SCOTTSDALE TRANSPORTATION COMMISSION
Notice and Agenda

Date: Thursday, December 16, 2021
Time: 5:15 P.M.
Location: Virtual
Live Stream: https://www.scottsdaleaz.gov/scottsdale-video-network/live-stream

Meeting will be held electronically and remotely
Until further notice, Transportation Commission meetings are being held electronically to virtually attend and listen/view the meeting in progress. Transportation Commission meetings are televised on Cox Cable Channel 11/streamed online at ScottsdaleAZ.gov (search "live stream") or will be available on Scottsdale's YouTube channel to allow the public to listen/view the meeting in progress.

Call To Order

Roll Call

Don Anderson, Vice-Chair	Mary Ann Miller, Commissioner
Pamela Iacovo, Chair	Kerry Wilcoxon, Commissioner
Karen Kowal, Commissioner	Andy Yates, Commissioner
B. Kent Lall, Commissioner	

Public Comment

Spoken comment is being accepted on both agendized and non-agendized items. To sign up to speak on these items, please click here. Request to speak forms must be submitted no later than 90 minutes before the start of the meeting.

Written comment is being accepted for both agendized and non-agendized items and should be submitted electronically at least 90 minutes before the meeting. These comments will be emailed to the Transportation Commission and posted online prior to the meeting. To submit a written public comment electronically, please click here.

1. **Approval of Meeting Minutes---------- Discussion and Action**
   Regular Meeting of the Transportation Commission – November 18, 2021

2. **Transportation Action Plan Approval ---------- Presentation, Discussion and Action**
   Review, discussion and recommendations on public input received to date and recommendation for the City Council to approve the Transportation Action Plan, subject to any changes resulting from the discussion on public input – David Meinhart, Transportation Planning Manager

3. **Commission Identification of Future Agenda Items---------- Discussion**

Commission members identify items or topics of interest to staff for future Commission presentations

Adjournment

 Persons with a disability may request a reasonable accommodation by contacting Kyle Lofgren at 480-312-7637. Requests should be made 24 hours in advance, or as early as possible, to allow time to arrange the accommodation. For TYY users, the Arizona Relay Service (1-800-367-8939) may also contact Kyle Lofgren at 480-312-7637.

DRAFT SUMMARIZED MINUTES

CITY OF SCOTTSDALE
TRANSPORTATION COMMISSION
REGULAR MEETING

Thursday, November 18, 2021

Meeting Held Electronically and Remotely

CALL TO ORDER

Chair Iacovo called the regular meeting of the Scottsdale Transportation Commission to order at 5:16 p.m.

ROLL CALL

PRESENT: Pamela Iacovo, Chair
Don Anderson, Vice Chair
Karen Kowal
B. Kent Lall
Mary Ann Miller
Kerry Wilcoxon

ABSENT: Andy Yates

STAFF: Ratna Korepella, Transit Manager
Dave Meinhart, Transportation Planning Manager
Mark Melnychenko, Transportation & Streets Director
Kyle Lofgren, Staff Coordinator
Pete Peralta, Transit Coordinator

Mark Melnychenko, Transportation & Streets Director, spoke words of condolence and appreciation for the fallen law enforcement officer, Lieutenant Breckman and the Commission observed a moment of silence. Commissioners shared their condolences.

PUBLIC COMMENT

No public comments were submitted.

1. APPROVAL OF MINUTES

COMMISSIONER WILCOXON MOVED TO APPROVE THE REGULAR MEETING MINUTES OF THE TRANSPORTATION COMMISSION ON OCTOBER 21, 2021 AS PRESENTED. COMMISSIONER KOWAL SECONDED THE MOTION, WHICH CARRIED 6-0 WITH CHAIR IACOVO, VICE CHAIR ANDERSON, COMMISSIONERS KOWAL, LALL, MILLER AND WILCOXON VOTING IN THE AFFIRMATIVE WITH NO DISSENTING VOTES.

2. APPOINTMENT OF PATHS AND TRAILS SUBCOMMITTEE MEMBERS

Chair Iacovo recommended that Vice Chair Anderson and Commissioner Lall continue in their roles unless a conflict exists. Vice Chair Anderson and Commissioner Lall expressed their willingness to serve.

CHAIR IACOVO NOMINATED VICE CHAIR ANDERSON AND COMMISSIONER LALL TO SERVE ON THE PATHS & TRAILS SUBCOMMITTEE. CARRIED 6-0 WITH CHAIR IACOVO, VICE CHAIR ANDERSON, COMMISSIONERS KOWAL, LALL, MILLER AND WILCOXON VOTING IN THE AFFIRMATIVE WITH NO DISSENTING VOTES.

3. CLEVER DEVICES APPLICATION ON BUSES

Ratna Korepella, Transit Manager, introduced Pete Peralta, Transit Coordinator, who gave the presentation. Mr. Peralta explained that Clever Devices are an intelligent transportation system for public transit and provided a brief background of the City's history with Clever Devices. In 2018, there was a regional decision to upgrade from the orbital ACS system to the Clever Device system that is now installed. The trolley vehicles employ an intelligent vehicle network, which is includes an input of modems, computer sensors and onboard Cleverware. A touchscreen provides information to the driver. All the collected information is sent to a Clever Devices server and fed into a workstation. All information needed by the onboard computer is downloaded before and after vehicles are put into service and while in the yard. Trolley routes are now connected with other bus routes in real time. Route highlights were reviewed.

Mr. Peralta provided an overview of Clever Device benefits, including onboard annunciators, which call out each stop on an automated basis; announcement of other important messages; dispatches of communications, incidents and detours to the bus driver; pre-population of detour route; viewing of buses in real time through the website or mobile app. In terms of transit planning, Clever Devices have helped the City to run scenarios during public planning for public input. It helps understand average vehicle speeds, mileage covered and to estimate fleet requirement needs. The information is used to generate timetables, rosters and schedules for operators. Inefficiencies in the route can be adjusted via software. The software assists in planning connectivity with other regional routes. The automatic passenger counters provide board alighting data at each stop, which helps with decisions to direct funds to the busiest route locations. It assists with on-time performance reports. It integrates videos on the bus interior and exterior, utilizing eight high definition cameras and DVR. This assists with investigations, incidents and vandalism. For the National Transit Database (NTB) reporting, Clever Devices assist with validating trolley service, reports for annual revenue miles and missed miles. The automatic passenger counters assist in computing trips for passenger miles traveled. Demonstrations of the software use were provided.

Commissioner inquired as to user experience with the system. Mr. Peralta said he can reach out to Valley Metro to obtain information on how many people have downloaded the mobile app.

Commissioner asked if information received has been used to improve efficiency. Commissioner also asked if data could be fed into intelligent infrastructure, such as extending green or preferred access through intersections. Mr. Peralta stated that in terms of efficiency, the information is new. Some routes have improved layover times. Signal timing is a separate project in terms of the Loop 101 connectivity pilot project. Ms. Korepella added that the Department makes changes to transit services every six months. They are constantly looking at Clever Device operations data as a guide for changes to the run times and schedules. They will be prepared so share some of this data to the Commission in the coming months.

Commissioner inquired whether the COVID 50 percent capacity restrictions on the trolleys are still in effect. Mr. Peralta said they are no longer under capacity restrictions, however, they continue to enforce the TSA mandate for masks. This is set to expire in January and has not yet expired.

Chair suggested a future agenda item on Clever Device reports and how they are used to update the transit system. Another item could address the percentage of riders who have downloaded the app.

4. TRANSPORTATION ACTION PLAN REVIEW

Dave Meinhart, Transportation Planning Manager, provide an overview of public input received. Phase I included an online questionnaire and link to the draft TAP for comments with 222 responses. An overview of responses was provided. High concerns included traffic congestion, safety and driver behavior. Categories of suggested improvements were in the bike/pedestrian system and high capacity traffic. Respondents stated that 70 cents of each dollar should go to transportation improvements that are not related to adding more capacity to roadways. The second phase of outreach was a virtual public open house. There were 156 webpage views with 11 written comments.

Highlights of written comments from both phases include:

- Revise plan for 128th Street
- Improve bike and pedestrian access
- Crosswalk design concerns
- Light rail extension
- Widen Chaparral road for access to Fashion Square
- Development density concerns
- Do not install roundabouts
- Future Rio Verde widening must include wildlife crossing near 124th Street
- Do not widen Mountain View Road between 92nd and 96th
- Need mass transit
- Support reducing number of travel lanes

Mr. Meinhart reviewed changes to the TAP since the last review. Discussion ensued regarding microtransit definition, details and options. Mark Melnychenko, Transportation & Streets Director, reviewed benefits, including access to areas of the City that would usually not offer transit options,

minimizing need for high cost infrastructure and maintenance. The discussion will continue with the Commission going forward.

Commissioner asked whether any elements of the TAP will be affected by the recently passed transportation bill in terms of funding or prioritization. Mr. Meinhart stated that it is quite early in the process. There may be more funding for some of the nonmotorized active transportation uses and safety improvements.

Mr. Meinhart stated that the Transportation Commission will be asked to recommend approval of the TAP at its December 16, 2021 meeting. It is hoped to receive City Council adoption in the first half of calendar year 2022.

Commissioner asked how the recent passage of the Master Plan affects TAP process and approval. Mr. Meinhart stated that the intent is to develop a plan that is consistent with the newly adopted and voter-approved General Plan. The transportation sections did not change dramatically from the prior General Plan. However, there was a higher emphasis on nonmotorized use of the system. This has led to proposals for potential reductions in the number of lanes on roadways and similar changes.

In response to a question from Chair, Mr. Meinhart stated that the TAP includes a list of likely CIP projects. The CIP list is developed each year and is reviewed with the public though the City Council process. Timing is affected by available funding. There was discussion regarding concerns with some of the projects contained in the CIP plan.

There was discussion regarding placing a note on three of the more controversial projects as being future topics for discussion. Mr. Meinhart commented that it is challenging to predict which projects should receive extra emphasis, as most of the City has already been built and most neighborhoods already have roadways. Mr. Melnychenko stated that the list that has been developed is a roadmap for the future. It still must go through a process with City Council. Each must also go through a citizen process in various phases. What has been provided is staff's best snapshot of what is expected.

Commissioner commented that providing a statement in the TAP regarding these processes for CIP projects would provide adequate clarification. Mr. Meinhart stated his understanding that that language is included. He quoted from the document: "The projects included in the CIP list all remain subject to the City's annual budget development and prioritization process. Projects with authorized funding will continue to follow the public review process that occurs during design and prior to construction."

Commissioner suggested a discussion regarding 128th Street and whether Commissioners agree that it should be included as a project. Chair suggested this discussion take place under Agenda Item 5.

5. REVIEW OF FISCAL YEAR 2023-2027 CIP PROJECTS

Mr. Meinhart prefaced the discussion by noting there are no dramatic changes from what is currently in the plan. Every year, the City develops a new CIP plan. It covers five years, however only the first year is technically funded. The typical process schedule was reviewed.

Within the Public Works Division, the process is as follows:

- Re-budget ongoing projects with no significant cost or timing changes (not ranked)
- Update database and prioritize projects that require significant changes or projects that were in the five-year plan, but were not funded in the first year of the five-year plan
- Develop project scopes/cost estimates for unbudgeted projects and prioritize

The list of prioritized project recommendations was reviewed. Commissioner asked how many of the projects will typically be funded. Mr. Meinhart stated that it varies in terms of revenues. Historically the "Y" projects have been funded with the potential to add in two to three additional projects. It is likely that items 1 through 18 are in good shape to receive funding, with later numbered projects being more questionable. Items 8 through 11 are grant requests and each are excellent projects.

Next steps include:

- Input from the Transportation Commission will be provided to the City Manager's Executive Team
- Final recommendations for the FY 23-27 CIP will be reviewed with the Transportation Commission in approximately March, 2022

Commissioner voiced concerns regarding construction of the roadway through the Preserve. Upon review, there was discussion in 2019 regarding removing 128th Street from the plan and then ultimately agreeing to leave it in until 118th Street was constructed. 118th Street is now constructed and Commissioner is not comfortable with leaving the plan to construct the road through the Preserve without a very convincing reason. Chair added that the Commission received a memorandum from the Chair of the McDowell Sonoran Preserve, who outlined comments from the January, 2019 meeting minutes, where the Commission recommended that the City remove the roadway as going through the Preserve. However, it was ultimately the City Council's decision to leave it in.

Chair summarized that the classification is for 128th Street to be a minor collector, which includes going through the Preserve. The classification would have to be changed. In addition, the Commission would have to recommend that 128th Street not go through the Preserve and that access be restricted to emergency vehicles. Mr. Meinhart noted that this discussion is mixing agenda items and this item is not agendized for action. In looking at a recommendation on the TAP at the next meeting, if there is a preference to change the classification and eliminate the roadway from the street map, it would be most appropriate to have this discussion as part of the final recommendation of the TAP as opposed to the CIP list. Unless a member of the Commission is proposing to add 128th Street as a prioritized project in the upcoming five-year CIP, it would not be appropriate to be discussing this in detail tonight.

In response to a Commissioner comment, Mr. Meinhart clarified that 128th Street is currently designated as a minor collector. The TAP makes no recommended change in this regard. The last vote taken by the Transportation Commission regarding 128th Street occurred in February of 2019 and that recommendation was to retain the street as a minor collector. The Commission is free to discuss this and vote on the item as part of the TAP approval in December.

Chair suggested that the Commission be prepared in December to discuss the request to remove 128th Street from the classification map as a minor collector and to remove the roadway plan for

the CIP project to construct it to an 11-foot lane, based upon the Commission's original recommendation from 2019. Mr. Meinhart clarified that the Commission's final vote in 2019 regarding 128th Street occurred in February of 2019 and was a five to zero vote to retain 128th Street in the plan. The current Commission is free to make alternate recommendations.

6. COMMISSION IDENTIFICATION OF FUTURE AGENDA ITEMS

Items were identified as follows:

- Update on Clever Devices, including data analysis and impact on decisions being made for the transit system
- What the passage of the new transportation bill means for Arizona
- Periodic updates on revenue projections in conjunction with transportation gas tax changes

7. ADJOURNMENT

With no further business to discuss, being duly moved by Vice Chair Anderson and seconded by Commissioner Lall, the meeting adjourned at 7:40 p.m.

AYES: Chair Iacovo, Vice Chair Anderson, Commissioners Kowal, Lall, Miller and Wilcoxon
NAYS: None

SUBMITTED BY:

eScribers, LLC

***Note: These are summary action meeting minutes only. A complete copy of the audio/video recording is available at http://www.scottsdaleaz.gov/boards/transp.asp**

SCOTTSDALE TRANSPORTATION COMMISSION REPORT

To: **Transportation Commission**
From: **Dave Meinhart, Transportation Planning Manager**
Subject: **Transportation Action Plan Approval**
Meeting Date: **December 16, 2021**

Action: Discussion, comment, and proposed action

Purpose:
During 2021, the Transportation Commission has agendized preparation of the Transportation Action Plan (TAP) at eight meetings. In addition, the city conducted two phases of public outreach for the draft TAP. Phase I ran from August 25-September 3, 2021 and included an online questionnaire as well as a link to the draft TAP for written comments. Phase II was conducted as a virtual public open house with recorded presentations for each plan element that ran from October 18-31, 2021. Both outreach phases included press releases and various on-line notifications through the city's home page and social media outlets.

After a full year of review by the Transportation Commission and the general public, staff is recommending that the Transportation Commission approve the TAP (Attachment 1) and forward the document to the City Council for review and final adoption.

Information:
Transportation Action Plan Review Process
Discussions on the TAP began in January 2021 by highlighting two focus points: 1) emphasizing refinement of the existing transportation system over adding new infrastructure, especially if the new infrastructure will be difficult to implement at a reasonable cost; and, 2) emphasizing livable streets/community over rapid traffic throughput.

Meetings in March, April, May and June centered on proposed updates to the planned street, transit, bikeway, trail and pedestrian systems. In July, discussion moved to system preservation and maintenance and goals, policies and performance measures. In August, TAP implementation strategies were reviewed, and a first review of the draft TAP introduction and elements was completed. In September, Phase I public input was reviewed, and a second review of the draft TAP was completed. In November, Phase I and Phase II public input were reviewed, and the Transportation Commission completed its third review of the draft TAP.

Feedback from the Transportation Commission at the November meeting provided some additional editorial changes to the Glossary that have been incorporated into the final draft.

Remaining Public Input Issue – 128th Street
One issue that commission members wished to discuss more fully at this meeting is the future plan for the 128th Street corridor south of Jomax Road where the McDowell Sonoran Preserve adjoins both sides of the planned roadway corridor. This topic received more public feedback than any other. Seventeen commenters proposed that 128th Street in this location only be used for emergency access, or potentially no access at all, to help reduce potential impacts to wildlife and to limit motorized traffic within the Preserve. Also, the McDowell Sonoran Preserve Commission voted on November 18, 2021 to forward a recommendation to the Transportation Commission and the City Council stating:

> "Amend the designation of a ¾ mile long section of 128th Street, from its current designation of "Minor Collector" to a new designation as "Emergency Access Only" where it passes through Scottsdale's McDowell Sonoran Preserve." (see Attachment 2)

To assist with the discussion on the 128th Street alignment running ¾ miles south of the Jomax Road alignment, some historical background is provided:

- Road right-of-way
  - 1975 – Maricopa County acquired fifty-five feet of right-of-way on the 128th Street alignment through purchase and dedication.
- Long Range Plans mapping 128th Street as a minor collector (one travel lane each direction, typically with a center turn lane)
  - 1984 – Circulation Element of the Scottsdale Foothills General Plan, which was developed after a large portion of land area was annexed into the city.
  - 1991 – Circulation Element of the General Plan
  - 2001 – Community Mobility Element of the General Plan (shown as "collector").
  - 2008 – Streets Element of Transportation Master Plan
  - 2016 - Streets Element of Transportation Master Plan (noted as two lanes with no center turn lane)
  - 2021 – Circulation Element of the General Plan 2035 (shown as "collector")
- McDowell Sonoran Preserve
  - 1998 – Recommended Study Boundary was expanded to this area. In the ¾-mile segment of the 128th Street alignment south of Jomax Road, the planned Preserve adjoined both sides of the alignment.
  - 2012 – City acquired underlying land from the Arizona State Land Department in 2012. Property conveyed "subject to existing reservations, easements or right-of-way."
- Transportation Commission and City Council discussions
  - 2016 – Potential changes to the classification of 128th Street south of Jomax Road were discussed with the Transportation Commission and City Council during the development of the 2016 Transportation Master Plan. The Transportation Commission recommended designating the portion of 128th Street adjoining the Preserve on both sides as a paved, but gated, emergency access road. An ensuing Council Study Session in April 2016 led to a recommendation to keep 128th Street in the plan with discussion of reconsideration after completion of 118th Street between Jomax Road and Dynamite Boulevard/Rio Verde Drive or completion of nearby developments.
  - 2019 – Changes to the classification of 128th Street were considered by the Transportation Commission as a potential Transportation Master Plan amendment. Discussion on changing the classification of 128th Street to reflect the Commission's 2016 recommendation occurred in January. After further deliberations in February, the Commission voted to retain the existing 128th Street classification.
- Other coordination
  - In 2019, the Planning Department and Public Safety indicated their preference for keeping 128th Street in the transportation network to serve both emergency and general

access needs. Since that time, further discussions have indicated greater acceptance of an emergency only access, if it meets all weather access needs and provides temporary construction access.

- Scottsdale Water has plans to install a water distribution line in the 128th Street corridor from Rio Verde Drive to one mile south of the Jomax Road alignment (Ranch Gate Road) to serve future customers.

To reflect the longstanding, and regularly updated, transportation network plan for the area south of Rio Verde Drive, staff recommends the Transportation Commission maintain 128th Street on the Street Classification map as a minor collector with no center turn lane; and 2) delete 128th Street from the recommended list of future CIP projects in the Implementation Program section of the Transportation Action Plan. This would eliminate prioritization of improvements to 128th Street over the next 5-10 years and allow for continued coordination with the McDowell Sonoran Preserve Commission, the City Council and other departments on issues related to wildlife protection, public access/emergency access, utilities, and extent of/financial responsibilities for any improvements.

Transportation Action Plan Recommendation:
Recommend the City Council approve the Transportation Action Plan, subject to any changes resulting from the discussion on public input at the meeting.

Next Steps:
Staff will begin the review process with City Council in early 2022.

Attachment 1 – Draft TAP
Attachment 2 – 128th Street area map with McDowell Sonoran Preserve Commission recommendation

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Contact: Dave Meinhart, 480-312-7641, dmeinhart@scottsdaleaz.gov

SCOTTSDALE TRANSPORTATION & STREETS IS ON THE MOVE...

Scottsdale's Transportation Action Plan (TAP) 2021 provides an overview of Scottsdale's current transportation infrastructure, as well as a roadmap for Scottsdale's transportation future. It includes the objectives, policies, values and guidelines to inform transportation decisions moving forward, along with a prioritized implementation plan to preserve and improve how we get around Scottsdale--whether by foot, bus, bike, vehicle, motorcycle, scooter, horse, or something yet to emerge--over the next 10 years.

HOW TO NAVIGATE THIS SITE

The plan is divided into transportation elements, which you can navigate to with the top menu. Also included in the menu are an implementation plan and a list of the figures included throughout the site.

Within each element section you'll find relevant goals, policies, performance measures, classifications, figures, and ongoing data collection.

Since Scottsdale drafted its first plan in 2008 and revised it in 2016, there have been significant shifts in community priorities, city leadership, traffic patterns, technology and funding. More people, for example, are interested in bikeways, trails and other amenities that support non-motorized modes of transportation. Despite additional development over the last 20 years, travel demand has not grown as much as projected. And new technology, such as adaptive traffic signals and autonomous vehicles, is reducing congestion. Several projects that made sense in 2008 have become unnecessary, infeasible or unaffordable in 2021.

...from Master Plan to ACTION PLAN.

The first notable difference with the 2021 plan is renaming it an "Action" plan rather than a "Master" plan. While a new name may seem like an insignificant change, it reflects an important shift in priorities.

When the 2008 and 2016 master plans were written, Scottsdale still had many locations in need of additional infrastructure, including roads, traffic lanes, paths, trails, and transit routes. A "master" plan that attempted to envision all that could and should be built over the next 20 to 30 years made sense. Now, most of the improvements included in the first two plans have either already been built, will be completed in the next five years or are no longer practical or feasible. The concept of a "Master" plan has become too rigid, too prescriptive, and too impractical to keep up with changing understanding, priorities and technology.

...from planning more to PLANNING SMARTER.

The 2021 "Action" plan eliminates a one-size-fits-all approach, replacing it with smarter, more flexible policies and planning that enable adaptability to Scottsdale's character areas [link to section below], changing technology and opportunities to leverage funding and coordinate projects.

For example, the TAP 2021 no longer includes policy dictating access to a path within a half mile of every home. While that might make sense in the Scottsdale's more urban character area, it's impractical in a character area of planned communities that have walls blocking access to the paths.

A rigid implementation plan that stipulates use of a certain type of technology that may become outdated has been replaced with a plan that includes pilot programs to continually evaluate and consider emerging technology.

Finally, the more rigid approach of narrowly defining funding for projects has been replaced with an approach that encourages saving money and time through departmental, interdepartmental and inter-agency coordination.

...from building more to PRESERVING AND IMPROVING WHAT WE HAVE.

With less need to plan and build new infrastructure, the TAP 2021 also prioritizes preserving and improving what we already have. The plan includes renovating infrastructure to meet modern acceptable safety and comfort standards that may have changed from when infrastructure was first built, such as meeting modern Americans with Disabilities Act (ADA) standards, widening shared use paths and adding shade for pedestrian and bicyclists. The plan also focuses on closing gaps within the paths, trails, bikeways and transit systems and improving regional connectivity and includes maintenance plans for pavement, paths, trails, and streetlights to extend their life and reduce cost over time.

...from prioritizing cars to PRIORITIZING PEOPLE.

Over the past 13 years, the city has widened roads to accommodate more traffic and built out roads to new development. More recently, however, traffic growth has slowed, and more people are valuing open space over more development.

The TAP 2021 prioritizes safe and accessible travel for all transportation users and supports active transportation for a healthier, more active lifestyle. One of the most notable changes with the TAP 2021 is a reclassification of many of Scottsdale's streets to reflect reduced traffic volumes. While 5% of streets need additional capacity, many others have been reclassified to reduce the number of required lanes, enabling them to be transformed into "Complete Streets" [link] that are safer and more comfortable for bicycles and pedestrians.

Ultimately, encouraging and providing better access to multimodal transportation is a "win-win" as it also reduces traffic congestion for drivers and improves air quality for all of us.

TAP 2021 GOALS AND VALUES

The following goals and values guide the TAP 2021:

1. Prioritize people, safety and livability over motor vehicles and travel speed.

2. Improve accessibility for all types of transportation and transportation users.
3. Promote active and healthy living.
4. Support sustainability and cost savings by preserving and maintaining existing infrastructure.
5. Coordinate intradepartmental and interdepartmental projects and leverage funding to plan efficiently and economically.
6. Close system gaps and improve local and regional connectivity with path systems, trail corridors and transit routes.
7. Provide transportation options that support economic vitality.
8. Ensure flexibility that can respond to economic development, changing technology and shifting priorities.
9. Continually evaluate technology to innovate and implement safer, greener and more accessible transportation solutions.
10. Improve environmental sustainability with decisions, programs and policies that preserve open space, reduce traffic congestion and consume less non-renewable resources.

Additional goals specific to transportation elements are included in each section.

COORDINATION WITH SCOTTSDALE'S GENERAL PLAN

The TAP 2021 goals and values align with those of the *Scottsdale General Plan 2035* [Link to plan], which aims for a city with Exceptional Experience, Outstanding Livability, Community Prosperity and Distinctive Character.

TAP 2021 GUIDING POLICY

In each section are goals specific to the transportation system elements. Additionally, the following policy guides the TAP 2021 and the Transportation & Streets Department overall:

Transportation network shall maximize travel route choices, travel mode choices, and access and mobility for all ages and abilities.

NOTABLE PLAN UPDATES

Implementation Plan

Often there are more desired operational needs and projects than budgets and time allow. The following guidelines will be used to prioritize transportation investments:

1. Preserve, maintain and optimize existing infrastructure.
2. Meet Americans with Disabilities Act (ADA), air quality, water quality and other regulatory requirements.
3. Enhance safety and test new concepts and technology.
4. Provide transit service with minimum 30-minute frequency.
5. Develop capital projects with funding from outside sources.
6. Develop capital projects that are funded only by the City and prioritize non-motorized access.

Performance Measures

Specific Performance Measures to track progress have been added for each transportation element.

Specific Plan Updates by Element

Street

- Street reclassifications
- Updated street cross sections

Transit

- Bus boardings per revenue mile
- Bus boardings per revenue hour
- On-time performance
- Connectivity to transportation network

Bikeway

- Removal of infeasible and impractical projects
- Identification of system and regional connectivity gaps

Trail

- Identification of system and regional connectivity gaps
- Plan to improve connectivity to preserve
- Plan to improve trail connectivity in rural neighborhoods

Pedestrian

- Modify location of landscape trees to improve warm weather shade
- Adjust sidewalk widths in less densely developed or limited access areas

SUPPORTING COMMUNITY INPUT

The TAP 2021 attempts to facilitate community input into future transportation planning by providing a more accessible online reference that is easier to navigate and includes explanation and insight into transportation decisions and planning. The TAP 2021 is intended to serve not only transportation planners and engineers, but also Scottsdale citizens, business owners, and developers as future transportation decisions are made.

STREET ELEMENT

INTRODUCTION

The Street Element of the Scottsdale *Transportation Action Plan* includes information and guidance to provide an efficient and multi-modal street network for automobiles, trucks, transit, bicycles, pedestrians and in some corridors, equestrians. Different strategies, such as building or widening streets, reconfiguring existing streets and applying technology, are used to improve traffic flow.

The city's planned travel lane capacity for the arterial and collector street system (see below for street classifications) is largely complete. Out of 1,061 lane miles of classified streets, approximately 51 lane miles (5%) will be left to build after the Capital Improvement Plan spanning fiscal years 2021-22 through 2025-26 is completed (see Figure S-1). Ten of those lane miles are adjacent to neighboring jurisdictions that will likely help fund future construction, and 14 of the lane miles are expected to be built by future development.

A greater number of arterial and collector street system miles are missing "complete streets" components. Complete streets provide better accommodations for non-motorized uses and add safety features such as dedicated turn lanes and raised medians. Many street segments built more than twenty years ago also lack adequate sidewalks (typically six-feet minimum width), accessible corner ramps and bike lanes, components that are now standard with street design. In all, an estimated 78 miles (12%) of sidewalks and 132 miles (21%) of bike lanes are missing from arterial and collector streets where all travel lanes have already been constructed.

Over the years, some streets were built with too many lanes based on anticipated development patterns that ultimately did not occur. On other streets, creation of the McDowell Sonoran Preserve reduced capacity needs. In all, thirty-two lane miles can be converted to non-auto uses by restriping or narrowing the street. Narrowing the distance between the outside curbs will be considered when the remaining travel lanes will continue to operate at 75% or less of capacity (7,500-10,000 vehicles per lane per day, depending on number of lanes, land use and access conditions).

The Street Element supports creating a safe and efficient roadway system. As the street system continues to age, preventive maintenance and repair and/or replacement of pavement, concrete, traffic signals and streetlights will need to be prioritized.

GOALS

1) Emphasize traffic safety, livable streets and multi-modal community access over rapid traffic throughput.
2) Develop and manage the street network in a manner that places reliance on maintaining existing infrastructure and improving the efficiency of the existing system before adding new roadway capacity.
3) Maintain and improve multi-modal circulation by narrowing roadways where appropriate; including alternative modes of transportation when widening roadways; using existing and future Intelligent Transportation Systems technology and access control to manage traffic flow; and identifying major and minor intersections for capacity and safety improvements.

4) Provide a framework for the development of a transportation system for Scottsdale that is based on the complete streets concept, where streets are designed and constructed in a manner that supports comfortable usage by all travel mode types.
5) Minimize heat island effects by reducing existing pavement where traffic demand is less than previously planned and experimenting with paving technologies that reduce daytime heat absorption and nighttime heat radiation.

POLICIES

1) Complete Streets: Provide sufficient right-of-way and design, operate, and maintain Scottsdale's streets to promote safe and convenient access and travel for users of all types: pedestrians; mobility-assisted; bicyclists; transit vehicles and riders; equestrians; cars; and trucks. Provide facilities and amenities that are recognized as contributing to complete streets, including roadway and pedestrian-level street lighting; pedestrian and bicycle safety improvements; access improvements in accordance with ADA; transit facilities accommodation, including but not limited to pedestrian access improvement to transit stops; street trees and landscaping; and street furnishings that are sensitive to the local context.

2) Traffic Safety: Collect, analyze and report on traffic collision data on a regular basis and develop remediation measures to address high frequency and high volume collision locations.

3) Roundabouts: Roundabouts shall be the first consideration for all intersections of one- or two-lane-per-direction streets that require all-way stop control. Traffic signals should only be installed or remain if a traffic or budget analysis justifies their advantage.

4) Roadway Restriping: Improve on-street bicycle accommodation and bicycling and pedestrian comfort through striping changes that consider historic and forecasted motor vehicle traffic, center turn lane requirements, existing pavement width and existing lane widths. This restriping protocol will typically be applied when roadways are being treated through standard pavement preservation applications and will incorporate buffered bike lanes where feasible.

5) Neighborhood Traffic Management: Protect Scottsdale’s residential neighborhoods from excessive vehicle travel speeds and cut-through traffic.

6) Truck Routes: All planned four lane or larger streets are considered truck routes, unless noted as an exception. Neighborhood/local system routes will not be considered for truck route designations.

7) Intelligent Transportation Systems (ITS): Support the ITS strategic plan to coordinate signals; integrate freeway and arterial operations; improve traffic progression; reduce incident clearance times; and enhance special event traffic management. Also recognize the need to balance traffic flow with improved pedestrian, bicycle and transit flow on some corridors.

8) Access Management: Define acceptable levels of access for each roadway classification to preserve

its function, including criteria for the spacing of signalized and unsignalized access points. Apply and enforce appropriate geometric design criteria and traffic engineering analysis to each allowable access point. Specific access management criteria shall be included in the City's *Design Standards & Policies Manual* (DS&PM), which is updated on a regular basis and approved by the city's Design Review Board.

9) Roadway Character Types: Identify roadway corridors as either urban, suburban or rural. Urban street areas are located in Old Town Scottsdale, where pedestrian activity is likely to be the highest and alternative modes of transportation are more likely. Suburban street areas often have separation between residential and commercial or employment uses. Generally, the suburban designation is for roadways south of Pinnacle Peak Road. Rural street areas are desert or low-density land use areas where commercial and employment activities are more limited, and equestrian activity is greater. Generally, roadways north of Pinnacle Peak Road are identified as rural.

10) Roadway Noise Abatement: Roadway noise levels considered for mitigation shall be consistent with the Arizona Department of Transportation's 2017 Noise Abatement Requirements. The ADOT standards are required by Federal law (Code of Federal Regulations – 23 CFR 772) to match the Federal Highway Administration's noise standards. These standards consider noise abatement when there is an increase of 15 decibels (dBA) in the model-predicted roadway noise levels over existing noise. levels occurs and/or the predicted noise level is at or above 67 dBA.

STREET SYSTEM/FUNCTIONAL CLASSIFICATION

The street system consists of a hierarchy from local streets (smallest capacity) to collector streets to arterial streets (largest capacity). These functional classes establish a common understanding of the use of the street and its character, regulate access from adjacent properties and determine how the costs of new street construction are shared between the city and surrounding properties. Location within areas of the city designated as Environmentally Sensitive Lands (ESL) is also a factor in street classifications.

Over the years, the three functional classes have evolved into a set of 20 sub-classifications as shown in Table S-1. Only the arterial and collector categories are identified on published maps. The character designations (rural, suburban and urban) are determined during the design review process. Location within areas of the city designated as Environmentally Sensitive Lands (ESL) is also a factor in roadway classifications.

Figure S-1

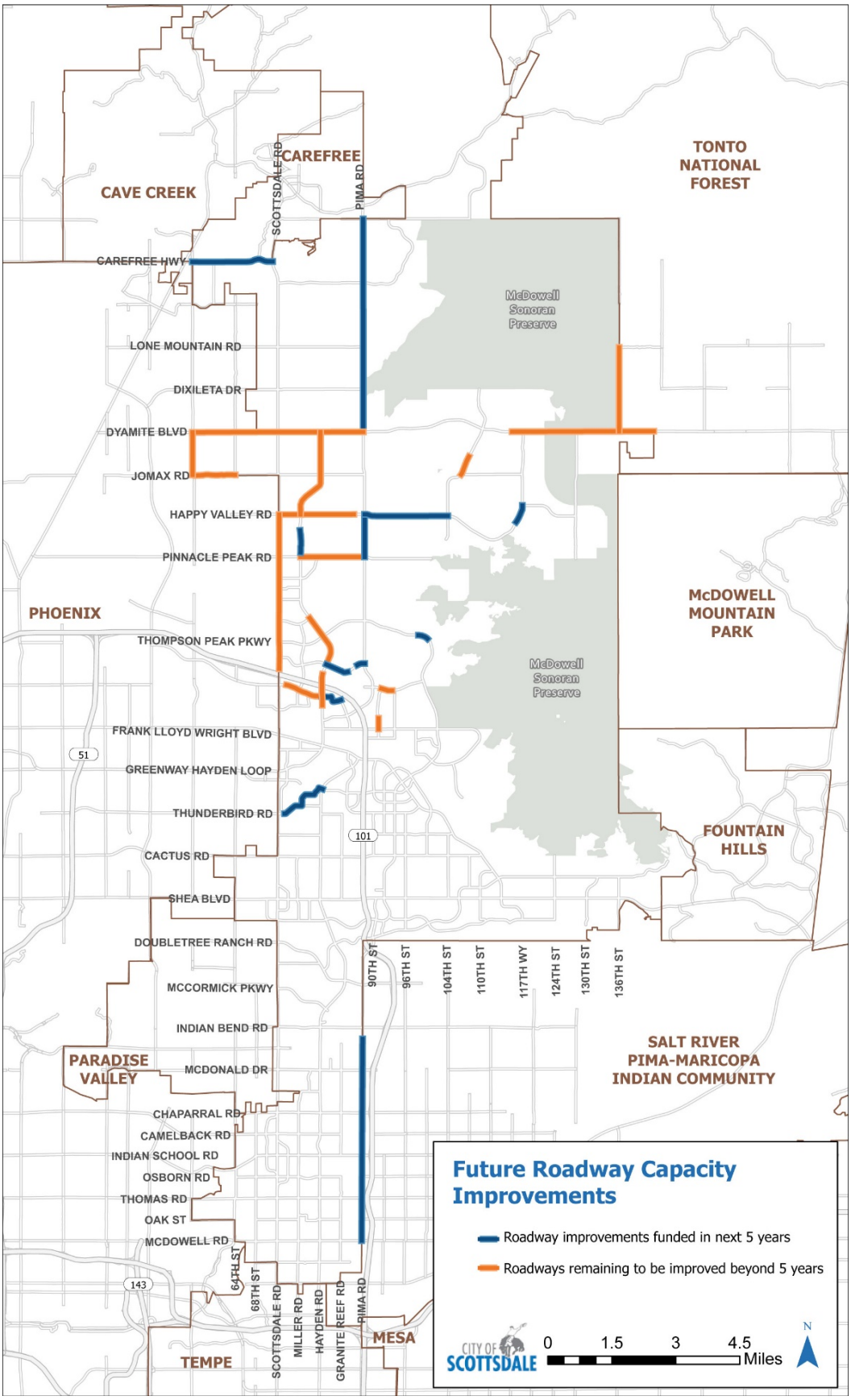

CAREFREE
CAVE CREEK
SCOTTSDALE RD
PIMA RD
TONTO NATIONAL FOREST
CAREFREE HWY
McDowell Sonoran Preserve
LONE MOUNTAIN RD
DIXILETA DR
DYAMITE BLVD
JOMAX RD
HAPPY VALLEY RD
PINNACLE PEAK RD
McDOWELL MOUNTAIN PARK
PHOENIX
THOMPSON PEAK PKWY
McDowell Sonoran Preserve
FRANK LLOYD WRIGHT BLVD
51
GREENWAY HAYDEN LOOP
THUNDERBIRD RD
101
FOUNTAIN HILLS
CACTUS RD
SHEA BLVD
DOUBLETREE RANCH RD
90TH ST
96TH ST
104TH ST
110TH ST
117TH WY
124TH ST
130TH ST
136TH ST
MCCORMICK PKWY
INDIAN BEND RD
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
PARADISE VALLEY
MCDONALD DR
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
MCDOWELL RD
64TH ST
68TH ST
143
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
MESA
TEMPE
Future Roadway Capacity Improvements
Roadway improvements funded in next 5 years
Roadways remaining to be improved beyond 5 years
CITY OF SCOTTSDALE
0
1.5
3
4.5
Miles
N

Table S-1

Functional Classification Categories	
Street Type	**Character**
Major Arterial	a) rural b) suburban c) urban
Minor Arterial	a) rural/ESL b) suburban c) urban
Major Collector	a) rural/ESL b) suburban c) urban
Minor Collector	a) rural/ESL with trails b) rural/ESL c) suburban d) urban
Local Collector	a) rural/ESL with trails b) rural/ESL c) suburban
Local Residential	a) rural/ESL with trails b) rural/ESL c) suburban
Local commercial/industrial	

Major and Minor Arterials

Arterial streets have raised medians, provide regional continuity and provide for long-distance traffic movements. Coordinating regional networks maintains continuous and useful links between Scottsdale and its neighbors. Major arterials stress traffic movement while minimizing local access. Minor arterials also stress traffic movement, but moderate access is provided to adjacent land uses. Access is controlled primarily through the raised medians, as well as by the spacing and location of driveways and intersections. Arterial streets generally serve higher traffic volumes (20,000–55,000 average daily trips [ADT]) than collector streets.

Major and Minor Collectors

Collector streets provide for shorter distance traffic movements and connect arterial and local streets. Collectors serve medium traffic volumes (5,000–32,000 ADT) and balance prioritizing access to adjacent commercial and residential land uses and travel efficiency.

Local Collector, Residential and Commercial/Industrial Streets

Local streets provide direct access to adjacent land uses, provide access to the collector street system and accommodate lower traffic volumes (usually less than 5,000 ADT) and travel speeds. Traffic calming can be considered on local streets.

Street Classification Map

Figure S-2 presents the recommended functional classification system for all arterial and collector streets in the city. Arterials and collectors are also designated as either major or minor. Minor collectors are further designated as having a center turn lane or not. The number of lanes ranges from two on a minor collector to six on a major arterial.

Table S-2 lists planned changes to street classifications and Table S-3 lists minor collector segments that would not require a center turn lane.

Table S-2

Street	From	To	2016 Classification	Planned
64th Street	Jomax Road	Dynamite Boulevard	Major Collector	Minor Collector
92nd Street	Raintree Drive	Frank Lloyd Wright Blvd.	Major Collector	Minor Collector
96th Street	Via Linda	Shea Boulevard	Major Collector	Minor Collector
100th Street Loop	Frank Lloyd Wright Blvd.	Frank Lloyd Wright Blvd.	Major Collector	Minor Collector
130th/132nd Street	Shea Boulevard	Via Linda	Major Collector	Minor Collector
Drinkwater Boulevard	Scottsdale Road	Scottsdale Road	Couplet	Minor Arterial
Goldwater Boulevard	Scottsdale Road	Scottsdale Road	Couplet	Minor Arterial
Hayden Road	McKellips Road	Indian School Road	Major Arterial	Minor Arterial
Legend Trail Parkway	Pima Road	Stagecoach Pass	Major Collector	Minor Collector
McCormick Parkway	Scottsdale Road	Hayden Road	Major Collector	Minor Collector
McDowell Mountain Rd.	105th Street	Bell Road	Minor Arterial	Minor Collector
Osborn Road	68th Street	Scottsdale Road	Major Collector	Minor Collector
Raintree Drive	Thompson Peak Pkwy.	Frank Lloyd Wright Blvd.	Major Collector	Minor Collector
Redfield Road	Raintree Drive	Frank Lloyd Wright Blvd.	Major Collector	Minor Collector
Thunderbird Road	89th Street	Frank Lloyd Wright Blvd.	Major Collector	Minor Collector
Westland Drive	Scottsdale Road	Hayden Road	Minor Arterial	Minor Collector

Figure S-2

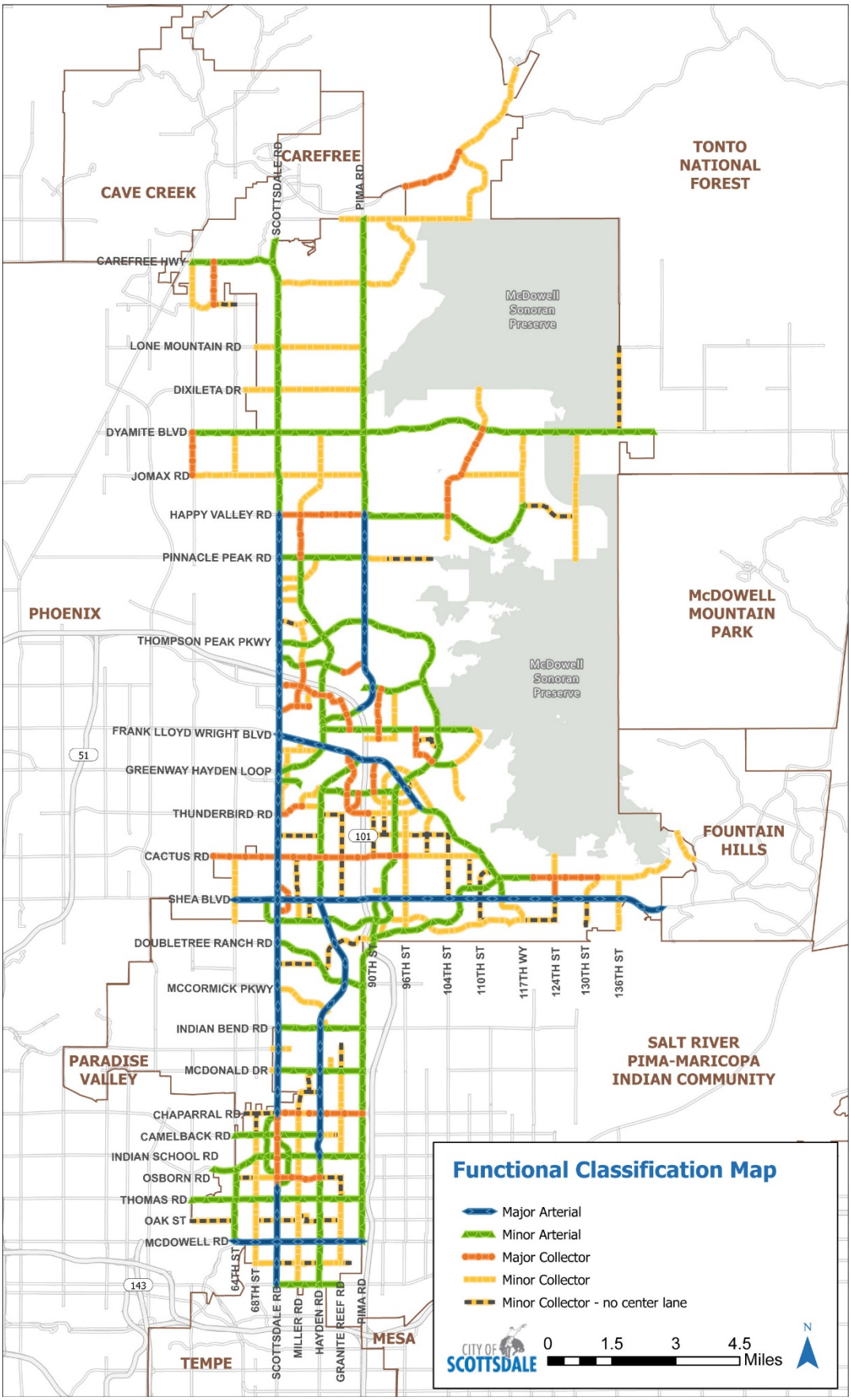

CAREFREE
CAVE CREEK
SCOTTSDALE RD
PIMA RD
TONTO NATIONAL FOREST
CAREFREE HWY
McDowell Sonoran Preserve
LONE MOUNTAIN RD
DIXILETA DR
DYAMITE BLVD
JOMAX RD
HAPPY VALLEY RD
PINNACLE PEAK RD
PHOENIX
McDOWELL MOUNTAIN PARK
THOMPSON PEAK PKWY
McDowell Sonoran Preserve
FRANK LLOYD WRIGHT BLVD
51
GREENWAY HAYDEN LOOP
THUNDERBIRD RD
101
FOUNTAIN HILLS
CACTUS RD
SHEA BLVD
DOUBLETREE RANCH RD
90TH ST
96TH ST
104TH ST
110TH ST
117TH WY
124TH ST
130TH ST
136TH ST
MCCORMICK PKWY
INDIAN BEND RD
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
PARADISE VALLEY
MCDONALD DR
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
MCDOWELL RD
64TH ST
68TH ST
143
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
MESA
TEMPE
Functional Classification Map
Major Arterial
Minor Arterial
Major Collector
Minor Collector
Minor Collector - no center lane
CITY OF SCOTTSDALE
0
1.5
3
4.5
Miles
N

Table S-3

Street	From	To	Proposed
68th Street	Camelback Road	Chaparral Road	Minor Collector - no center lane
78th Street	Mountain View Road	Shea Boulevard	Minor Collector - no center lane
78th Street	Jackrabbit Road	McDonald Drive	Minor Collector - no center lane
84th Street	Shea Boulevard	Thunderbird Road	Minor Collector - no center lane
90th Street	Cactus Road	Thunderbird Road	Minor Collector - no center lane
92nd Street	Sweetwater Avenue	Thunderbird Road	Minor Collector - no center lane
100th Street	Cactus Road	Camino del Santo	Minor Collector - no center lane
104th Street	Shea Boulevard	Sweetwater Avenue	Minor Collector - no center lane
108th Street	Via Linda	Cactus Road	Minor Collector - no center lane
110th Street	Mountain View Road	Cholla Street	Minor Collector - no center lane
110th Street/Altadena	Cholla Street	Frank Lloyd Wright	Minor Collector - no center lane
124th Street	Mountain View Road	Shea Boulevard	Minor Collector - no center lane
130th Street	Southern terminus	Shea Boulevard	Minor Collector - no center lane
136th Street	Dynamite Boulevard	Lone Mountain Road	Minor Collector - no center lane
Camelback Road	82nd Street	Granite Reef Road	Minor Collector - no center lane
Chaparral Road	66th Street	Scottsdale Road	Minor Collector - no center lane
Dove Valley Road	60th Street	64th Street	Minor Collector - no center lane
Eastwood Lane/Via de Ventura	Scottsdale Road	Doubletree Ranch Road	Minor Collector - no center lane
Granite Reef Road	Thomas Road	Osborn Road	Minor Collector - no center lane
Granite Reef Road	McDonald Drive	Arizona Canal	Minor Collector - no center lane
Grayhawk Drive	Scottsdale Road	Hayden Road	Minor Collector - no center lane
Jackrabbit Road	Quail Place	Scottsdale Road	Minor Collector - no center lane
Jackrabbit Road	Miller Road	Hayden Road	Minor Collector - no center lane
Miller Road	Shea Boulevard	Cactus Road	Minor Collector - no center lane
Miller Road	Chaparral Road	Jackrabbit Road	Minor Collector - no center lane
Mountain View Road	117th Way	124th Street	Minor Collector - no center lane
Oak Street/Murray Lane	Miller Road	Granite Reef Road	Minor Collector - no center lane
Osborn Road	64th Street	68th Street	Minor Collector - no center lane
Paradise Lane	98th Street	Thompson Peak	Minor Collector - no center lane
Pinnacle Peak Road	92nd/93rd Street	Via Ventosa	Minor Collector - no center lane
Raintree Drive	Frank Lloyd Wright	100th Street	Minor Collector - no center lane
Ranch Gate Road	118th Street	128th Street	Minor Collector - no center lane
Roosevelt Street	Scottsdale Road	Hayden Road	Minor Collector - no center lane
Roosevelt Street	Granite Reef Road	Latham Street	Minor Collector - no center lane
Sweetwater Avenue	Scottsdale Road	Hayden Road	Minor Collector - no center lane
Sweetwater Avenue	90th Street	Frank Lloyd Wright	Minor Collector - no center lane
Thunderbird Road	Hayden Road	84th Street	Minor Collector - no center lane
Via Linda	Via de Ventura	Loop 101 underpass	Minor Collector - no center lane

Figures S-3 through S-7 are graphical representations of the typical cross section for each street type.

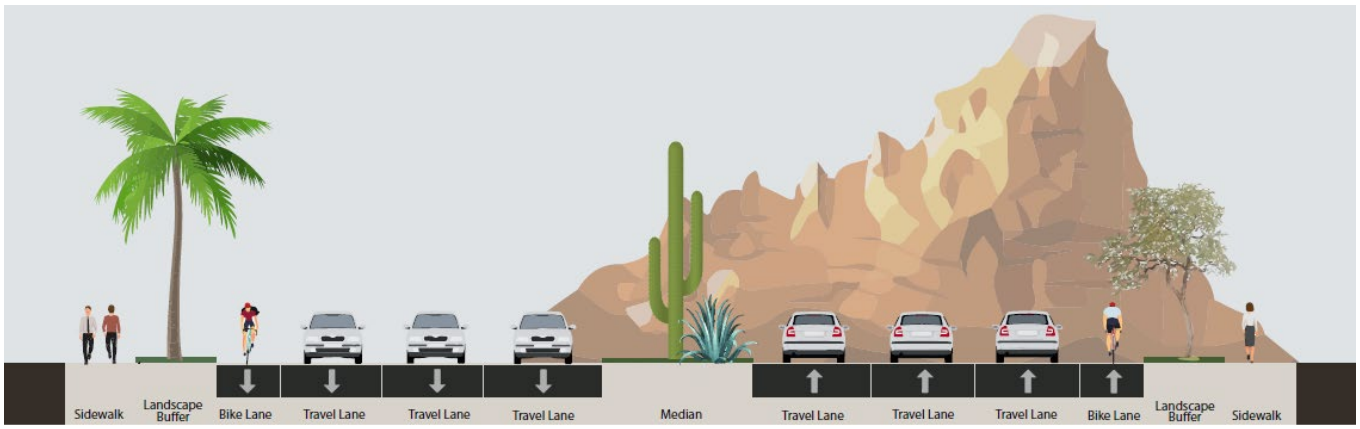


Figure S-4: Generalized Street Cross-section – Minor Arterial

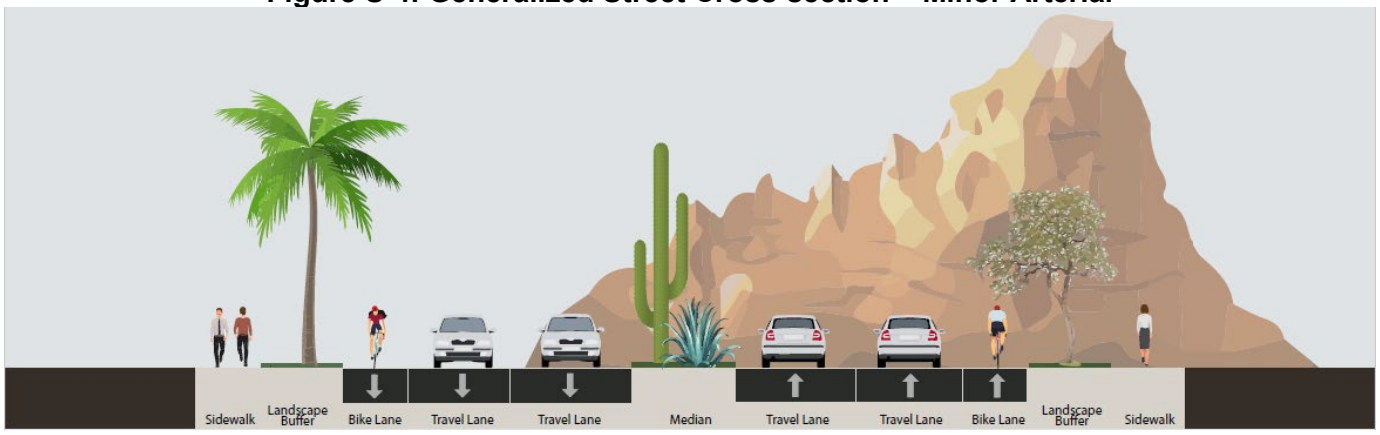
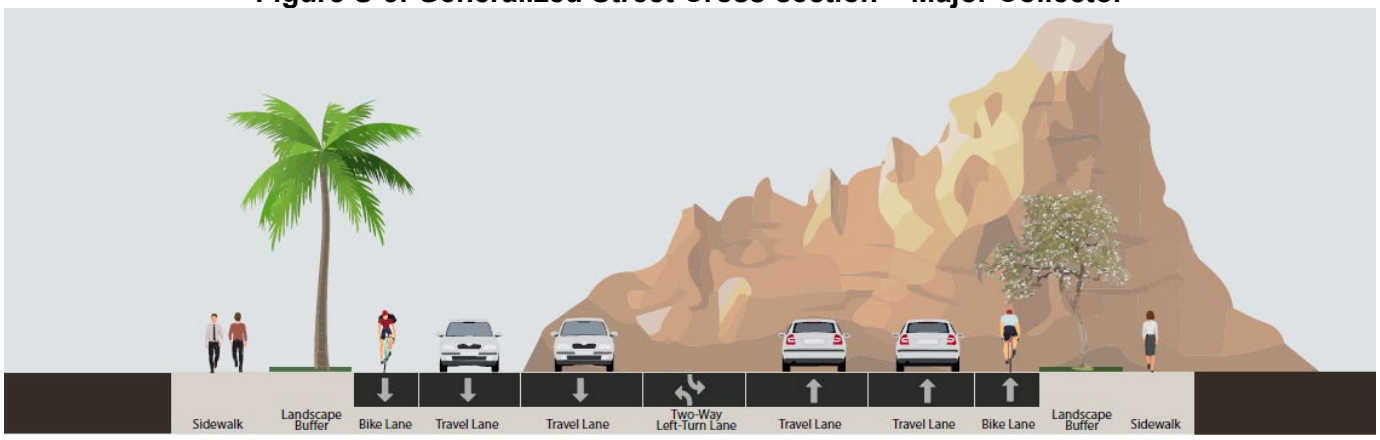


Figure S-5: Generalized Street Cross-section – Major Collector



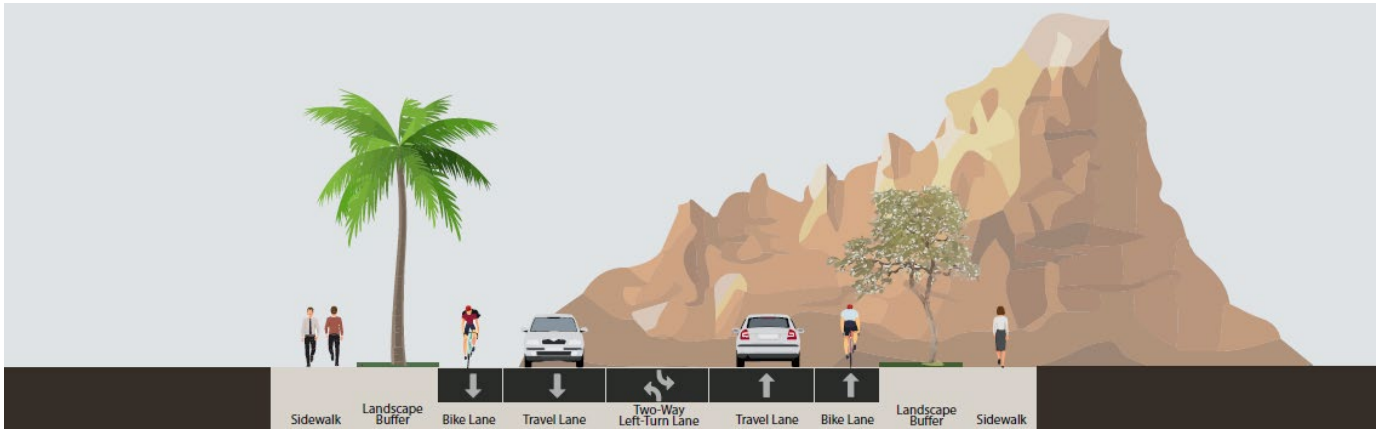
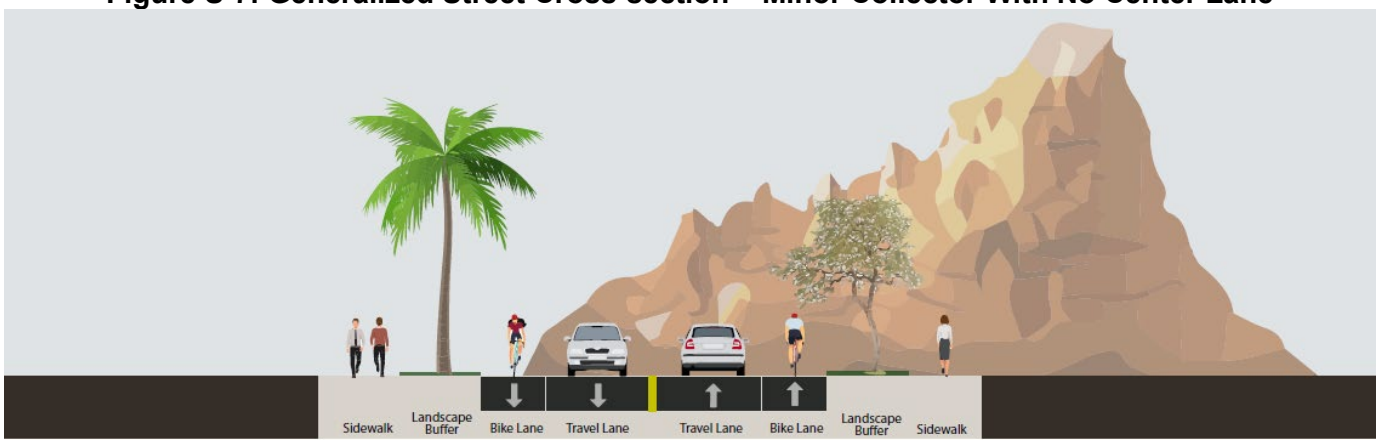


Figure S-7: Generalized Street Cross-section – Minor Collector With No Center Lane

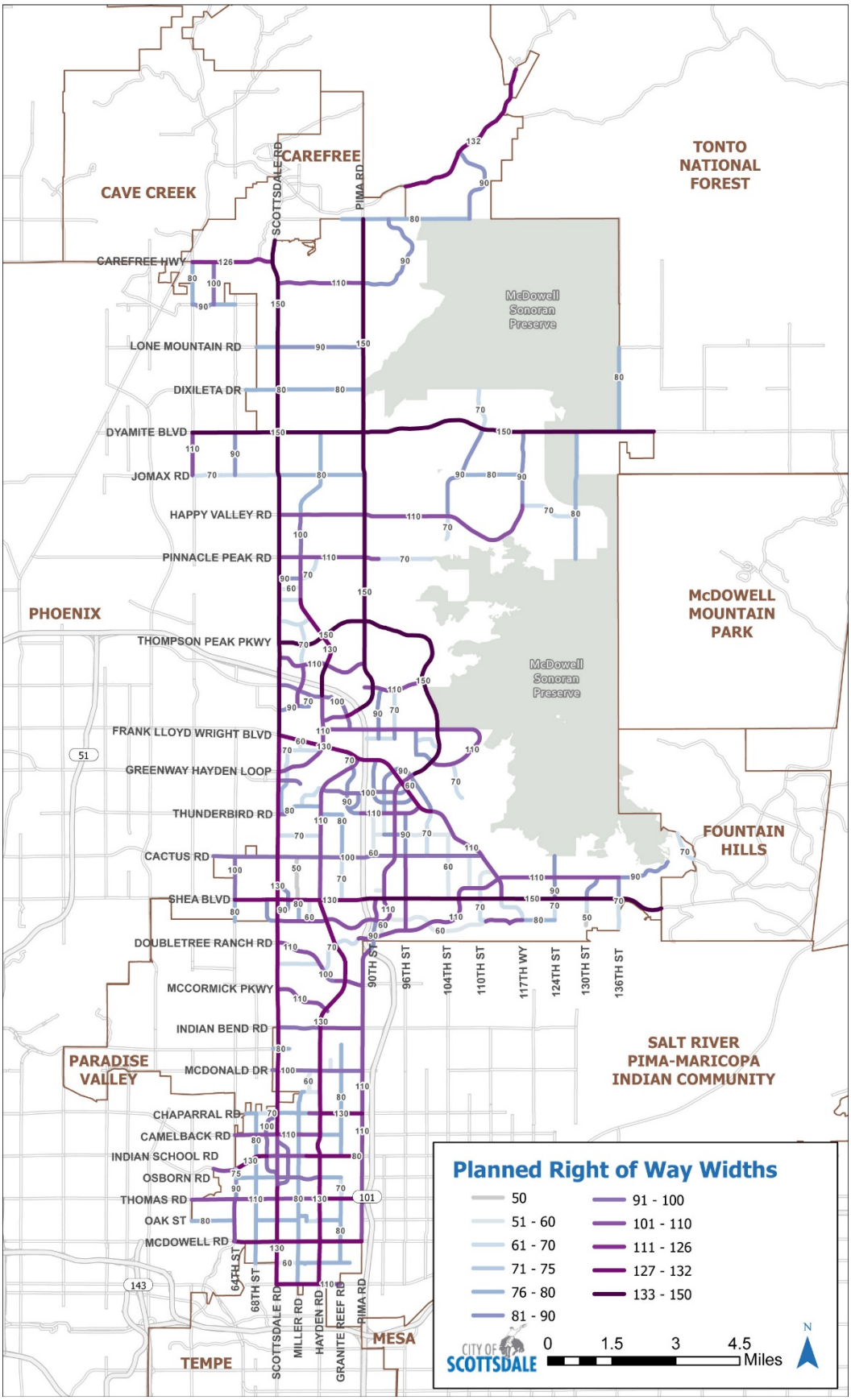


For all street classifications, the lane dimensions, sidewalk widths, sidewalk attachment to/detachment from the curb and placement of sidewalks with respect to shade trees are determined on a street segment basis. The type of curb, including vertical, rolled, or ribbon, is also determined on a street segment basis. (Additional information for these details is provided in the DS&PM [link].) All street classifications exist for each type of street--rural, suburban or urban. (For more information on street types, please see descriptions above [link] and the DS&PM [link].)

RIGHT-OF-WAY

Typical right-of-way requirements are provided in the DS&PM cross section examples. However, many street segments have had varying classifications over time. As a result, Figure S-8 is provided to identify the recommended right-of-way dedication widths for all streets classified as minor collector and larger on the Street Classification Map. The recommended widths are intended to provide a consistent outside edge of right-of-way that matches previous dedications and acquisitions, as well as to maintain consistency with the city's *Scenic Corridor Design Guidelines* (2003). These dimensions are stated for the street segments only. At intersections, a larger dimension may be necessary to accommodate turning lanes.

Figure S-8


CAREFREE
CAVE CREEK
TONTO NATIONAL FOREST
McDowell Sonoran Preserve
McDOWELL MOUNTAIN PARK
PHOENIX
FOUNTAIN HILLS
PARADISE VALLEY
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
MESA
TEMPE
SCOTTSDALE RD
PIMA RD
CAREFREE HWY
LONE MOUNTAIN RD
DIXILETA DR
DYAMITE BLVD
JOMAX RD
HAPPY VALLEY RD
PINNACLE PEAK RD
THOMPSON PEAK PKWY
FRANK LLOYD WRIGHT BLVD
GREENWAY HAYDEN LOOP
THUNDERBIRD RD
CACTUS RD
SHEA BLVD
DOUBLETREE RANCH RD
MCCORMICK PKWY
INDIAN BEND RD
MCDONALD DR
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
MCDOWELL RD
90TH ST
96TH ST
104TH ST
110TH ST
117TH WY
124TH ST
130TH ST
136TH ST
64TH ST
68TH ST
MILLER RD
HAYDEN RD
GRANITE REEF RD
51
101
143
Planned Right of Way Widths
50
51 - 60
61 - 70
71 - 75
76 - 80
81 - 90
91 - 100
101 - 110
111 - 126
127 - 132
133 - 150
CITY OF SCOTTSDALE
0 1.5 3 4.5 Miles
N

PERFORMANCE MEASURES

1) Reduce citywide intersection and roadway segment collision rates, based on six-year moving averages.
2) Maintain existing streets to a citywide “Very Good” pavement condition index (70-85).
3) Maintain vehicular level of service (LOS) D or better at most signalized intersections, except in designated activity cores or urban roadway corridors where walkability, transit access, and aesthetic or right-of-way considerations are overriding.
4) Use Maricopa Association of Governments data to monitor average roadway travel times and assess the feasibility of mitigation strategies when a trip takes 30% longer in peak travel times than during non-peak times.
5) Target average daily traffic volumes on collector streets 7,500-9,000 vehicles per lane per day using 2040 forecasted volumes.
6) Target average daily traffic volumes on arterial streets to no more than 8,500-10,000 vehicles per lane per day using 2040 forecasted volumes.
7) Maintain a positive (excellent/good) rating of 70 percent or better in the National Community Survey for “Ease of Travel by Car.”

PUBLIC TRANSIT ELEMENT

INTRODUCTION

Public transit is a key component of the city's transportation network and a critical mobility alternative for Scottsdale residents, visitors and workers. The Public Transit Element of the Scottsdale Transportation Action Plan (TAP) provides guidance on maintaining a viable transit system and expanding service to meet the needs of the community and region. This guidance aligns with the Connectivity section of the 2035 Scottsdale General Plan.

Public transit service coincides with Scottsdale's unique character areas, each with varying needs and lifestyles. It also serves visitors from all over the world, along with a large seasonal population. An effective transit service must provide transportation choices for those who elect to use transit, as well as those who are dependent on it by integrating future technology and micro-mobility solutions. Ultimately, transit planning aims to enhance connectivity to schools and inter-jurisdictional coordination; provide accessible mobility choices; reduce congestion and pollution; and improve quality of life.

A robust transit system does not stop at city boundaries but makes strong connections to the regional system. Routes should effectively serve major employment hubs, activity centers, local businesses and schools throughout Scottsdale and provide transfers to other routes that link to various parts of the Valley. Convenient and safe access to transit supports employees who work within and outside of Scottsdale, along with students, from elementary to college age.

The future for Scottsdale transit hinges on the ability to leverage and build on the existing bus system and improve connectivity to the rest of the region through cost-effective and data-driven solutions. Transit changes go through a regional public involvement process twice a year, and proposed modifications are based on public input, ridership, public requests, survey data and funding. Continuing to build strong partnerships with neighboring communities, such as
Phoenix and Tempe, and Valley Metro, the regional transit agency, is very important for ensuring a successful transit system in Scottsdale.

Continued funding for Scottsdale public transit also relies on people choosing to use it. To ensure transit service is attractive and competitive with other forms of transportation, it must be frequent, fast and convenient. In addition, the vehicles and bus facilities must be clean, reliable and comfortable.

Scottsdale Transportation and Streets developed a series of transit improvement strategies to be phased in over the next five to ten years. Planned improvements closely align with the 2035 General Plan and are consistent with the Scottsdale City Council's objective of "Advancing Transportation."

The following goals and policies guide planned improvements.

GOALS

1) Build a viable, cost effective, reliable public transportation alternative for all income levels and lifestyles and that coincides with Scottsdale's unique character areas, each with varying needs. Effective transit service provides citizens, visitors, a seasonal population and special events with transportation choices.
2) Develop routes that effectively serve major employment, commercial and retail uses; community and senior centers; schools; and other activity centers throughout Scottsdale, and that connect to the regional system.
3) Focus service on the transit-dependent population, as well as those who choose public transit for their transportation.
4) Continually monitor and improve paratransit programs as boundaries change with transit improvements.
5) Implement service and amenities to make the system more convenient to use and sustainable over time. Special consideration will be given to emerging technologies and infrastructure that improve service, mitigate the extreme heat and help reduce emissions.
6) Ensure that all transit assets, including the bus fleet, bus stops and park-and-ride facilities, are in a state of good repair.
7) Link the city's extensive active transportation network for pedestrians and cyclists directly to the public transit system.
8) Improve connections to the region's expanding High-Capacity Transit system (Light Rail, Streetcar, and Bus Rapid Transit) and provide convenient transfers to fixed service routes that link to other parts of the Valley.
9) Build upon the goals in the 2035 General Plan and the overall goal of Scottsdale City Council to "Advance Transportation." Provide transit investments that can be implemented with sustainable funding.
10) Maximize use of existing transit facilities (transit centers, park-and-rides, bus stops) to strengthen connections to local, fixed route, express and other potential transit modes and provide needed amenities and parking for those utilizing the transit system.
11) Explore micro transit options.

POLICIES

1) Service standards for Scottsdale's local bus routes ensure a 30-minute minimum frequency of service.
2) The standard for local bus stops is placement at 1/4-mile intervals.
3) To comply with National Transit Database reporting requirements, financial and system information will be reconciled quarterly.
4) Gather key transit system data by using Automated Passenger Counters and Clever Devices to analyze, measure and ensure the success of the system.
5) Review bus route performance at the segment level to evaluate and implement necessary changes to ensure successful routes and passenger connections within the transit system.

CURRENT TRANSIT SYSTEM

Existing transit service in Scottsdale is characterized by regional fixed route buses operating on the arterial and collector street grid system, express bus service, the trolley system and paratransit. (See Figure T-1.) Scottsdale currently has nine fixed routes, one express route and four trolley routes.

It is important to note that Trolley is the brand name for Scottsdale's owned and operated bus service, which differs from fixed routes by providing direct routes (without transfers) to selected activity centers in Scottsdale. Trolley routes also deliver better connectivity between neighborhoods, commercial corridors and the regional system. The Scottsdale Trolley is a free service funded by the 0.2% Scottsdale Transportation Sales Tax. Scottsdale also receives preventative maintenance funds from the Federal Transit Administration (FTA), Arizona Lottery Funds and other federal grants to offset a portion of trolley operating expenses. In addition, all trolley buses are purchased with FTA grant funds, which typically have a 15% to 20% local match requirement. There are currently 21 buses in the city's trolley fleet.

Trolley utilizing roundabout at Mustang Transit Center

Scottsdale has intergovernmental agreements (IGAs) with Valley Metro and the city of Phoenix to operate fixed route service, the most common form of transit service in the region. Fixed routes, where

the Regional Fare Policy applies, are primarily funded with the Proposition 400 Regional Sales Tax and are paid for per mile. It uses standard size transit vehicles (usually 40-foot buses) and is generally characterized by buses operating along the major arterial grid network. The vehicles make frequent stops, and passengers may need to make transfers to reach their destinations. Route 72 on Scottsdale Road is an example of fixed route bus service. Almost all fixed bus routes in Scottsdale connect to other jurisdictions, and the service is contracted to an outside provider. Most transit service is focused south of Frank Lloyd Wright Boulevard, where the highest population, land use densities and need are located.

Express buses operate as commuter service during peak hours and usually connect outlying areas with major activity centers. The routes, with limited a.m. and p.m. trips, typically serve park-and-ride lots or transit centers and may parallel fixed route service with fewer stops. Route 510, which travels between Scottsdale's Mustang Transit Center and downtown Phoenix, is an example of express bus service. Scottsdale is proposing to expand the express bus system by providing a convenient link to and use of the freeway system, the Mustang Transit Center and the Thunderbird Park-and-Ride.

East Valley Dial-a-Ride is a federally mandated demand-responsive paratransit service that does not follow a fixed route. Paratransit provides flexible-schedule, on-demand transportation for those unable to access traditional fixed route service, such as seniors and passengers with disabilities. The Americans with Disabilities Act (ADA) requires that complementary paratransit service be provided in all areas within 3/4 mile of fixed route bus service (See Figure T-2). Currently Scottsdale does not have any bus service north of Frank Lloyd Wright Boulevard and residents there fall outside the required paratransit service boundary. To help residents who are outside of the mandated service area, the city participates in the RideChoice program through Valley Metro.

Scottsdale also provides Cab Connection, an alternative program to Dial-A-Ride. Cab Connection offers more flexibility than Dial-a-Ride and operates at less cost to the city using a voucher system. All users must be Scottsdale residents and have a disability, be on dialysis or be age 65 or older. Extended service hours are usually provided for individuals who qualify under ADA.

Figure T-1

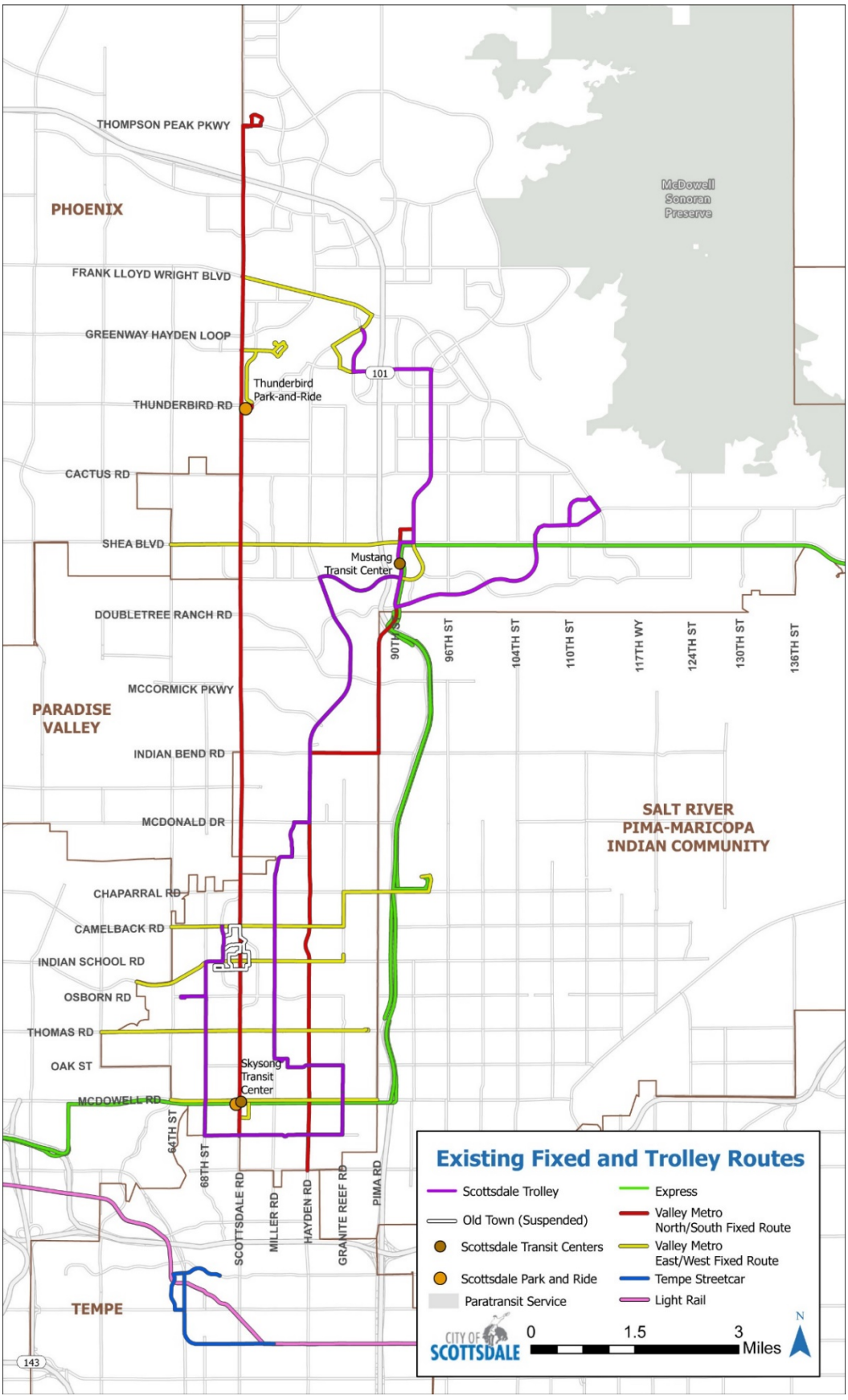
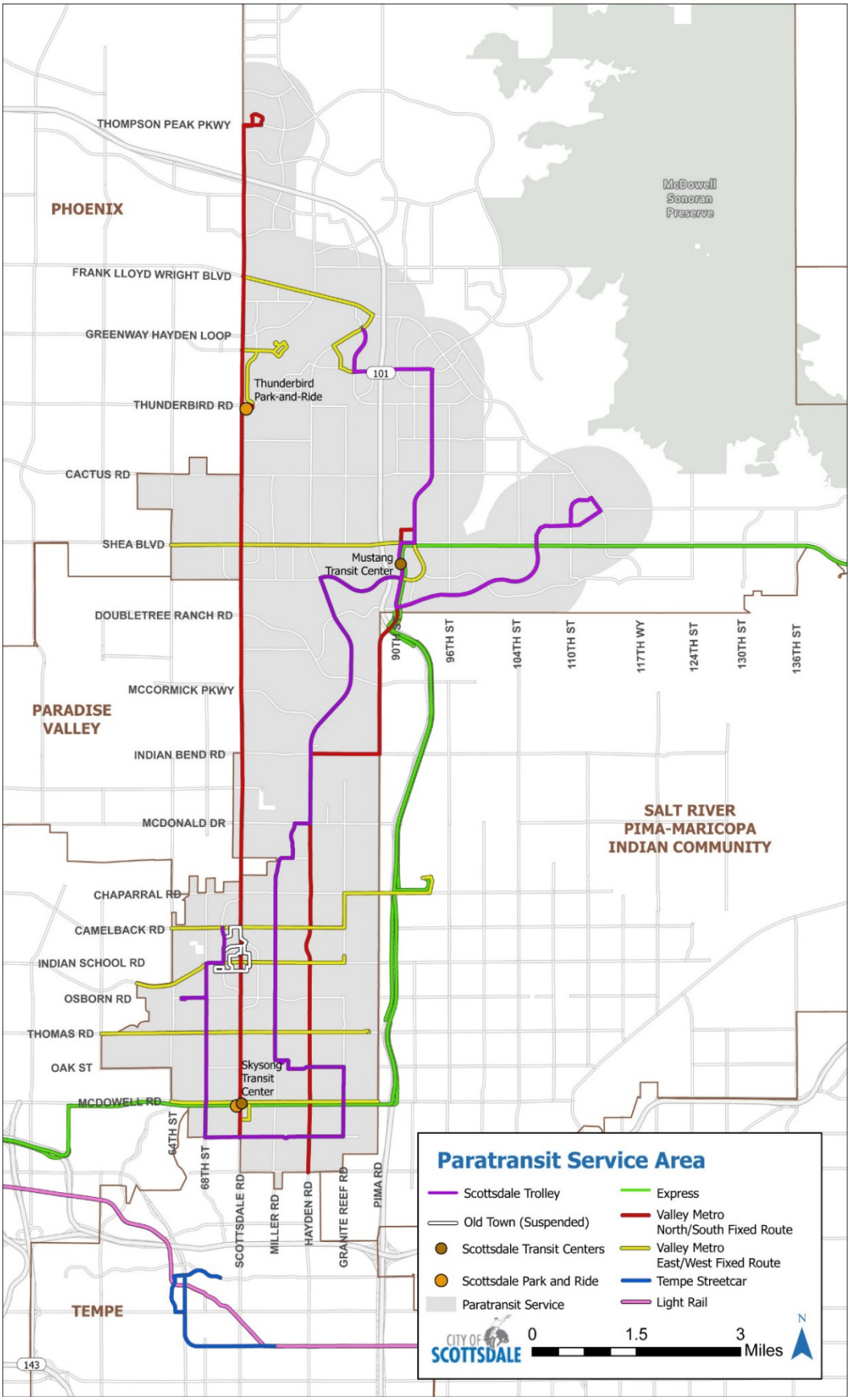

THOMPSON PEAK PKWY
PHOENIX
McDowell Sonoran Preserve
FRANK LLOYD WRIGHT BLVD
GREENWAY HAYDEN LOOP
101
Thunderbird Park-and-Ride
THUNDERBIRD RD
CACTUS RD
SHEA BLVD
Mustang Transit Center
DOUBLETREE RANCH RD
90TH ST
96TH ST
104TH ST
110TH ST
117TH WY
124TH ST
130TH ST
136TH ST
MCCORMICK PKWY
PARADISE VALLEY
INDIAN BEND RD
MCDONALD DR
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
Skysong Transit Center
MCDOWELL RD
64TH ST
68TH ST
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
TEMPE
143
Existing Fixed and Trolley Routes
Scottsdale Trolley
Old Town (Suspended)
Scottsdale Transit Centers
Scottsdale Park and Ride
Paratransit Service
Express
Valley Metro North/South Fixed Route
Valley Metro East/West Fixed Route
Tempe Streetcar
Light Rail
CITY OF SCOTTSDALE
0
1.5
3
Miles
N

Figure T-2


THOMPSON PEAK PKWY
PHOENIX
McDowell Sonoran Preserve
FRANK LLOYD WRIGHT BLVD
GREENWAY HAYDEN LOOP
101
Thunderbird Park-and-Ride
THUNDERBIRD RD
CACTUS RD
SHEA BLVD
Mustang Transit Center
DOUBLETREE RANCH RD
90TH ST
96TH ST
104TH ST
110TH ST
117TH WY
124TH ST
130TH ST
136TH ST
MCCORMICK PKWY
PARADISE VALLEY
INDIAN BEND RD
MCDONALD DR
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
Skysong Transit Center
MCDOWELL RD
64TH ST
68TH ST
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
TEMPE
143
Paratransit Service Area
Scottsdale Trolley
Old Town (Suspended)
Scottsdale Transit Centers
Scottsdale Park and Ride
Paratransit Service
Express
Valley Metro North/South Fixed Route
Valley Metro East/West Fixed Route
Tempe Streetcar
Light Rail
CITY OF SCOTTSDALE
0
1.5
3
Miles
N

FACILITIES

Existing transit facilities in Scottdale range from on-street passenger facilities, such as bus stops, to large facilities, such as park-and-rides and transit centers. Currently, Scottsdale has 524 active bus stop locations for all transit routes that are continually assessed for appropriate amenities, accessibility, and safety, including more lighting opportunities. To date, 250 of those locations have a bench or seating, 163 have transit shelters and 237 provide shade. Scottsdale uses a standard bus shelter kit that includes a bus shelter, seating, a trash receptacle, a bicycle rack and signs. Other amenities, including vertical shade elements for early morning and late afternoon users, should also be considered as technology and funding become available. The following criteria are used for deciding bus shelter locations:

- Bus frequency
- Highest ridership locations, often at the one-mile arterial intersections
- Bus operational requirements
- Pedestrian safety
- Passenger comfort
- Right-of-way availability

Scottsdale standard bus shelter and associated amenities

Bus stops are planned at ¼-mile intervals on all fixed bus routes and wider spacing for limited-stop/express bus routes. Overall, standard bus stop spacing makes the system more user friendly, as riders know where to expect stops and the city can market or "brand" service along a route.

Currently there are two transit passenger facilities located in Scottsdale. The Thunderbird Park-and-Ride, located adjacent to the Airpark at the southeast corner of Thunderbird and Scottsdale roads, provides 450 parking spaces for transit users who wish to make system connections and leave their vehicle at a secure facility. Planned improvements aim to increase use of the facility by providing access from additional routes. The Mustang Transit Center, located on 90th Street between Shea Boulevard and Mountain View Road outside the Mustang Library, provides amenities for end-of-line users or those making transit connections to other parts of the system. In addition to the two transit facilities, informal park-and-ride agreements have been established for shared parking arrangements at lots throughout Scottsdale.

PLANNED IMPROVEMENTS

Through the planning process, the following phased transit improvement strategies (See Figures T-3 and T-4) were developed in addition to the goals and policies. These strategies will help prioritize capital projects and system operational improvements. Consistent with the overall TAP emphasis, the strategies 1) emphasize refining the existing transportation system over adding new infrastructure and 2) emphasize livable streets/community over rapid traffic throughput.

Bus stops

- Improve the bus stop cleaning, refurbishment and prioritization process.
- Expand and improve lighting opportunities at bus stops.
- Improve ADA accessibility at bus stops in conjunction with the city's ADA Transition Plan.
- Increase shade at bus stops and modify structures to address solutions for full-day coverage.

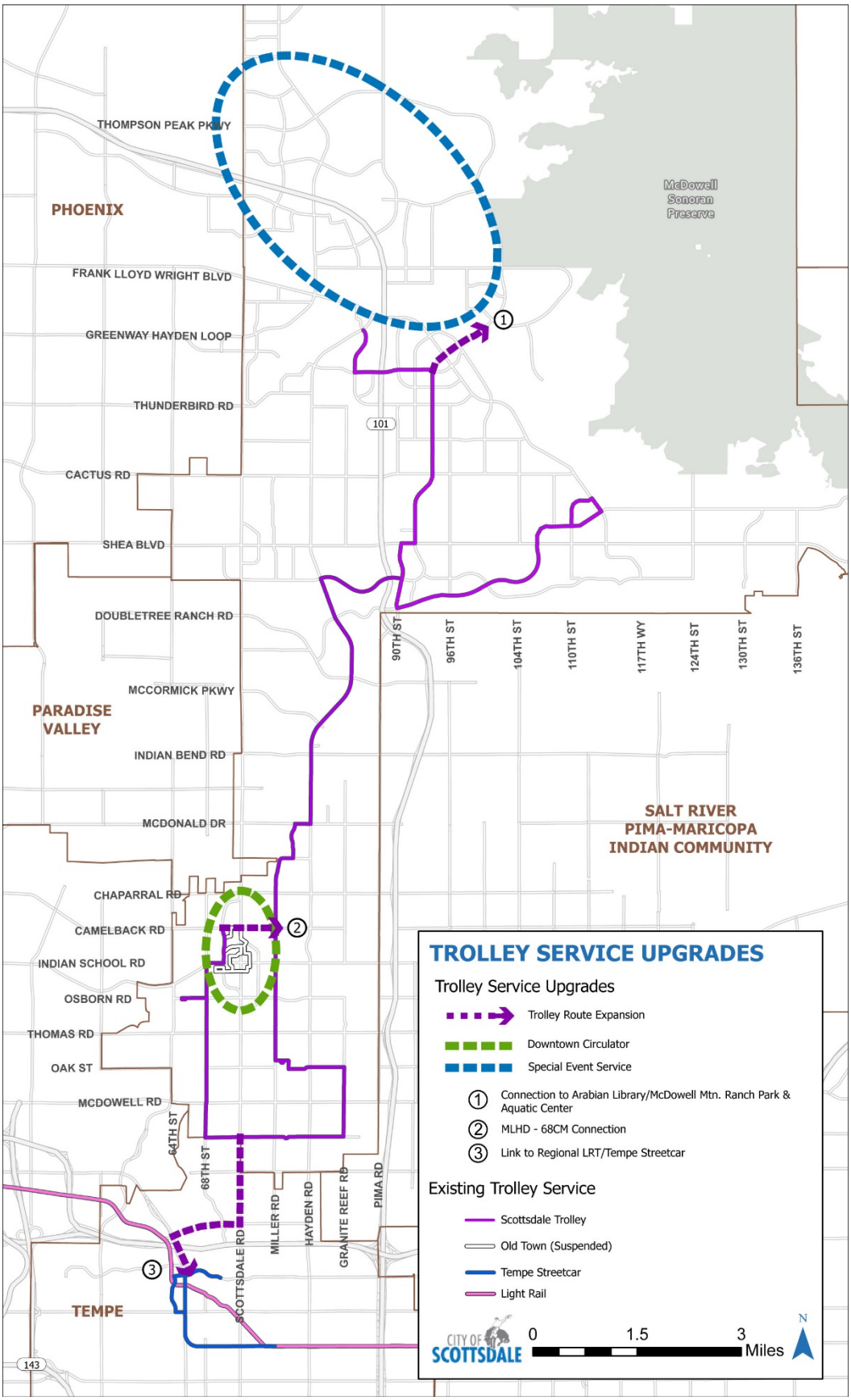
Service

- Work in tandem with Complete Streets efforts to accommodate all users of the street and make strong ties to the active transportation network.
- Coordinate layover locations on a continual basis to ensure drivers have amenities.
- Modify end-of-line turnarounds as needed to ensure connections are made with productive mileage.
- Provide connectivity between the MLHD and 68CM trolley routes on Camelback Road.
- Implement an express route connecting the Thunderbird Park-and-Ride and Mustang Transit Center to downtown Phoenix using Loop 101 and 202.
- Expand the use of the Thunderbird Park-and-Ride and the Mustang Transit Center.
- Expand service to McDowell Mountain Aquatic Center and Arabian Library.
- Provide special event service for major venues, such as the Waste Management Open and WestWorld events.

Data

- Improve the process and accuracy of reporting revenue miles and costs to the National Transit Database to ensure city compliance to receive federal funding.
- Develop a Transit Asset Management Plan.
- Use Automated Passenger Counter data to evaluate routes at the segment level.

Figure T-3


THOMPSON PEAK PKWY
PHOENIX
McDowell Sonoran Preserve
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GREENWAY HAYDEN LOOP
THUNDERBIRD RD
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CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
MCDOWELL RD
64TH ST
68TH ST
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
TEMPE
143
TROLLEY SERVICE UPGRADES
Trolley Service Upgrades
Trolley Route Expansion
Downtown Circulator
Special Event Service
1 Connection to Arabian Library/McDowell Mtn. Ranch Park & Aquatic Center
2 MLHD - 68CM Connection
3 Link to Regional LRT/Tempe Streetcar
Existing Trolley Service
Scottsdale Trolley
Old Town (Suspended)
Tempe Streetcar
Light Rail
CITY OF SCOTTSDALE
0
1.5
3
Miles
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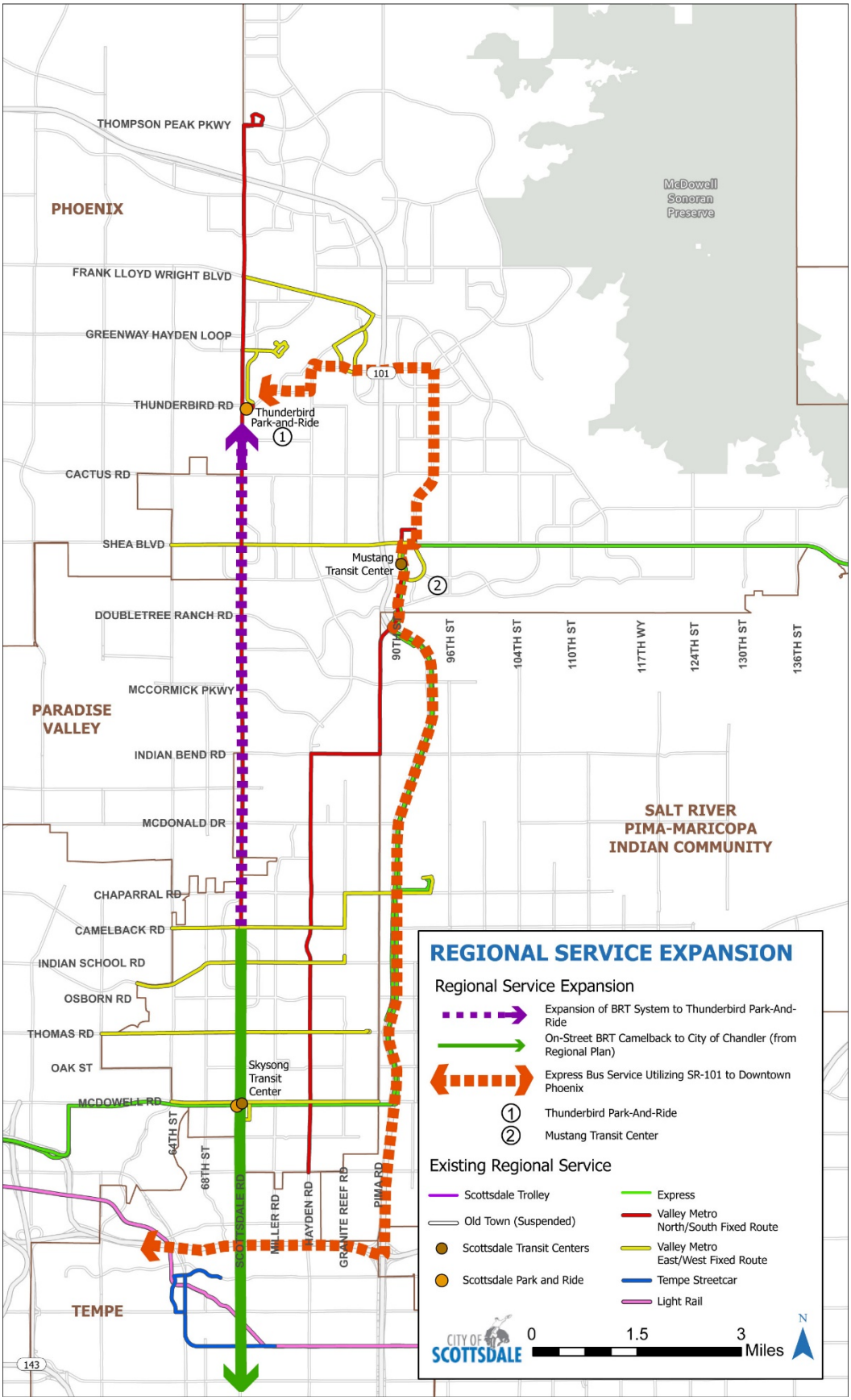
Figure T-4


THOMPSON PEAK PKWY
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McDowell Sonoran Preserve
FRANK LLOYD WRIGHT BLVD
GREENWAY HAYDEN LOOP
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THUNDERBIRD RD
Thunderbird Park-and-Ride
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CACTUS RD
SHEA BLVD
Mustang Transit Center
2
DOUBLETREE RANCH RD
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MCDONALD DR
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
CHAPARRAL RD
CAMELBACK RD
INDIAN SCHOOL RD
OSBORN RD
THOMAS RD
OAK ST
Skysong Transit Center
MCDOWELL RD
64TH ST
68TH ST
SCOTTSDALE RD
MILLER RD
HAYDEN RD
GRANITE REEF RD
PIMA RD
TEMPE
143
REGIONAL SERVICE EXPANSION
Regional Service Expansion
Expansion of BRT System to Thunderbird Park-And-Ride
On-Street BRT Camelback to City of Chandler (from Regional Plan)
Express Bus Service Utilizing SR-101 to Downtown Phoenix
1 Thunderbird Park-And-Ride
2 Mustang Transit Center
Existing Regional Service
Scottsdale Trolley
Old Town (Suspended)
Scottsdale Transit Centers
Scottsdale Park and Ride
Express
Valley Metro North/South Fixed Route
Valley Metro East/West Fixed Route
Tempe Streetcar
Light Rail
CITY OF SCOTTSDALE
0
1.5
3
Miles
N

Information

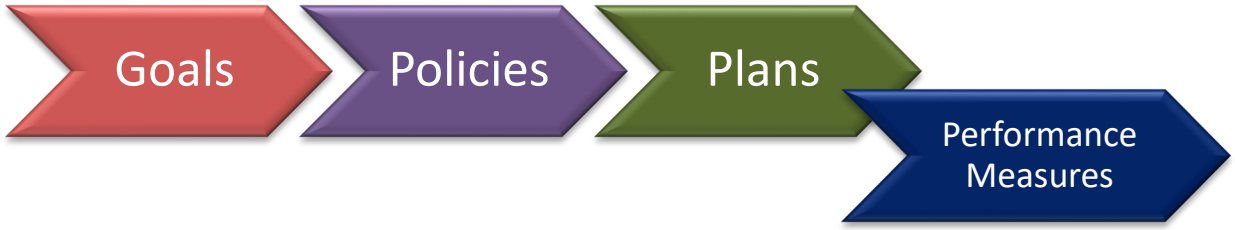
- Market transit services to city staff and the general public through press releases, social media, internal publications and the city website and news feed.
- Provide travel training for potential new rider groups.
- Consider rebranding “Scottsdale Trolley” through a public input process.

Emerging Technology

- Develop an electric bus fleet.
- Improve Transit Signal Priority.
- Expand the use of Clever Devices for increasing system data requirements and communication needs.

Regional Connectivity

- Based on ridership, funding and public comments, improve service frequency on Phoenix and East Valley routes connecting to Scottsdale.
- Expand connectivity to regional Light Rail and Tempe Streetcar with Trolley and fixed route service.
- Connect to on-street Bus Rapid Transit (BRT) routes from Phoenix.
- Evaluate the feasibility of and potentially implement an on-street BRT route on Scottsdale Road from the Thunderbird Park-and-Ride to Chandler.



PERFORMANCE MEASURES

Service performance measures provide the framework for evaluating our transit service both within and in and out of Scottsdale. Scottsdale evaluates local and regional service using three performance areas: ridership, productivity and quality of service. Performance measures help define the specific modal service levels (frequency), service design (routing) and standards for modifying service and can include existing and future regional fixed routes, trolley service, circulator service, express service, Bus Rapid Transit and paratransit. Performance measures provide a toolbox for determining productivity and managing transit service throughout the system.

The following series of performance measures will help evaluate the success of our existing transit system and future improvements.

1) *Bus boardings per revenue mile* is the number of passengers collected during one mile of scheduled revenue service (productivity).
2) *Bus boardings per revenue hour* is the number of passengers collected during one revenue hour of scheduled revenue service (productivity).
3) *On-time Performance* analyzes whether trips are arriving at time points early, late or on time and determines service reliability for customers (productivity).
4) *Connectivity to transportation network* evaluates the system on a quarterly basis to ensure convenient ties within the city transportation network and to the regional transit system (connectivity).
5) *Missed trips due to operational failures* determines maintenance quality and loss in revenue due to operational interruptions (reliability).
6) Rating of bus or transit service on the National Community Survey evaluates public opinion of the system. The city will aim for a positive rating of 60% or better (quality of service).

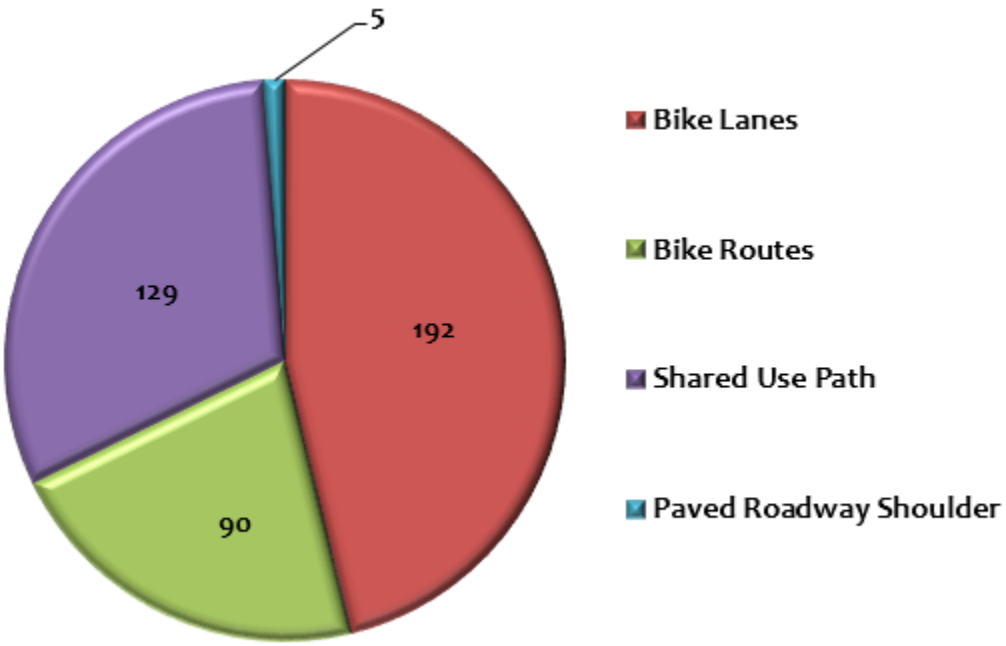
BIKEWAY ELEMENT

INTRODUCTION

The Bikeway Element of the Transportation Action Plan (TAP) serves to expand and enhance Scottsdale's on-street and paved path network to provide safe and inviting access for pedestrians, bicyclists and other non-motorized users to travel to destinations in Scottsdale and neighboring communities.

The City of Scottsdale currently maintains a robust network of on-street and off-street bike facilities, including bike lanes, bike routes, shared use paths and paved roadway shoulders (see Figure B-1).

2021 Existing Bikeway Network (Miles)



Scottsdale's street system provides the most direct access to nearly all destinations in the city for active transportation users via bike lanes and bike routes. These bike lanes and bike routes allow users direct access to the off-street shared use path network. City's design guidelines for arterial and collector streets are found in the *Design Standards and Policies Manual* (DS&PM). These facilities include bike lanes, sidewalks, and trails and are typically included with new construction and major reconstruction projects. New or modified bike lanes can also be installed when streets are restriped with pavement management projects.

The off-street network consists of paved shared use paths and unpaved shared use trails. Trails are discussed in the Trail Element of this TAP. All shared use paths and side-paths (adjacent to streets) are open to all non-motorized users. Shared use paths represent an important component of the overall bike network. They provide opportunities to ride for users who may not be comfortable riding in the roadway, such as casual cyclists, children, families and older adults.

GOALS

1) Build bike facilities that form a continuous network with seamless connections to public transit, schools, neighborhoods, community destinations and the regional bike network. Special consideration will be given to emerging concepts and infrastructure that increase the comfort and confidence level of all riders.
2) Implement education, encouragement and data collection programs to increase bike usage and improve bike safety.
3) Expand the network of on-street and off-street bike facilities to increase the amount of biking for all trip purposes.
4) Maintain and enhance the current bike transportation network to meet current design standards.
5) Achieve a Platinum-level Bicycle Friendly Community certification from the League of American Bicyclists (LAB) [link to program].

POLICIES

1) Construction Priorities: Completion and renovation of the three primary shared use paths (Arizona Canal/Cross Cut Canal, Central Arizona Project Canal and Indian Bend Wash), followed by other paths that improve regional connectivity, will be prioritized for use of capital improvement funds and grant requests. Side paths next to streets should be incorporated into improvement plans for collector and arterial streets.
2) Roadway Restriping: Improve on-street bike accommodation and bicyclist and pedestrian comfort through striping changes that consider historic and forecasted motor vehicle traffic, center turn lane requirements, existing pavement width and existing lane widths. This restriping protocol will typically be applied when roadways are being treated through standard pavement preservation applications and will incorporate buffered bike lanes where feasible.

3) Neighborhood Bikeways: Develop Neighborhood Bikeways on low-volume, low-speed roadways to be used by a wide range of bicyclist abilities. Improvement options should consider traffic calming and enhanced roadway crossings.

4) Wayfinding: Implement a cohesive wayfinding system directing people to and along shared use paths and Neighborhood Bikeways and to community destinations.

5) Intelligent Transportation Systems (ITS): Identify and test solutions that balance traffic flow with improved bicycle mobility in key corridors.

6) Education and data collection: Promote bicycling's benefits for health, recreation, transportation and tourism. Evaluate bicycle usage counts on the network to establish trends and prioritize outreach and improvements.

7) Safety and Enforcement: Inform the public (motorists, bicyclists and pedestrians) about bicycle, vehicle and pedestrian operation on streets and paths. Work with public safety staff to improve enforcement of traffic laws related to biking. Collect, analyze and report on bicycle collision data on a regular basis and develop remediation measures to address high-frequency and high-volume collision locations. Support Safe Routes to School programs. Support the use of grade separated crossings at barriers such as freeways and arterial roadways and along large drainageways.

ON-STREET BIKEWAYS

The on-street bike system will continue to expand and improve as new roadway segments of minor collector size or larger are constructed. New construction will follow the standard cross sections already in place or identified for revision through the TAP, and as mentioned above, potential new bike lane restriping efforts will be coordinated with the city's pavement management program.

As noted in the Street Element, minor collectors that do not require a center turn lane will also be a focus area for adding improved bike lanes, typically with painted buffers. Constructed bike lane buffers will also be assessed based on applicability, safety, cost and maintenance issues.

NEW DESIGNATION – NEIGHBORHOOD BIKEWAYS

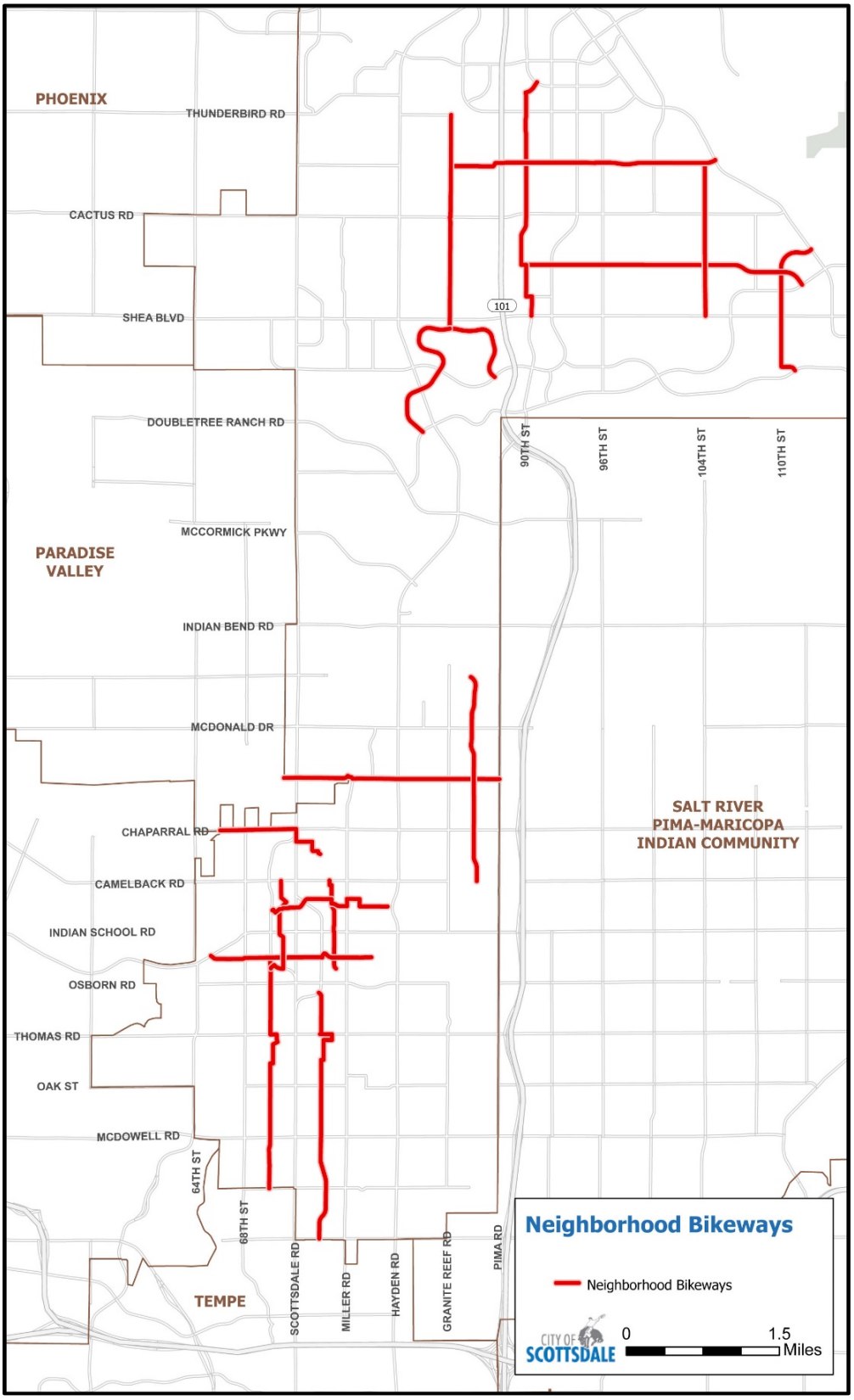
Neighborhood Bikeways are typically found on streets with traffic volumes of under 2,000 vehicles per day (vpd) and residential speeds (25 miles per hour or less) and often contain connections that can only be made by bike or as a pedestrian. They are typically found on the ¼-mile street network through neighborhoods but feature destinations such as parks, schools, libraries, community centers, religious centers, and medical facilities. They also connect to the rest of the bikeway network. Compared to bike lanes along busier streets,

neighborhood bikeways are low-stress and accommodate a wider range of users. They typically have shared lane markings (sharrows) or bike lanes, depending on traffic volumes, and can include signage, traffic calming and enhanced crossings at major streets (see Table B-1 and Figure B-2).

Table B-1 Scottsdale Neighborhood Bikeways

Street	From	To	Mileage
70th Street	Continental Drive	2nd Street	2.4
	(potential extension)		0.4
74th Street	McKellips Road	Thomas Road	2.0
	(potential extension)		0.5
84th Street	Shea Boulevard	Thunderbird Road	2.5
86th Street	Camelback Road	Lincoln Drive	2.0
	(potential extension)		0.5
Arabian Trail	Via Linda	Mountain View Road (east)	2.5
90th Street	Shea Boulevard	Redfield	2.4
104th Street	Shea Boulevard	Sweetwater	1.5
110th Street	Mountain View Road	Frank Lloyd Wright	1.5
Jackrabbit	Scottsdale Road	87th Terrace	2.0
Cholla	89th Street	Via Linda	2.8
Sweetwater	84th Street	Frank Lloyd Wright	2.6
2nd Street	Indian Bend Wash	Crosscut Canal	1.6
Glenrosa Street/5th Avenue	Indian Bend Wash	Arizona Canal	1.4
Chaparral Road/Rancho Vista Drive	64th Street	Arizona Canal	1.2
70th Street/Marshall Way	Osborn Road	Camelback Road	1.1
75th Street	2nd Street	Camelback Road	0.9
		Total	31.8

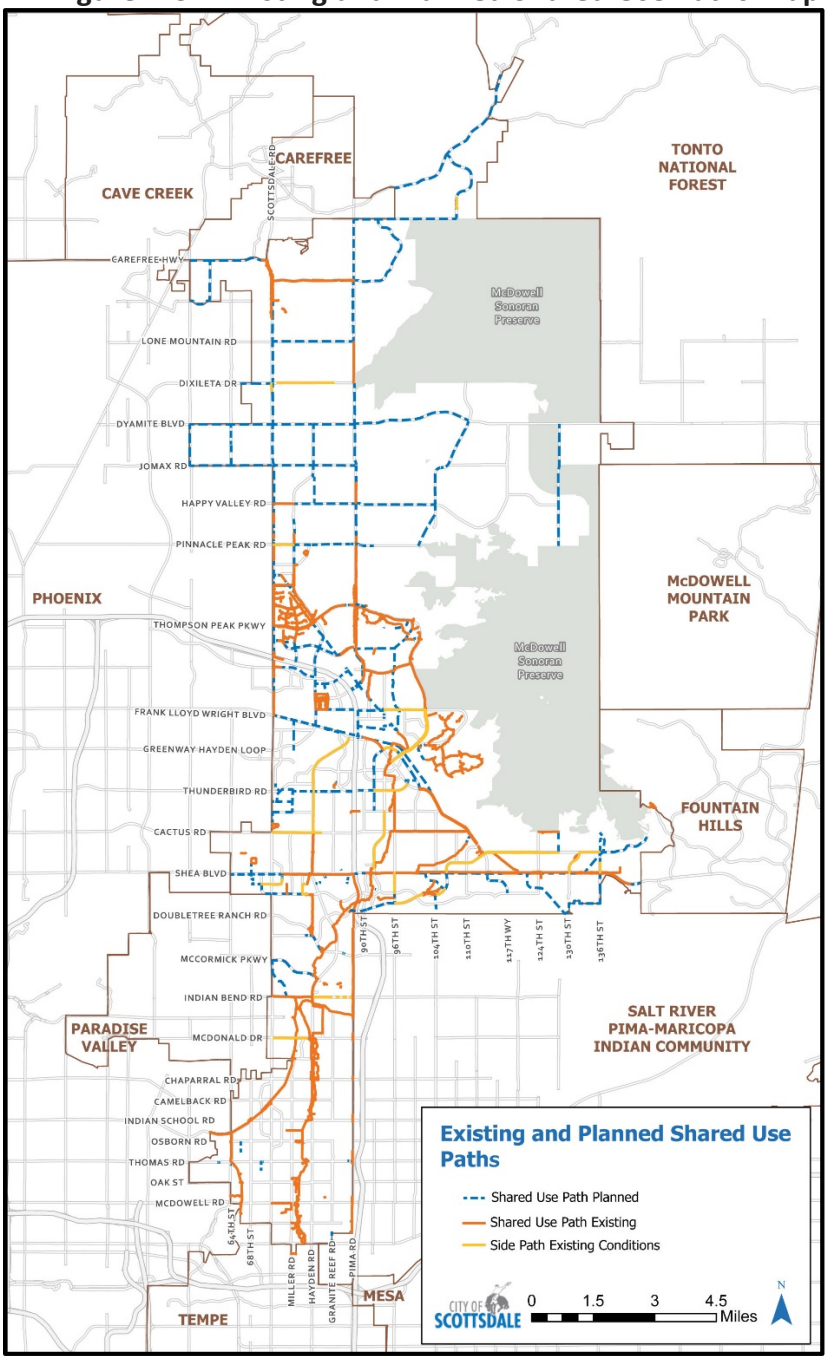
Figure B-2 –Neighborhood Bikeways



SHARED USE PATHS

The existing and planned shared use path network is shown in Figure B-3. These paths link to the on-street network while providing connectivity to a wider range of bicyclists. They also feature grade-separated crossings in many locations. Segments are prioritized for construction based on three criteria: the potential demand in the vicinity of the corridor, the existing bicycling conditions on parallel roadways and the potential for connections to the city's existing bicycle network. The availability of grant funding is also considered.

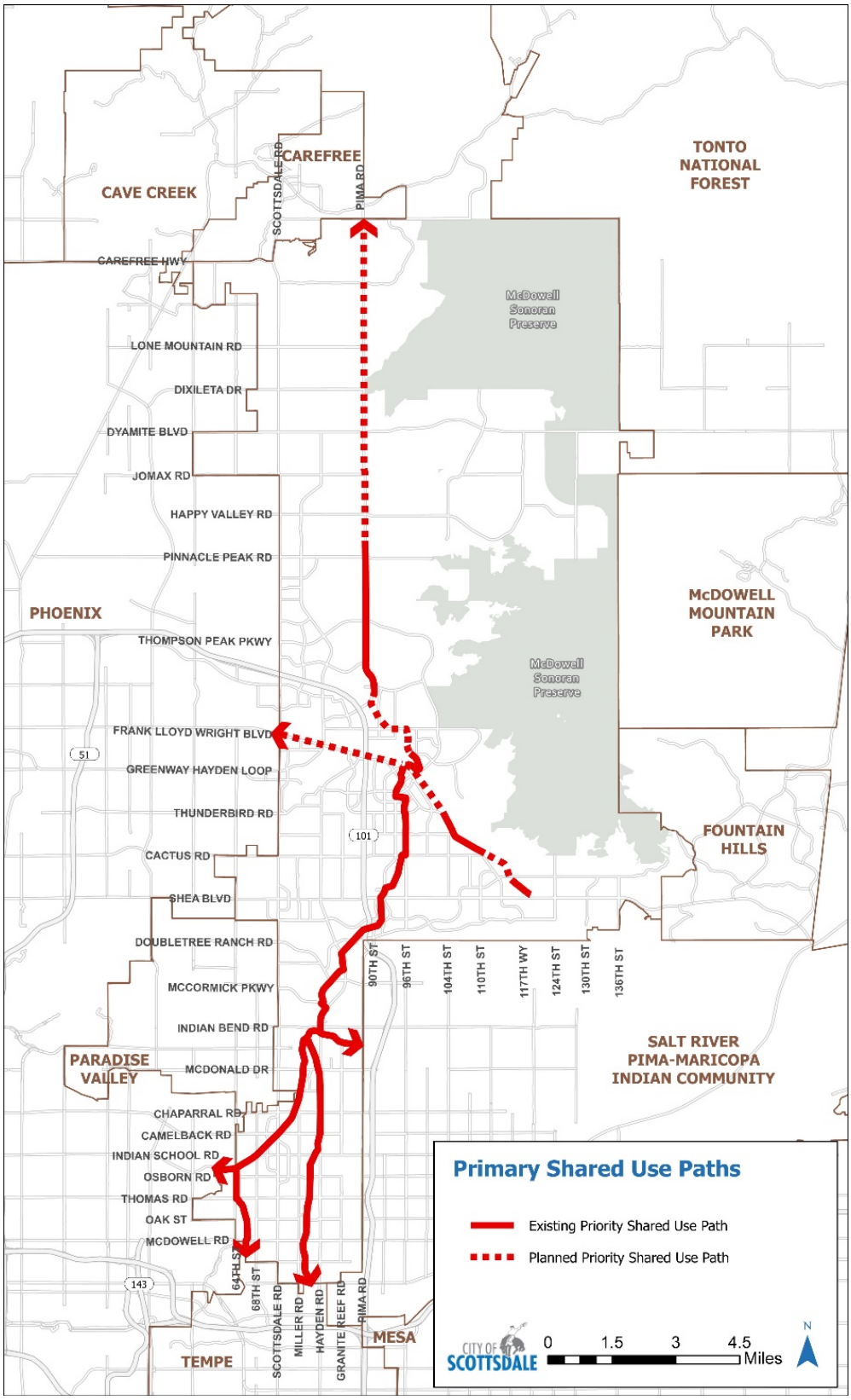
Figure B-3 – Existing and Planned Shared Use Paths Map



Three primary shared use paths serve as the spine and main linkages throughout Scottsdale: the Indian Bend Wash (IBW) Path, the Crosscut Canal Path/Arizona Canal Path and the Central Arizona Project (CAP) Canal Path. Each provides local and regional connectivity and is a high priority for implementation. More details on the three primary paths are provided below and shown in Figure B-4:

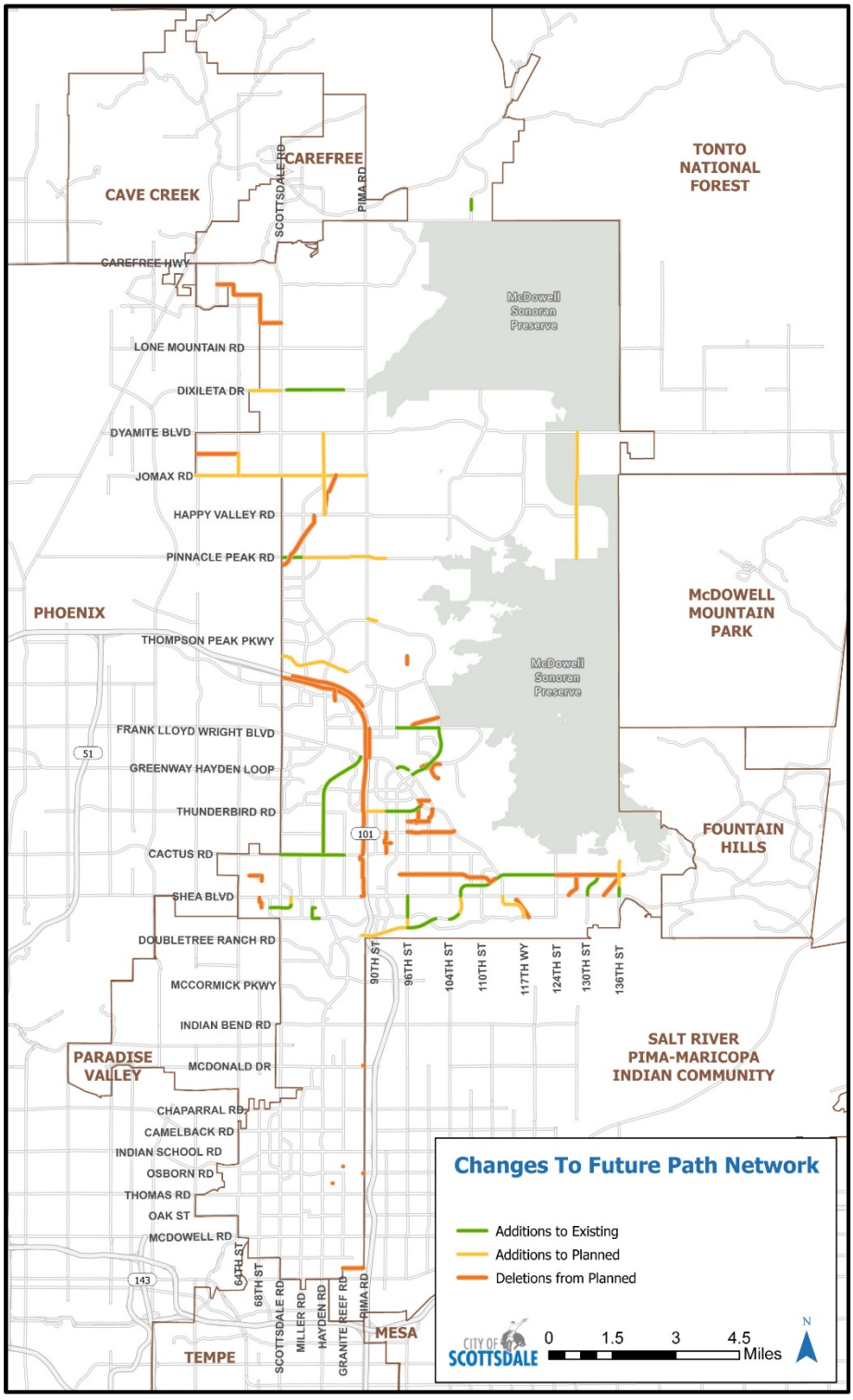
- Indian Bend Wash (IBW) Path – The IBW path runs north/south and links to the city of Tempe and the town of Carefree. Approximately 15 miles of path exist from McKellips Road to the WestWorld area, which is the approximate center point of the IBW Path. The northern section is approximately 13 miles long, of which 3.5 miles is constructed between Trailside View and Pinnacle Peak Road, while the rest is planned.
- Crosscut Canal Path/Arizona Canal Path – The 1.8-mile Crosscut Canal Path connects to a path in Tempe and to the 5.8-mile Arizona Canal Path, which connects to Phoenix and the Salt River Pima Maricopa Indian Community. Both canals are paved throughout Scottsdale.
- Central Arizona Project (CAP) Canal Path – As part of a regional planned path, Scottsdale's 9.2-mile planned path runs along the south side of the CAP Canal, primarily along adjacent developed land. Approximately 2.2-miles of the path are complete east of Loop 101 along the Frank Lloyd Wright Boulevard corridor. This path connects to city of Phoenix and the Salt River Pima-Maricopa Indian Community.

Figure B-4 – Primary Shared Use Path Map



Changes to the future non-primary path network are broken into three categories: additions to the planned system, additions to the existing path system and deletions from the planned path system. These changes represent a net change of 12 additional path miles. These changes are shown in Figure B-5.

Figure B-5 – Changes To Future Path Network



PERFORMANCE MEASURES

1) Reduce citywide per capita bicycle collision occurrences, based on six-year moving average data.
2) Maintain a positive (excellent/good) rating of 70% or better in the National Community Survey for "Ease of Travel by Bicycle."
3) Percentage of residences within ½-mile network distance to a shared use path.
4) Mileage of completed shared use paths.
5) Mileage of arterial and collector roadways with bike lanes.
6) Mileage of completed Neighborhood Bikeways.
7) Number of annual bicyclist boardings on transit routes.
8) Annual counts from permanent counters, mobile counters, and third party vendors.

TRAIL ELEMENT

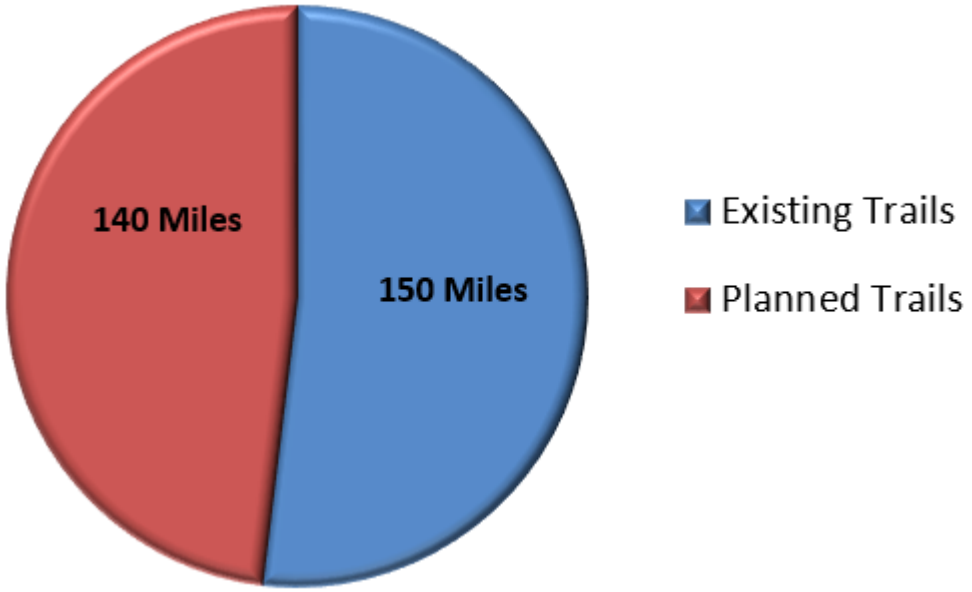
INTRODUCTION

Scottsdale's goal is to develop and maintain a citywide interconnecting network of trails to provide valuable recreation and transportation opportunities for residents and visitors. Trails function as transportation links between schools, residential areas, parks, places of employment, shopping areas and other areas of interest. Trails also provide hikers, walkers, joggers, equestrians, mountain bicyclists and people with disabilities opportunities to improve health and fitness, spend time with family and friends, enjoy the natural environment and escape the stress of everyday life. Trails are an integral part of Scottsdale's transportation infrastructure and a fundamental component to an enhanced quality of life for the community.

Scottsdale has been preparing plans and building public trails for the last five decades. In 2004, after an extensive public involvement process, the *Scottsdale Trails Master Plan: On the Right Trail* was officially adopted by City Council. In 2007, the Transportation Department assumed responsibility for public trails outside Scottsdale's McDowell Sonoran Preserve and kept the commitment to include trails within an element of the first Transportation Master Plan update which occurred in 2016. This 2021 Transportation Action Plan Trail Element is a culmination of the past planning efforts and aligned with approved policies, network planning and design standards.

Today Scottsdale has 150 miles of trails that are woven throughout neighborhoods within the city. This transportation action plan documents 140 miles of planned trails that will complete the buildout of the network over future years (see Figure T-1)

Figure T-1
Miles of Existing and Planned Trails Outside of Scottsdale McDowell Sonoran Preserve



GOALS

1) Develop an effective and connected multi-modal transportation system with the integration of trails.
2) Actively work with neighborhoods, neighborhood associations and adjacent jurisdictions to coordinate all planned and existing links to the trail network.
3) Provide improved trail connectivity within neighborhoods and access to schools and parks.
4) Maintain Scottsdale's high aesthetic values and environmental standards when planning and constructing trails.
5) Educate the public about easements and maintenance responsibilities associated with the trail network.

POLICIES

1) Trail access: Purchase public access if necessary, align trails where there is available access, and avoid condemnation when possible.
2) Trail obstruction: Coordinate with landowners regarding obstruction removal and require trail realignment by landowner if necessary.
3) New trails crossing undeveloped land: Identify existing rights of way along parcel boundaries to build temporary trail if necessary and require developers to dedicate a public nonmotorized access easement and build trail if applicable.
4) Trail Easement Abandonment: Trail easement abandonment requests will require a Trail Impact Analysis.

TRAIL CLASSIFICATIONS & STANDARDS

Trail widths vary depending on the purpose and environment. A trail could follow a major roadway, weave through a neighborhood or traverse rugged terrain. Therefore, trail classifications and standards were established to assist in providing the right trail for the right place.

Scottsdale has four types of trails: primary trails, secondary trails, neighborhood trails and minimally improved/rugged trails. Each classification has unique standards that align the trail with its environment. For all trail classifications, motorized vehicles are only permitted for maintenance and emergency purposes and where trail widths allow.

Primary Trails

Primary Trails provide both transportation and recreation links between residential areas, schools, businesses, parks, places of employment and other areas of significant community activity. Primary Trails are used by hikers, equestrians and bicyclists and typically have the most use of the trail types. The trail surface may be comprised of either native soil or decomposed granite. Urban Trails have the greatest width of all trail classifications and therefore accommodate leisurely side-by-side travel and easy passing for multiple user types. These trails are typically located within areas of relatively level topography.

Secondary Trails
Secondary Trails provide alternative transportation and recreation links through areas such as desert washes, scenic corridors, vista corridors and other desert open space areas. Secondary Trails are also used by hikers, equestrians and bicyclists, but typically experience a lower level of use than Primary Trails. Secondary Trails are narrower than Primary Trails and occasionally users must travel single file. Secondary Trails are typically located within areas of level to moderate topography.

Neighborhood Local Trails
Neighborhood Local Trails provide access in and around neighborhood areas and provide connections to Primary and Secondary Trails. Neighborhood Local Trails typically act as "feeder" trails to the regional trail network and may provide close-to-home recreational opportunities. Hikers, equestrians and bicyclists also use Neighborhood Local Trails, and in more rural areas, they sometimes serve as "sidewalks."

Minimally Improved/Rugged Trails
Minimally Improved/Rugged Trails are built as far away from traffic as possible and designed for equestrians, hikers, runners and mountain bikers. Minimally Improved/Rugged Trails are constructed in areas where other disability-accessible trail options are available or where the construction of an accessible trail will alter substantially the character of the surrounding area, impact culturally significant areas or be difficult to construct because of the terrain, such as in washes.

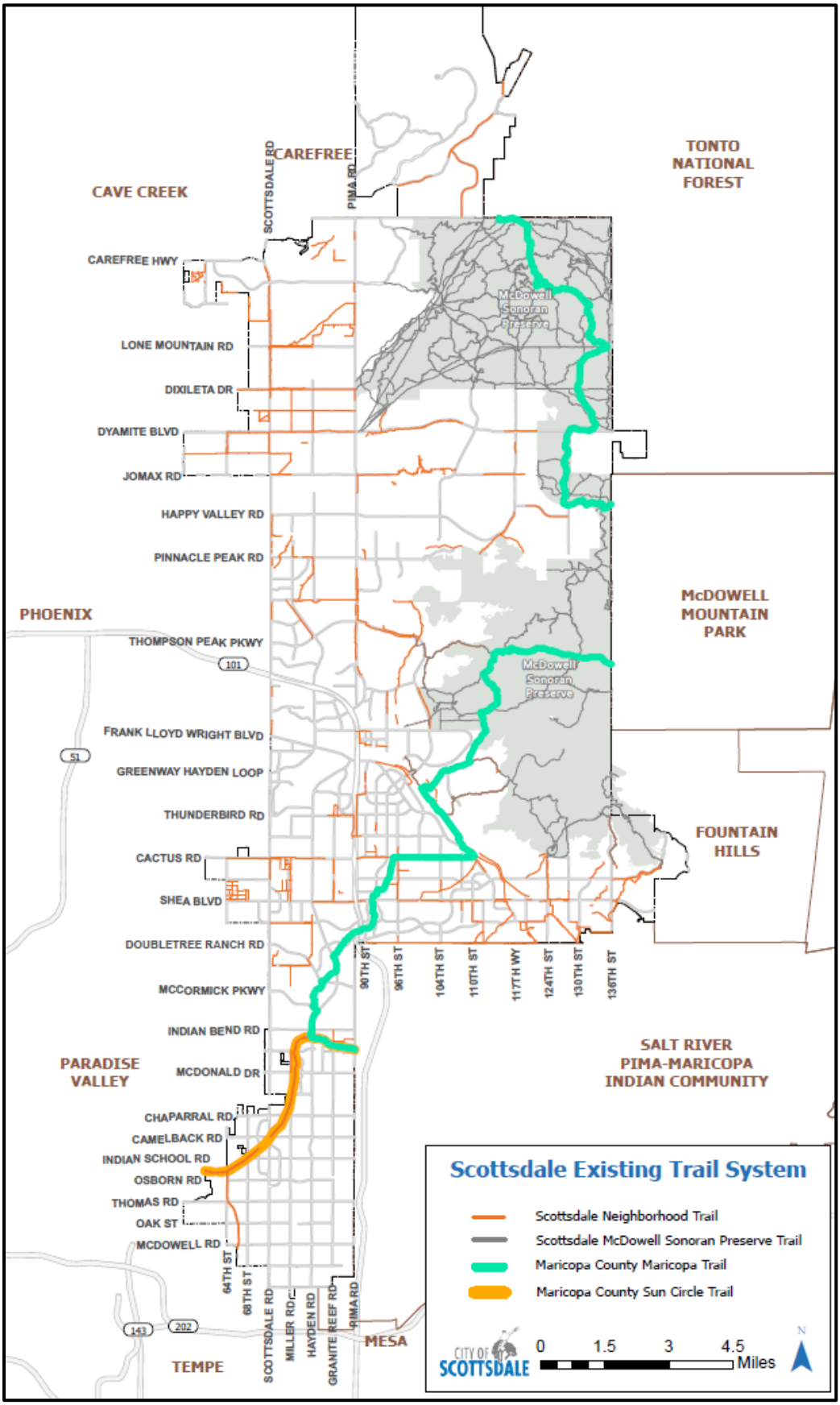
Trail standards such as slope, width and vegetation clearance are associated with each trail classification. These standards can be found in the Scottsdale *Design Standards & Policies Manual* (2018).

TRAIL CORRIDORS & REGIONAL CONNECTIVITY

Scottsdale has a robust trail system throughout the city with 220 miles of trails in Scottsdale's McDowell Sonoran Preserve and 150 miles of trails in the neighborhood trail system.

Main trail corridors, including the Arizona Canal, Crosscut Canal, Central Arizona Project Aqueduct and Arizona Public Service (APS) Powerline, provide gateways to the regional trail system. An extensive regional trail system, including the Sun Circle Trail and Maricopa Trail, winds through Scottsdale and aligns with existing trails located along the main trail corridors, the Indian Bend Wash Path System and Scottsdale's neighborhood trail system (see Figure T-2).

Figure T-2 Scottsdale Existing Trail System



TRAIL PRIORITIZATION

Neighborhood trails are constructed using a yearly capital project. The first priorities for trail construction are the completion of planned connections to the Scottsdale's McDowell Sonoran Preserve at designated access points approved by the McDowell Sonoran Preserve Commission and planned Neighborhood Trails in rural areas that do not have sidewalks.

Specific trail segments and improvements are further prioritized by the following criteria:

- Corrects safety issue on an existing trail or with a new trail
- Completes a gap or unfinished project resulting in a significant, usable and continuous trail
- Completes the final unfinished segment in an existing trail
- Connects a trail to another trail
- Improves access to a neighborhood, community, Preserve or regional trail destination
- Constructs a trail which meets the desired design guidelines without special conditions that would increase the construction costs
- Builds a trail in an area with high potential use due to the surrounding character area and/or land uses

ADJUSTMENTS TO PLANNED NETWORK

During the development of the Transportation Action Plan, the planned trail system was reviewed to identify segments that:

- Lack connectivity,
- Are prone to network redundancy,
- Are infeasible to construct due to terrain and/or lack sufficient public rights-of-way or easements.

In this effort, 48 miles of planned trails were removed from the planned network of 188 miles, leaving 140 miles of planned trails.

Additionally, the Transportation Action Plan prioritizes completing the remaining connections to Scottsdale's McDowell Sonoran Preserve at designated access points approved by the McDowell Sonoran Preserve Commission and filling in gaps within the neighborhood trail systems.

Scottsdale will continue to add to the robust network of trails available to residents and visitors. Most importantly, Scottsdale will continue to conduct inventories of the existing neighborhood trail system and make improvements to trails in need of repair. Scottsdale will also continue to educate residents and homeowner associations on their responsibility to maintain trails adjacent to their homes and communities.

The following figures provide the locations of the planned trail segments removed from the network.

Figure T-3 Central Area – Planned Trail Segments Removed from Network

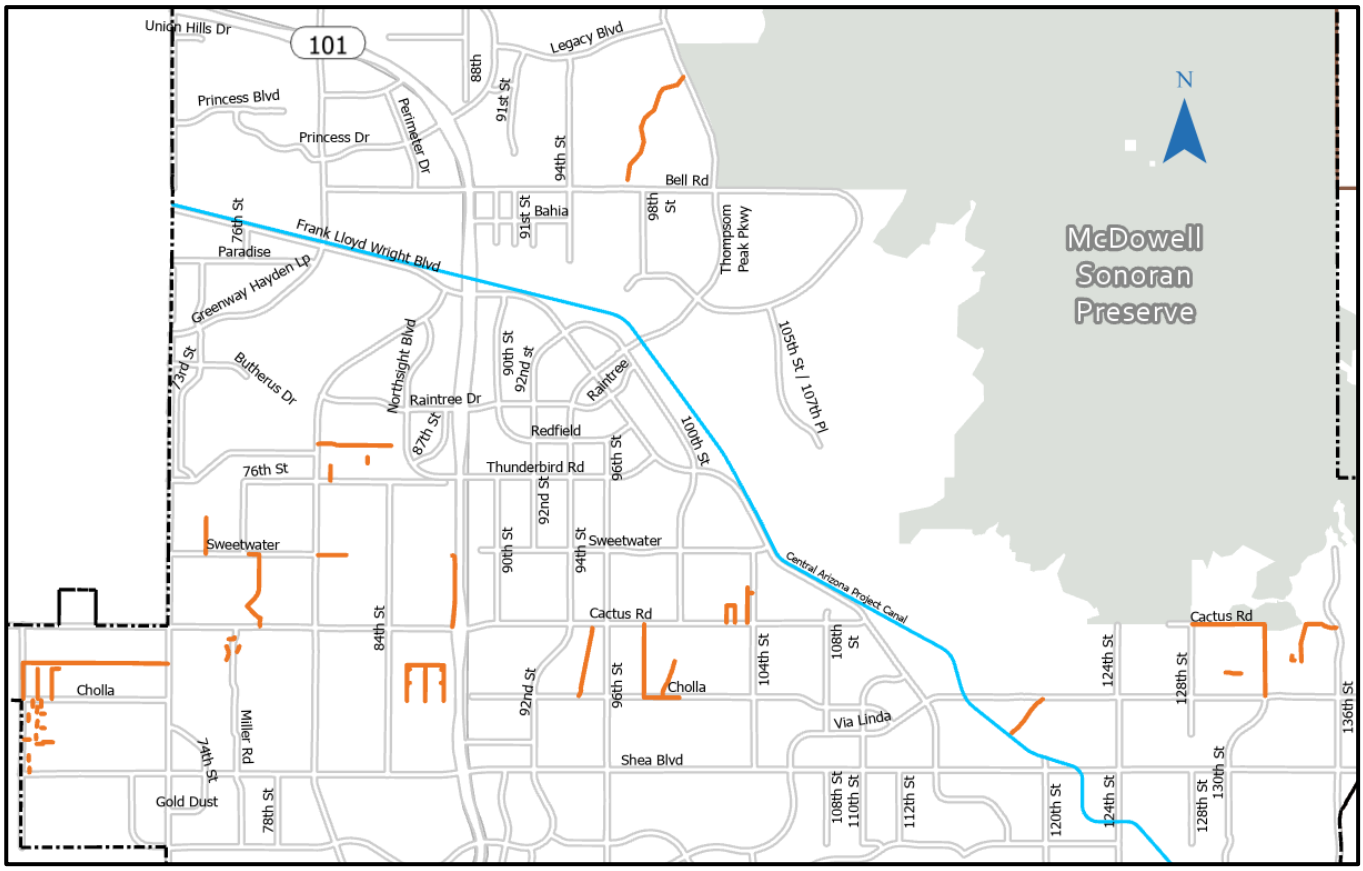


Figure T-4 Northern Area A – Planned Trail Segments Removed from Network

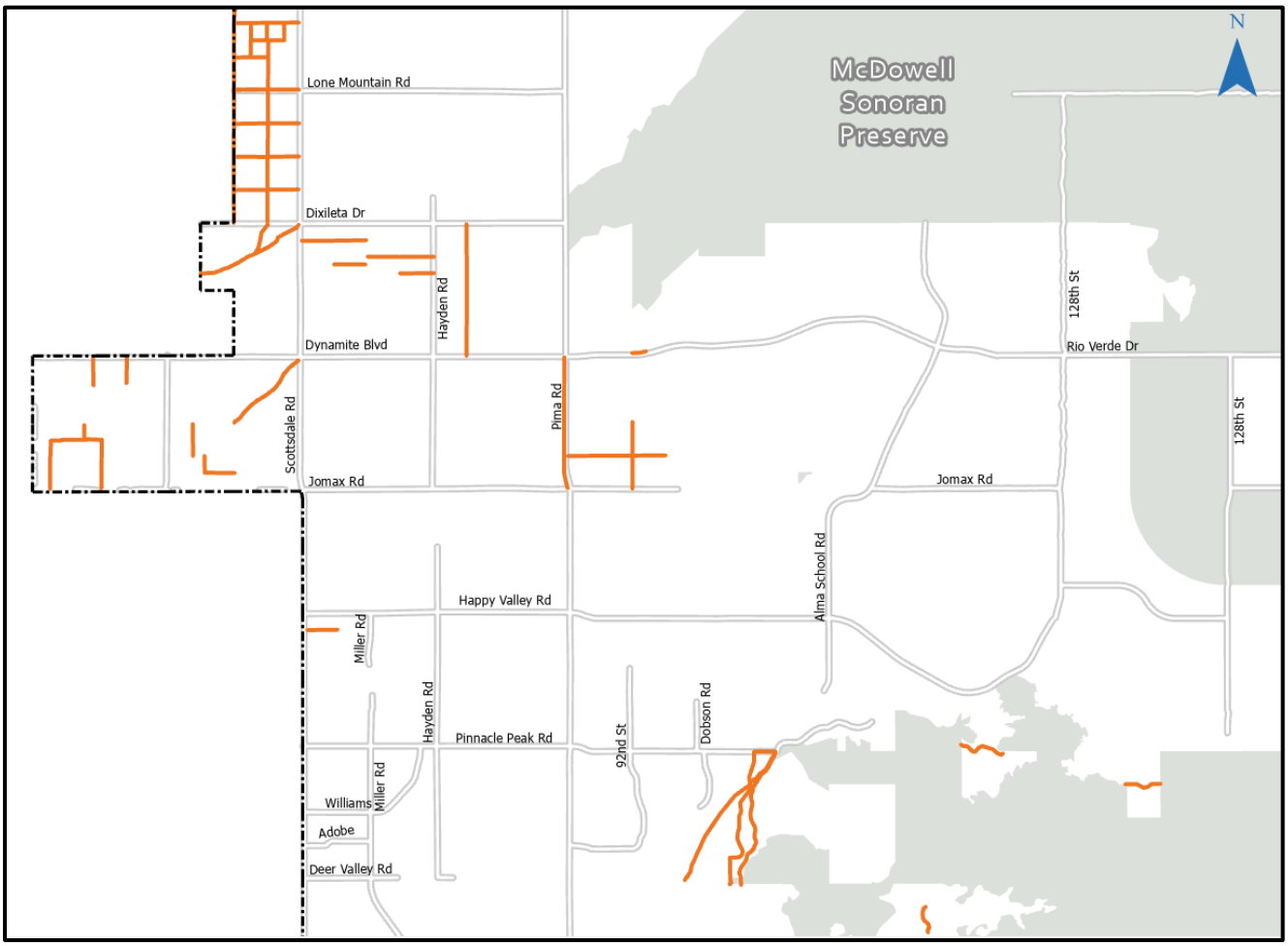


Figure T-5 Northern Area B – Planned Trail Segments Removed from Network

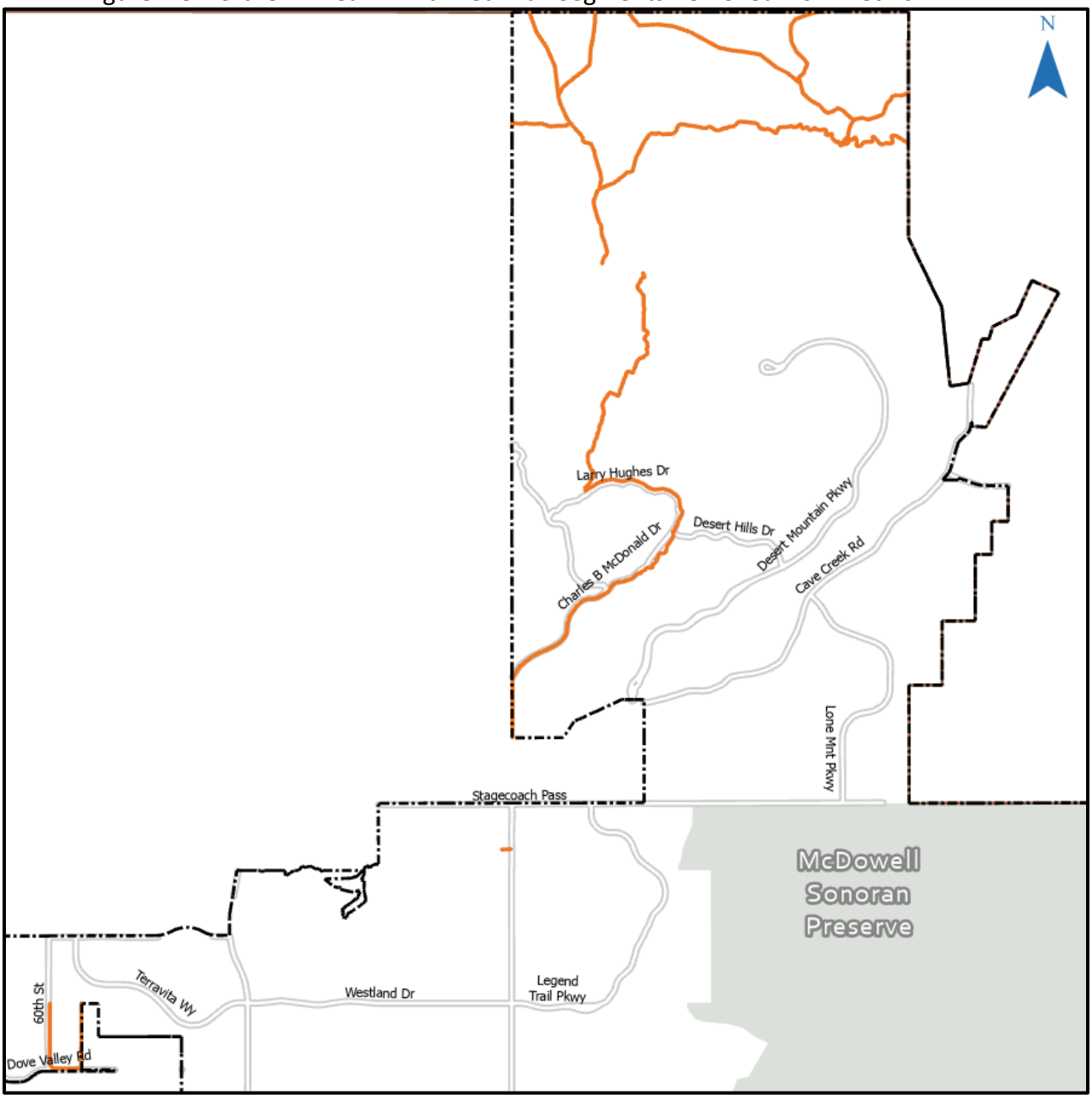
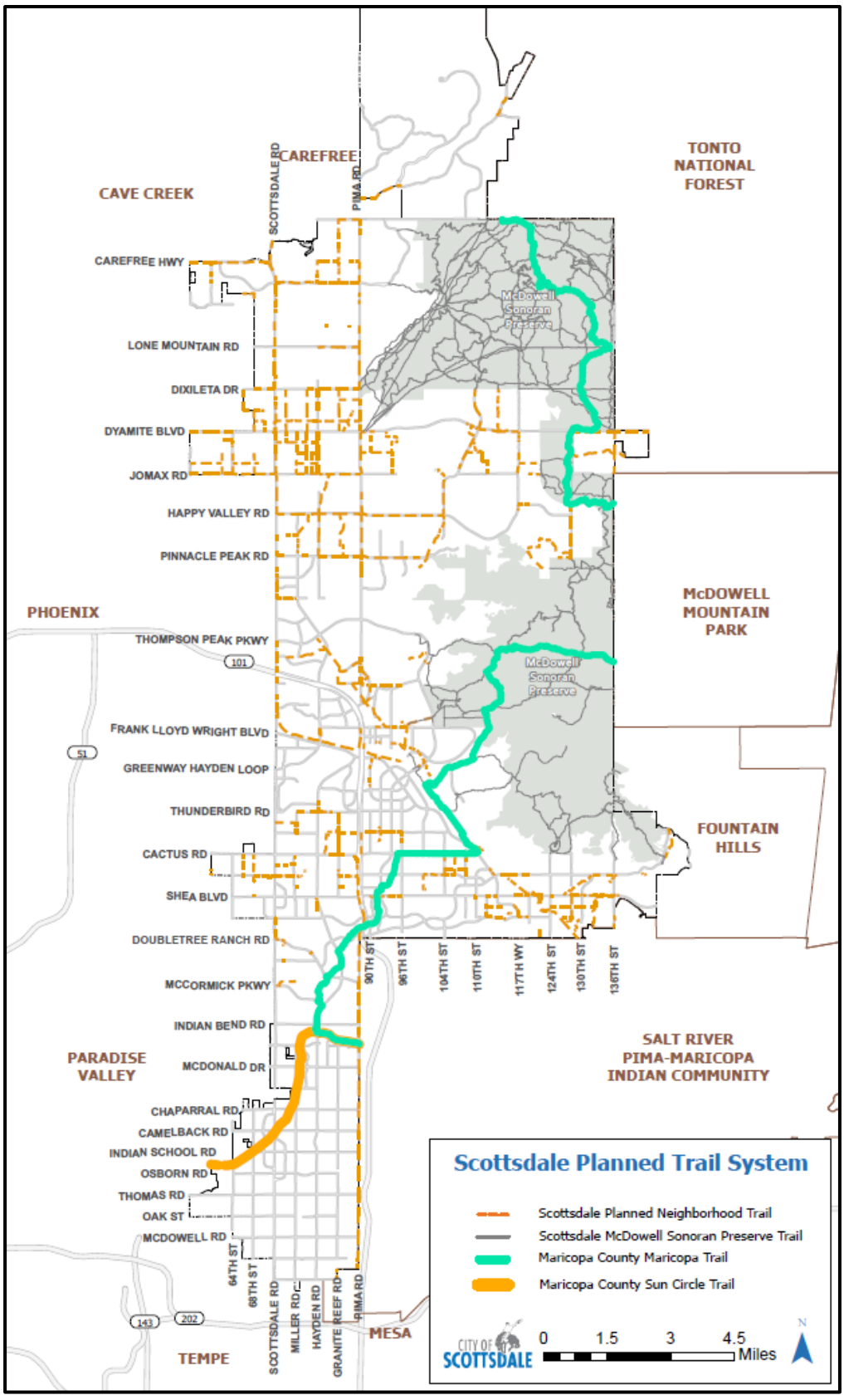


Figure T-6 depicts the planned trail network outside of the Scottsdale's McDowell Sonoran Preserve including network adjustments.

Figure T-6 Scottsdale Planned Trail System



PERFORMANCE MEASURES

1) Mileage of completed trails per year
2) Mileage of rehabilitated trails per year
3) Percent of planned trail network constructed per year
4) Percent of population within ¼ mile network distance to trail

PEDESTRIAN ELEMENT

INTRODUCTION

Scottsdale's sidewalks and enhanced crossings provide a network for people walking, skating and using personal assistive mobility devices. The Pedestrian Element will assess priorities to make Scottsdale more walkable and provide safe, convenient, barrier-free pedestrian ways and facilities that promote walking short distances. For example, shade along sidewalks and bus stops can make walking and transit use much more comfortable.

Specific sidewalk standards are found in the *Design Standards and Policies Manual* (DS&PM) Street Geometrics and Public Pedestrian Facilities sections. The TAP Streets Element provides cross sections by functional classification [will link] with guidance similar to that in the DS&PM. The cross sections outline sidewalk placement, which vary by functional classification and character areas.

One significant change to the pedestrian element in the 2021 TAP is a new policy to locate shade trees on the west side of north/south streets and on the north side of east/west streets on the side of the sidewalk, opposite the street. Previously shade trees were placed between the sidewalk and the street. The new orientation provides the most shade for pedestrians during the hottest months of the year.

GOALS

1) Build and maintain pedestrian facilities that form a continuous and interconnected network with seamless connections to public transit, schools, neighborhoods and community destinations.

2) Provide pedestrian amenities, promote land uses and encourage private efforts that enhance public spaces, neighborhoods, commercial and employment areas.

3) Implement education, encouragement and data collection programs to increase walking and reduce the number and severity of pedestrian crashes.

4) Create and improve pedestrian access between neighborhoods and to transit routes.

5) Maintain and enhance the current pedestrian network to meet current design standards.

6) Provide pedestrian/cycling enhanced crossings where appropriate.

POLICIES

1) Construction Priorities: Prioritize use of capital improvement funds to complete projects that address accessibility concerns, network gaps, school and/or transit access and reductions in neighborhood barriers.

2) Roadside Landscaping: Orient shade tree placement to maximize shade on the sidewalk during the summer months (west of west-side sidewalk on north/south roads, north of north-side sidewalk on east/west roads).

3) Roadway Restriping: Improve pedestrian comfort through striping changes that provide greater separation from vehicles though the installation of new bike lanes, wider bike lanes or buffered bike lanes.

4) Neighborhood Barriers: Reduce the length of continuous perimeter walls to encourage pedestrian connectivity to collector and arterial streets and shared use paths and transit connections.

5) Enhanced Pedestrian Crossings: Develop and use the *Guidelines to Identify Pedestrian Crossing Treatments* to support grade separations, pedestrian signals and other crossing enhancements.

6) Intelligent Transportation Systems (ITS): Identify and test solutions that balance traffic flow with improved pedestrian mobility in key corridors.

7) Safety: Work with public safety staff to improve enforcement of traffic laws related to pedestrians. Collect, analyze and report on pedestrian collision data on a regular basis and develop remediation measures to address high-frequency and high-volume collision locations. Support Safe Routes to School programs.

SIDEWALK CROSS SECTIONS

Trees are located on the west or north side of the sidewalk to provide maximum shade during hotter times of the year. In previous plans, trees were located between the sidewalk and the curb on both sides of the street. Lower growing landscaping will typically remain in a 3- to 4-foot buffer between the sidewalk and curb. Figure P-1 shows the current cross section and location of trees, while Figure P-2 shows the proposed change in location of trees and shade. Figure P-3 show the new orientation of shade trees on streets. Cross sections did not change on the south side and east side of streets in relation to the placement of trees and continue to place a landscape buffer between the sidewalk and curb.

Figure P-1
Existing Cross Section

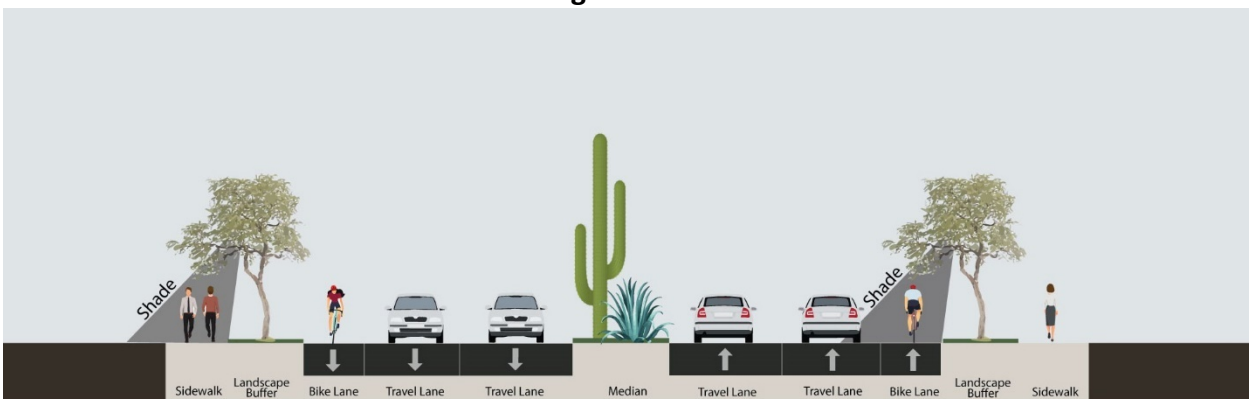


Figure P-2

Cross Section with Proposed Tree Position Change

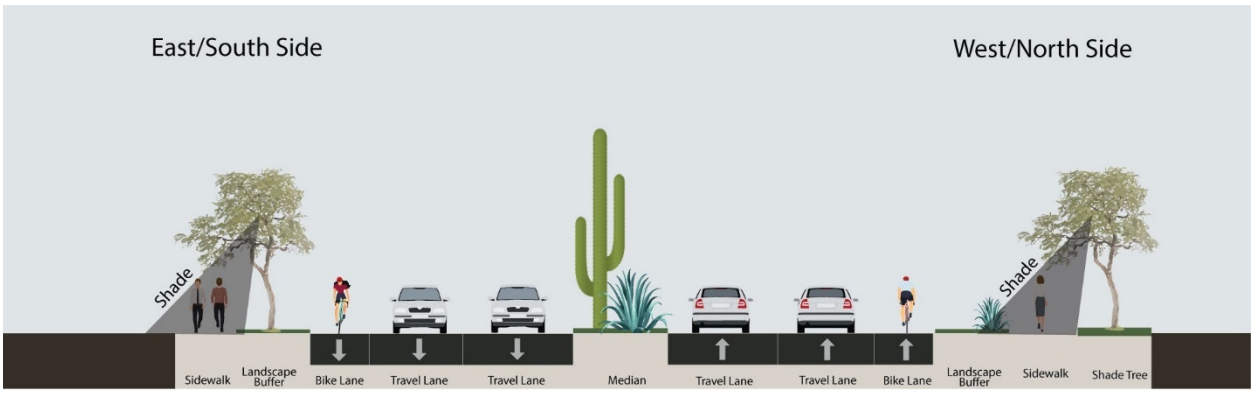


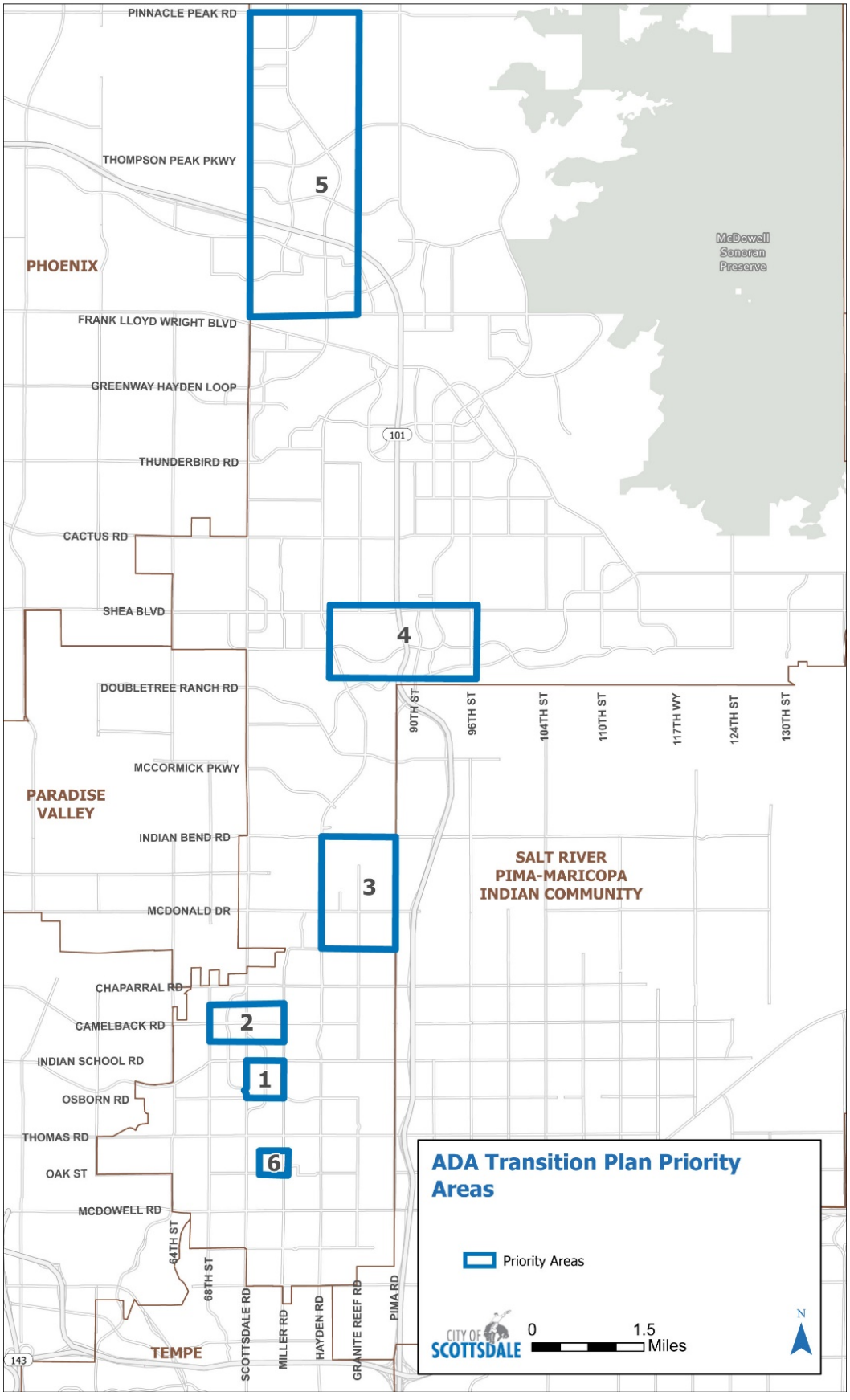
Figure P-3
Proposed Cross Section

In areas where sidewalks are less likely to experience high volumes of pedestrians due to lower density and/or subdivision access restrictions, one side of four-lane and six-lane streets has a narrower sidewalk of six feet, while maintaining an eight-foot-wide sidewalk on the other side. The wider sidewalk also serves as a side path for bicyclists. Some roads are planned to have a 10-foot multi-use path in place of a sidewalk to provide regional non-motorized connections to the city of Phoenix.

ACCESSIBILITY

The 2021 draft Scottsdale Americans with Disability Act (ADA) Self-Evaluation and Transition Plan Update prioritizes areas for improvements for pedestrians along streets and transit routes (shown in Figure P-4). Additional ADA improvements will continue to be included on streetscape, pavement maintenance, and developer-driven projects.

Figure P-4 Priority Areas



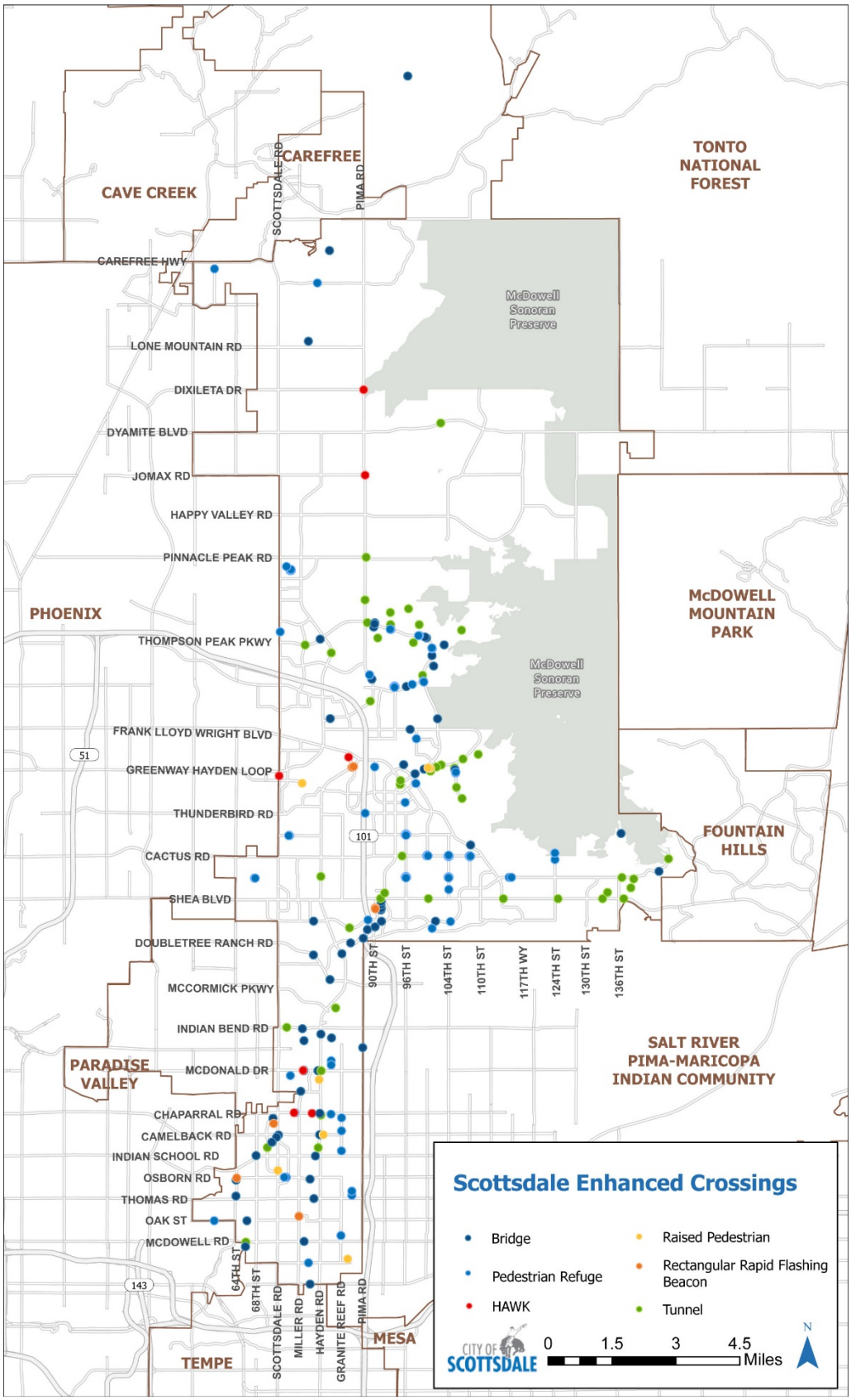
ENHANCED CROSSINGS

Trends show that we are more active than previous generations. With the movement towards livable communities, walking and biking are becoming more attractive to enhance the quality of life. Enhanced crossings are integral in accomplishing connectivity and safety and promote the health, livability and equity of a community. There are two main categories of enhanced crossings: grade separated and at-grade crossings. Criteria such as sight distance, proximity to intersections, traffic volumes, roadway cross section and nonmotorized volumes are used to determine what type of crossing is appropriate at a given location.

Enhanced bicycle, pedestrian and equestrian crossings provide safer connectivity at various locations including intersections, physical barriers and high nonmotorized activity areas. Enhanced crossings also provide regional connectivity, transit access and ADA accessibility. Types of enhanced crossings include bridges, tunnels, pedestrian refuge islands, raised pedestrian crossings, high intensity activated crosswalks (HAWKs) and rectangular rapid flashing beacons. Currently, there are 219 enhanced crossings in Scottsdale ranging from raised pedestrian crosswalks to tunnels and bridges.

As shown in Figure P-5, enhanced crossings are more prevalent in central and southern Scottsdale due to the context of the built environment. Central and southern Scottsdale has an urban and dense environment compared to northern Scottsdale, which has a suburban and low-density environment. A myriad of opportunities remain in central and southern Scottsdale to integrate enhanced crossings. A pedestrian refuge is the most commonly implemented enhanced crossing Scottsdale because it serves neighborhoods and is cost-effective.

Figure P-5 Scottsdale Enhanced Crossings



GRADE-SEPARATED CROSSINGS

A grade-separated crossing is a bridge, underpass or tunnel that allows nonmotorized traffic to avoid any interaction at street crossings, intersections or a physical barrier. Grade separated crossings are encouraged where paths and trails intersect major streets or canals. Examples of grade-separated crossings are shown in Figure P-6.

Figure P-6 Grade Separated Crossings

Bridge **Underpass** **Tunnel**

Grade-separated crossings should be required with new construction where major roadways cross a trail or path. Design of new drainage culverts should accommodate a path and trail and consider the needs of bicyclists, pedestrians and equestrians.

AT-GRADE CROSSINGS

Where grade-separated crossings are not viable or necessary, at-grade crossings can be used. In many locations and for many reasons, grade separation and/or signalization may not be feasible or warranted. Several specific treatments can be incorporated at designated crossings that give path and trail users a greater sense of security, comfort and convenience.

Signalized At-grade Crossings

In the absence of a grade-separated crossing, a signalized crossing should be considered if warranted, according to the Manual on Uniform Traffic Control Devices (MUTCD). Examples of signalized crossings include a Rectangular Rapid Flashing Beacon or High Intensity Activated Crosswalk (HAWK) (see Figure P-7).

Figure P-7 – Signalized Enhanced Crossings

Rectangular Rapid Flashing Beacon

HAWK

Unsignalized At-Grade Crossings

Unsignalized at-grade crossings are considerably less costly than grade-separated crossings. Streets with many lanes, higher traffic speeds and higher traffic volumes would better accommodate bicyclists and pedestrians with the use of a greater number of design treatments such as a Raised Pedestrian or Pedestrian Refuge (see Figure P-8).

Figure P-8 Unsignalized At-Grade Crossings

Raised Pedestrian

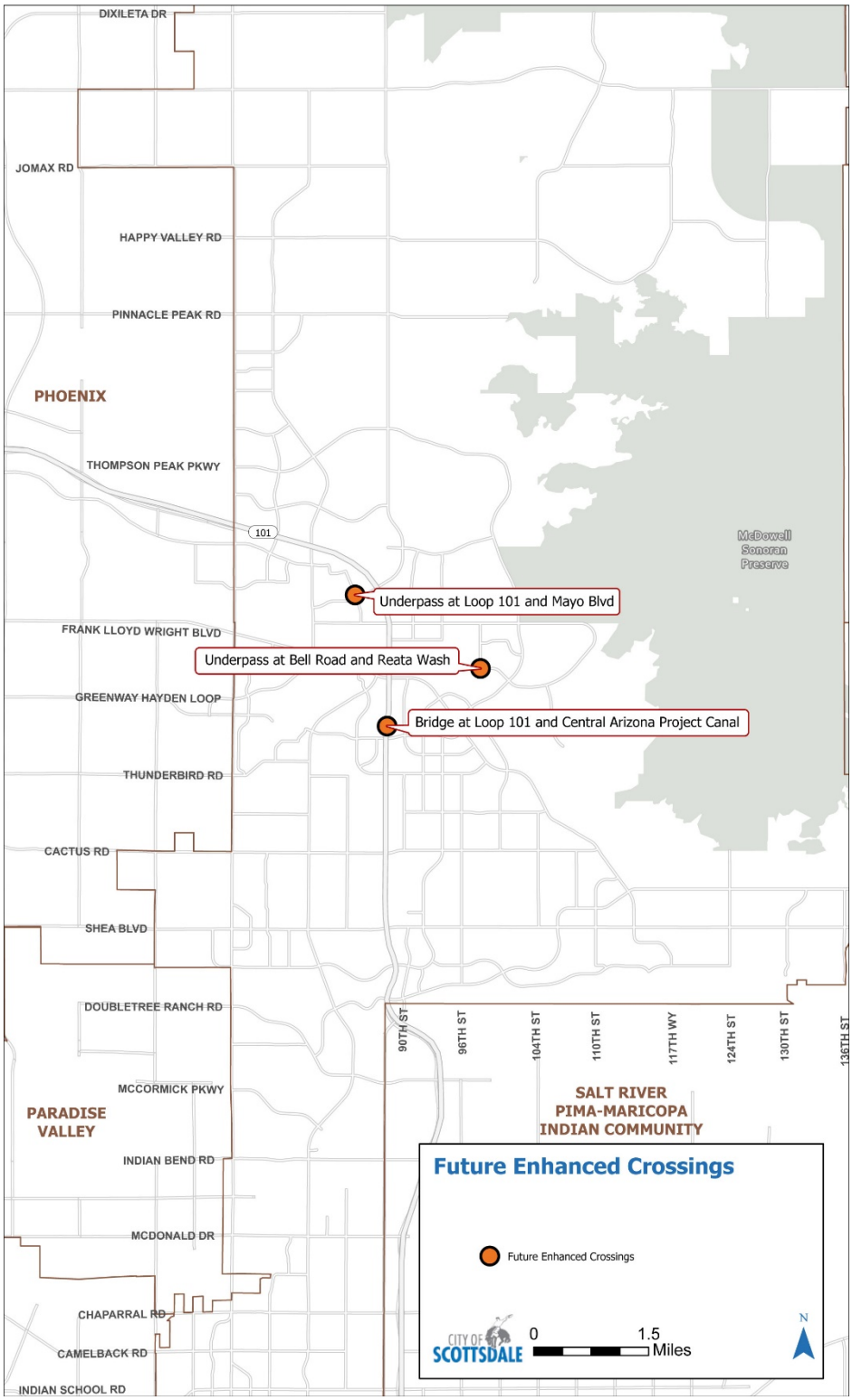
Pedestrian Refuge

FUTURE ENHANCED CROSSINGS

Scottsdale recently developed *Guidelines to Identify Pedestrian Crossing Treatments* to assist in determining what type of crossing is appropriate for an identified location. The document incorporates recommendations from state and federal transportation agencies, provides a standardized process to evaluate new crossing locations and provides criteria and considerations for establishing a new enhanced crossing.

In addition to using established guidelines for the installation of new enhanced crossings, Scottdale continues to be proactive in the planning and future capital programming of three identified locations that are critical for regional connectivity. These locations are a bridge over the Loop 101 along the Central Arizona Project Canal, an underpass at Bell Road within the Reata Wash to provide connectivity between WestWorld and Scottsdale's McDowell Sonoran Preserve and an underpass at Loop 101 at the Mayo Boulevard alignment (see Figure P-9).

Figure P-9 Future Enhanced Crossings



PEFORMANCE MEASURES

1) Reduce citywide per capita pedestrian collision occurrences, based on six-year moving average data.
2) Complete pedestrian improvements identified as Priority Areas in the ADA Self-Evaluation and Transition Plan Update within five years.
3) Maintain a positive (excellent/good) rating of 80 percent or better in the National Community Survey for “Ease of Walking.”
4) Percentage of arterial and collector roadway miles with sidewalks that meet current design standards.
5) Percentage of population within ¼ mile network walking distance to a collector or arterial street.

IMPLEMENTATION PROGRAM

INTRODUCTION

There will always be a finite level of resources available to meet current and future transportation system needs. Therefore, a program to prioritize new transportation infrastructure projects, programs and services must also consider the requirements necessary to preserve, maintain and operate/optimize the existing transportation system. Goal 2 in the Street Element of this Transportation Action Plan (TAP) provides a good example of this concept:

> "Develop and manage the street network in a manner that places reliance on maintaining existing infrastructure and improving the efficiency of the existing system before adding new roadway capacity."

The major recurring revenue sources available for transportation are the city's annual share of the State Highway User Revenue Fund (HURF) at $17.9 million in 2020-21, which is primarily generated through per gallon taxes on fuel and the 0.2% Transportation privilege (sales) tax at $23.6 million in 2020-21. HURF revenue is shared with cities based on population. When looking at new 2020 census data, HURF revenue is forecast to drop by approximately $1.1 million per year, versus pre-census 5-year estimates, and will be less in 2025-2026 than was collected in 2020-21. The forecasted 0.2% sales tax revenue is expected to average 3% growth annually through 2025-26.

Both revenue sources have restrictions on their use. HURF expenditures must be tied to the operation, maintenance and improvement of the street system, including traffic signals. However, HURF revenues provide less than 80% of the city's actual costs to preserve, maintain and operate the street system. Up to one-half of the 0.2% sales tax can be used for planning and operations-related transportation costs. The remaining half of the 0.2% sales tax is programmed for capital improvements.

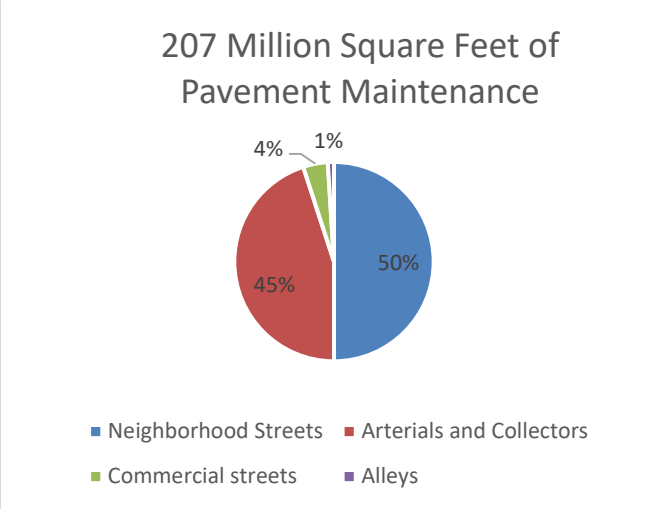
A much smaller recurring revenue source is the state's Local Transportation Assistance Fund (LTAF), which is also shared based on population. Annual LTAF revenue totals approximately $650,000 per year, less than 2% of the total generated by HURF and the 0.2% Transportation sales tax. LTAF can only be used for transit-related expenses.

Other revenue sources are reliant on voter-approved sales tax extensions, competitive grants and federal funding levels. These include the city's 0.1% temporary Transportation sales tax (expires 1/31/29) at $12.4 million in 2020-21. Proposition 400 regional transportation sales tax

(expires 12/31/25) will provide a total of $240.4 million and federal one-time grants and federal transit preventative maintenance grants will provide of total of $30.7 million through 2025-26.

EXISTING TRANSPORTATION SYSTEM (2021)

Pavement/Striping/Signage/Concrete
The city maintains 207 million square feet (3,380 lane miles) of street and alley pavement. The street system also includes striping and signage that must be maintained and renovated/replaced on an ongoing basis. Sidewalk maintenance issues are funded out of the pavement-related operating budget, while new ramps that meet Americans with Disabilities Act (ADA) requirements are funded from the pavement overlay capital program.



Intelligent Transportation/Traffic Signals/Streetlights
Many intersections in Scottsdale are fully signalized, and a large portion of these are connected to the city's Intelligent Transportation System (ITS). In addition, most streets in areas not covered by Natural Area Open Space development requirements, generally south of the Thompson Peak Parkway east/west alignment, have a street lighting system. The city is responsible for operation and maintenance of 318 traffic signals, 175 ITS cameras and 8,966 Streetlights.

Grading & Drainage/Bridges & Culverts/Sweeping/Dust Control
Due to the city's topography, drainage management is another critical requirement within the transportation system. The city is responsible for 232 bridges and large culverts that are part of the Arizona Department of Transportation's Bridge Inspection Program. The city also maintains 95 washes and drainage channels comprising 160 acres and including 9000 grates, catch basins, handrails and guardrails.

To address airborne particulates, a major concern in the Phoenix region, and stormwater quality, the city operates a program that sweeps major streets twice per month, the Old Town/Entertainment District five times per week, residential streets once per month and shared use paths (57 miles) twice per month. The city also provides additional sweeping service and maintenance when requested. Over 20,000 miles of sweeping occurs annually. The city also

has a comprehensive dust control program on unpaved roads and shoulders that includes dust palliative roads (29 miles), shoulders (76 miles), alleys (95 miles) and lots. Maintenance grading is also required on 8 miles of roads and 28 miles of shoulders that do not have dust palliative treatment due to lower traffic volumes.

Medians and Right of Way

The city is responsible for 27 million square feet (620 acres) of median and back of curb (right of way) landscaping, which is part of the city's standard cross section requirements for roadway projects. Medians are typically 16-24' wide, depending on the street classification, and the landscaping often includes irrigation systems that also require maintenance. In some master planned communities, the homeowner's association takes on primary responsibility for maintaining median and right of way landscaping.

Transit

The city owns and maintains a fleet of twenty-one buses for use on trolley routes. The city also maintains 593 bus stops, 197 of which include bus shelters. The buses, which cost more than $500,000 each, have been purchased with a combination of federal grants and regional Proposition 400 funding and therefore have not impacted the city's transportation budget. If no replacement for Proposition 400 is enacted, however, the city will likely be responsible for at least 20% of bus purchase costs beginning in 2026. Additionally, bus routes in Scottsdale and associated paratransit service, which receive approximately $12 million in regional funding per year from Proposition 400, would not be available beginning in 2026.

Paths and Trails

Maintenance or sweeping costs for Scottsdale's 129 miles of concrete shared use paths, including side paths in roadway corridors, are absorbed in operating budgets discussed previously. The city does not program dedicated funds for maintaining its 150 miles of trails, the majority of which are the responsibility of adjacent property owners or homeowner associations.

TRANSPORTATION INVESTMENT PRIORITIES

The following list of ranked priorities will be used to guide transportation system investments:

1) Preserve/Maintain/Optimize existing infrastructure.
2) Meet Americans with Disabilities Act, Air Quality, Water Quality and other regulatory requirements.
3) Enhance safety and test new concepts/technology.
4) Provide transit service with minimum 30-minute frequency.
5) Develop capital projects with funding from outside sources.

6) Develop capital projects that are funded only by the city and prioritize non-motorized access.

The following factors, in addition to cost, will guide transportation investment in specific Capital Improvement Plan (CIP) projects and programs:

- Condition and maintenance cost of existing assets
- Safety and/or regulatory compliance requirements
- Citizen input
- Expected usage levels (current and projected)
- Connection to regional networks
- Completion of a network gap
- Coordination with new development
- Connection to transit service
- Recommendation in a regional plan
- Expansion of non-auto options

CAPITAL IMPROVEMENT PLAN (CIP) – POTENTIAL PROJECT AND PROGRAM LIST

Taking into consideration the investment priorities and project review factors described in the previous section, the table below provides the recommended list of potential CIP projects. Projects that are currently included in the draft Proposition 400 Extension regional plan (as of July 2022) are highlighted in green. The projects included in the CIP list all remain subject to the city's annual budget development and prioritization process. Projects with authorized funding will continue to follow the public review process that occurs during design and prior to construction.

Category	Project/Program Name	Description
New Roadway Capacity	Legacy Boulevard Bridge	Construct the second bridge and approaches on Legacy Boulevard over the Reata Pass Wash. The bridge is approximately 250' long x 40' to accommodate 2 travel lanes, bike lane and sidewalk.
	Dynamite Boulevard - 56th to Pima	Construct a complete street from 56th Street to Pima Road (4 miles). Depending on volume forecasts, the project will be widened to either 3 or 5 lanes. A 5-lane roadway is more likely east of Scottsdale Road. Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lanes, 6-8' sidewalk on one side, 8-10' side path and 6-8' trail. The project crosses the Rawhide Wash (100-year discharge of 9,000 cfs) approximately 1/2 mile west of Pima Road. A bridge span of approximately 300' is anticipated. Additional turn bay capacity and signal modifications are planned at Scottsdale Road and Pima Road. A new major intersection at the Hayden Road alignment is also planned.
	Pinnacle Peak Road - Scottsdale Road to Pima Road	Construct a 4-lane complete street between Scottsdale and Pima roads (2 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, an 8-10' side path and 6-8' multi-use trail. Additional turn bay capacity and signal modifications at key intersections may be required. Right-of-way acquisition will be necessary in some locations.
	Miller Road - Princess Drive to Legacy Boulevard	Construct a 4-lane complete street between Princess Drive and Legacy Boulevard (1 mile). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median and 8' sidewalks. The project will cross the Loop 101 using the new underpass completed in 2021. The majority of this project is expected to be constructed by private development.

	Scottsdale Road - Loop 101 to Jomax Road	Construct a 4- to 6-lane complete street (4.7 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' shared use path and 6-8' trail. A new bridge, using Scottsdale and Proposition 400 ALCP funds, has already been constructed over the Rawhide Wash (100-year discharge of 9,000 cfs) approximately 1,200' south of Pinnacle Peak Road.
	Happy Valley Road - Scottsdale Road to Pima Road	Construct a 4-lane complete street between Scottsdale and Pima roads (2 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' shared use path and 6-8' trail. The project crosses the Rawhide Wash (100-year discharge of 9,000 cfs) approximately 250' west of existing Hayden Road. A bridge span of approximately 300' is anticipated. Additional turn bay capacity and signal modifications are planned at Scottsdale Road and Pima Road. A new major intersection at the Miller Road alignment is also planned.
	Jomax Road - 56th Street to 94th Street	Construct a new 3-lane complete street between 56th and 94th streets (4.5 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, a 10' shared use path and 6-8' multi-use trail. Traffic signals and additional turn bay capacity at Hayden Road may also be included. Right-of-way acquisition will be necessary in some locations.
	Lone Mountain Road - 68th Street to Pima	Construct a new 3-lane complete street between 68th Street and Pima Road (2.5 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' multi-use trail. Right of way acquisition may be required in some locations.

	56th Street - Jomax to Dynamite	Construct a new 5-lane collector complete street between Jomax Road and Dynamite Boulevard (1 mile). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' multi-use trail. Traffic signals and additional turn bay capacity at Jomax Road and Dynamite Boulevard may also be included, and a roundabout is planned at the Pinnacle Vista Drive intersection. Right-of-way acquisition will be necessary in some locations.
	Mountain View Road - 92nd to 96th (requires reclassification in future)	Expand Mountain View Road from a 3-lane to a 5-lane complete street between 92nd and 96th streets. Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, and 6-8' sidewalk on each side. Right-of-way acquisition will be required.
	Shea Boulevard/Loop 101 Bypass	Construct roundabouts at up to three locations to facilitate travel on the Mountain View Road corridor between Loop 101 and 96th Street as an east/west alternative to Shea Boulevard, which is at or over capacity in this area. The intersections include Mt. View/90th, Mt. View/92nd, and Mt. View/96th.
	Hayden Road - Jomax to Dynamite	Construct a new 3-lane complete street between Jomax Road and Dynamite Boulevard (1 mile). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' multi-use trail. Traffic signals and additional turn bay capacity at Jomax Road and Dynamite Boulevard may also be included. Right-of-way acquisition will be necessary in some locations. The majority of this project is expected to be constructed by private development.
	North Old Town Intersection Improvements	Add capacity and improve vehicular and pedestrian safety at up to eight intersections in the vicinity of Scottsdale Fashion Square and the Scottsdale Waterfront high activity areas. The intersections are Scottsdale/Camelback, Scottsdale/Fashion Square, Scottsdale/Highland, Scottsdale/Rancho Vista, Scottsdale/Chaparral, Goldwater/Highland, Goldwater/Camelback and Camelback/Marshall Way. A roundabout is planned at the Goldwater/Highland location.

	Alma School Road - Happy Valley to Dynamite	Complete the missing 1/2-mile gap in the minor arterial roadway near Jomax Road, realign and improve the Alma School Parkway and Jomax Road intersection to a roundabout, add 8-10' shared use path and 6'-8' shared use trail on west side, add missing sections of 6' sidewalk on east side and improve roadside and cross drainage.
	Stagecoach Pass Road - Pima to 97th	Widen Stagecoach Pass Road for 1.1 miles to accommodate bike lanes, construct a 6' sidewalk on the north side and improve cross drainage. The majority of this project is expected to be constructed by private development.
	128th Street - Ranch Gate to Rio Verde	Construct two 11' travel lanes with a 5' buffer and a 10' colored concrete path on the east side. The roadway would be constructed with grading but no drainage culverts.
	Scottsdale Road Intersection Improvements - Mountain View to Greenway	Construct additional turn lane capacity and/or pedestrian crossing improvements at up to 11 signalized intersections and new right turn bays at up to 15 locations. Major intersections include Shea Boulevard, Cactus Road, Thunderbird Road and Greenway Parkway.
	Dixileta Drive - 66th Street to Pima	Construct a new 3-lane complete street between 66th Street Road and Pima Road (2.75 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' multi-use trail. Right-of-way acquisition may be required in some locations.
	Rio Verde Drive - 118th to 144th	Construct a 4-lane complete street between 118th and 144th streets (3.25 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' trail on north side. A wildlife underpass or overpass may be installed in the vicinity of the 124th Street alignment. A roundabout or traffic signal may be installed at 136th Street.
	136th Street - Rio Verde to Lone Mountain	Construct a new 3-lane complete street between Rio Verde Drive and Lone Mountain Road (2 miles). Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane, 6-8' sidewalk or trail on the east side. Right of way acquisition will be required in some locations.

Transit	Scottsdale Road BRT - Roosevelt Street to Camelback Road	Design and construct infrastructure and operate a bus rapid transit system on Scottsdale Road that would connect to Tempe and Chandler. The project is proposed in the new Regional Transportation Plan that is being prepared by MAG.
Complete Street Renovations	Hayden Road Complete Street - McKellips Road to Indian School Road	Reconfigure the existing 6-lane Hayden Road between McKellips Road and Indian School Road as a 4-lane complete street with additional intersection turn lane capacity, increased access management (raised medians), on-street bike lanes and accessible 8' minimum width sidewalks.
	Via Linda Active Transportation Corridor	Reconfigure the Via Linda corridor between 90th Street and Frank Lloyd Wright Boulevard (3.7 miles) to meet arterial complete street standards. Improvements include continuous sidewalks that meet current arterial standards for setback from curb (other than near transit stops), accessibility and freedom from obstructions. The project will also create continuous 4-6' bike lanes through modifications to existing curbs and/or median edges. 1/4-mile pedestrian crossings will also be considered. An existing pedestrian overpass near the 102nd Street alignment that was constructed over 30 years ago may also need modifications by the time this project is scheduled. The city operates local bus service, with approximately ¼-mile stop spacing, on the entire project length.
	Scottsdale Road Active Transportation Corridor - Highland to Frank Lloyd Wright	Reconfigure the Scottsdale Road corridor between Highland Avenue and Frank Lloyd Wright Boulevard to meet arterial complete street standards. Improvements include continuous sidewalks that meet current arterial standards for width (8' minimum), accessibility and freedom from obstructions. The project will also create continuous 5-6' bike lanes. Three miles of frontage in this regional corridor is in Paradise Valley and 2.8 miles of frontage is in Phoenix.

	92nd/94th Street Active Transportation Corridor	Reconfigure the 92nd/94th Street corridor between Shea Boulevard and Thunderbird Road (2.2 miles) to meet arterial complete street standards. Improvements include continuous sidewalks that meet current arterial standards for setback from curb (other than near transit stops), accessibility and freedom from obstructions. The project will also create continuous 4-6' bike lanes through modifications to existing curbs and/or median edges. Intersection improvements at Cactus Road and 1/4-mile pedestrian crossings will also be considered. The city operates local bus service, with approximately ¼-mile stop spacing, on the entire project length.
	Scottsdale Road Active Transportation Corridor - McKellips to Roosevelt	Reconfigure the Scottsdale Road corridor between McKellips Road and Roosevelt Street to meet arterial complete street standards. Improvements include continuous sidewalks that meet current arterial standards for setback from curb (other than near transit stops), accessibility and freedom from obstructions. The project will also create continuous 5-6' bike lanes. The western frontage in this regional corridor is in Tempe.
	Miller Road Active Transportation Corridor - Marigold Lane to Jackrabbit Road	Reconfigure the Miller Road corridor between Marigold Lane and Jackrabbit Road to provide sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. Pedestrian crossing treatments may also be necessary at several ¼-mile locations. The majority of this 5-mile corridor has been in its current configuration for more than 40 years. For 3 miles, Miller Road is used for local bus service that connects to 3 east/west regional bus routes.
	68th Street Active Transportation Corridor	Reconfigure the 68th Street corridor between Continental Drive and Jackrabbit Road (4 miles) to provide sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. The section north of Chaparral Road will require widening to provide space for bike lanes. Pedestrian crossing treatments may also be necessary at several ¼-mile locations. The southern 2.5 miles of the project corridor is used as a local bus route. The corridor also connects to regional bus routes at four east/west streets and to Tempe's local circulator at Continental Drive. Approximately 0.8 miles of frontage on the northern end of the project corridor are in Paradise Valley.

	Oak Street Active Transportation Corridor - 56th Street to Pima Road	Reconfigure the Oak Street corridor between 56th Street and Pima Road to provide sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. Pedestrian crossing treatments may also be necessary at several ¼-mile locations. The majority of this 4-mile corridor has been in its current configuration for more than 40 years. Oak Street has 1 mile of transit service and intersects with two regional bus routes and 2 local routes.
	Downtown Couplet Active Transportation Improvements	Provide continuous 6-8' sidewalks and bike lanes on the City's 3-mile downtown couplet roadway. The project will include reducing the roadways (Goldwater Boulevard and Drinkwater Boulevard) to 2 lanes in each direction and adjusting median and curb locations to allow for bike lanes and sidewalks in both directions. An improved crossing treatment will be necessary on Drinkwater Boulevard north of Earll Drive
	Roosevelt Street/Continental Drive Active Transportation Corridor	Reconfigure the Roosevelt Street/Continental Drive corridor between 66th Street and Latham Street (3 miles) to provide bike lanes or shared lanes and sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. Pedestrian crossing treatments may also be necessary at several ¼-mile locations, as well as at Scottsdale Road and Hayden Road. Single lane roundabouts may be considered at the 68th Street, Miller Road and Granite Reef Road intersections. Two miles of the corridor are on local bus routes operated by Scottsdale and/or Tempe. It also intersects with two regional bus routes. The southern frontage west of Scottsdale Road (0.75 miles) is in Tempe.
	Granite Reef Road Active Transportation Corridor	Reconfigure the Granite Reef Road corridor between Roosevelt Street and Lincoln Drive to provide sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. Pedestrian crossing treatments may also be necessary at several 1/4 mile locations. Granite Reef Road between Roosevelt Street and Camelback Road (3 miles) has been designated by MAG as an Active Transportation Grid Tier 1 and Tier 2 corridor. One mile of the corridor has transit service, and the entire corridor intersects 3 east/west bus routes.

	Chaparral Road Active Transportation Corridor	Reconfigure and realign Chaparral Road between 66th Street and 69th Place (0.5 miles) to provide two 11' travel lanes, 5' buffered bike lanes and setback sidewalks that meet current standards for width (6' minimum), accessibility and freedom from obstructions. Single lane roundabouts may be constructed at the 66th Street and 68th Street intersections.
	Westland Road - Hayden to Pima	Widen/reconstruct/realign Westland Road between Hayden and Pima roads (1 mile) as a 3-lane complete street. Other project elements will include 5-6' bike lanes, curb/gutter, catch basins, storm drains/culverts, center turn lane/raised median, 6-8' sidewalk on one side, 8-10' side path and 6-8' multi-use trail. A roundabout will be considered at the Westland/Hayden intersection. Right-of-way acquisition will be necessary in some locations.
	Cactus Road Active Transportation Corridor - 60th to Loop 101	Modify curb lanes as necessary to allow for 5' bike lanes, construct approximately 1.5 miles of missing sidewalk (6-8') and reconstruct approximately 4 miles of sidewalk that is too narrow and sits mostly back of curb. An 8' side path exists on the north side from Scottsdale Road to 84th Street. Frontage on the north side of the road between 60th Street and Scottsdale Road is in Phoenix.
Shared Use Paths	Indian Bend Wash Shared Use Path Expansion - McKellips Road to Shea Boulevard	Redesign and widening/reconstruction of the Indian Bend Wash shared use path system between McKellips Road and Shea Boulevard (approximately 10 miles). The improvements will meet current design standards for width, slope and accessibility that were not in place when most of the pathway was built in the 1970s and 1980s. Impacts to the usability of the path due to adjacent irrigation and ponded stormwater will be addressed and a new bridge will be required at the Osborn Road crossing. Improved accommodations for cyclists at the two remaining signalized roadway crossings, Indian Bend Road and McCormick Parkway are also needed. Phase I is funded in the FY 22-26 CIP.
	Pima Shared Use Path - Roosevelt to McDowell	Reconstruct and widen approximately 0.7 miles of existing 8' path that is in poor repair. The new width will be 10'. It is expected that the path will continue south when the Salt River Pima-Maricopa Indian Community extends Pima Road to the Curry Road alignment.

	CAP Path and Trail	Complete the CAP Trail shared-use path between Scottsdale Road and 124th Street. The project will include an 8-10' concrete path and grade-separated crossings at Thompson Peak Parkway, Via Linda and Shea Boulevard. Approximately 2.3 miles of the 8.3-mile corridor have been constructed by the city or adjacent landowners. The 3 grade separated crossings will pass under existing bridges. A separate proposal for a Loop 101 overpass bridge has also been developed.
	WestWorld Area Path and Trail Connections	Construct approximately 5.5 miles of 10' shared use path and 6-8' trail that link the upper Indian Bend Wash Path System to the McDowell Mountain Preserve, the north Pima Road Path and Thompson Peak Park. Grade-separated crossings will connect to existing drainage structures at Thompson Peak Parkway and Bell Road and to buried tunnels at Pima Road and Hayden Road.
	Shea Boulevard Shared Use Path - 142nd Street to Eagle Mountain Parkway	Construct a 10’ wide shared use concrete path, handrail, and new guardrail along curb on the south side of Shea Boulevard from the existing section of shared use path at 142nd Street east to Eagle Mountain Parkway in Fountain Hills. Partnership with Fountain Hills is required.
	Shea Boulevard Shared Use Path Gap Connections	Complete approximately 4.6 miles of 8-10' shared use path gaps along the south side of Shea Boulevard between 64th Street and 142nd Street. Approximately 4.4 miles of 8' shared use path separated from back of curb has been constructed over the past several decades by adjacent development and/or the city. There is not sufficient space on street to add bike lanes by narrowing travel lanes.
	CAP/Loop 101 Bike and Pedestrian Bridge	A concept for the Loop 101 overpass bridge was developed using a MAG design assistance grant in 2014. This structure, including approaches, is approximately 2000 feet long and is separate from the CAP Path & Trail project.
	Bicycle/Pedestrian Bridge at Loop 101 and Union Hills	Construct a new bicycle/pedestrian bridge across the Loop 101 on the former Union Hills Road alignment and approximately 0.6 miles of 10' shared use path from Loop 101 to Pima Road. An underpass at Pima Road to connect to the Indian Bend Wash Path extension may also be constructed.

	Indian Bend Wash Northwest Branch - Scottsdale Road to Indian Bend Road	Construct a new 10' shared use path connecting Scottsdale's Indian Bend Wash Path to an existing bridge where Scottsdale Road crosses the northwest branch of Indian Bend Wash (approximately 1.1 miles). This connection is part of a proposed Regional Conduit identified in MAG's 2020 *Active Transportation Plan.*
Street Reconfigurations and Enhanced Pedestrian/Bicycle Crossings	Pedestrian/Bicycle Crossing Enhancements	Improve the ability for pedestrians and bicyclists to safely cross busy streets. Improvements may include hybrid pedestrian beacons, rectangular rapid flash beacons, pedestrian refuges, pedestrian median barriers, crosswalk treatments, sidewalk gap removals and improved lighting or other approved technologies.
	Buffered Bike Lanes (Striping)	Repurpose underutilized curb lanes and/or unnecessary two-way center turn lanes by striping buffered bike lanes
	Neighborhood Greenways (Bicycle Boulevards)	Design and construct improvements to support Neighborhood Bikeways. Typical features of these corridors include restriping, traffic calming, wayfinding signage and enhanced crossings of major roadways.
	Grade Separated Pedestrian/Bicycle Crossings	Install new grade separated crossings for pedestrians and cyclists across major streets with strong active transportation use. The new connections would support connections from paths to parks/schools/employment across arterial roadways. Targeted corridors would include Scottsdale Road, Hayden Road and Shea Boulevard.
	Separated Bike Lanes	Repurpose underutilized curb lanes and/or unnecessary two-way center turn lanes by constructing physical buffers for bike lanes or constructing new side paths.
	Roadway Right Sizing	Repurpose underutilized curb lanes and/or unnecessary two-way center turn lanes by narrowing roadway footprints (moving curbs).

Preservation/Maintenance/ Optimization	Pavement Management	Complete ongoing street and alley pavement overlays and all associated improvements, which may include milling and surface treatments on the existing roadway; traffic control; new pavement thickness; water valve and manhole lowering and raising; signal detection upgrades from loops to video; Americans with Disabilities Act (ADA) upgrades for concrete ramps and signal push buttons; concrete repairs to curbs and sidewalks; new striping plans; new thermoplastic striping; and new signage for bike lanes and sidewalks.
	ADA Improvements	Scottsdale has developed an ADA Transition plan for improved pedestrian accessibility through the provision of improved sidewalk ramps, improved transit stops, modifications to driveway cross slopes and the elimination of sidewalk gaps. Improvements to corner ramps are also federally required for pavement overlay projects.
	Signal System and ITS Replacements and Upgrades	Scottsdale currently operates 318 traffic signals and 175 ITS cameras, all with limited lifespans for equipment and structures. Intelligent Transportation System (ITS) communications equipment and traffic control room requirements must also be upgraded over time. In addition, changes in technology, design standards and citizen expectations (including bicycle detection and emergency vehicle preemption) can affect how the signal system is managed and maintained.
	Streetlight Replacement and Maintenance	Scottsdale is responsible for close to 9,000 streetlights, all with limited lifespans for equipment and structures.
	Traffic Signals	Install new signals that have met warrants or perform major signal renovations at up to four intersections per year.
	Intersection and Roadway Corridor Safety Improvements	Scottsdale prepares a citywide collision report every two years, and the data is used to prioritize locations to conduct roadway safety assessments. The assessments often identify long-term capital improvement recommendations. Only a small number of these intersection improvements qualify for federal grants.
	Transit Stop Improvements	Construct new or renovate existing transit shelters and bus stop pads and furnishings. There are currently close to 600 bus stops in the city, of which 197 have shelters.

	Sidewalks	Install missing gaps and/or renovate short segments in the sidewalk system. Particular focus is given to locations near schools and/or along transit routes.
	Bikeways	Install missing gaps and/or renovate short segments in the shared use path network. Install, update or renovate path or bike-lane striping.
	Trails	Construct new trails or install missing gaps in the trail network. Update or renovate existing trail surfaces and signage.
	Neighborhood Traffic Management	The city works with neighborhoods to remediate traffic speed and cut-through concerns using an adopted policy.
	LED Conversion for Streetlights	Complete a citywide conversion of nearly 10,000 high pressure sodium streetlights to energy efficient LED lights. The project will also evaluate smart lighting management systems to provide insights into power usage and remote diagnostic and dimming capabilities.

LIST OF ABBREVIATIONS AND ACRONYMS

ADA - American with Disabilities Act
ADOT - Arizona Department of Transportation
ADT - Average Daily Traffic
APS - Arizona Public Service
SRTS - Safe Routes to School
BRT - Bus Rapid Transit
CAP - Central Arizona Project
CFR - Code of Federal Regulations
CIP - Capital Improvement Program
dBA - Decibels
DRB - Design Review Board
ESL - Environmentally Sensitive Land
HAWK - High Intensity Activated Crosswalk
HURF - Highway User Revenue Fund
IGA - Intergovernmental Agreement
ITS - Intelligent Transportation System
LAB - League of American Bicyclists
LTAF - Local Transportation Assistance Fund
MAG - Maricopa Association of Governments
MUTCD - Manual on Uniform Traffic Control Devices
NAOS - Natural Area Open Space
NTD - National Transit Database
SRPMIC - Salt River Pima-Maricopa Indian Community

LIST OF TERMS AND DEFINITIONS

Access Management	Proactive management of vehicular access points to land parcels adjacent to all manner of roadways.
Active Transportation	Any self-propelled, human-powered mode of transportation, such as walking, skateboarding or bicycling.
Activity Center	Area where there is a concentration of commercial, retail, office and other land uses.
ADA Transition Plan	A plan that includes an entity's programs, services, activities, facilities, current policies, practices and procedures as required by the American with Disabilities Act.
Americans with Disabilities Act	Federal civil rights law passed in 1990. The law prohibits discrimination against people with disabilities and requires public entities and public accommodations to provide accessible accommodations for people with disabilities.
Arabian Library	City of Scottsdale Library.
Arizona Canal	A water conveyance canal included in the Salt River Project water system.
At-grade Crossing	A crossing that where a shared use path or trail crosses a Roadway on the same level.
Automated Passenger Counters	An electronic device available for installation on transit vehicles including buses and rail vehicles which accurately records boarding and alighting data.
Bicycle Friendly Community	A city recognized by the League of American Bicyclists as a community providing safe accommodation and facilities for bicyclists and encouraging residents to bike for transportation and recreation.
Bike Lane	An integral section of a roadway that is marked for exclusive bicycle use and is always one-way.
Bike Route	A shared street, bike lane or shared use path in any combination that is designated by signing or placement on a map.
Buffered Bike Lane	A conventional bicycle lane paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.
Bus Rapid Transit	A bus-based public transport system designed to have better capacity and higher average travel speed than a conventional bus system.
Cab Connection	A taxi voucher program for Scottsdale residents who are age 65 or older or have a certified disability. The program provides a transportation alternative that is within the control of the participant, is flexible and is relatively affordable.
Capital Improvement Plan	A plan that authorizes and provides the basis for control of expenditures for the acquisition of significant city assets and construction of all capital facilities.
Central Arizona Project Aqueduct	A 336-mile diversion canal in Arizona that diverts water from the Colorado River into central and southern Arizona.

Clever Device	A device that provides computer aided dispatch, automatic vehicle location, real-time passenger Information and automatic vehicle management for transit vehicles.
Commuter	A person who travels some distance to work on a regular basis.
Complete Street	A street designed and operated to enable safe and comfortable access for all users: motorists, pedestrians, bicyclists, and transit.
Crosscut Canal	A water conveyance canal included in the Salt River Project water System.
Dial-a-Ride	A transport system that complements the existing transit system by providing transportation to people who are unable to utilize local bus service due to a disability.
Employment Hub	A high concentration of traded-sector jobs and employers Within an urban area.
Express Route Service	A type of fixed route transit that typically picks up passengers from park-and-ride lots in suburban areas and takes them to a central urban location.
Federal Transit Administration	A federal agency that provides financial and technical assistance to local public transit systems, including buses, subways, light rail, commuter rail, trollies and ferries.
Fixed Route	Transit services provided on a repetitive, fixed schedule along a specific route with vehicles stopping to pick up and deliver passengers to specific locations, each fixed route trip serves the same origins and destinations, such as rail and bus.
Freeway	A facility designed to safely handle very large volumes of through traffic. Direct access is limited to widely spaced interchanges.
Grade Separated Crossing	A structure built to provide a pedestrian or bicyclist way across high-speed, high-volume roadways by means of either an overpass (bridge) or underpass (tunnel).
Grid System	Roadways that are parallel lines and another set of the same lines perpendicular to them used for motor vehicles and transit.
High Capacity Transit	Transit technology that operates on separate right-of-way and functions to move large numbers of passengers at high speeds, e.g., busway, light rail, commuter rail, etc.
High Intensity Activated Crosswalk	A traffic control device used to stop road traffic and allow pedestrians and bicyclists to cross safely.
Highway User Revenue Fund	A fund that contains revenues collected from gasoline and use-fuel taxes, motor-carrier taxes, vehicle-license taxes, motor vehicle registration fees and other miscellaneous fees in the state of Arizona.
Indian Bend Wash Path System	An existing and planned shared use path corridor that stretches from the Scottsdale/Tempe border on the south to the Scottsdale/Carefree border on the north. Portions of the corridor traverse flood control facilities designed for recreational uses.

Intelligent Transportation System	The control and information systems that use integrated communications and data processing technologies for the purposes of improving the mobility of people and goods and increasing safety, reducing traffic congestion and managing incidents effectively.
Intergovernmental Agreement	Any agreement that involves or is made between two or more governments in cooperation to address issues of mutual concern.
Inter-jurisdictional Coordination	An effort to bring all parties together to discuss issues, examine solutions, resolve problems and improve regional connectivity.
League of American Bicyclists	A membership organization that promotes cycling for fun, fitness and transportation through advocacy and education.
Light Rail Transit	A light capacity transit mode utilizing predominately semi-exclusive right-of-way and electronically propelled rail vehicles capable of multiple unit operation.
Local Residential	A street that provides direct access to adjacent land uses, provide access to the collector street system and accommodate lower traffic volumes (usually less than 5,000 ADT) and travel speeds.
Local Route	A transit route comprised within the Scottdale Trolley System.
Local Transportation Assistance Fund	A fund used to provide assistance to local communities for general transportation purposes statewide.
Loop 101	A freeway contained within the Arizona Department of Transportation regional freeway system.
Major Arterial	A roadway street with raised medians providing regional continuity and carries large volumes of traffic between areas of the city and through the city. Typical cross-section are six lanes contained within 150 feet of right of way.
Major Collector	A roadway street providing traffic movement between arterial and local streets, with some direct access to abutting commercial and multi-family land uses. Center left- turn lanes are provided to allow for greater access. Typical cross-section is four lanes contained within 100-feet of right of way.
Mandated Service Area	The area required to provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each side of each fixed transit route. The corridor shall include an area with a three-fourths of a mile radius at the ends of each fixed route.
Maricopa Trail	An unpaved trail contained within Maricopa County regional trail system.
McDowell Sonoran Preserve	The Scottsdale McDowell Sonoran Preserve is a large, Permanently protected, sustainable desert habitat that includes an interconnected network of non-motorized, multi-use trails (hike/bike/horse) accessed from multiple trailhead locations.

Minor Arterial	A roadway street with raised medians providing regional continuity and carries large volumes of traffic between areas of the city and through the city. Typical cross-section are four lanes contained within 110 feet of right of way.
Minor Collector	A roadway street providing traffic movement between arterial and local streets, with some direct access to abutting commercial and multi-family land uses. Center left- turn lanes are often provided to allow for greater access. Typical cross-section is two lanes contained within 80-feet of right of way.
MLHD Trolley, 68CM Trolley	Miller Road and Hayden Road, 68th Street and Hayden Road routes served by Scottsdale Trolley.
Multimodal System	Having or using a variety of transportation modes.
Mustanger Transit Center	A transit facility located at 90th Street and Cochise Drive in Scottsdale, Arizona that includes bus bays with enhanced access for flexible routing options, transit shelters that provide bicycle parking, trash receptacles; enhanced shade and seating options and public art.
National Community Survey	A benchmarking survey providing a comprehensive and accurate picture of livability and resident perspectives about local government services, policies and management.
National Transit Database	Primary source for information and statistics on the transit systems in the United States.
Natural Area Open Space	A percentage of property required by the city of Scottsdale to be preserved to protect environmental features, including vegetation, washes, mountain ridges and peaks from inappropriate development.
Neighborhood Bikeway	A bicycle facility typically found on streets with traffic volumes of under 2,000 vehicles per day (vpd) and residential speeds (25 miles per hour or less) which often contains connections that can only be made by bike or as a pedestrian.
Neighborhood Circulator	A short-distance, circular, fixed-route transit mode that takes riders around a specific area with major destinations.
Neighborhood Traffic Management	The assessment of traffic issues in local neighborhoods to address speed and other traffic conditions.
Neighborhood Trail	A trail that provides access in and around neighborhood areas and provides connections to Primary and Secondary Trails.
Nonmotorized	Not equipped with a motor.
Old Town Scottsdale	An area formerly known as Downtown Scottsdale located in the heart of the city of Scottsdale.
On-Street Network	Facilities located on the street, anywhere on or along the curb of streets.
Paratransit	Transportation for people with disabilities who are unable to use the regular, fixed route transit service that serves their region.

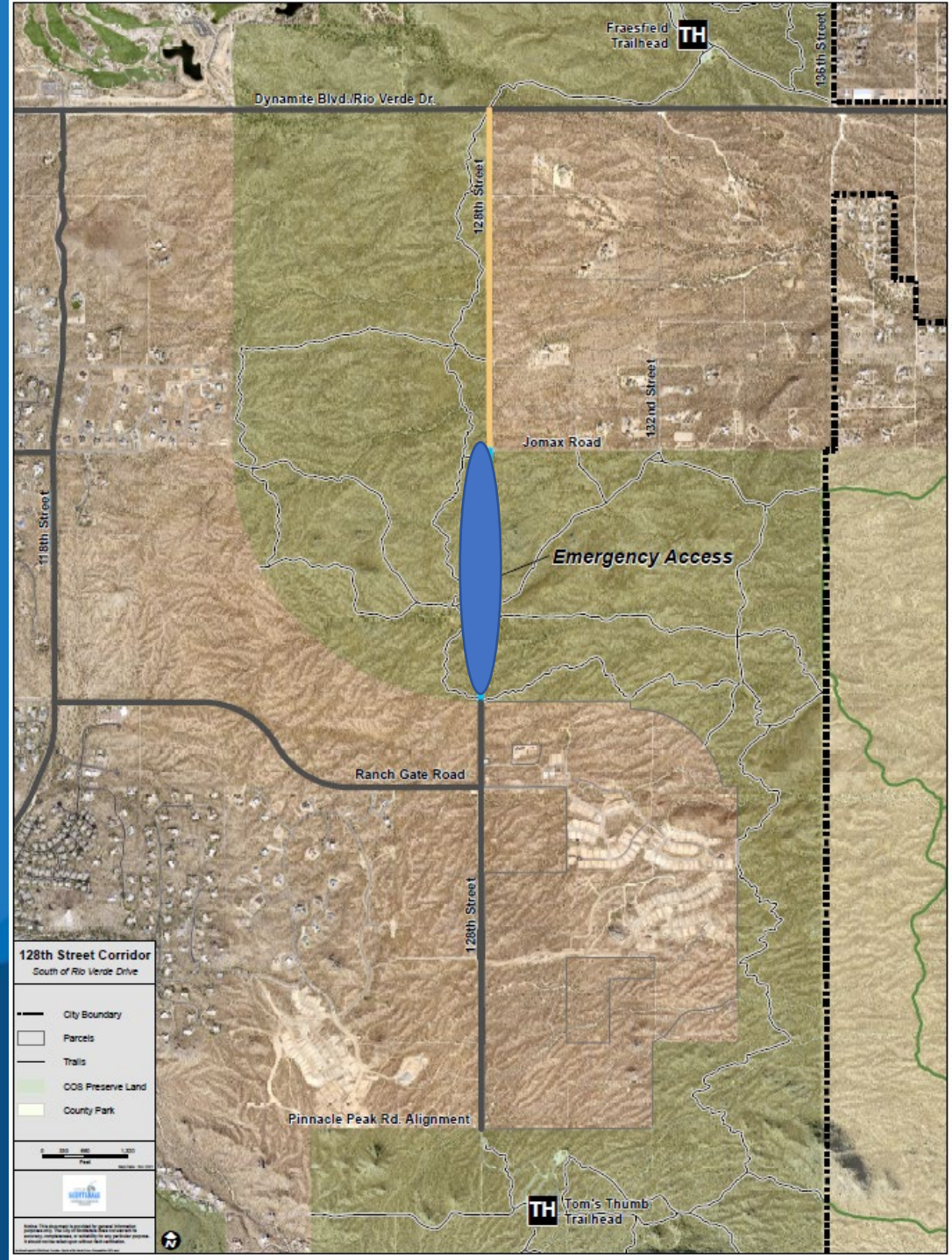
Park-n-Ride	Parking lots with public transport connections that allow commuters and other people heading to city centers to leave their vehicles and transfer to a bus, rail system (rapid transit, light rail, or commuter rail), or carpool for the remainder of the journey.
Paved Path Network	A network made up of paved shared use paths with a minimum width of eight feet.
Paved Roadway Shoulder	An area paved adjacent to the striped edge line of a roadway.
Pavement Condition Index	A score given to a section of pavement on a roadway with a range from 0–100. A score of 85-100 represents a road in excellent condition.
Pedestrian Refuge	A crossing that includes raised median islands that provide a location for pedestrians to safely wait for a gap in the traffic so they can finish crossing the road.
Performance Measure	A regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs.
Preventive Maintenance	All the activities, supplies, materials, labor, services, and associated costs required to preserve or extend the functionality and serviceability of a transit asset in a cost-effective manner.
Primary Trail	A trail that provides both transportation and recreation links between residential areas, schools, businesses, parks, places of employment and other areas of significant community activity.
Proposition 400	A half-cent sales tax extension approved by Maricopa County, Arizona voters that went into affect January 1, 2006, for transportation improvements in the Maricopa County region.
Public Transit	A system of transport for passengers by group travel systems available for use by the general public.
Raised Pedestrian Crossing	A crosswalk with ramped speed tables spanning the entire width of the roadway, often placed at midblock crossing locations.
Rectangular Rapid Flashing Beacon	A crossing with pedestrian-actuated conspicuity enhancements used in combination with a pedestrian, school, or trail crossing warning sign to improve safety at uncontrolled, marked crosswalks.
Regional Fare Policy	A policy set by Valley Metro Regional Transportation Authority for the fixed route and light rail systems.
Regional Sales Tax	A tax collected at the point of sale within a specified region such as a county.
Restriping	To change the lane markings or other markings on a road or another paved path.
RideChoice Program	Transportation for ADA paratransit certified people with disabilities and seniors aged 65 and above who reside in participating communities.

Right-of-way	The area allowing the right to make an access corridor, usually to and from another piece of land.
Roadway Cross Section	The view obtained in a section between the right-of-way lines cut perpendicular to the direction of travel along the road. It includes features on the traveled portion of the road used by vehicular traffic as well as access for non-vehicular traffic.
Roundabout	A circular traffic control device used in place of a traffic signal or multi-way stop.
Route 510	Valley Metro express transit route which travels between Scottsdale's Mustang Transit Center and downtown Phoenix.
Route 72	Valley Metro regional transit route serving Scottsdale Road with end points at Thompson Peak Parkway and Chandler Fashion Square.
Rugged Trail	A trail built as far away from traffic as possible and designed for equestrians, hikers, runners and mountain bikers.
Safe Routes to School	A federal program enabling and encouraging children, including those with disabilities, to walk and bicycle to school.
Salt River Pima-Maricopa Indian Community	A sovereign tribe located in the metropolitan Phoenix area.
Scottsdale Airpark	One of the largest employment centers in the state of Arizona. Anchored by the Scottsdale Airport, the Scottsdale Airpark encompasses an 8.6 square mile area with over 2,900 businesses employing more than 51,000 people.
Scottsdale General Plan 2035	An adopted plan that guides the physical development of Scottsdale, Arizona for a twenty-year timeframe.
Scottsdale Trolley System	A public transit system managed and operated by the city of Scottsdale, Arizona.
Secondary Trail	A trail that provides alternative transportation and recreation links through areas such as desert washes, scenic corridors, vista corridors and other desert open space areas.
Shared Use Path	A paved pathway set aside for the exclusive use of active transportation travel that is intended for two-way movement separated from roadway infrastructure.
Side Path	An eight-foot or ten-foot-wide sidewalk that is separated from the back of curb in most cases and/or is adjacent to a bike lane.
Sidewalk	A paved path for pedestrians at the side of a road.
Standard Size Transit Vehicle	A transit vehicle averaging a length of 39 feet with a seating capacity of 29.
Sun Circle Trail	An unpaved trail contained within the Maricopa County regional trail system.
Tempe Streetcar	A modern streetcar system located in Tempe, Arizona.
Thunderbird Park-n-Ride	A transit facility located at Scottdale Road and Thunderbird Road served by regional transit routes.

Traffic Signal	A signaling device positioned at road intersections, pedestrian crossings, and other locations to control flows of traffic.
Trail	An unpaved, natural soil area with a minimum width of four feet to allow the movement of pedestrians, equestrians and bicyclists.
Trail Easement	The area the allows a use on a specific piece of land.
Transit Asset Management Plan	A plan that uses the condition of assets to guide the optimal prioritization of funding at transit properties in order to keep transit networks in a State of Good Repair.
Transit Center	A transit facility providing a connection point where multiple buses are able to stop simultaneously to allow cross-route transfers between other buses or, where an LRT station exists, a transfer to an LRT vehicle.
Transit Dependent Population	Populations that rely on public transportation for transportation and have limited or no access to a private automobile.
Transit Frequency	The amount of time it takes between transit vehicle arrivals at a specific stop location.
Transit Modes	Transit buses, vans, light rail, and other vehicles that operate on a predetermined route according to a predetermined schedule.
Transit Signal Priority	The utilization of existing vehicle location and wireless communication technologies to advance or extend the green light of a traffic signal for a transit vehicle.
Transportation Action Plan	A multimodal plan to guide transportation improvements in the city of Scottsdale for a five to ten-year time frame.
Transportation Sales Tax	A tax collected at the point of sale by a public entity for transportation improvements.
Truck Route	Four-lane or larger streets identified for regular through passage of trucks over 10,000 lbs. Intermittent pick-up and delivery of materials and merchandise may occur on all streets.
Turnaround	A location permitting the turning around of a vehicle.
Valley Metro	The Regional Public Transportation Authority located in Maricopa County, Arizona.
Vehicles Per Day	Vehicles traveling past a specific location in a 24-hour period, typically stated as an annualized average to account for seasonal variations.
Voucher System	A system that sets up procedures to safely verify, approve, record, and issue vouchers for public transportation.
Waste Management Open	A professional golf tournament on the PGA Tour, held in late January/early February at the Tournament Players Club in Scottsdale, Arizona.
Wayfinding	Signage to assist pedestrians and bicyclists to reach destinations and identify routes.
WestWorld	A premier, nationally recognized, user-friendly equestrian center and special events facility serving the city of Scottsdale community and visitors.

The McDowell Sonoran Preserve Commission, recommends the Transportation Commission and Scottsdale City Council amend the Transportation Action Plan as follows:

- ✓ **Amend the designation of the highlighted section of 128th Street, from its current designation of "Minor Collector" to a new designation as "Emergency Access Only" where it passes through Scottsdale's McDowell Sonoran Preserve.**

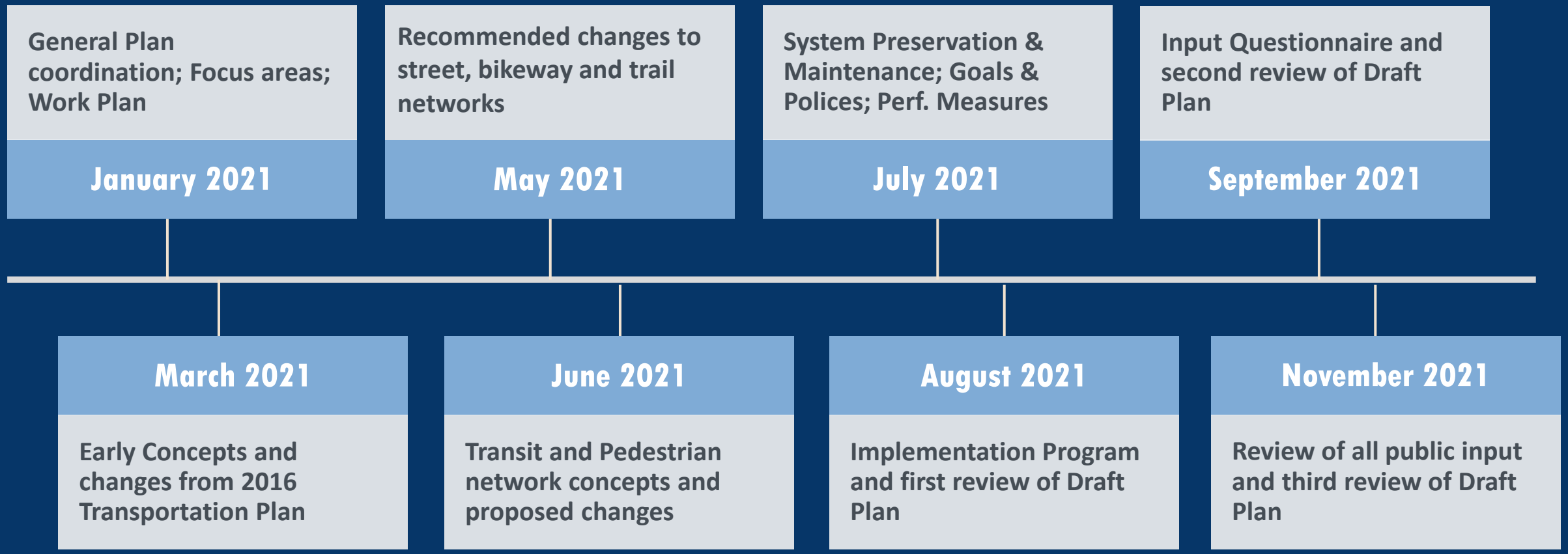


CITY OF SCOTTSDALE

Transportation Action Plan Approval

Transportation Commission
December 16, 2021

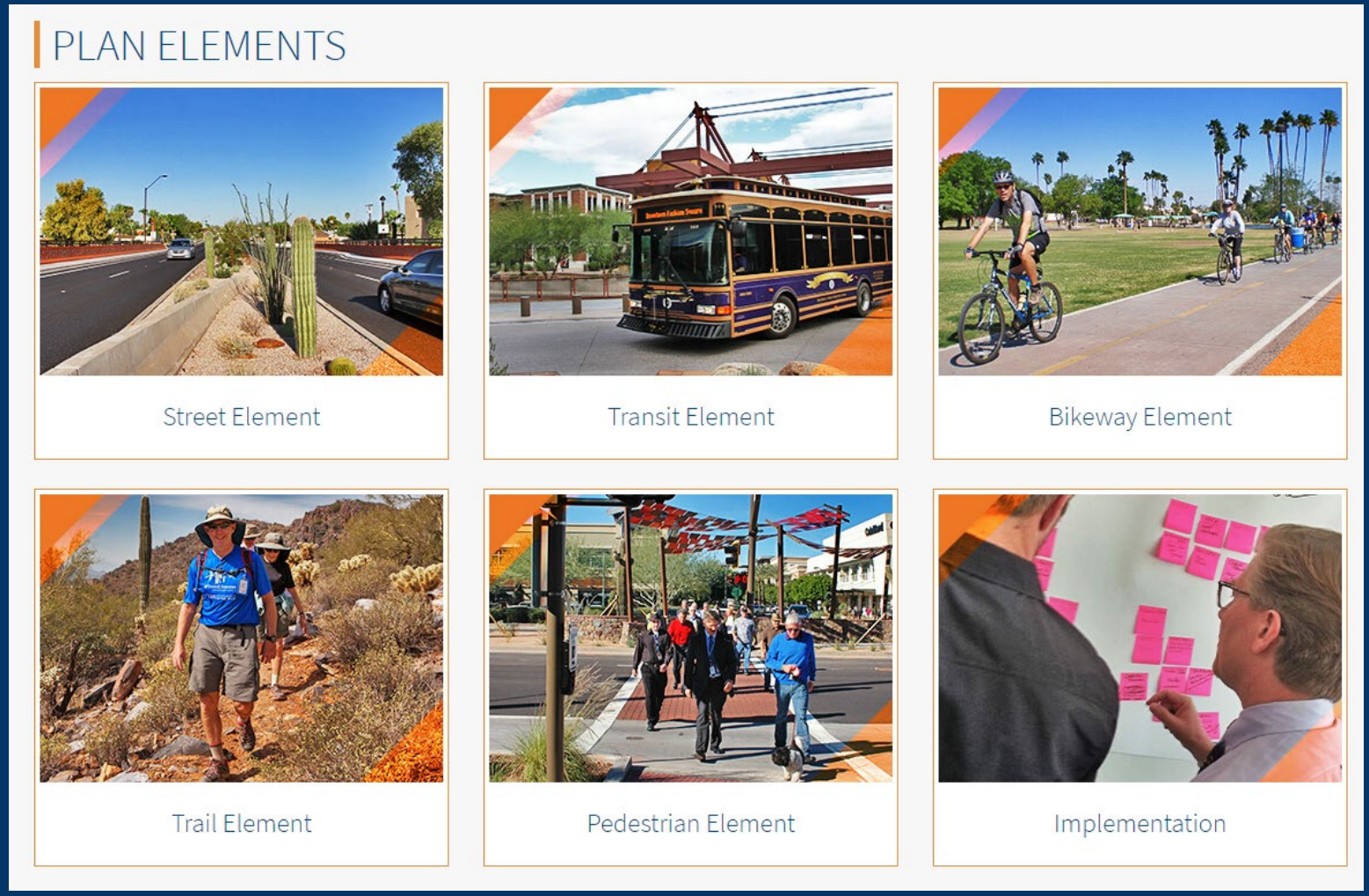
Transportation Action Plan Development



CITY OF SCOTTSDALE

Changes from 3rd Draft in November 2021

- Only adjustment was an update of the definition of light rail transit in the Glossary

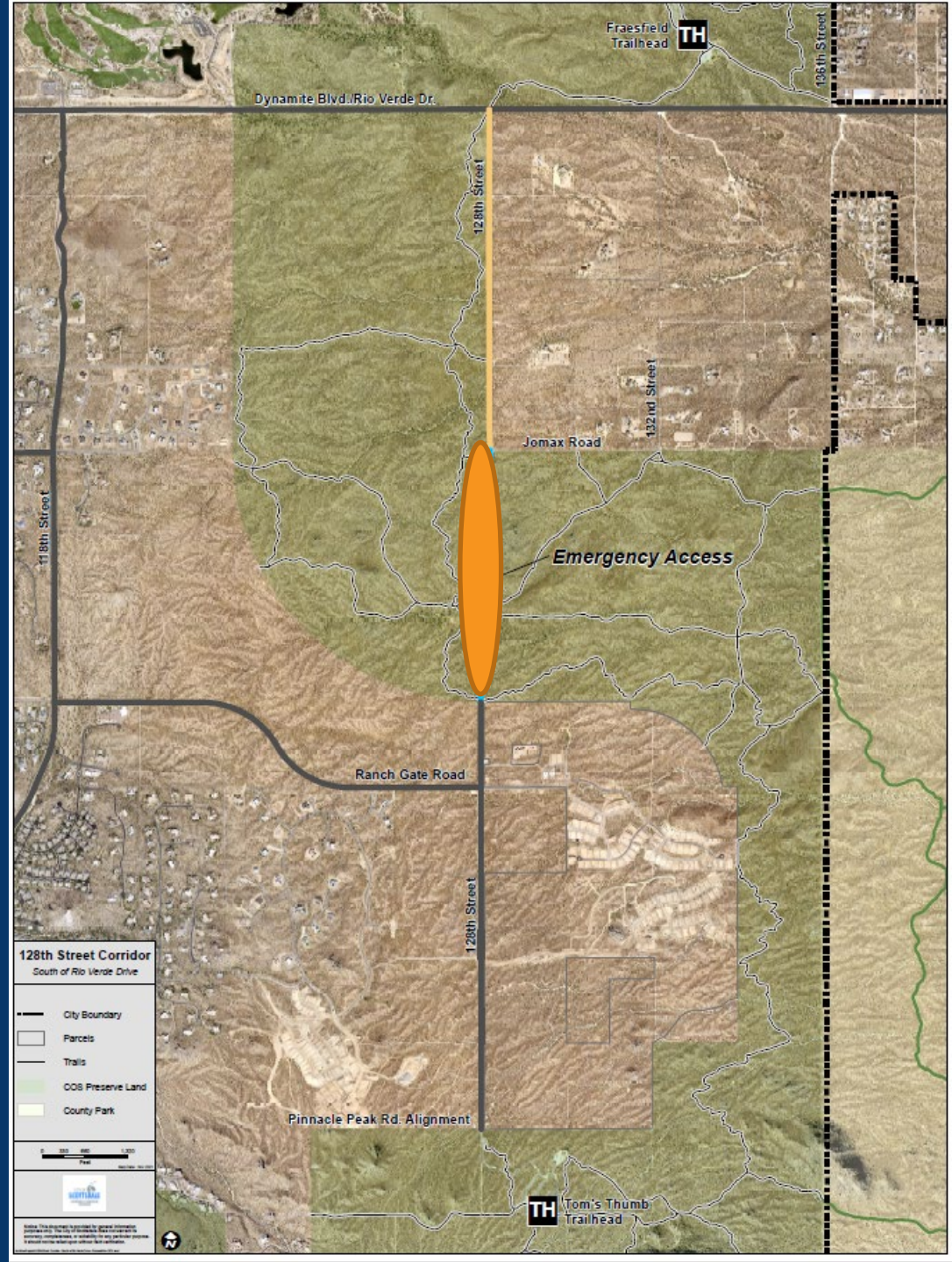


Transportation Action Plan

CITY OF SCOTTSDALE

Public Input Issue – 128th Street Corridor

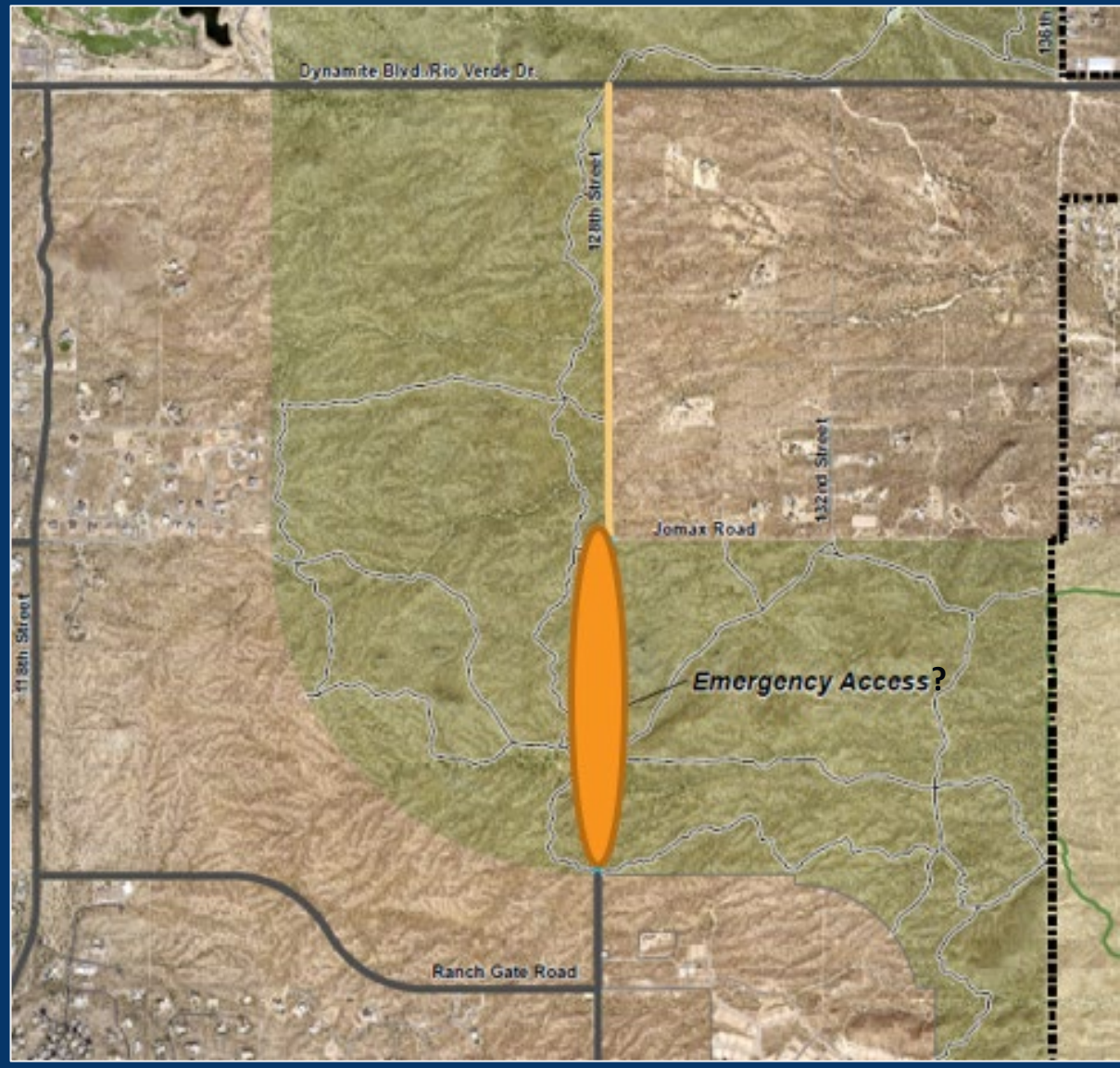
- Received more written comments than any other item in the draft TAP
- November 18, 2021: The McDowell Sonoran Preserve Commission, recommends the Transportation Commission and Scottsdale City Council amend the Transportation Action Plan as follows:
  - ✓ **Amend the designation of the highlighted section of 128th Street, from its current designation of "Minor Collector" to a new designation as "Emergency Access Only" where it passes through Scottsdale's McDowell Sonoran Preserve.**



CITY OF SCOTTSDALE

128th Street Background

- Segment of concern runs ¾ miles south from the Jomax Road alignment
- Road right-of-way acquired 1975
- Included in 4 General Plans and 2 Transportation Master Plans as a collector (1984-2021)
- Preserve acquired adjoining land in 2012
- Previous deliberations in 2016 and 2019 to change 128th designation to emergency access only
- Water line planned for construction in corridor
- Connection of 118th Street between Jomax Road and Rio Verde Drive now in place (reduces concerns from Planning and Public Safety to maintain general access
- Construction access for new development continues



CITY OF SCOTTSDALE

128th Street Recommendation for Transportation

- To reflect the longstanding, and regularly updated, transportation network plan for the area south of Rio Verde Drive, staff recommends the Transportation Commission maintain 128th Street on the Street Classification map as a minor collector with no center turn lane; and 2) delete 128th Street from the recommended list of future CIP projects in the Implementation Program section of the Transportation Action Plan.
  - Eliminates prioritization of improvements to 128th Street over the next 5-10 years and allows for continued coordination with the McDowell Sonoran Preserve Commission, the City Council and other departments on issues related to wildlife protection, public access/emergency access, utilities, and extent of/financial responsibilities for any improvements.

CITY OF SCOTTSDALE

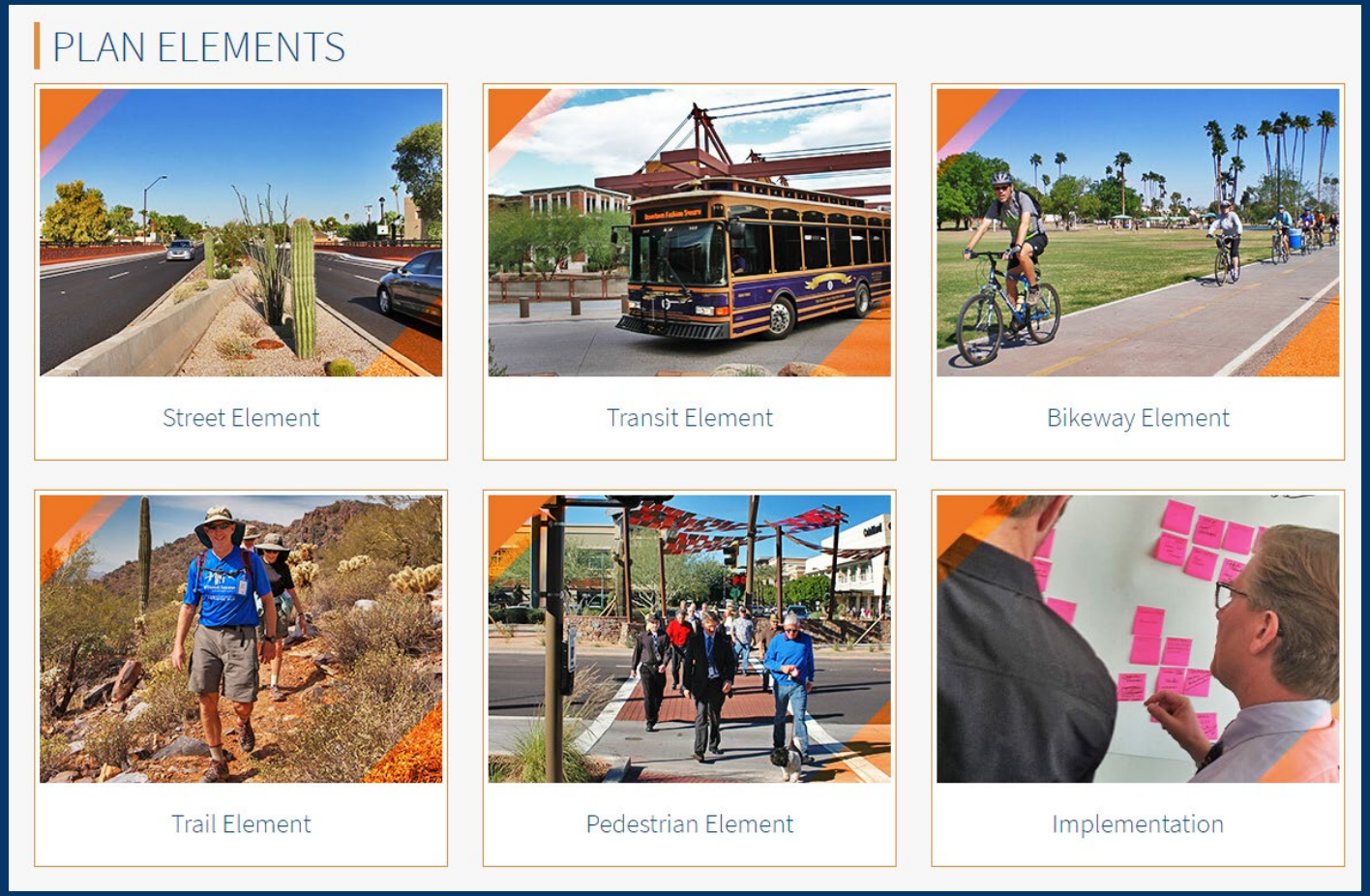
Transportation Action Plan Recommendation

- Recommend the City Council approve the Transportation Action Plan, subject to any changes resulting from the discussion on public input at the meeting.

CITY OF SCOTTSDALE

Next Steps

- Initiate review with City Council in early 2022



CITY OF SCOTTSDALE

Public Comment - 12/16/21 Agenda Item 2 - Transportation Action Plan 2021

Dear Commissioners,

I write regarding two aspects of the draft Transportation Action Plan 2021 ("TAP").

1. Rio Verde Drive – 118th to 144th

Rio Verde Drive bisects the only wildlife migration route between the southern and northern portions of the Preserve. The Implementation Chapter of the draft TAP states (bold italics added):

> A wildlife underpass or overpass ***may*** be installed in the vicinity of the 124th Street alignment.

To the contrary, a wildlife underpass or overpass is ***necessary***. This is not a hypothetical need. For example, at the Transportation Commission's February 21, 2019 meeting, former Transportation Director Paul Basha, advised:

> The Fish & Game Department has done analysis of wildlife north and south of Dynamite and they are seeing a distinction in the genetics of the animals, based on whether they live north or south.

Accordingly, the TAP Implementation Chapter should read:

> A wildlife underpass or overpass will be installed in the vicinity of the 124th Street alignment.

2. 128th Street alignment within the boundaries of the McDowell Sonoran Preserve ("128th Street alignment")

In the draft TAP, the 128th Street alignment is designated as a Minor Collector and slated for construction:

128th Street - Ranch Gate to Rio Verde	Construct two 11' travel lanes with a 5' buffer and a 10' colored concrete path on the east side. The roadway would be constructed with grading but no drainage culverts.

The 128th Street alignment should be removed from the TAP for these reasons:

1. Streets do not belong in the Preserve *period* (with the exception of streets that terminate at a trailhead).

2. A street at the 128th Street alignment would bisect the only wildlife migration route between the southern and northern portions of the Preserve.

3. Growth and development in the area is not a justifiable reason for building a road through the Preserve. The Preserve was never intended to respond to the needs of growth and development. Rather, growth and development must yield to the Preserve.

4. Scottsdale's General Plan recognizes the importance of wildlife corridors and migration routes and supports their preservation. See Attachment 1 – excerpts from the General Plan.

5. These General Plan policies are of particular note with respect to the 128th Street alignment:

   OS 2.4 Protect wildlife corridors, habitat, and trail crossings when planning future mobility routes through and adjacent to the Scottsdale McDowell Sonoran Preserve.

   OS 6.4 Ensure development plans respect existing topography, view corridors, wildlife corridors, and open space. Where possible, enhance existing viewsheds as areas are developed and redeveloped.

   CONSV 2.3
   Maintain natural washes as wildlife movement corridors and avoid disturbances to preserve habitat linkages.

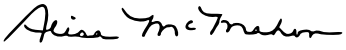
6. CONSV 2.3 highlights the critical importance of removing the 128th Street alignment from the TAP. A street in this location would be a double whammy. First, the gooseneck is a vital habitat linkage, providing the only wildlife migration route between the southern and northern portions of the Preserve. Second, washes are natural wildlife corridors. A street on the 128th Street alignment would cross no less than **five** 50 cfs washes, greatly disturbing this vital habitat linkage. See Attachment 2.

7. A street at the 128th Street alignment would create a precedent for developing additional streets within the Preserve to accommodate development.

There has been discussion of designating the 128th Street alignment as "emergency only access," with gates at each end. For the reasons stated above, that designation should not be considered.

Finally, if increased emergency capacity is needed in the area, I urge consideration of alternative solutions. The "atypical" cross-section in the 2016 Transportation Master Plan may be one such solution. See Attachment 3 (highlights added). I note that the "atypical" cross-section is not in the draft Transportation Action Plan 2021.

In sum, please recommend removal from the TAP of the 128th Street alignment in any form, including "emergency only access." Thank you.



Dr. Alisa McMahon
7454 E. Camino Rayo de Luz
Scottsdale, AZ 85266

GENERAL PLAN 2035
Adopted by City Council on June 8, 2021; Ratified by Scottsdale Citizens on November 2, 2021

REFERENCES TO WILDLIFE CORRIDORS & MIGRATION ROUTES

Goal OS 2
Fulfill the Scottsdale McDowell Sonoran Preserve initiative to create an integrated desert open space and wildlife corridor system that connects to the regional Sonoran Desert open space system.

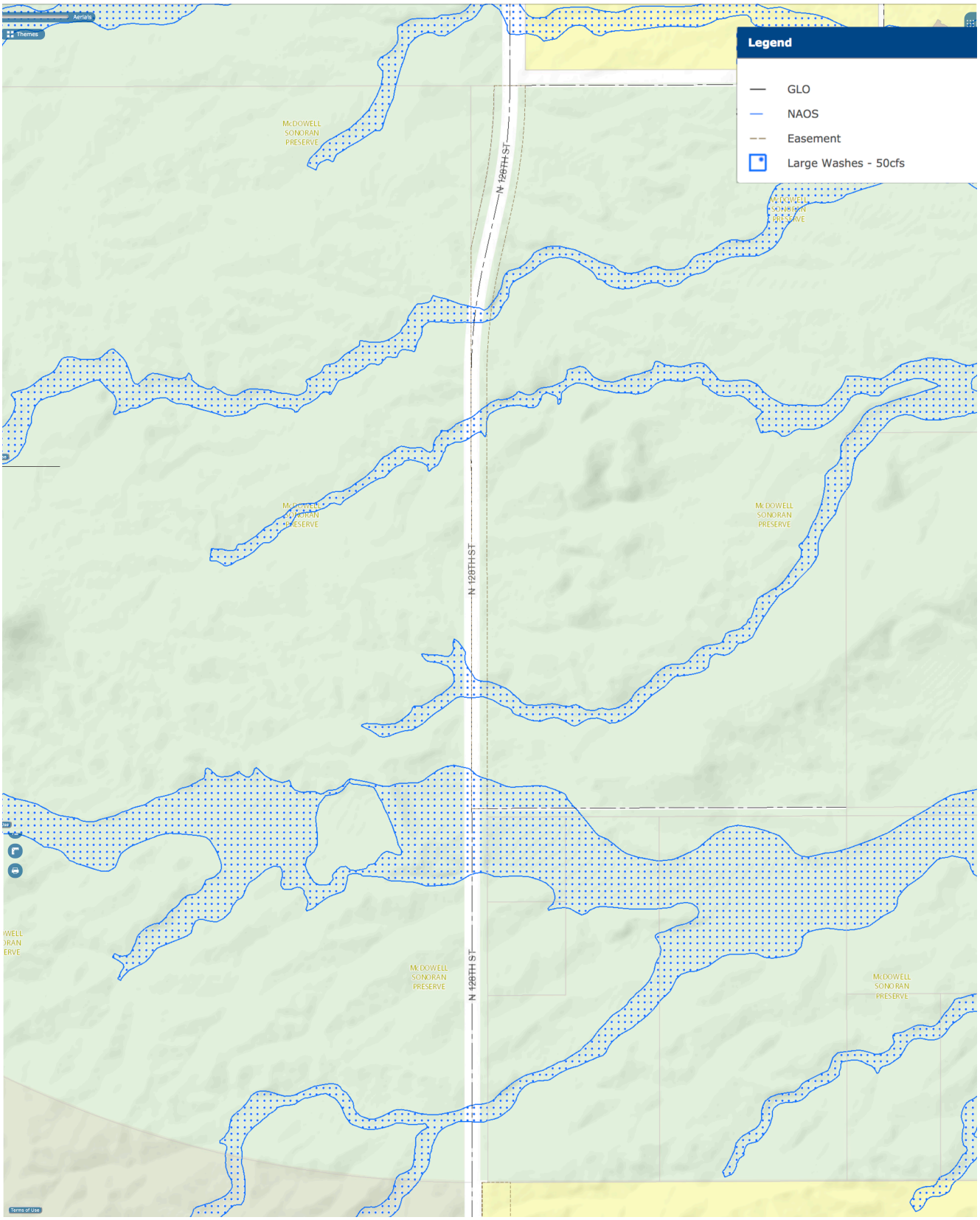
OS 2.4
Protect wildlife corridors, habitat, and trail crossings when planning future mobility routes through and adjacent to the Scottsdale McDowell Sonoran Preserve.

Goal OS 3
Maintain the lush desert character and wildlife corridors by protecting and preserving natural open spaces.

OS 6.4
Ensure development plans respect existing topography, view corridors, wildlife corridors, and open space. Where possible, enhance existing viewsheds as areas are developed and redeveloped.

OS 9.2 ‡
Engage with other public and private agencies on the planning and development of open space sites and facilities next to city boundaries. Support the regional open space network and coordinate with adjacent jurisdictions to supply open space systems, interconnected trail networks, recreation opportunities, stormwater drainage, and sensitive wildlife habitat and migration routes.

CONSV 2.3
Maintain natural washes as wildlife movement corridors and avoid disturbances to preserve habitat linkages.



Source: https://eservices.scottsdaleaz.gov/maps/parcel-information)

6 September 2021

McDowell Sonoran Preserve Commission

Cynthia Wenstrom, Chair
Laurie LaPat-Polasko, Vice Chair
Stephen Coluccio
Mark Hackbarth
Marsha Lipps
Kerry Olsson
Jeffrey Smith

RE: 9 September 2021 Commission Meeting, Item 6

Members of the McDowell Sonoran Preserve Commission

The agenda for your 9 September meeting includes Item 6:
"LETTER FROM MPSC CHAIR TO TRANSPORTATION COMMISSION"

The description of this item indicates that the topic is information, discussion, and possible action regarding a potential letter from McDowell Sonoran Preserve Commission Chair Wenstrom to the Transportation Commission. The topic of the potential letter is identified as the status of 128th Street from north of Ranch Gate Road to Jomax Road.

The current Transportation Master Plan includes 128th Street as a minor collector for its entire length from Tom's Thumb Trailhead to Dynamite Boulevard. The segment of north of Ranch Gate Road to Jomax Road is included. Right-of-way for 128th was dedicated to the City of Scottsdale prior to the Preserve acquisition in this vicinity. Therefore, a public right-of-way exists for 128th Street from north of Ranch Gate Road to Jomax Road with the Preserve both west and east of this right-of-way.

128th Street from north of Ranch Gate Road to Jomax Road was a specific topic of discussion when the 2016 Transportation Master Plan was prepared.

The 2016 Transportation Master Plan was discussed at a City Council Study Session dated 12 April 2016. The recommendation of the Transportation Commission and the Transportation Department at this meeting was for 128th Street to not exist in the Preserve.

The pertinent page of the marked agenda for 12 April 2016, Council Work Study Session, Item 1, Transportation Master Plan, "City of Scottsdale Transportation Master Plan 2016, Transportation Commission Recommendation 2-4-2016", is pdf page 23, document page 19, Figure 18. The yellow line indicating 128th Street as a minor collector clearly ends from north of the Preserve and from south of the Preserve. The roadway does not intrude into the Preserve.

The current Council-approved 2016 Transportation Master Plan in Figure 8 on page 9 includes the yellow line indicating a minor collector through the Preserve, from Tom's Thumb Trailhead to Dynamite Boulevard, including from north of Ranch Gate Road to Jomax Road.

The 12 April 2016 Council Work Study Session approved meeting minutes on page 2 states, in part,

> "The Council provided direction to:
>
> ...

> Make improvements to 128th Street and keep it open to all traffic, including construction traffic, until the completion of development projects or until improvements are made to 118th Street."

The 2016 Transportation Master Plan was subsequently approved by the City Council at their regular meeting of 5 July 2016.

The direction of the City Council was accomplished: 128th Street from north of Ranch Gate Road to Jomax Road was open for traffic. Further improvements to 118th Street were completed. The subject completion was the connection of 118th Street from Jomax Road to Dynamite Boulevard, during August 2019 to January 2020. Thereby, per the City Council direction, 128th Street no longer must remain open. The conditions of the City Council to retain 128th Street until 118th Street was improved have been satisfied. Therefore 128th Street no longer needs to exist in the Preserve.

Some maintain that the paved road must remain always available in the event of an emergency. However, the 2016 Transportation Master Plan accommodated emergency means of access.

Figure 8 on page 9 of the approved 2016 Transportation Master Plan designates Ranch Gate Road between 118th and 128th streets, and Jomax Road between Alma School Parkway and 118th Street, " ... to be constructed as one motor vehicle lane and one bicycle lane per direction with raised landscaped medians".

Figure 3 on page 5 of the 2016 Transportation Master Plan depicts the "Generalized Street Cross Section of a One Lane Arterial or Local Collector". This diagram is contrasted with Figure 4 on page 5 of the 2016 Transportation Master Plan which depicts the "Generalized Street Cross Section of a Major Collector". Figure 3 has a raised landscaped median while Figure 4 has a center two-way left-turn lane. Figure 3 has one motor vehicle lane per direction while Figure 4 has two motor vehicle lanes per direction.

Importantly, the bicycle lane in Figure 3 is noticeably wider than in Figure 4. This is intentional. The 2016 Transportation Master Plan recognized the presence of the Preserve. The Preserve restricts street availability in the area north of the Tom's Thumb Trailhead, south of Jomax Road, east of 118th Street, and west of the Preserve. The Preserve boundary south of Dynamite Boulevard is approximately the 122nd Street alignment; then south of Jomax Road, the boundary curves east to approximately the 134th Street alignment.

Because of the Preserve; Ranch Gate Road between 118th Street and 128th Street; and Jomax Road between Alma School Parkway and 118th Street; the 2016 Transportation Master Plan included an atypical cross-section. The intention was that in the event of an emergency, each of these two street segments could be used for two directions of motor vehicle travel on either side of the raised median. During normal circumstances, there would be one wide motor vehicle lane and one wide bicycle lane. During emergencies, police officers could direct traffic to use two lanes on either side of the median.

(128th Street, between Tom's Thumb Trailhead and Ranch Gate Road, was also intended to be constructed to this atypical cross-section: a wide motor vehicle lane and a wide bicycle lane. Unfortunately, this roadway was constructed as an 11-foot motor vehicle lane and a 4-foot bicycle lane on either side of the raised landscaped median.)

The right-of-way for 128th Street, from north of Ranch Gate Road to Jomax Road, bounded by the Preserve on both sides, is a legacy of pre-Preserve planning. The assumption before the Preserve was conceived and acquired, was that all this property would be developed as private homes and potentially private commercial businesses.

Prior to the Preserve, Dynamite Boulevard was planned to be a six-lane major arterial for its entire length in Scottsdale. Also prior to the Preserve, Happy Valley Road, east of Alma School Road, was planned as a four-lane minor arterial curving south, then north to become 118th Street as a four-lane minor arterial to connect to Dynamite Boulevard. In the 2016 Transportation Master Plan, both of these streets were downsized: Dynamite Boulevard, east of Pima Road, to a four-lane minor arterial; and the 118th Street extension of Happy Valley Road to a one-lane-per-direction minor collector.

Because the Preserve exists, this land remains in its natural state for perpetuity. It will never be developed, and therefore wide roads are unnecessary for these never-to-exist homes and businesses. Dynamite Boulevard and the 118th Street extension of Happy Valley Road were both down-sized in recognition of this non-development. 128th Street from north of Ranch Gate Road to Jomax Road, should also be similarly down-sized from a paved minor collector to a gated, unpaved emergency access only.

There is no longer, and never will be, a transportation need for 128th Street from north of Ranch Gate Road to Jomax Road.

If this right-of-way had not existed when the Preserve acquired the adjacent land, no one would propose a paved road through the Preserve. No one is suggesting that a paved road should be constructed for the one-half-mile between the Lost Dog Wash and Ringtail trailheads. Private residences exist in close proximity to both trailheads. The closest roads connecting 124th and 128th streets are Via Linda – one-half-mile south and Shea Boulevard – one-mile south.

The City of Scottsdale is littered with cars and roads. Fortunately, we have a Preserve that consists of more than one-third of our land area. This is good and should remain. We only have one Preserve – fortunately this one Preserve is very large. The Preserve should be sacrosanct – devoid of motor vehicles and paved roads.

Allowing a gated and unpaved emergency access is a compromise. Even this type of access should not exist.

Typically, public safety is paramount. Whenever an emergency occurs, the importance of human life requires public safety vehicles and personnel to respond. A gated and unpaved roadway provides this access.

If an emergency occurs, such as a wildfire in the Preserve, or a blockage on Dynamite Boulevard, between 118th and 128th streets, the police can open the 128th Street emergency access for traffic. If an expedited evacuation becomes necessary, police can direct people to use the previously described emergency four lanes on Ranch Gate Road and Jomax Road.

Dozens of private gated communities exist throughout Scottsdale. When police or fire responders require access, they unlock the gates and have motor vehicle access. The same would occur for 128th Street from north of Ranch Gate Road to Jomax Road, from either the north or the south.

Alternatives are available for unusual and emergency situations that do not require a permanent paved road through the Preserve.

Merely because the access may be needed for some emergencies in the future, the access should not be continuously present for perpetuity.

A minimum of five neighborhoods in north Scottsdale apparently have only one access:

96th Place, south of Dynamite Boulevard, is approximately one mile with only one access, serving approximately 70 homes.

136th Street, north of Larkspur Drive, is approximately three-quarter mile with only one access, serving approximately 60 homes.

132nd Street, north of Via Linda, is approximately one-half mile long with one access, serving approximately 130 homes.

136th Street, south of Shea Boulevard, is more than one mile long with one access, serving approximately 110 homes.

124th Street, south of Mountain View Road, is a two-square-mile neighborhood of approximately 100 homes served by only one intersection.

None of these neighborhoods appear to have emergency or alternative access. An emergency access can be provided of 128th Street, from north of Ranch Gate Road to Jomax Road.

Also, a separate bicycle path is proposed, and is unnecessary. Bicyclists should only be on mountain bikes and can use the same unpaved travelway used by emergency vehicles. The fewer the disruptive scars to the Preserve, the better.

The width of the emergency access should be a maximum of 22 feet from edge to edge. The narrower the disruptive scars to the Preserve, the better.

Critically, the portion of the Preserve that is being considered for a permanent and ever-present paved minor collector road, is the only connection and a narrow connection between the portion of the Preserve north of Dynamite Boulevard and the portion of the Preserve south of Tom's Thumb. This connection is vital for both fauna and flora. Animal travel throughout the expanse of the Preserve is essential for the health of the Preserve – no other options exist. Human travel can occur elsewhere – other paved road options exist.

In the 128th Street in the Preserve circumstance, the sanctity of the Preserve should be preserved. Motor vehicles should be subordinate, and completely absent unless necessary for emergency circumstances.

A gated, unpaved emergency access, without a separate bicycle facility, on 128th Street from north of Ranch Gate Road to Jomax Road is sufficient, and the most that should be accepted.

Paul Basha

Paul E. Basha, Licensed Professional Engineer in Washington, Arizona, and Nevada.

Internationally Certified as a Professional Traffic Operations Engineer

TENTATIVE FUTURE AGENDA ITEMS

Rev.12-09-2021

All Items Subject to Change

TRANSPORTATION COMMISSION

MEETING DATE: January 20, 2022 **REPORTS/PRESENTATIONS DUE January 13**

- **Approval of Meeting Minutes ..... Action**
  Approval of Regular meeting minutes December 16, 2021
- **Vacant Land .....Presentation and Discussion**
  Impact on areas and traffic with new buildings created – Phil Kercher, Traffic Engineer & Ops Manager
- **New Project Development .....Presentation and Discussion**
  Project development and how it ties in with Transportation – Phil Kercher, Traffic Engineer & Ops Manager
- **Bus Ridership and the Transit System.....Presentation and Discussion**
  Update on bus ridership and the Transit System – Ratna Korepella, Transit Manager
- **Other Transportation Projects and Programs Status .....Information**
  Status of projects and programs – Mark Melnychenko, Transportation & Streets Director
- **Commission Identification of Future Agenda Items.....Discussion**
  Commissioners may identify items or topics of interest for future Commission meetings

MEETING DATE: February 17, 2022 **REPORTS/PRESENTATIONS DUE February 10**

- **Approval of Meeting Minutes ..... Action**
  Approval of Regular meeting minutes January 20, 2022
- **Roundabout Education……..…….…….…Presentation and Discussion**
  Discuss benefits of Roundabouts and how success is evaluated – Phil Kercher, Traffic Engineer & Ops Manager
- **Miller Road Bridge and Flood Control Project .....Presentation, Discussion and Possible Action**
  Update on the Miller Road Bridge and Flood Control Project – David Meinhart, Transportation Planning Manager
- **Commission Identification of Future Agenda Items.....Discussion**
  Commissioners may identify items or topics of interest for future Commission meetings

FUTURE ITEMS:

- **Loop 101 Mobility Project.....Presentation and Discussion**
  Kristin Darr, consultant
- **Impact on Parking.....Presentation and Discussion**
  Latest parking study, Walter Brodzinski, Right-Way Supervisor
- **Urban Air Mobility .....Presentation and Discussion**
  Discuss Urban Air Mobility as Mode of Transportation
- **Smart City.....Presentation and Discussion**
  Discussion on the City's participation in Smart City applications.
- **Study and Results from Truck Platooning .....Presentation and Discussion**
  Update on Study and Results from Truck Platooning
- **Electric Car Movement.....Presentation and Discussion**
  Presentation on electric car movement – Hong Huo, Traffic Engineer Principal
- **Shea and 124th Street Underpass .....Presentation and Discussion**
  Update on underpass – Susan Conklu, Senior Transportation Planner
- **Downtown Trolley.....Presentation and Discussion**
  Update on trolly usage – Ratna Korepella, Transit Manager

- **General Plan Update.....Presentation and Discussion**
  Update on general plan – Erin Perreault
- **Transit System Evaluation Recommendations..... Action**
  Presentation of the Transit Plan Evaluation Recommendations – Ratna Korepella, Transit Manager
- **Update on MAG Prop 400E .....Presentation and Discussion**
  Update on MAG Prop 400E – MAG staff
- **Utilities Causing Project Delays……Discussion**
  Discuss the delays utility projects are holding up project schedules and budgets- Mark Melnychenko, Transportation & Streets Director
- **Scooter Pattern Usage……Presentation and Discussion**
  Discuss the number of EZ tickets received for scooter devices – Susan Conklu, Senior Transportation Planner
- **Bus Stop Lighting……..…Discussion**
  Discuss future plans to light bus stop shelters – Ratna Korepella, Transit Manager
- **Connected Vehicle Technology on Loop 101 ……...……..…Discussion**
  Discuss USA's Transportation Research Department regarding connected vehicle technology – Mark Melnychenko, Transportation & Streets Director

PATHS & TRAILS SUBCOMMITTEE

MEETING DATE: February 1, 2021 **REPORTS/PRESENTATIONS DUE January 25**

- **Approval of Meeting Minutes ..... Action**
  Approval of Regular meeting minutes of December 7, 2021
- **Other Transportation Projects and Programs Status.....Information**
  Status of projects and programs – Susan Conklu, Senior Transportation Planner
- **Subcommittee Identification of Future Agenda Items.....Discussion**
  Subcommittee members may identify items or topics of interest for future Subcommittee meetings

FUTURE ITEMS:

- **Wayfinding.....Presentation and Discussion**
  Update on Wayfinding – Susan Conklu, Senior Transportation Planner
- **Bicycle Education Program .....Presentation and Discussion**
  Update on Laws and Education – Susan Conklu, Senior Transportation Planner
- **Bike Month Recap.....Presentation and Discussion**
  Information on Bike Month – Susan Conklu, Senior Transportation Planner
- **Access to Indian Bend Wash .....Presentation and Discussion**
  Better access and how the Parks Dept. can assist. – Susan Conklu, Senior Transportation Planner
- **Path and Trail Gap Analysis .....Presentation and Discussion**
  Information on gaps in the citywide path and trails network – Greg Davies, Senior Transportation Planner
- **Equestrian Connectivity .....Presentation and Discussion**
  Panel – Susan Conklu, Senior Transportation Planner
- **Vision Zero.....Presentation and Discussion**
  Information on Vision Zero (Tempe) – Susan Conklu, Senior Transportation Planner
- **Grant Process .....Presentation and Discussion**
  Information on how the grant process works and updates on upcoming grant applications – Dave Meinhart, Transportation Planning Manager
- **Bike Lane Safety Measures .....Presentation and Discussion**
  Information on how bike lanes improve safety – Susan Conklu, Senior Transportation Planner
- **Pavement Restriping .....Presentation and Discussion**
  Information on the coordination of re-paving and re-striping – Dave Meinhart, Transportation Planning Manager