-	7,619	8,747	-	14	11	18
N Cave Creek Road	E Union Hills Dr	E Beardsley Dr	1,759	-	10,198	10,427	5,661	25	8	41	1,874	-	10,934	10,427	5,661	23	17	41
N Cave Creek Road	W Bell Rd	E Union Hills Dr	2,606	-	14,358	11,884	13,885	38	12	59	2,656	-	14,447	11,884	13,885	34	19	59
N Cave Creek Road	E Greenway Rd	W Bell Rd	2,954	-	15,276	17,032	11,549	42	14	53	2,645	-	12,908	17,032	11,549	35	19	53
N Cave Creek Road	E Greenway Pkwy	E Greenway rd	2,966	-	14,091	15,573	8,405	36	16	47	2,530	-	11,694	15,573	8,405	31	21	47
N Cave Creek Road	E Thunderbird Road	E Greenway rd	4,585	-	19,716	17,549	6,268	43	16	61	3,699	-	16,858	17,549	6,268	36	19	61
N Cave Creek Road	N 7th street	E Thunderbird Road	7,044	-	22,254	23,959	3,242	50	17	67	5,309	-	19,163	23,959	3,242	41	38	67
N Center Street	W Broadway RD	W Main Street	9,545	-	24,040	20,369	11,588	58	46	73	7,157	-	17,916	20,369	11,588	46	63	73
N Center Street	W Main Street	W University Dr	8,874	-	23,357	22,746	10,347	58	42	73	7,318	-	17,748	22,746	10,347	47	52	73

Road Name	From	To	Existing Non-Linked Pedestrian Activity							Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level		
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale			100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School			100% Scale	100% Scale
			max 17365	max 36448	max 38480	max 48037	max 25580	max 100	max 100			max 100	max 14351	max 43096	max 34050	max 52283	max 25580			max 100	max 100
N Center Street	W Brown Rd	W Mckellips Road	5,316	-	17,774	23,602	10,065	50	15	63	4,495	-	15,658	23,602	10,065	43	41	63			
N Center Street	W University Dr	W Brown Rd	8,245	-	23,136	24,106	12,663	61	32	76	6,755	-	18,771	24,106	12,663	50	50	76			
N Center Street	W Southern Avenue	W Broadway Rd	11,020	371	24,429	23,160	12,434	63	49	73	10,352	371	20,894	23,160	12,434	54	72	73			
N Center Street	Us 60 Ranp	W Southern Avenue	8,942	772	18,999	16,031	5,553	45	45	49	9,150	772	16,755	16,031	5,553	39	79	79			
N Central Avenue	W Buckeye Rd	I17	9,149	121	20,307	22,419	12,047	57	71	28	8,489	121	19,147	22,419	12,047	50	100	100			
N Central Avenue	W Jefferson St	E Washington St	10,265	178	24,665	19,117	11,124	58	100	34	10,259	178	23,700	19,117	11,124	52	100	100			
N Central Avenue	W Northern Avenue	Dunlap Ave	8,607	874	20,083	22,672	9,441	55	40	53	5,150	874	14,843	22,672	9,441	42	54	55			
N Central Avenue	W Glendale Avenue	W Northern Avenue	8,227	-	20,404	9,331	5,238	38	45	50	4,774	-	13,801	9,331	5,238	27	60	60			
N Central Avenue	W Bethany home rd	W Glendale Av	9,439	48	21,840	6,742	6,373	39	47	61	6,541	48	15,711	6,742	6,373	28	56	61			
N Central Avenue	W Camelback Rd	W Bethany home rd	15,896	101	27,755	9,426	8,162	55	82	79	10,796	101	20,618	9,426	8,162	39	100	100			
N Central Avenue	W Indian School Rd	W Camelback Rd	15,094	3,905	31,365	9,970	11,832	64	97	82	13,363	3,905	27,640	9,970	11,832	53	100	100			
N Central Avenue	W thomas Rd	W Indian School Rd	15,157	10,341	37,001	22,180	9,353	84	100	76	11,721	10,466	31,074	22,180	9,353	68	100	100			
N Central Avenue	W McDowell Rd	W thomas Rd	16,653	9,669	38,429	24,539	12,142	90	100	65	13,377	9,696	34,050	24,539	12,142	75	100	100			
N Central Avenue	E Van Burent Street	W McDowell	15,288	4,404	36,787	28,002	13,721	87	100	55	13,783	4,404	34,001	28,002	13,721	75	100	100			
N Central Avenue	W Van Buren Street	W Washington St	11,002	178	26,703	19,099	11,476	61	100	38	10,959	178	25,269	19,099	11,476	54	100	100			
N Central Avenue	W Jefferson Street	W Buckeye Rd	11,211	175	26,512	17,705	11,197	59	91	39	11,236	175	25,850	17,705	11,197	53	100	100			
N Central Avenue	W Broadway RD	W I17	9,937	28	19,400	33,138	6,267	61	52	36	8,585	28	16,756	33,138	6,267	52	100	100			
N Central Avenue	W Southern Avenue	W Broadway Rd	5,046	-	13,031	25,952	13,920	52	19	35	4,224	-	11,766	25,952	13,920	45	34	52			
N Central Avenue	W Baseline Road	W Southern Avenue	2,651	27	10,726	21,289	18,755	48	5	36	2,795	27	11,505	21,289	18,755	44	17	48			
N Central Avenue	W Dobbins Road	W Baseline Road	1,688	111	8,305	19,911	11,900	37	3	26	2,000	111	9,085	19,911	11,900	34	15	37			
N Citrus Road	End	W Pinnacle peak rd	47	-	247	-	-	0	0	0	108	-	640	-	-	1	1	1			
N County Club Dr	E Mckellips Rd	E McDowell Rd	2,323	-	9,278	10,352	2,853	22	8	30	1,853	-	7,452	10,352	2,853	18	23	30			
N County Club Dr	E Baseline Rd	Us 60 Ramp	8,757	7,374	19,552	12,747	2,747	45	43	47	9,310	7,374	17,216	12,747	2,747	40	78	78			
N County Club Dr	Us 60 Ranp	E Southern Avenue	8,631	8,619	19,715	14,469	6,928	52	46	56	9,380	8,619	17,638	14,469	6,928	46	82	82			
N County Club Dr	E Southern Avenue	E Broadway Road	11,911	12,694	26,474	18,268	11,825	72	51	79	10,847	12,694	21,828	18,268	11,825	60	76	79			
N County Club Dr	E Broadway Rd	W Main Street	10,181	-	23,092	20,415	11,797	58	51	76	8,310	-	18,493	20,415	11,797	47	70	76			
N County Club Dr	W Main Street	E University Dr	8,873	-	22,445	20,149	13,207	57	41	73	7,681	-	17,783	20,149	13,207	47	62	73			
N County Club Dr	W Mckellips Road	Brown St	5,441	-	16,215	16,333	8,672	41	12	62	4,958	-	15,313	16,333	8,672	36	42	62			
N County Club Dr	E University Dr	Brown St	8,286	-	22,174	22,958	14,418	60	31	74	7,204	-	18,465	22,958	14,418	50	55	74			
N Dysart Rd	I 10 ramp	E McDowell RD	560	1,212	1,928	-	1,297	4	4	7	2,919	1,645	8,561	-	1,297	12	26	26			
N Dysart Rd	W Indian School Rd	W Camelback Rd	497	956	1,934	3,479	973	7	2	4	2,635	1,293	8,608	3,479	973	14	15	15			
N Dysart Rd	E Thomas RD	W Indian School Rd	491	486	1,696	3,479	1,200	7	2	3	3,539	2,234	10,785	3,479	1,200	17	19	19			
N Dysart Rd	E McDowell RD	E Thomas RD	763	413	2,383	3,403	-	6	4	6	3,989	2,120	11,371	3,403	-	17	21	21			
N Dysart Rd	W Buckeye Rd	E Van Burent Avenue	1,401	-	5,205	-	15,407	20	4	19	2,838	-	9,193	-	15,407	22	19	22			
N Dysart Rd	E Van Burent Street	I 10 ramp	1,032	857	3,891	-	8,528	13	4	13	3,162	857	9,822	-	8,528	18	22	22			
N Dysart Rd	W Buckeye Rd	W SR 85	1,278	-	4,463	-	11,931	16	4	17	1,630	-	5,838	-	11,931	16	19	19			
N El Mirage Rd	W Waddell	Grand Ave	1,043	-	5,096	-	5,558	10	5	15	1,994	-	4,718	-	5,558	10	11	15			
N El Mirage Rd	W Peoria Avenue	W Waddell Rd	1,013	-	5,170	-	4,296	9	3	14	1,933	-	4,364	-	4,296	8	9	14			
N Elsworth Dr	W Mckellips Road	E McDowell RD	62	-	999	6,625	-	7	0	2	489	-	2,695	6,625	-	8	8	8			
N Elsworth Dr	Brown St	E Mckellips Rd	210	-	2,518	3,313	266	6	1	8	1,143	-	5,308	3,313	266	8	8	8			
N Elsworth Dr	University Dr	Brown St	342	-	4,952	6,625	1,907	12	1	21	1,494	-	7,881	6,625	1,907	14	8	21			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17385	max 36448	max 38480	max 48037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	max 100
N Elsworth Dr	E Apacheta	University Dr	358	-	5,300	8,488	2,766	15	1	27	1,344	-	7,993	8,488	2,766	16	10	27
N Elsworth Dr	W Broadway RD	E Apacheta	358	-	5,592	7,039	2,851	14	2	29	1,318	-	7,945	7,039	2,851	15	11	29
N Elsworth Dr	E Southern Avenue	W Broadway Rd	373	-	6,211	7,039	3,258	15	2	30	2,093	-	9,431	7,039	3,258	17	13	30
N Elsworth Dr	Us 60 Ranp	E Southern Avenue	322	-	4,018	5,693	1,164	10	2	18	2,022	-	8,581	7,039	1,164	15	15	18
N Elsworth Dr	E Baseline Rd	Us 60 Ramp	250	-	3,201	5,176	-	8	1	13	2,444	-	10,439	5,176	-	14	19	19
N Frank Lloyd Wright B	N Scottsdale Road	N G Hayden Rd	2,080	-	4,917	10,870	-	16	25	6	6,227	-	12,678	10,870	-	24	39	39
N Frank Lloyd Wright B	N Hayden Road	N G Hayden Rd	1,909	-	5,035	10,409	-	15	26	7	5,498	-	11,952	10,409	-	22	38	38
N Frank Lloyd Wright B	N A101/ N Pima Roa	E Thunderbird Road	2,710	-	6,091	17,638	3,548	27	16	15	6,764	-	13,259	17,638	3,548	33	39	39
N Frank Lloyd Wright B	E Thunderbird Road	E Cactus Road	1,507	-	7,865	19,696	3,755	29	5	23	3,437	-	10,128	19,696	3,755	30	26	30
N Frank Lloyd Wright B	E Cactus Road	E Via Linda	854	-	5,561	10,369	4,005	18	2	16	1,743	-	6,331	10,369	4,005	18	14	18
N Frank Lloyd Wright B	E Via Linda	E Shea Blvd	836	-	5,269	10,352	4,054	18	2	15	1,647	-	6,220	10,352	4,054	18	11	18
N Frank Lloyd Wright B	N G Hayden Rd	N A101/ N Pima Road	2,901	-	5,829	7,148	-	14	13	6	4,504	-	8,611	12,220	-	20	43	43
N Gilbert Rd	W Mckellips Road	E Lehi Road	1,628	-	8,695	3,433	6,264	18	7	17	1,496	-	9,627	3,433	6,264	17	12	18
N Gilbert Rd	W McDowell Rd	E Lehi Rd	810	-	4,565	73	5,403	10	4	8	772	-	5,099	73	5,403	9	11	11
N Gilbert Road	W Brown Rd	W Mckellips Road	2,883	-	13,695	9,908	10,494	33	11	33	2,511	-	14,381	9,908	10,494	30	19	33
N Gilbert Road	E University Dr	W Brown Rd	3,828	-	17,820	13,175	14,636	44	17	53	3,372	-	17,119	13,175	14,636	39	22	53
N Gilbert Road	E Main Street	E University Dr	3,934	-	17,097	14,153	12,751	43	21	55	3,104	-	14,599	14,153	12,751	36	26	55
N Gilbert Road	E Broadway Rd	E Main Street	4,071	-	17,931	23,983	14,324	54	21	57	3,191	-	14,151	23,983	14,324	45	26	57
N Gilbert Road	E Southern Avenue	E Broadway Road	4,663	-	19,207	39,704	20,312	75	21	64	4,013	-	15,984	39,704	20,312	64	32	75
N Gilbert Road	Us 60 Ranp	E Southern Avenue	4,207	-	15,476	35,173	18,790	65	23	43	3,339	-	11,944	35,970	18,790	56	35	65
N Gilbert Road	E Guadalupe rd	E baseline rd	3,940	-	14,527	29,703	12,902	54	17	38	4,679	-	14,629	29,703	12,902	50	37	54
N Gilbert Road	E Elliot Road	W Guadalupe Road	3,374	-	11,777	13,995	14,796	39	14	30	4,599	-	14,982	13,995	14,796	39	38	39
N Gilbert Road	W Warner Rd	E Elliot Road	2,325	-	10,299	5,118	8,847	24	9	22	3,756	-	14,597	5,118	8,847	26	26	26
N Gilbert Road	E Ray Rd	W Warner Rd	1,574	-	8,140	3,935	1,096	13	7	15	2,700	-	13,281	3,935	1,096	17	23	23
N Gilbert Road	E Baseline Rd	Us 60 Ramp	3,677	-	13,725	39,833	14,049	63	20	38	3,743	-	12,157	39,833	14,049	56	32	63
N hayden Road	E Cactus Road	E Redfield Road	5,605	-	12,232	17,764	2,686	34	30	11	4,729	-	11,213	17,764	2,686	29	62	62
N hayden Road	E Mckellips Rd	W McDowell	7,234	-	15,093	10,450	10,637	39	27	47	6,425	-	13,301	10,450	10,637	33	51	51
N hayden Road	W McDowell Rd	E Thomas RD	8,261	-	18,103	3,413	10,912	36	33	59	8,233	-	16,526	3,413	10,912	31	90	90
N hayden Road	E Thomas RD	e Indian School road	9,578	1,369	20,433	216	9,392	36	37	64	9,193	1,369	18,617	216	9,392	31	93	93
N hayden Road	E Indian School Road	E camel Back Rd	7,943	3,438	17,841	843	8,615	34	33	54	7,745	3,438	16,412	843	8,615	30	95	95
N hayden Road	E Camel Back	E Chaparral Road	6,934	4,687	16,009	970	6,013	31	34	50	6,414	4,687	15,296	970	6,013	27	100	100
N Hayden Road	E Chaparral Road	E Mcdonald dr	7,272	7,585	17,355	6,564	8,617	42	26	48	5,460	7,585	15,546	6,564	8,617	35	94	94
N Hayden Road	E Mcdonald dr	E Indian Bend Road	6,008	2,340	14,061	13,615	8,749	40	19	32	5,107	2,340	11,625	13,615	8,749	33	58	58
N Hayden Road	E Indian Bend Road	E Mccormick	4,708	338	10,161	13,307	3,597	29	21	19	4,551	338	8,437	13,307	3,597	24	29	29
N Hayden Road	E Mccormick	E Via De Ventura	6,020	269	11,413	13,656	324	28	24	18	5,671	269	9,883	13,656	324	24	58	58
N Hayden Road	E Via De Ventura	E shea Blvd	7,574	63	15,347	13,007	2,939	35	22	21	8,050	63	14,903	13,007	2,939	31	51	51
N Hayden Road	E shea Blvd	E Cactus Road	7,548	-	13,071	7,982	1,392	27	25	14	5,261	-	10,027	7,982	1,392	20	64	64
N Higley Road	W Mckellips Road	E McDowell RD	2,086	-	7,676	5,263	324	14	7	19	3,616	-	8,756	5,263	324	14	18	19
N Higley Road	W Brown Rd	W Mckellips Road	2,031	-	10,067	7,154	5,089	22	10	33	2,764	-	10,970	7,154	5,089	21	21	33
N Higley Road	E University Dr	W Brown Rd	2,182	95	13,280	4,694	4,965	22	10	49	2,565	95	13,054	4,694	4,965	20	20	49
N Higley Road	E Main Street	E University Dr	2,019	139	12,063	3,877	2,115	18	10	49	2,056	139	11,032	3,877	2,115	15	20	49

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec		
			max 17365	max 36448	max 38480	max 46037	max 25580	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25580	max 100	max 100	max 100
N Higley Road	E Broadway Rd	E Main Street	2,311	13	11,683	4,135	2,478	18	13	48	2,078	13	10,557	4,135	2,478	15	27	48
N Higley Road	E Southern Avenue	E Broadway Road	2,395	-	11,919	11,167	6,806	29	11	43	3,320	-	11,546	11,167	6,806	26	29	43
N Kyrene Rd	E Guadalupe rd	E baseline rd	9,757	484	21,189	7,195	13,657	46	45	58	8,638	484	18,213	7,195	13,657	39	79	79
N Kyrene Rd	W Elliot dr	E Guadalupe rd	6,776	91	16,900	13,737	3,790	37	30	39	6,936	91	14,062	13,737	3,790	31	59	59
N Litchfield Rd	W Indian School Rd	E Indian School road	386	937	1,291	2,915	9,535	13	2	3	2,590	1,486	7,529	7,235	9,535	23	18	23
N Litchfield Rd	W Yuma Rd	W Van Buren Street	1,553	-	4,715	-	14,467	18	3	16	2,780	-	7,380	-	14,467	20	16	20
N Litchfield Rd	W SR 85	W Yuma Rd	1,424	-	4,390	-	6,124	11	3	15	1,791	-	4,946	-	6,124	10	16	16
N Litchfield Rd	W Lower BuckeyeRD	W SR 85	1,123	-	3,325	-	1,907	6	3	10	1,138	-	3,272	-	1,907	5	13	13
N Litchfield Rd	E Camel Back	E Glandale Av	1,660	-	3,906	3,431	399	8	5	10	2,403	-	7,066	3,431	399	11	13	13
N Litchfield Rd	E Indian School Road	E camel Back Rd	1,357	824	3,656	5,643	6,730	16	10	5	2,355	824	7,529	7,235	6,730	20	19	20
N Litchfield Rd	E Thomas RD	W Indian School Road	468	768	1,334	2,030	5,725	9	2	3	3,159	1,645	8,883	7,197	5,725	21	22	22
N Litchfield Rd	E McDowell RD	E Thomas RD	958	825	3,075	1,645	324	6	4	5	3,950	1,632	10,318	7,168	324	19	20	20
N Litchfield Rd	I 10 ramp	E McDowell RD	799	981	2,486	3,330	2,614	9	4	6	3,010	981	7,556	3,330	2,614	14	21	21
N Litchfield Rd	W Van Buren Street	I 10 ramp	1,077	539	3,433	-	8,727	12	4	11	3,098	539	8,010	-	8,727	16	20	20
N McClintock Dr	E Warner Road	E Elliot Road	4,776	-	14,854	20,548	8,613	43	22	28	4,028	-	12,339	20,548	8,613	36	32	43
N McClintock Dr	E Elliot Road	E Guadalupe rd	5,740	-	17,450	15,842	14,543	48	24	33	5,220	-	13,370	15,842	14,543	39	33	48
N McClintock Dr	W Chandler Blvb	W Ray Road	2,504	-	11,120	27,467	11,773	47	11	26	4,805	-	13,156	27,467	11,773	46	33	47
N McClintock Dr	W Ray Road	E Warner Road	3,230	-	12,677	24,202	10,369	45	16	27	4,054	-	12,975	24,202	10,369	41	37	45
N McClintock Dr	E Guadalupe rd	E baseline rd	7,136	-	18,837	12,145	18,609	50	33	45	5,975	-	14,958	12,145	18,609	41	43	50
N McClintock Dr	E Baseline Rd	Us 60 Ramp	6,964	-	17,599	3,652	16,400	40	41	45	5,398	-	13,296	3,652	16,400	31	62	62
N McClintock Dr	Us 60 Ranp	E Southern Avenue	8,144	-	20,542	3,615	18,263	45	46	55	5,874	-	14,143	3,615	18,263	34	64	64
N McClintock Dr	E Southern Avenue	E Broadway Road	11,589	8,066	25,069	8,720	19,858	65	59	87	9,461	8,066	21,203	8,720	19,858	54	78	87
N McClintock Dr	E Broadway Rd	E Apachetal	9,983	17,308	21,508	11,922	13,898	66	51	78	8,871	14,070	19,554	11,922	13,898	55	84	84
N McClintock Dr	E Apachetal	E University Dr	9,604	19,317	20,532	18,519	4,385	64	38	71	9,317	18,723	18,959	18,519	4,385	56	80	80
N Pima Road	E Frank Lloyd Wright	E Bell Rd	2,988	-	5,622	7,160	-	14	11	6	5,444	-	9,521	12,210	-	22	40	40
N Pima Road	E Bell RD	E Deer Vally Road	2,290	-	4,693	959	-	7	7	5	3,450	-	10,376	959	-	12	33	33
N Pima Road	E Deer Vally Road	E Pinnacle Creek	455	-	1,391	-	-	2	1	2	449	-	3,057	-	-	3	4	4
N Pima Road	E Pinnacle Creek	E Happy Vally Road	442	-	1,471	-	-	2	2	2	545	-	2,967	-	-	3	4	4
N Pima Road	E Happy Vally Road	E Jomax	433	-	1,343	-	-	2	2	2	481	-	2,611	-	-	2	5	5
N Pima Road	E Jomax Road	E Dynamite Blvd	256	-	853	-	-	1	1	1	425	-	2,171	-	-	2	2	2
N Pima Road	E Lone Mountain Rd	E Cave Creek Road	422	-	975	-	-	1	1	1	937	-	2,485	-	-	3	3	3
N Pima Road	E Dixileta Dr	E Lone Mountain Rd	120	-	501	-	-	1	0	0	439	-	1,543	-	-	2	3	3
N Pima Road	E Dynamite	E Via Donna Road	244	-	804	-	-	1	1	1	285	-	1,471	-	-	1	3	3
N Pima Road	E Via Donna Road	E Dixileta	181	-	695	-	-	1	0	0	278	-	1,326	-	-	1	3	3
N Power Road	E Williams Field Road	E ray rd	101	-	273	-	1,966	2	1	1	912	-	4,525	-	1,966	6	13	13
N Power Road	E Baseline Rd	Us 60 Ramp	1,733	410	5,726	14,624	-	20	8	17	3,343	410	10,409	14,624	-	23	31	31
N Power Road	E Thomas RD	1.6 Mile North	433	-	2,358	28	2,494	5	0	6	1,378	-	5,567	28	2,494	8	13	13
N Power Road	E Rittenhouse Road	E Williams Field Road	110	-	310	-	3,404	3	0	1	3,447	-	7,248	-	3,404	11	15	15
N Power Road	E McDowell RD	E Thomas RD	587	-	3,756	3,350	3,126	10	0	11	1,838	-	7,683	3,350	3,126	13	14	14
N Power Road	E Mckellips Rd	E McDowell RD	849	-	6,234	8,092	1,225	15	3	19	2,168	-	9,574	8,092	1,225	17	18	19
N Power Road	Brown St	E Mckellips Rd	1,394	-	8,281	8,651	13,180	28	5	29	2,793	-	10,963	8,651	13,180	28	23	29

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 36448	max 38460	max 48037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	
N Power Road	University Dr	Brown St	1,921	340	10,230	11,964	15,651	36	7	37	3,480	340	11,663	11,964	15,651	35	20	37
N Power Road	Main St	University Dr	2,451	664	9,207	11,167	8,541	28	12	34	3,167	664	9,639	11,167	8,541	27	27	34
N Power Road	W Broadway RD	Main St	2,463	781	9,343	12,737	4,629	27	11	32	3,417	781	9,436	12,737	4,629	25	27	32
N Power Road	E Southern Avenue	W Broadway Rd	2,766	991	9,993	14,400	2,106	27	10	32	4,258	991	11,371	14,400	2,106	27	28	32
N Power Road	Us 60 Ranp	E Southern Avenue	2,078	1,222	6,798	14,451	-	22	10	21	3,426	1,222	9,704	14,451	-	23	29	29
N Power Road	E Guadalupe rd	E baseline rd	1,178	82	5,059	10,995	4,268	19	4	12	3,741	82	12,538	10,995	4,268	25	24	25
N Rural	E Elliot Road	E Guadalupe rd	6,078	-	15,194	17,628	15,776	49	31	36	5,753	-	13,442	17,628	15,776	42	42	49
N Rural	W Chandler Blvb	W Ray Road	4,088	-	11,158	26,006	15,952	51	14	23	4,561	-	12,574	26,006	15,952	47	36	51
N Rural	W Ray Road	E Warmer Road	4,365	-	12,561	24,596	17,285	52	20	22	4,549	-	12,486	24,596	17,285	47	39	52
N Rural	E Warmer Road	E Elliot Road	5,048	-	14,088	22,776	13,158	49	25	24	4,606	-	11,732	22,776	13,158	42	38	49
N Rural	E Guadalupe rd	E baseline rd	10,065	74	21,173	12,472	16,950	54	44	55	7,182	74	16,561	12,472	16,950	43	57	57
N Rural	E Baseline Rd	Us 60 Ramp	9,359	351	20,593	10,599	17,616	52	48	54	7,237	351	15,501	10,599	17,616	41	58	58
N Rural	E Southern Avenue	E Broadway Road	14,966	21,503	28,871	17,208	20,789	92	67	83	12,757	22,386	24,369	17,208	20,789	78	100	100
N Rural	E Broadway Rd	Apachel Bl	14,068	16,674	24,804	25,594	13,901	84	69	70	12,510	20,222	22,637	25,594	13,901	76	100	100
N Rural	E University Dr	Apachel Bl	12,611	13,243	22,940	35,908	5,776	80	65	64	12,188	18,613	22,537	35,908	5,776	76	100	100
N Rural	Us 60 Ranp	E Southern Avenue	11,541	11,670	23,579	8,753	17,533	65	61	60	8,136	10,956	16,761	8,753	17,533	50	85	85
N Saguaro Blvd	E Grande Blvd	N Mcdowell MountainR	990	-	3,345	-	7,047	10	1	9	1,141	-	5,134	-	7,047	11	8	11
N Saguaro Blvd	E Palisades Blvd	E Grande Blvd	981	-	3,305	-	3,422	7	1	9	1,316	-	5,332	-	3,422	8	10	10
N Saguaro Blvd	E shea Blvd	E Palisades Blvd	1,160	-	4,049	-	114	5	1	10	2,081	-	7,845	-	114	8	6	10
N Scottsdale Road	E Deer Vally Road	E Pinnacle Peek	274	-	730	-	-	1	2	1	1,123	-	6,375	-	-	6	6	6
N Scottsdale Road	E Pinnacle Peak	E Happy Vally Road	351	-	868	-	-	1	1	1	949	-	5,065	-	-	5	4	5
N Scottsdale Road	E Happy Vally Road	E Jomax	386	-	1,017	-	-	1	2	1	550	-	3,111	-	-	3	4	4
N Scottsdale Road	E Jomax Road	E Dynamite Blvd	260	-	945	-	-	1	1	1	335	-	1,951	-	-	2	2	2
N Scottsdale Road	E A202 Ramp	1St St	8,608	9,005	19,444	30,018	1,184	61	53	43	8,064	15,021	17,257	43,379	1,184	68	100	100
N Scottsdale Road	E Mckellips Rd	Curry St	7,792	13,283	15,232	29,992	6,879	65	54	39	6,424	9,172	14,036	34,705	6,879	57	99	99
N Scottsdale Road	E Mckellips Rd	W McDowell	9,424	-	18,076	23,311	12,798	57	44	51	6,658	-	14,153	23,311	12,798	46	89	89
N Scottsdale Road	W McDowell Rd	E Thomas RD	10,250	-	20,410	7,045	9,705	42	43	64	9,818	-	18,428	7,045	9,705	36	100	100
N Scottsdale Road	E Thomas RD	e Indian School road	9,849	-	24,392	4,266	5,778	39	44	60	9,348	-	21,710	4,266	5,778	33	100	100
N Scottsdale Road	E Indian School Road	E camel Back Rd	6,888	-	20,301	4,456	2,780	31	43	46	6,134	-	18,952	4,456	2,780	26	100	100
N Scottsdale Road	E Camel Back	E Chaparral Road	7,520	-	18,120	9,594	1,239	32	44	39	6,822	-	16,946	9,594	1,239	28	100	100
N Scottsdale Road	E Chaparral Road	E Mcdonald dr	9,246	144	17,947	13,118	3,038	39	34	32	7,888	144	15,567	13,118	3,038	32	100	100
N Scottsdale Road	E Mcdonald dr	E Lincoln Dr	5,919	276	11,360	11,267	3,496	29	28	17	4,297	276	8,502	11,267	3,496	22	70	70
N Scottsdale Road	E Frank Lloyd Wright	E Pinnacle Park Rd	3,520	-	5,895	7,142	-	15	12	6	6,824	-	17,470	7,142	-	25	32	32
N Scottsdale Road	E Lincoln Dr	E Indian Bend Road	5,187	338	9,946	7,999	1,849	23	27	13	3,201	338	7,100	8,051	1,849	16	49	49
N Scottsdale Road	E Indian Bend Road	E Mocking Bird	4,949	327	10,373	11,174	-	24	20	12	3,826	327	7,339	11,174	-	18	31	31
N Scottsdale Road	E Mocking Bird	E Doubletree Ranch R	5,278	190	10,552	10,006	668	24	20	12	4,271	190	7,703	10,006	668	18	32	32
N Scottsdale Road	E Doubletree Ranch	E shea Blvd	4,072	-	9,242	7,571	4,634	23	17	13	3,924	-	7,598	7,571	4,634	19	23	23
N Scottsdale Road	E shea Blvd	E Cactus Road	6,295	-	11,557	11,422	7,439	33	24	14	4,458	-	8,200	11,422	7,439	25	39	39
N Scottsdale Road	E Cactus Road	E Thunderbird Road	5,778	-	11,189	19,911	6,352	38	26	12	5,480	-	9,937	19,911	6,352	33	42	42
N Scottsdale Road	E Greenway Rd	E frank Lloyd wright blv	3,445	-	7,273	12,724	571	21	16	8	6,826	-	12,571	12,724	571	26	39	39
N Scottsdale Road	E Thunderbird Road	E Greenway rd	4,263	-	9,211	14,514	5,046	29	22	11	6,026	-	11,900	14,514	5,046	30	41	41

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Compo-site Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 38448	max 38460	max 46037	max 25580	max 100	max 100	max 100	max 14351	max 43098	max 34050	max 52283	max 25560	max 100	max 100	
N Scottsdale Road	E 1st Street	University Dr	11,135	9,299	22,466	44,828	78	78	59	54	10,940	16,165	20,712	44,828	78	74	100	100
N Scottsdale Road	E Curry Road	A 202	8,576	16,480	15,333	19,908	2,891	56	54	34	7,315	16,034	14,300	29,626	2,891	56	100	100
N Scottsdale Road	E Lone Mountain Rd	Dove Valley	731	-	1,906	-	-	2	2	1	896	-	3,423	-	-	3	5	5
N Scottsdale Road	E Dixileta Dr	E Lone Mountain Rd	231	-	962	-	-	1	1	1	561	-	2,401	-	-	2	5	5
N Scottsdale Road	Via Donna Rd	E Dixileta	234	-	901	-	-	1	1	1	286	-	1,376	-	-	1	3	3
N Scottsdale Road	E Dynamite	Via Donna Rd	282	-	1,084	-	-	1	1	1	240	-	1,295	-	-	1	3	3
N Scottsdale Road	Greenway	G Hayden Rd	3,063	-	7,176	9,087	1,907	19	20	8	5,324	-	10,417	9,087	1,907	21	45	45
N Scottsdale Road	E Carefree Hwy	E Cave Creek Road	514	-	1,414	38	-	2	1	2	910	-	3,298	38	-	3	7	7
N Signal Butte Road	University Dr	Brown St	142	-	3,217	-	3,367	6	1	13	387	-	5,060	-	3,367	7	5	13
N Signal Butte Road	W Apachetal	University Dr	141	-	3,448	-	2,640	6	1	16	616	-	5,922	-	2,640	7	8	16
N Signal Butte Road	Broadway Rd	W Apachetal	138	-	3,561	-	649	4	1	16	946	-	6,275	-	649	6	10	16
N Sunrise Blvd	W Beardsley rd	Grand Ave	492	-	3,271	-	-	3	1	8	1,084	-	4,706	-	-	5	7	8
N Sunrise Blvd	Grand Ave	Stardust Blvd	607	-	4,570	-	-	5	1	18	1,269	-	6,050	-	-	6	6	18
N Sunrise Blvd	Stardust Blvd	N 128 Avenue	1,072	-	7,650	-	-	8	2	39	1,907	-	10,288	-	-	10	9	39
N Sunrise Blvd	N 128th Avenue	W Bell Rd	1,233	-	7,853	-	-	8	4	24	1,643	-	6,908	-	-	7	12	24
N Sunrise Blvd	W Bell Rd	W Beardsley rd	502	-	3,564	-	419	4	2	7	1,807	-	7,616	-	419	8	10	10
N Tatum Blvd	E Dixileta Dr	N Cave Creek Rd	94	-	1,142	28	-	1	1	2	383	-	5,986	28	-	5	2	5
N Tatum Blvd	E Dynamite	E Dixileta	102	-	1,113	18	-	1	0	2	371	-	6,226	18	-	5	2	5
N Tatum Blvd	Doubletree Ranch Rd	Lincoln Dr	4,018	-	8,856	17,159	649	27	12	9	2,547	-	5,896	18,182	649	22	16	27
N Tatum Blvd	E Jomax Rd	E Dynamite Blvd	74	-	932	-	-	1	0	2	385	-	5,937	-	-	5	3	5
N Tatum Blvd	E Pinna Peak	Joe max Rd	43	-	591	-	-	1	0	1	510	-	7,210	-	-	6	4	6
N Tatum Blvd	E Union Hills Dr	E Pinna Peak	983	-	5,770	10,938	669	16	3	14	3,054	-	13,439	10,938	669	23	13	23
N Tatum Blvd	E Bell RD	E Union Hills Dr	1,778	-	9,611	16,416	6,502	30	8	23	2,806	-	10,991	16,416	6,502	29	21	30
N Tatum Blvd	E Greenway Rd	E Bell Rd	3,257	-	13,280	26,932	8,061	46	15	33	2,956	-	12,993	26,932	8,061	41	25	46
N Tatum Blvd	E Thunderbird Road	E Greenway rd	4,255	-	15,696	31,091	10,249	54	18	37	3,619	-	12,923	31,091	10,249	46	21	54
N Tatum Blvd	E Cactus Road	E Thunderbird Road	5,132	-	16,499	26,645	4,002	46	19	37	3,882	-	12,403	26,645	4,002	38	20	46
N Tatum Blvd	E shea Blvd	E Cactus Road	4,578	-	14,405	23,279	496	38	12	30	3,506	-	10,539	23,279	496	30	17	38
N Tatum Blvd	Doubletree Ranch Rd	E shea Blvd	3,538	-	10,018	12,667	668	24	12	15	1,871	-	6,067	12,667	668	17	18	24
N Tatum Blvd	E Mcdonald dr	E Lincoln Dr	3,418	-	6,567	10,136	-	18	14	6	2,512	-	4,566	10,546	-	14	26	26
N Tomdarlington	E Dove Valley Rd	E Carefree Hwy	583	-	1,904	-	-	2	1	1	965	-	3,539	-	-	4	6	6
N Val Vista Dr	E University Dr	W Brown Rd	2,332	316	13,965	11,515	5,954	30	11	43	2,317	316	14,554	11,515	5,954	28	20	43
N Val Vista Dr	E Main Street	E University Dr	2,181	319	13,805	13,230	3,396	29	12	49	2,106	319	13,664	13,230	3,396	26	19	49
N Val Vista Dr	E Broadway Rd	E Main Street	2,201	286	13,776	22,002	7,026	40	12	53	2,214	286	13,543	22,002	7,026	36	21	53
N Val Vista Dr	E Southern Avenue	E Broadway Road	2,534	156	15,882	32,244	10,754	55	12	56	3,213	156	15,315	32,244	10,754	49	23	56
N Val Vista Dr	E Baseline Rd	Us 60 Ramp	1,705	-	10,448	24,555	4,526	37	9	28	2,668	-	11,617	24,555	4,526	35	22	37
N Val Vista Dr	E Guadalupe rd	E baseline rd	1,709	-	10,747	29,723	10,573	47	8	28	2,660	-	13,771	29,723	10,573	45	20	47
N Val Vista Dr	E Elliot Road	W Guadalupe Road	1,116	-	7,409	10,883	11,780	28	6	20	1,617	-	12,056	10,883	11,780	29	17	29
N Val Vista Dr	W Warner Rd	E Elliot Road	902	-	5,256	10,856	6,706	21	4	11	857	-	10,270	10,856	6,706	23	8	23
N Val Vista Dr	E Ray Rd	W Warner Rd	564	-	2,842	5,798	629	9	3	4	662	-	9,618	11,422	629	18	5	18
N Val Vista Dr	Us 60 Ranp	E Southern Avenue	1,809	-	11,687	32,171	8,329	48	10	36	2,876	-	12,103	32,171	8,329	44	23	48
S 16th Street	E Greenway Rd	W Bell Rd	2,530	-	13,748	15,601	5,438	33	13	45	2,169	-	11,619	15,601	5,438	28	18	45

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec		
			max 17385	max 38448	max 38460	max 48037	max 25580	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	max 100
S 16th Street	E Union Hills Dr	E Beardsley Dr	2,325	-	12,529	7,140	9,133	28	10	43	2,093	-	11,833	7,140	9,133	24	19	43
S 16th Street	W Bell Rd	E Union Hills Dr	2,952	-	15,736	15,611	8,988	38	12	57	2,522	-	14,842	15,611	8,988	34	18	57
S 16th Street	E Glendale Rd	E Northern Rd	7,608	-	16,739	14,790	4,573	39	30	46	4,938	-	13,118	14,790	4,573	30	54	54
S 16th Street	E Bethany RD	E Glendale Av	10,736	27	19,390	18,032	6,878	49	45	54	8,024	27	15,584	18,032	6,878	39	66	66
S 24 th street	E A202	E McDowell RD	11,089	-	21,727	8,516	16,185	51	65	51	7,578	-	16,125	8,516	16,185	39	81	81
S 24 th street	E Camel Back	E Glendale Av	10,438	2,795	21,209	32,088	4,508	63	47	53	8,903	2,795	18,211	32,088	4,508	53	70	70
S 24 th street	E Indian School Road	E camel Back Rd	12,649	1,114	25,610	18,938	14,749	65	45	72	11,493	1,114	21,744	18,938	14,749	54	66	72
S 24 th street	E Thomas RD	e Indian School road	14,697	-	28,189	22,567	12,947	70	73	84	10,950	-	22,309	22,567	12,947	55	77	84
S 24 th street	E McDowell RD	E Thomas RD	14,285	-	27,636	13,692	14,087	62	75	80	9,408	-	21,506	13,692	14,087	47	84	84
S 24 th street	E Van Burent Street	E A202	11,916	-	21,870	8,544	11,699	48	64	49	9,781	-	18,952	8,544	11,699	39	84	84
S 35th Avenue	I 10 ramp	W McDowell	9,072	43	18,220	10,397	25,560	56	55	43	6,257	43	13,756	10,397	25,560	45	67	67
S 35th Avenue	A 101 Ramps	W deer vally rd	3,957	115	10,839	-	6,520	19	20	23	3,089	115	10,055	-	6,520	16	33	33
S 35th Avenue	W Deer Vally Rd	W Pinnacle peak rd	1,971	54	6,228	-	1,927	9	8	13	2,457	54	7,780	-	1,927	10	25	25
S 35th Avenue	W Union Hills Dr	A 101 Ramps	4,741	121	13,441	-	5,715	21	23	38	3,997	121	13,305	-	5,715	19	37	38
S 35th Avenue	W Bell RD	W Union Hills dr	5,140	68	16,542	35	7,492	26	23	48	4,709	68	15,218	35	7,492	22	32	48
S 35th Avenue	W Greenway rd	W Bell Rd	5,862	1,036	18,897	111	9,233	31	26	54	4,278	1,036	14,862	111	9,233	24	33	54
S 35th Avenue	W Thunderbird Rd	W Greenway rd	6,284	2,286	19,839	8,677	16,724	48	30	57	4,117	2,286	14,542	8,677	16,724	37	34	57
S 35th Avenue	W Cactus Rd	W Thunderbird Rd	8,405	4,805	21,461	10,510	18,489	57	41	62	4,825	4,805	15,278	10,510	18,489	43	46	62
S 35th Avenue	W Peoria Avenue	W Cactus Rd	9,949	2,965	24,532	19,170	22,612	70	45	65	7,019	2,965	17,275	19,170	22,612	55	49	70
S 35th Avenue	W Olive Avenue	W Peoria Avenue	10,253	2,251	24,963	20,530	17,152	67	47	71	7,780	2,251	18,711	20,530	17,152	53	51	71
S 35th Avenue	W Northern Avenue	W Olive Avenue	9,916	2,811	25,832	21,496	14,696	66	48	74	6,670	2,611	18,199	21,496	14,696	51	50	74
S 35th Avenue	W G lendale AV	W Northern Avenue	8,471	726	24,590	25,988	12,003	64	45	81	4,580	726	17,497	25,988	12,003	49	50	81
S 35th Avenue	W Bethany home rd	W Glendale Av	5,648	1,074	22,157	27,823	15,346	64	29	84	3,716	1,074	17,146	27,823	15,346	52	43	84
S 35th Avenue	W Camelback Rd	W Bethany home rd	7,998	1,658	24,251	22,648	16,281	65	41	81	5,184	1,658	17,716	22,648	16,281	51	51	81
S 35th Avenue	W Indian School Rd	W Camelback Rd	10,405	2,360	26,377	14,124	13,668	59	46	72	7,850	2,360	18,667	14,124	13,668	45	58	72
S 35th Avenue	E Thomas RD	W Indian School Rd	10,432	499	25,414	17,014	8,949	55	48	65	8,943	499	19,959	17,014	8,949	44	60	65
S 35th Avenue	W McDowell Rd	E Thomas RD	12,404	80	24,887	13,710	16,990	60	52	58	9,833	80	19,448	13,710	16,990	48	65	65
S 35th Avenue	W Van Buren Street	I 10 ramp	9,824	21	20,242	10,397	24,323	58	55	45	6,611	21	15,391	10,397	24,323	45	69	69
S 35th Avenue	W Buckeye Rd	W Van Buren Street	8,386	-	16,253	7,095	12,306	39	39	34	6,663	-	14,501	7,095	12,306	32	56	56
S 35th Avenue	W Lower BuckeyeRD	W Buckeye Rd	6,076	-	10,635	3,358	3,864	21	29	17	5,860	-	11,026	3,358	3,864	19	47	47
S 48th Street	End	E Chandler Rd	2,390	55	7,190	5,176	1,563	15	11	14	3,843	55	9,071	5,176	1,563	16	31	31
S 48th Street	E Chandler Blvd	E ray rd	3,561	98	9,974	7,057	3,863	22	14	24	5,185	98	13,424	7,057	3,863	24	38	38
S 48th Street	E Ray Rd	W Warner Rd	4,065	126	11,493	8,524	4,527	26	9	29	5,128	126	13,402	8,524	4,527	25	43	43
S 48th Street	W Warner Rd	W Elliot Dr	4,513	79	12,815	13,886	3,997	31	9	35	5,818	79	14,508	13,886	3,997	31	51	51
S 48th Street	W Elliot dr	E Guadalupe rd	4,685	138	14,170	13,284	859	29	9	39	6,323	138	14,184	13,284	859	28	60	60
S 48th Street	E Guadalupe rd	W Baseline Road	8,047	1,299	18,416	13,248	3,321	39	22	46	7,921	1,299	17,161	13,248	3,321	34	90	90
S 48th Street	W Baseline Road	W Southern Avenue	9,016	877	19,232	14,230	3,976	42	27	37	8,957	877	19,089	14,230	3,976	38	100	100
S 48th Street	W Southern Avenue	W Broadway Rd	10,874	3,177	22,241	6,718	1,933	40	31	31	8,020	3,177	20,890	6,718	1,933	33	100	100
S 48th Street	W Broadway RD	W University Dr	6,477	2,816	19,710	6,661	19	32	72	20	4,659	2,816	18,494	6,661	19	26	100	100
S 56th Street	E Guadalupe rd	E baseline rd	9,432	624	20,373	7,958	10,164	43	21	52	9,234	624	19,155	7,958	10,164	38	83	83
S 56th Street	W Elliot dr	E Guadalupe rd	6,498	154	16,569	10,725	3,057	33	13	39	7,896	154	14,925	10,725	3,057	29	60	60

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/University	Shop/Errands	Social/Rec	School	100% Scale			100% Scale	100% Scale	Work	College/University	Shop/Errands	Social/Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100			max 100	max 100	max 14351	max 43098	max 34050	max 52283			max 25560	max 100	max 100
S 7th Avenue	W I17	W Buckeye Rd	8,965	102	20,383	10,553	10,805	45	71	27	7,780	102	18,861	10,553	10,805	39	100	100			
S 7th Avenue	W Broadway RD	W I17	10,189	45	19,826	24,225	4,557	52	53	36	8,656	45	17,720	24,225	4,557	44	100	100			
S 7th Avenue	W Jefferson St	W Washington St	10,144	178	24,409	12,436	11,011	52	100	33	9,920	178	22,448	12,436	11,011	45	100	100			
S 7th Avenue	W Beardsley rd	Deer Valley Rd	5,097	-	11,548	5,287	7,575	26	25	26	4,596	-	9,478	5,287	7,575	22	43	43			
S 7th Avenue	W Union Hills Dr	W Beardsley rd	5,849	-	15,439	6,147	8,463	32	26	49	5,300	-	14,850	6,147	8,463	28	42	49			
S 7th Avenue	W Bell RD	W Union Hills dr	5,316	-	17,315	11,475	8,177	38	25	56	4,373	-	16,084	11,475	8,177	32	38	56			
S 7th Avenue	W Greenway rd	W Bell Rd	3,725	-	14,242	8,145	8,876	31	22	43	3,121	-	12,591	8,145	8,876	26	31	43			
S 7th Avenue	W Indian School Rd	W Camelback Rd	15,321	9,817	30,079	8,488	14,711	70	95	86	12,862	9,817	25,937	8,488	14,711	58	100	100			
S 7th Avenue	W thomas Rd	W Indian School Rd	15,105	10,688	32,809	18,858	11,581	79	100	79	11,591	11,160	28,121	18,858	11,581	65	100	100			
S 7th Avenue	W Van Buren Street	W McDowell	14,709	8,559	34,984	26,091	10,466	84	100	51	13,145	8,559	31,202	26,091	10,466	72	100	100			
S 7th Avenue	W Washington ST	W Van Buren Street	10,815	178	26,106	19,061	13,016	61	100	36	10,526	178	23,743	19,061	13,016	53	100	100			
S 7th Avenue	W Buckeye Rd	W Jefferson Street	10,925	139	26,292	14,345	11,709	56	82	37	10,943	139	24,692	14,345	11,709	50	100	100			
S 7th Avenue	W McDowell Rd	W thomas Rd	15,805	7,855	35,143	24,539	7,198	80	100	61	12,761	7,993	30,606	24,539	7,198	67	100	100			
S 7th St	W Baseline Road	W Southern Avenue	2,867	515	10,532	24,632	18,526	51	2	36	2,971	515	11,897	24,632	18,526	47	18	51			
S 7th St	W Dobbins Road	W Baseline Road	1,750	513	8,521	21,774	12,254	40	2	26	2,149	513	9,513	21,774	12,254	37	16	40			
S 83rd Avenue	W Cactus Rd	W Thunderbird Rd	2,032	-	10,570	16,004	10,590	35	10	29	2,861	-	12,183	16,004	10,590	33	27	35			
S 83rd Avenue	Grand Ave	W Cactus Rd	2,609	-	12,801	19,081	11,360	41	10	35	3,481	-	13,391	19,081	11,360	38	23	41			
S 83rd Avenue	W Olive Avenue	Grand Ave	2,698	-	10,862	15,739	10,199	35	11	33	3,634	-	12,336	15,739	10,199	34	25	35			
S 91st Avenue	W Peoria Avenue	Grand Ave	2,974	-	11,836	7,205	3,678	23	12	38	3,269	-	12,089	7,205	3,678	21	24	38			
S 91st Avenue	E McDowell RD	E Thomas RD	1,786	-	7,792	-	3,185	11	9	17	2,588	-	12,469	-	3,185	15	24	24			
S 91st Avenue	W Camelback Rd	W Glendale Av	944	-	8,096	113	2,914	11	4	21	1,622	-	14,341	113	2,914	15	11	21			
S 91st Avenue	Grand Ave	W Cactus Rd	2,567	-	9,888	3,451	3,814	18	13	28	2,551	-	9,362	3,451	3,814	15	29	29			
S 91st Avenue	W Broadway RD	W Lower Buckeye RD	720	-	1,269	-	4,132	5	1	1	908	-	2,000	-	4,132	6	22	22			
S 91st Avenue	W Lower BuckeyeRD	W Buckeye Rd	970	-	1,737	-	909	3	4	2	1,989	-	3,628	-	909	5	23	23			
S 91st Avenue	W Buckeye Rd	W Van Buren Street	1,662	-	3,032	-	6,270	10	5	5	3,029	-	6,022	-	6,270	12	24	24			
S 91st Avenue	W Van Buren Street	E McDowell RD	1,742	-	5,016	-	9,845	15	8	9	3,281	-	9,646	-	9,845	18	24	24			
S 91st Avenue	E Thomas RD	W Indian School Rd	1,032	-	7,950	35	8,462	16	5	24	1,853	-	13,529	35	8,462	19	16	24			
S 91st Avenue	W Indian School Rd	W Camelback Rd	987	-	8,000	38	7,727	15	5	24	1,302	-	12,522	38	7,727	17	14	24			
S 91st Avenue	W Glendale Avenue	W Northern Avenue	832	-	4,707	103	2,282	7	4	12	1,365	-	8,905	103	2,282	10	14	14			
S 91st Avenue	W Northern Avenue	W Olive Avenue	1,827	-	8,329	5,304	7,538	20	8	24	2,282	-	10,242	5,304	7,538	20	20	24			
S 91st Avenue	W Olive Avenue	W Peoria Avenue	2,797	-	11,310	7,197	5,550	24	11	36	2,943	-	11,751	7,197	5,550	22	23	36			
S Alma School Road	E University Dr	W Brown Rd	7,953	-	20,544	15,239	14,060	51	35	67	7,274	-	16,849	15,239	14,060	43	61	67			
S Dobson Road	E Baseline Rd	Us 60 Ramp	8,539	16,525	22,002	14,871	9,012	63	40	59	6,414	17,214	16,021	14,871	9,012	51	71	71			
S Dobson Road	W Southern Avenue	W Broadway Rd	11,189	17,919	26,308	12,902	9,018	69	44	89	10,532	18,620	22,512	12,902	9,018	59	72	89			
S Dobson Road	Us 60 Ranp	W Southern Avenue	8,512	16,214	20,659	9,890	10,910	59	48	67	7,910	17,054	17,416	9,890	10,910	51	76	76			
S Elsworth Road	E Rittenhouse Road	E Queen Creek Road	270	-	741	-	8,714	9	1	1	757	-	1,674	-	8,714	9	6	9			
S Elsworth Road	E Ocotill Road	E Rittenhouse Road	298	-	809	-	5,815	6	1	1	934	-	2,246	-	5,815	7	6	7			
S Elsworth Road	E Chandler Heights R	E Ocotill Road	221	-	795	-	3,142	4	1	1	936	-	2,900	-	3,142	6	6	6			
S Elsworth Road	E Cloud Road	E Chandler Heights Rd	193	-	704	-	3,129	4	1	1	570	-	2,366	-	3,129	5	5	5			
S Elsworth Road	E Riggs Road	E Cloud Road	145	-	608	-	1,907	2	1	1	362	-	1,835	-	1,907	3	5	5			
S Miller Rd	Broadway	Southern Ave	461	-	1,394	-	-	2	2	3	1,264	-	2,302	-	-	3	9	9			

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			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38480	max 46037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
S Miller Rd	W Hazen Rd	Irvin Ave	362	-	992	-	2,627	4	0	3	589	-	1,109	-	2,627	3	7	7			
S Miller Rd	Southern Ave	Baseline Rd	449	-	1,345	-	1,888	3	1	5	1,254	-	2,271	-	1,888	4	9	9			
S Mills	W Curry Road	N Galvin Pkwy	9,500	26,040	17,450	24,873	-	69	64	37	8,666	16,322	17,636	35,533	-	63	100	100			
S Mills	W University Dr	E 1st street	10,820	20,046	22,585	43,110	3,279	89	73	50	11,750	24,838	22,713	52,283	3,279	92	100	100			
S Mills	W Broadway RD	E Apachetal	12,225	13,481	24,081	35,060	14,598	88	82	58	11,915	15,201	23,742	39,547	14,598	84	100	100			
S Mills	W Southern Avenue	W Broadway Rd	14,028	31,822	26,115	26,098	14,453	100	80	70	13,719	32,686	25,395	26,098	14,453	90	100	100			
S Mills	Us 60 Ranp	W Southern Avenue	11,097	6,392	21,008	15,711	9,315	56	65	56	10,142	5,624	18,217	15,711	9,315	47	100	100			
S Mills	W Baseline Road	Us 60 Ramp	8,733	589	19,089	10,535	12,313	46	49	55	9,359	589	17,137	10,535	12,313	40	79	79			
S Mills	E Apachetal	W University Dr	10,429	18,929	22,322	26,696	9,994	79	82	50	10,318	19,427	22,163	35,493	9,994	78	100	100			
S Mills	E 1st Street	E Curry Road	8,544	20,956	15,758	26,758	1,813	66	66	33	8,797	21,470	16,320	37,710	1,813	69	100	100			
S Sossaman	E Chandler Heights R	E Ocotill Road	181	-	844	-	-	1	1	2	789	-	1,501	-	-	2	5	5			
S Sossaman	E Cloud Road	E Chandler Heights Rd	142	-	773	-	-	1	1	2	391	-	1,004	-	-	1	5	5			
S Sossaman	E Riggs Road	E Cloud Road	97	-	665	-	-	1	1	2	216	-	742	-	-	1	3	3			
SR 85	S Rooks Rd	S 1st St	330	-	880	-	2,152	3	2	4	977	-	1,772	-	2,152	4	6	6			
SR 85	N 1st St	S Cemetary Rd	444	-	1,539	-	7,900	9	3	8	1,108	-	2,717	-	7,900	9	8	9			
W Baseline Rd	S 35th Avenue	S 27th Avenue	212	-	1,339	9,260	-	10	2	5	588	-	5,574	15,545	-	17	5	17			
W Baseline Rd	S 27th Avenue	S 19th Avenue	415	20	2,506	10,025	3,274	14	3	11	698	20	5,549	13,682	3,274	19	12	19			
W Bell Road	N Del Webb Blvd	N 107 th Avenue	1,275	-	6,918	-	-	7	7	44	2,196	-	9,653	-	-	9	12	44			
W Bell Road	N 107 th Avenue	N 99th Avenue	1,029	-	5,590	3,313	-	9	8	42	1,350	-	6,965	3,313	-	9	13	42			
W Bell Road	N 99th Avenue	N 91st Avenue	1,139	-	6,432	19,382	2,318	26	7	42	2,266	-	9,847	19,382	2,318	27	14	42			
W Bell Road	N 91st Avenue	N 83rd Avenue	827	-	4,581	16,118	5,103	24	6	23	2,672	-	9,492	26,167	5,103	35	17	35			
W Bell Road	N 83rd Avenue	A 101 Ramps	611	-	2,753	12,974	3,814	18	6	11	2,298	-	6,784	17,715	3,814	25	17	25			
W Bell Road	A 101 Ramps	N 75th Avenue	962	-	4,304	15,611	3,432	22	7	17	3,322	-	9,693	24,187	3,432	33	19	33			
W Bell Road	N 75th Avenue	N 67th Avenue	1,480	463	5,468	25,090	3,720	32	11	20	4,117	463	10,448	27,394	3,720	37	27	37			
W Bell Road	N 67th Avenue	N 59th Avenue	2,196	853	7,070	20,714	9,694	36	15	26	4,972	853	11,546	20,714	9,694	38	28	38			
W Bell Road	N 59th Avenue	N 51st Avenue	2,666	858	8,705	10,528	11,448	30	18	33	5,054	858	12,356	10,528	11,448	32	27	33			
W Bell Road	N 51st Avenue	N 43rd Avenue	2,828	426	9,914	8,627	9,640	28	21	38	4,429	426	12,615	8,627	9,640	29	31	38			
W Bell Road	N 43rd Avenue	N 35th Avenue	3,313	-	11,775	81	7,469	20	24	47	4,313	-	14,070	81	7,469	21	39	47			
W Bell Road	N 35th Avenue	N 117	4,498	1,703	13,613	63	4,803	22	29	55	5,855	1,703	16,682	63	4,803	23	32	55			
W Bell Road	N Citrus Road	N Cotton Lane	58	-	481	-	-	0	0	3	1,405	-	3,180	-	-	4	6	6			
W Bell Road	R H Johnson Blvd	N El Mirage Road	654	-	3,854	-	1,622	5	5	19	1,744	-	6,287	-	1,622	8	12	19			
W Bell Road	N 163rd Avenue	Sunrise Blvd	31	-	169	-	1,012	1	0	1	912	-	3,746	-	1,012	5	9	9			
W Bell Road	N A303	N 163rd Avenue	39	-	268	-	-	0	0	2	1,140	-	3,765	-	-	4	7	7			
W Bell Road	N Cotton Lane	N A303	47	-	362	-	-	0	0	2	1,283	-	3,356	-	-	4	6	6			
W Bell Road	Sunrise Blvd	N Reems Road	33	-	272	-	2,909	3	0	2	1,004	-	4,570	-	2,909	7	9	9			
W Bell Road	Reems Road	N Bullard Avenue	119	-	978	-	4,122	5	1	7	1,330	-	6,179	-	4,122	9	12	12			
W Bell Road	Bullard Avenue	N Litchfield Road	355	-	2,301	-	1,059	3	3	14	1,681	-	6,981	-	1,059	8	12	14			
W Bell Road	Litchfield Rd	Grand Avenue	476	-	2,977	-	-	3	4	17	1,660	-	6,272	-	-	6	14	17			
W Bell Road	Grand Ave	N Dysart Road	597	-	3,663	-	-	4	5	19	1,795	-	6,509	-	-	7	14	19			
W Bell Road	N Dysart Road	R H Johnson Blvd	693	-	4,032	-	39	4	5	20	1,721	-	6,515	-	39	7	11	20			
W Buckey road	N 16th Street	S I 10	4,264	78	10,348	11,775	5,452	28	71	18	4,874	78	13,206	11,803	5,452	28	100	100			

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			Work	College/University	Shop/Errands	Social/Rec	School	100% Scale			100% Scale	100% Scale	Work	College/University	Shop/Errands	Social/Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
W Buckey road	N 7th Street	N 16th Street	6,937	127	16,627	24,974	10,865	53	95	30	8,300	127	20,038	25,515	10,865	52	100	100			
W Buckey road	N Central Avenue	N 7th Street	7,042	160	16,891	22,439	11,566	52	100	30	8,603	160	19,525	22,439	11,566	50	100	100			
W Buckey road	N 7th Avenue	N Central Avenue	7,119	130	17,736	13,951	11,586	45	100	30	8,600	130	20,199	13,951	11,586	44	100	100			
W Buckey road	N 19th Avenue	N 7th Avenue	7,712	85	19,077	10,563	14,220	46	92	33	9,317	85	21,781	10,563	14,220	45	100	100			
W Buckey road	S 27th Avenue	S 117	6,108	-	11,183	3,386	10,358	28	46	25	7,180	-	13,579	3,386	10,358	28	91	91			
W Buckey road	S 35th Avenue	43rd Ave	4,600	-	9,270	3,368	2,875	18	43	17	5,485	-	12,245	3,368	2,875	19	56	56			
W Buckey road	N 51st Avenue	43rd Ave	2,078	-	7,110	38	3,249	11	40	8	3,263	-	11,673	38	3,249	15	48	48			
W Buckey road	S 117	N 19th Avenue	6,470	-	12,590	3,421	12,597	31	73	27	7,781	-	14,665	3,421	12,597	31	100	100			
W Buckeye Rd	S 117	27th Ave	6,141	-	11,027	3,386	11,653	29	53	25	7,256	-	12,985	3,386	11,653	28	100	100			
W Cactus Road	N 43rd Avenue	S 35th Av	4,447	2,259	14,004	14,781	20,424	50	34	58	4,987	2,259	15,024	14,781	20,424	46	47	58			
W Cactus Road	S 35th Av	N 27th Avenue	5,995	5,708	15,788	14,650	17,382	53	42	65	6,779	5,708	16,889	14,650	17,382	49	41	65			
W Cactus Road	N 27th Avenue	N 19th Avenue	5,798	8,986	14,047	21,357	8,883	53	41	59	6,643	8,986	15,258	21,357	8,883	49	46	59			
W Camelback RD	N Reems Road	N Litchfield Road	699	-	1,579	3,431	1,830	7	4	4	1,924	-	5,994	3,431	1,830	11	14	14			
W Camelback RD	N Litchfield Road	N 8th Street	458	518	1,495	3,441	610	6	3	4	1,736	559	6,566	3,441	610	10	16	16			
W Camelback RD	N El Mirage Road	S 107th Avenue	269	39	2,526	18	1,029	3	2	10	1,796	39	11,539	18	1,029	12	11	12			
W Camelback RD	N 99th Avenue	N 91st Avenue	354	24	4,370	38	3,796	8	3	20	1,187	24	11,904	38	3,796	14	10	20			
W Camelback RD	N 91st Avenue	N 83 RD Avenue	568	-	6,996	73	3,732	10	4	31	1,306	-	13,483	73	3,732	15	13	31			
W Camelback RD	N 83rd Avenue	N 75th Avenue	955	-	10,848	6,708	7,848	23	7	51	1,777	-	16,397	6,708	7,848	26	13	51			
W Camelback RD	N 75th Avenue	N 67th Avenue	1,751	-	13,395	18,941	18,765	47	13	66	2,711	-	17,689	18,941	18,765	47	26	66			
W Camelback RD	N 67th Avenue	N 59th Avenue	3,254	-	14,313	22,695	14,917	49	23	68	4,792	-	17,672	22,695	14,917	48	33	68			
W Camelback RD	N 59th Avenue	N 51st Avenue	4,401	-	14,340	24,190	7,186	45	29	66	6,358	-	17,186	24,190	7,186	44	40	66			
W Camelback RD	N 51st Avenue	N 43rd Avenue	4,894	438	14,240	18,572	9,978	43	34	64	6,749	438	16,708	18,572	9,978	42	54	64			
W Camelback RD	N 35th Avenue	S 27th Avenue	5,913	2,080	17,934	17,409	16,604	53	46	90	6,571	2,080	19,614	17,409	16,604	50	54	90			
W Camelback RD	N 43rd Avenue	N 35th Avenue	5,202	1,785	15,878	17,499	13,804	48	39	75	6,523	1,785	17,999	17,499	13,804	46	58	75			
W Camelback RD	S 27th Avenue	N 117	4,702	1,738	14,345	18,840	13,558	47	46	76	5,082	1,738	15,604	18,840	13,558	44	56	76			
W Camelback Rd	N 19th Avenue	N 7th Avenue	9,398	6,794	20,743	10,352	12,382	53	70	97	10,024	6,794	22,297	10,352	12,382	50	100	100			
W Camelback Rd	N 7th Avenue	N Central Avenue	9,785	1,869	18,089	9,243	12,183	45	87	76	10,417	1,869	19,262	9,243	12,183	42	100	100			
W Camelback Rd	N 117	N 19th Avenue	5,980	1,176	17,743	20,703	13,222	52	46	94	6,419	1,176	19,221	20,703	13,222	49	81	94			
W Camelback RD	N 8th Street	N El Mirage Road	321	402	1,228	108	-	2	2	4	1,571	402	6,821	108	-	7	11	11			
W Camelback RD	S 107th Avenue	N 99th Avenue	245	55	2,892	-	4,181	7	2	13	1,112	55	10,209	-	4,181	12	8	13			
W Chandler Heights R	S Alma School Road	S Arizona Avenue	547	-	1,414	-	-	2	4	5	2,082	-	8,738	-	-	9	23	23			
W Deer Vally Road	Grand Ave	End	56	-	224	-	-	0	0	1	237	-	1,292	-	-	1	3	3			
W Dobbins Rd	S 27th Avenue	S 16th Street	176	64	1,438	11,417	812	12	1	5	311	64	3,491	11,801	812	13	4	13			
W Dobbins Rd	19th Avenue	S 7th Avenue	476	141	2,794	12,639	7,145	21	4	12	796	141	4,808	13,561	7,145	21	12	21			
W Dobbins Rd	S 7th Avenue	S Central Avenue	641	159	3,370	12,872	9,319	23	5	14	1,085	159	5,526	12,872	9,319	23	12	23			
W Dobbins Rd	S central Avenue	S 7th Street	678	137	3,494	13,664	7,276	22	6	14	1,172	137	5,802	13,664	7,276	22	14	22			
W Elliot Rd	S Alma School Road	N Arizona Avenue	3,483	-	11,639	27,760	6,946	44	23	41	8,375	-	17,262	27,760	6,946	48	50	50			
W Elliot Rd	Arizona Ave	S Mcqueen Rd	3,028	-	9,264	21,225	5,236	34	21	32	8,685	-	19,215	21,225	5,236	44	55	55			
W Elliot Rd	48th St	End	2,368	55	6,641	11,177	2,051	20	20	24	3,666	55	8,765	11,177	2,051	21	54	54			
W Elliot Rd	S 48th Street	S 56th Street	2,976	27	7,640	11,194	554	20	23	27	4,963	27	10,289	11,194	554	22	48	48			
W Elliot Rd	S 56th Street	S Kyrene Rd	3,653	-	8,747	10,001	-	20	26	29	5,753	-	12,378	10,001	-	23	44	44			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38480	max 46037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
W Elliot Rd	S Kyrene	S rural Rd	3,321	-	8,395	13,838	5,735	28	26	27	5,638	-	11,842	13,838	5,735	30	39	39			
W Elliot Rd	S Rural Rd	S McClintock Dr	3,155	-	8,827	17,226	14,649	39	23	26	4,903	-	11,870	17,226	14,649	39	31	39			
W Elliot Rd	S McClintock Dr	S Price Rd	3,001	-	10,018	20,923	5,034	35	20	32	4,351	-	12,466	20,923	5,034	34	27	35			
W Elliot Rd	S Price Rd	S Dobson rd	3,215	-	11,497	27,392	8,520	45	23	39	4,273	-	13,197	27,392	8,520	43	27	45			
W Elliot Rd	S Dobson rd	S Alma School Road	3,455	-	12,660	32,954	14,944	57	25	45	4,822	-	14,488	32,954	14,944	54	57	57			
W Elliot Rd	S Mcqueeh	N Cooper Rd	2,560	-	7,728	14,909	8,173	30	19	25	9,032	-	18,872	14,909	8,173	41	54	54			
W Elliot Rd	N Cooper Rd	S Gilbert Rd	2,130	-	7,871	10,314	12,029	29	13	25	7,187	-	16,903	10,314	12,029	37	49	49			
W Elliot Rd	S Gilbert Rd	S lindsay Rd	1,873	-	7,625	8,863	13,630	28	12	24	3,387	-	13,727	8,863	13,630	32	27	32			
W Elliot Rd	S lindsay Rd	S Val Vista Dr	1,115	-	5,841	8,183	11,170	23	9	19	1,844	-	11,784	8,183	11,170	26	14	26			
W Elliot Rd	S Val Vista DR	S Greenfield Rd	447	-	3,341	5,176	6,971	14	4	11	760	-	10,421	5,176	6,971	19	8	19			
W Germann Rd	S Dobson rd	S Alma School Road	875	-	2,511	8,544	1,660	12	7	9	4,186	-	11,323	8,544	1,660	21	49	49			
W Germann Rd	S Alma School Road	S Arizona Avenue	642	-	2,375	11,829	-	13	6	10	7,375	-	13,830	11,829	-	26	54	54			
W Glendale Av	N Litchfield Road	N Dysart Road	890	-	2,669	-	3,462	6	8	8	1,545	-	4,385	-	3,462	8	7	8			
W Glendale Av	N El Mirage Road	N 107 th Avenue	209	50	1,214	-	39	1	1	5	1,665	50	5,177	-	39	6	7	7			
W Glendale Av	N 67th Avenue	N 59th Avenue	4,305	-	12,595	10,272	15,063	38	29	64	6,445	-	19,041	10,272	15,063	41	40	64			
W Glendale Av	N 59th Avenue	N 51st Avenue	4,925	-	14,896	17,396	18,123	49	32	75	6,807	-	18,840	17,396	18,123	49	41	75			
W Glendale Av	N 51st Avenue	N 43rd Avenue	4,423	6	15,033	21,081	18,648	53	31	74	5,611	6	17,527	21,081	18,648	50	39	74			
W Glendale Av	N 43rd Avenue	N 35th Avenue	3,594	620	15,653	26,098	16,638	56	27	82	4,121	620	17,482	26,098	16,638	52	46	82			
W Glendale Av	N 35th Avenue	S 27th Avenue	4,393	620	16,461	24,493	10,079	50	32	84	4,791	620	17,939	24,493	10,079	46	42	84			
W Glendale Av	S 27th Avenue	N 117	4,045	620	12,951	15,528	14,673	42	38	64	4,385	620	14,118	15,528	14,673	39	43	64			
W Glendale Av	N 117	N 19th Avenue	4,859	186	15,117	19,578	12,958	47	37	71	5,210	186	16,423	19,578	12,958	44	40	71			
W Glendale Av	N 19th Avenue	N 7th Avenue	4,955	-	14,618	15,215	9,225	39	37	64	5,284	-	15,822	15,215	9,225	36	47	64			
W Glendale Av	N 7th Avenue	N Central Avenue	3,910	-	11,004	10,803	5,757	28	37	46	4,201	-	11,922	10,803	5,757	26	52	52			
W Glendale Av	N Central Avenue	N 7th Street	3,853	-	10,698	1,395	7,760	21	35	44	4,133	-	11,614	1,395	7,760	20	47	47			
W Glendale Av	N 83rd Avenue	N 75th Avenue	1,359	-	5,888	91	8,418	14	10	27	2,596	-	15,351	91	8,418	21	23	27			
W Glendale Av	N 75th Avenue	N 67th Avenue	2,664	-	9,478	3,486	10,091	23	19	49	4,352	-	17,861	3,486	10,091	29	36	49			
W Glendale Av	N 107th Avenue	N 99th Avenue	195	67	1,037	35	-	1	2	4	1,558	67	5,539	35	-	6	7	7			
W Glendale Av	N 91st Avenue	N 83rd Avenue	519	-	3,058	75	4,169	7	4	13	1,555	-	11,009	75	4,169	13	14	14			
W Glendale Av	N 99th Avenue	N 91st Avenue	260	30	1,739	75	477	2	2	7	1,550	30	7,874	75	477	8	9	9			
W Glendale Av	N Dysart Road	N El Mirage Road	331	-	1,676	-	3,155	5	3	7	925	-	3,800	-	3,155	6	7	7			
W Greenway Pkwy	N Cave Creek Rd	16th St	2,413	-	12,469	15,618	6,409	33	17	62	3,177	-	15,667	15,618	6,409	33	20	62			
W Greenway Pkwy	7th St	16th St	2,273	-	12,305	17,560	3,315	32	15	58	3,046	-	15,591	17,560	3,315	32	19	58			
W Greenway Pkwy	N 7th Avenue	7th St	2,498	-	12,025	11,297	8,372	30	16	52	3,619	-	15,462	11,297	8,372	31	23	52			
W Greenway Pkwy	N 19th Avenue	N 7th Avenue	2,818	1,288	11,418	11,458	6,840	30	19	49	4,138	1,288	14,433	11,458	6,840	31	28	49			
W Greenway Pkwy	N 35th Avenue	N 27th Avenue	3,468	2,352	12,240	443	10,148	25	24	53	4,484	2,352	14,420	443	10,148	26	27	53			
W Greenway Pkwy	N 27th Avenue	N 19th Avenue	3,211	2,677	11,171	6,269	5,987	26	23	49	4,563	2,677	13,648	6,269	5,987	27	29	49			
W Greenway Pkwy	N 64 Street	56th St	1,997	-	8,216	34,782	12,355	51	16	24	3,607	-	12,451	34,782	12,355	51	41	51			
W Greenway Pkwy	N 56th Street	N 64th Street	2,308	-	10,178	34,385	12,912	53	17	33	2,761	-	12,607	34,385	12,912	50	25	53			
W Greenway Pkwy	N Tatum Blvd	40th St	2,906	-	11,468	29,110	10,135	48	21	42	3,265	-	13,367	29,110	10,135	45	23	48			
W Greenway Rd	N 64th Street	N Scottsdale Road	3,822	-	7,806	26,060	5,991	39	26	17	7,051	-	13,680	26,060	5,991	42	41	42			
W Greenway Rd	N 32nd Street	N 40th street	3,028	-	12,290	13,308	12,102	36	22	53	3,570	-	14,313	13,308	12,102	35	25	53			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Compo-site Activity Level			
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38460	max 46037	max 25580	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
W Greenway Rd	W Greenway Pkwy	N 32nd street	2,372	-	10,665	16,560	9,386	35	19	50	2,937	-	12,713	16,560	9,386	33	25	50			
W Happy Vally Rd	N 195th Avenue	Grand Ave	20	-	140	-	-	0	0	0	129	-	676	-	-	1	1	1			
W Happy Vally Rd	N 19th Avenue	N 7th Street	194	-	593	-	-	1	4	1	2,253	-	4,907	-	-	6	19	19			
W Happy Vally Rd	N 27th Avenue	N 19th Avenue	480	-	1,103	-	-	1	5	2	3,086	-	6,020	-	-	7	19	19			
W Happy Vally Rd	N 35th Avenue	N 27th Avenue	595	-	1,765	-	496	3	5	5	2,995	-	7,188	-	496	9	19	19			
W Happy Vally Rd	N 51st Avenue	N 35th Avenue	334	-	2,276	3,313	2,421	7	2	6	2,756	-	9,478	3,313	2,421	14	15	15			
W Happy Vally Rd	N 67th Avenue	N 51st Avenue	105	-	1,440	8,488	2,232	11	1	4	1,383	-	8,783	8,488	2,232	17	5	17			
W Indian School RD	N Reems Road	N Litchfield Road	359	203	1,383	4,426	8,091	13	2	4	2,508	343	8,240	7,225	8,091	21	14	21			
W Indian School RD	N Litchfield Road	N 8th Street	479	793	1,522	7,078	6,723	15	2	4	3,093	1,622	9,277	7,255	6,723	22	17	22			
W Indian School RD	N 8th Street	N Dysart Road	417	748	1,198	5,019	2,259	9	3	3	2,621	2,120	7,514	5,362	2,259	16	19	19			
W Indian School RD	N Dysart Road	N El Mirage Road	412	1,097	1,505	3,469	305	6	3	4	2,722	1,625	9,302	3,469	305	14	19	19			
W Indian School RD	N El Mirage Road	N 107 th Avenue	363	353	3,337	35	4,363	8	2	12	2,857	353	14,197	35	4,363	17	16	17			
W Indian School RD	N 99th Avenue	107th Avenue	357	-	3,813	-	7,113	10	2	15	1,681	-	11,938	-	7,113	17	13	17			
W Indian School RD	51st Avenue	43rd Avenue	5,442	502	15,378	11,912	18,977	46	39	61	7,123	502	17,713	11,912	18,977	45	52	61			
W Indian School RD	59th Ave	51st Ave	3,601	-	14,638	20,804	18,569	51	27	64	5,226	-	17,363	20,804	18,569	50	35	64			
W Indian School RD	43rd Ave	35th Ave	7,531	1,440	17,052	10,452	11,883	43	49	65	8,781	1,440	18,974	10,452	11,883	41	61	65			
W Indian School RD	S 27th Avenue	27th Ave	8,472	3,493	18,705	10,379	9,658	45	56	78	9,092	3,493	20,138	10,379	9,658	42	59	78			
W Indian School RD	27th Ave	N 19th Avenue	6,334	8,188	14,334	8,488	8,963	41	60	66	6,667	8,188	15,367	8,488	8,963	38	62	66			
W Indian School Rd	N 117	N 19th Ave	8,158	11,946	19,188	11,801	10,102	54	79	86	8,813	11,946	20,529	11,801	10,102	51	100	100			
W Indian School RD	N Alsup RD	N Reems Road	8	-	350	932	723	2	0	2	945	-	3,471	3,313	723	7	9	9			
W Lower Buckeye Roa	S 27th Avenue	23rd Ave	3,749	-	6,975	6,653	4,620	20	33	14	5,028	-	9,945	6,653	4,620	21	66	66			
W Lower Buckeye Roa	23rd Ave	S 19th Avenue	2,682	-	5,258	6,653	5,384	18	33	11	3,519	-	7,532	6,653	5,384	18	70	70			
W Lower Buckeye Roa	31st Ave	S 27th Avenue	2,821	-	5,403	18	2,442	9	29	8	3,851	-	7,871	18	2,442	11	42	42			
W Lower Buckeye Roa	S 35th Avenue	31st Ave	2,450	-	5,105	18	383	7	29	6	3,436	-	7,513	18	383	9	47	47			
W Lower Buckeye Roa	W SR 85	S Litchfield Rd	1,109	-	3,142	-	1,660	5	3	8	1,072	-	2,801	-	1,660	4	13	13			
W Lower Buckeye Roa	S Litchfield Rd	S Vermeersch Rd	751	-	3,098	-	1,184	4	5	13	1,483	-	4,535	-	1,184	6	11	13			
W Lower Buckeye Roa	S Vermeersch Rd	S El Mirage Rd	285	-	1,986	-	-	2	3	9	903	-	3,303	-	-	3	11	11			
W Main Street	S Counrty Club Dr	S Center Street	6,655	-	16,673	19,203	10,163	47	57	74	7,159	-	17,905	19,203	10,163	44	59	74			
W Main Street	S Center Street	N McQueen RD	6,560	-	16,250	17,844	13,865	48	53	71	6,899	-	17,286	17,844	13,865	45	52	71			
W McDowell RD	N Litchfield Road	N Dysart Road	421	750	1,394	3,330	876	6	3	5	3,706	1,625	10,326	3,330	876	16	21	21			
W McDowell RD	N Dysart Road	N El Mirage Road	285	857	1,268	-	-	2	3	5	3,552	1,479	10,461	-	-	12	22	22			
W McDowell RD	N El Mirage Road	N 115th AV	120	559	790	-	-	1	1	2	2,831	559	9,328	-	-	10	26	26			
W McDowell RD	N 51st Avenue	N 43rd Avenue	4,374	6	15,606	13,700	8,556	38	34	65	6,291	6	19,311	13,700	8,556	38	52	65			
W McDowell RD	N 59th Avenue	N 51st Avenue	3,071	-	13,598	15,545	10,128	38	23	61	4,945	-	18,756	15,545	10,128	40	38	61			
W McDowell RD	N 67th Avenue	N 59th Avenue	2,238	-	11,426	13,664	17,476	40	17	54	3,713	-	17,185	13,664	17,476	42	33	54			
W McDowell RD	N 75th Avenue	N 67th Avenue	1,817	-	8,857	10,352	9,071	27	13	40	3,239	-	15,053	10,352	9,071	30	26	40			
W McDowell RD	N 83rd Avenue	N 75th Avenue	1,569	-	6,448	6,625	1,275	14	11	26	3,323	-	13,026	6,625	1,275	19	19	26			
W McDowell RD	N 99th Avenue	N 91st Avenue	713	-	2,712	-	7,831	10	6	9	3,373	-	12,233	-	7,831	19	24	24			
W McDowell RD	N 43rd Avenue	N 35th Avenue	6,713	43	16,749	14,131	20,338	52	51	60	8,089	43	19,281	14,131	20,338	50	64	64			
W McDowell RD	N 7th Avenue	N Central Avenue	9,367	11,551	22,713	24,855	12,367	72	100	47	10,551	11,551	24,431	26,412	12,367	68	100	100			
W McDowell RD	N Central Avenue	N 7th Street	9,666	9,407	23,388	25,245	17,830	76	100	51	11,281	9,407	25,716	26,354	17,830	73	100	100			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level			
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale			100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec			School	100% Scale	100% Scale
			max 17365	max 36448	max 38480	max 46037	max 25560	max 100			max 100	max 100	max 14351	max 43096	max 34050	max 52283			max 25560	max 100	max 100
W McDowell RD	N 27th av	N 19th Avenue	8,279	6,827	15,813	15,573	11,110	51	76	45	8,964	6,827	16,978	15,573	11,110	48	100	100			
W McDowell RD	N 35th Avenue	N 27th av	7,670	1,321	15,929	13,710	21,375	53	55	52	8,391	1,321	17,320	13,710	21,375	50	63	63			
W McDowell RD	N 7th Street	N 16th Street	12,800	2,245	26,366	22,713	20,829	76	100	69	14,351	2,245	28,638	22,713	20,829	71	100	100			
W McDowell RD	N 16th Street	N A51	9,437	68	17,946	13,755	16,063	51	82	62	10,228	68	19,527	13,755	16,063	48	100	100			
W McDowell RD	N A51	N 24th Street	7,297	-	15,945	10,389	14,655	43	65	59	8,027	-	17,430	10,389	14,655	40	87	87			
W McDowell RD	N 24th Street	N 32nd street	8,178	1,333	18,962	13,692	14,250	50	64	74	9,406	1,333	21,014	13,692	14,250	48	81	81			
W McDowell RD	N 115th AV	N 107 th Avenue	205	-	892	-	-	1	2	2	3,279	-	10,470	-	-	11	21	21			
W McDowell RD	N 91st Avenue	N 83rd Avenue	1,261	-	4,259	-	2,054	7	9	14	3,215	-	11,644	-	2,054	14	25	25			
W McDowell RD	N 19th Avenue	N 7th Avenue	9,381	8,417	22,845	22,693	6,565	62	100	48	10,650	8,417	24,644	22,693	6,565	58	100	100			
W McDowell RD	N 107th Avenue	N 99th Avenue	380	-	1,524	-	1,278	3	3	5	3,279	-	11,474	-	1,278	13	22	22			
W Olive Avenue	N Del Webb Blvd	N 99th Avenue	674	-	4,776	-	590	5	6	33	1,144	-	7,460	-	590	7	13	33			
W Olive Avenue	N 75th Avenue	N 67th Avenue	2,656	6,353	10,419	22,693	3,836	41	18	51	4,896	7,204	15,095	22,693	3,836	43	34	51			
W Olive Avenue	N 67th Avenue	n 59th Avenue	2,909	7,924	12,569	19,483	3,969	42	21	60	4,898	9,858	16,776	19,483	3,969	44	36	60			
W Olive Avenue	N 19th Avenue	N 7th Avenue	8,986	2,954	17,432	29,341	12,627	63	60	63	10,095	2,954	19,735	29,341	12,627	60	67	67			
W Olive Avenue	N 7th Avenue	N central Avenue	5,092	1,306	12,220	21,689	12,620	47	42	49	5,571	1,306	13,649	21,689	12,620	44	69	69			
W Olive Avenue	N Central Avenue	N 7th Street	3,954	449	11,221	22,199	11,759	44	29	47	4,169	449	12,483	22,199	11,759	41	64	64			
W Olive Avenue	N 35th Avenue	N 27th Avenue	9,525	4,835	19,572	21,621	11,893	60	61	74	10,659	4,835	21,621	21,621	11,893	57	50	74			
W Olive Avenue	N 27th Avenue	N 19th Avenue	9,670	4,744	19,932	32,921	11,451	70	65	72	10,856	4,744	22,379	32,921	11,451	66	70	72			
W Peoria Avenue	N 111th Avenue	N 107 th Avenue	856	-	4,503	-	-	5	7	36	1,014	-	5,280	-	-	5	10	36			
W Peoria Avenue	N 99th Avenue	N 91st Avenue	1,791	-	8,120	7,178	1,294	16	11	48	2,928	-	11,625	7,178	1,294	18	21	48			
W Peoria Avenue	N 91st Avenue	N 83rd Avenue	1,945	-	8,674	15,739	7,796	30	13	42	3,565	-	13,244	15,739	7,796	32	24	42			
W Peoria Avenue	N 75th Avenue	N 67th Avenue	2,197	6,540	11,300	27,952	14,284	55	15	50	3,965	6,540	14,897	27,952	14,284	54	32	55			
W Peoria Avenue	N 67th Avenue	N 59th Avenue	2,531	7,232	12,382	17,675	11,220	45	19	53	4,057	7,596	15,311	17,675	11,220	45	31	53			
W Peoria Avenue	N 59th Avenue	N 51st Avenue	2,756	7,899	12,566	11,293	10,712	40	20	52	4,051	7,960	14,923	11,293	10,712	39	27	52			
W Peoria Avenue	N 51st Avenue	N 43rd Avenue	3,404	4,784	13,221	16,408	13,179	45	27	53	4,159	4,784	14,761	16,408	13,179	43	36	53			
W Peoria Avenue	N 43rd Avenue	N 35th Avenue	6,032	1,119	15,705	18,247	19,143	54	44	62	6,690	1,119	16,905	18,247	19,143	50	53	62			
W Peoria Avenue	N 19th Avenue	N 7th Avenue	7,653	3,561	14,666	33,759	4,372	57	58	55	8,665	3,561	16,825	33,759	4,372	54	71	71			
W Peoria Avenue	N 107th Avenue	N 99th Avenue	1,462	-	6,978	35	-	8	11	49	1,907	-	8,843	35	-	9	14	49			
W Peoria Avenue	N 83rd Avenue	N 75th Avenue	2,022	608	9,755	26,108	13,706	46	14	43	3,739	608	14,058	26,108	13,706	47	29	47			
W Peoria Avenue	N 117	N 19th Avenue	8,439	5,937	18,160	33,377	4,878	63	62	65	9,364	5,937	20,341	33,377	4,878	59	60	65			
W Peoria Avenue	N 35th Avenue	N 117	9,324	2,807	18,812	21,725	14,878	60	61	67	10,089	2,807	20,649	21,725	14,878	56	49	67			
W Pima St	S 307th Ave	SR 85	40	-	122	-	2,699	3	0	1	92	-	203	-	2,699	2	0	3			
W Pima St	S 307th Ave	N Stout Rd	40	-	124	-	2,713	3	0	1	94	-	205	-	2,713	2	0	3			
W Pinnacle Peak Rd	N 27th Avenue	N 19th Avenue	1,593	-	3,143	-	-	4	15	7	2,883	-	6,710	-	-	8	31	31			
W Pinnacle Peak Rd	N 35th Avenue	N 27th Avenue	1,512	-	3,576	-	571	5	9	10	3,615	-	7,463	-	571	9	30	30			
W Pinnacle Peak Rd	N 51st Avenue	N 35th Avenue	668	-	3,446	10,369	2,787	15	4	10	1,964	-	7,833	10,369	2,787	18	16	18			
W Pinnacle Peak Rd	W Deer Vally Rd	N 51st Avenue	263	-	3,108	12,385	2,713	16	2	8	1,324	-	8,411	17,472	2,713	24	11	24			
W Queen Creek Rd	S Price Rd	S Dobson rd	738	-	1,411	4,093	3,941	9	6	3	2,550	-	6,506	5,194	3,941	15	23	23			
W Queen Creek Rd	S Dobson rd	S Alma School Road	741	-	1,717	6,146	8,215	15	5	4	3,838	-	10,541	7,057	8,215	24	40	40			
W Ray Rd	I 10 ramp	N 56th Street	3,016	62	6,749	6,690	-	15	26	19	5,901	62	11,622	6,690	-	19	43	43			
W Ray Rd	48th St	I 10 ramp	2,357	100	6,820	5,221	3,108	16	19	22	5,047	100	12,154	5,221	3,108	21	45	45			

Road Name	From	To	Existing Non-Linked Pedestrian Activity						Existing Linked Activity	Captive Ped. Activity	2020 Non-Linked Pedestrian Activity						2020 Linked Activity	Composite Activity Level
			Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	100% Scale	Work	College/ University	Shop/ Errands	Social/ Rec	School	100% Scale	100% Scale	
			max 17365	max 36448	max 38460	max 46037	max 25560	max 100	max 100	max 100	max 14351	max 43096	max 34050	max 52283	max 25560	max 100	max 100	
W Ray Rd	N McClintock Dr	S Price Rd	1,510	-	8,932	22,705	9,111	38	13	30	4,128	-	13,873	22,705	9,111	40	38	40
W Ray Rd	S Rural Rd	N McClintock Dr	2,103	-	9,078	22,741	16,602	45	15	27	4,543	-	13,835	22,741	16,602	46	41	46
W Ray Rd	S Kyrene	S rural Rd	3,302	-	8,635	19,410	12,760	39	22	20	5,698	-	13,215	19,410	12,760	41	45	45
W Ray Rd	N 56th Street	S Kyrene Rd	3,899	10	8,345	12,308	2,027	24	26	20	7,095	10	13,644	12,308	2,027	28	41	41
W Ray Rd	48th St	E Chandler Blvd	2,088	163	11,556	12,233	9,020	31	9	34	5,459	163	22,621	12,233	9,020	40	30	40
W Rio Verde Dr	N Alma School Pkwy	N Pallsades Blvd	86	-	324	-	-	0	0	1	422	-	2,500	-	-	2	2	2
W Rio Verde Dr	N Pallsades Blvd	N Forest Road	12	-	66	-	-	0	0	0	44	-	162	-	-	0	1	1
W Thomas RD	N Litchfield Road	N Dysart Road	279	229	881	1,195	1,164	3	2	3	3,872	2,246	11,162	7,168	1,164	21	19	21
W Thomas RD	N Dysart Road	N El Mirage Road	232	113	949	3,403	-	4	2	3	3,396	2,216	10,487	3,403	-	16	20	20
W Thomas RD	S 83rd Avenue	N 75th Avenue	1,631	-	11,007	10,389	11,404	31	11	48	3,027	-	17,179	10,389	11,404	34	15	48
W Thomas RD	N 19th Avenue	N 7th Avenue	10,499	6,588	23,917	15,545	12,057	61	100	65	11,292	6,641	25,271	15,545	12,057	57	100	100
W Thomas RD	N 7th Avenue	N Central Avenue	8,493	6,274	23,956	20,731	7,867	60	100	57	9,154	6,465	25,323	20,731	7,867	56	100	100
W Thomas RD	N Central Avenue	N 7th Street	9,114	9,135	24,515	24,044	8,850	67	100	59	9,823	9,137	25,972	24,044	8,850	62	100	100
W Thomas RD	N 7th Street	S 16th Street	12,157	3,954	26,377	18,868	12,922	66	100	74	13,385	3,954	28,248	18,868	12,922	62	100	100
W Thunderbird Rd	N 99th Avenue	N 101	2,060	-	7,715	4,091	2,120	14	12	39	3,216	-	11,588	4,091	2,120	17	20	39
W Thunderbird Road	83rd Ave	N 75th Avenue	905	-	5,782	18,090	11,109	32	7	22	2,374	-	10,640	18,090	11,109	34	22	34
W Thunderbird Road	N 75th Avenue	N 67th Avenue	1,308	351	7,054	15,036	7,947	28	11	29	2,821	351	11,072	15,036	7,947	30	28	30
W Thunderbird Road	N 67th Avenue	N 59th Avenue	2,492	776	9,237	16,732	13,258	38	17	36	4,217	776	12,927	16,732	13,258	38	25	38
W Thunderbird Road	N 59th Avenue	N 51st Avenue	3,230	766	10,682	15,326	11,335	37	20	39	4,788	766	13,881	15,326	11,335	37	26	39
W Thunderbird Road	N 51st Avenue	N 43rd Avenue	3,488	322	11,507	14,376	10,930	36	23	43	4,456	322	13,829	14,376	10,930	35	31	43
W Thunderbird Road	N 43rd Avenue	N 35th Avenue	3,338	1,394	12,304	10,601	16,632	39	25	53	3,863	1,394	13,583	10,601	16,632	37	36	53
W Thunderbird Road	N 35th Avenue	N 117	3,475	4,804	13,250	9,240	14,616	40	26	60	4,094	4,804	14,351	9,240	14,616	38	31	60
W Thunderbird Road	N 117	N 19th Avenue	3,024	3,856	11,406	9,652	14,082	37	24	52	3,769	3,856	12,486	9,652	14,082	35	34	52
W Thunderbird Road	N 19th Avenue	N 7th Street	2,695	1,192	10,592	24,373	4,553	39	17	45	3,308	1,192	12,527	24,373	4,553	37	31	45
W Thunderbird Road	N 7th Street	N Cave Creek Road	2,320	-	9,306	18,868	2,970	30	13	35	2,470	-	11,487	18,868	2,970	29	17	35
W Thunderbird Road	N 101	N 83 RD Avenue	964	-	5,004	13,210	7,404	24	8	20	2,246	-	9,283	13,210	7,404	26	22	26
W Thunderbird Road	N 107th Avenue	N 99th Avenue	2,293	-	7,798	3,313	-	12	13	48	2,886	-	9,519	3,313	-	13	20	48
W Van Buren Street	N 24th Street	N 32nd street	9,204	2,407	17,148	3,358	11,378	39	69	42	10,173	2,407	19,786	3,358	11,378	38	91	91
W Van Buren Street	N 7th Street	N 16th Street	11,361	165	25,357	20,586	14,506	64	100	53	13,345	165	28,701	20,586	14,506	62	100	100
W Van Buren Street	N 7th Avenue	N Central Avenue	10,061	178	24,788	20,566	12,739	61	100	43	12,105	178	27,373	20,566	12,739	58	100	100
W Van Buren Street	N 19th Avenue	N 7th Avenue	10,560	109	24,810	17,196	10,576	56	100	45	12,591	109	27,273	17,196	10,576	54	100	100
W Van Buren Street	N 32nd Street	N 40th Street	8,059	5,771	15,990	6,625	9,734	41	69	38	8,978	5,787	18,368	6,625	9,734	40	89	89
W Van Buren Street	N 110	N 24th Street	8,135	47	14,487	3,396	8,117	30	75	38	9,055	47	16,730	3,396	8,117	30	97	97
W Van Buren Street	N 16th Street	N 110	8,729	99	17,241	8,644	9,768	40	93	44	9,904	99	19,860	8,644	9,768	39	100	100
W Van Buren Street	N Central Avenue	N 7th St	10,201	178	24,898	22,439	14,142	64	100	46	12,204	178	27,635	22,439	14,142	61	100	100
W Van Buren Street	N Litchfield Road	N Dysart Road	968	-	3,589	-	16,308	19	6	14	3,115	-	8,667	-	16,308	22	17	22
W Van Buren Street	N 107th Avenue	N 99th Avenue	823	-	1,757	-	3,116	5	5	5	3,504	-	8,355	-	3,116	12	21	21
W Van Buren Street	N 99th Avenue	N 91st Avenue	1,260	-	2,455	-	11,358	13	8	6	3,880	-	8,387	-	11,358	19	23	23
W Van Buren Street	N 91st Avenue	N 83rd Avenue	1,371	-	2,819	-	5,075	8	10	6	3,280	-	6,995	-	5,075	12	23	23