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Introduction

The city of Phoenix for the past 30 years has been evolving in making a difference in transportation options. Phoenix was fortunate to embark in a comprehensive bicycle network plan in the 1980s and 1990s that accomplished a significant amount of pedestrian and bicycle transportation network in cooperation with the regional partners to take advantage of federal and local funding to implement projects. Up to this point, the existing bicycle network consists of 778 miles of bicycle facilities that includes 542 miles of bicycle lanes, 161 miles of bicycle routes, 43 miles of paved shared use paths, and 32 miles of unpaved multi-use paths. The existing network is shown in Map #1 – Existing Bike Facilities. This network will continue to grow and expand with the work efforts and change in City strategies.

In the past three years, there has been a significant change in policy direction for the City of Phoenix's transportation network. For the City of Phoenix, the primary focus of street design will include the safety and comfort of all users of the public right-of-way (ROW). Bicycle facilities are one of the components of the transportation system that provides choices for residents, connects people to places and other transportation options, and promotes a sustainable transportation option.

The work efforts outlined below show both a policy and funding shift to integrate bicycle facilities into decision making at a variety of levels through many Street Transportation programs.

- On July 2, 2014, City of Phoenix council members moved to adopt two Complete Streets ordinances, aimed at changing the way that streets are developed, designed, and constructed. Complete Streets are designed to encourage and facilitate active transportation and public health, and accommodate people of all ages and abilities, including pedestrians, wheelchair users, bicyclists, users of public transportation, motorists, emergency responders, and freight movers. In addition, on June 28, 2017 City Council adopted the Complete Streets Policy to take the next step in implementing the initiative.

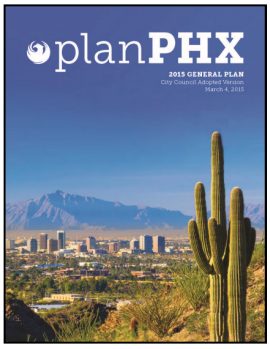
- City Council adopted the Comprehensive Bicycle Master Plan in November 2014, which sets forth a blueprint for expanding bicycle facilities throughout the city to enhance bicycling as a safe and healthy transportation choice for our community. Through the city's public budget hearings process, two million dollars is set-aside annually in the Street Transportation Department's Capital Improvement Program to complete the thirty-nine identified projects.

- The Grid Bike Share Program was launched in November 2014 with private funding. The program started with 250 bicycles at 24 stations. In 2015, the City Council approved the purchase of 250 bicycle racks for the program using funds from the Street Transportation Department's non-

general fund reserve account for citywide bicycling improvements. To further encourage bicycling as a convenient and affordable mode of transportation, the Street Transportation Department works with its vendor, Cyclehop, LLC, to operate and expand the City's GRID Bike Share program

As of Dec. 31, 2016, the Grid Bike Share system has grown to 49 stations with the capacity for 500 bicycles. The system has three planned expansions in the next five years.

- The Phoenix City Council approved an updated General Plan on March 4, 2015, and Phoenix voters approved the updated General Plan on the August 25, 2015 ballot. The City's General Plan 2015 outlines the blueprint of 'creating a Connected Oasis.' The Vision of the Connected Oasis aims to ultimately enhance the quality of life for all city of Phoenix residents. It is framed by residents' enhanced levels of prosperity, improved health and a thriving natural environment (Prosperity, Health, and Environment). The City's General Plan identifies five core values for achieving the vision. The five core values provide the framework for the goals and initiatives of the updated General Plan: 1) celebrate our diverse communities and neighborhoods, 2) strengthen our local economy, 3) **connect people and places**, 4) build the sustainable desert city, and 5) create an even more vibrant downtown.



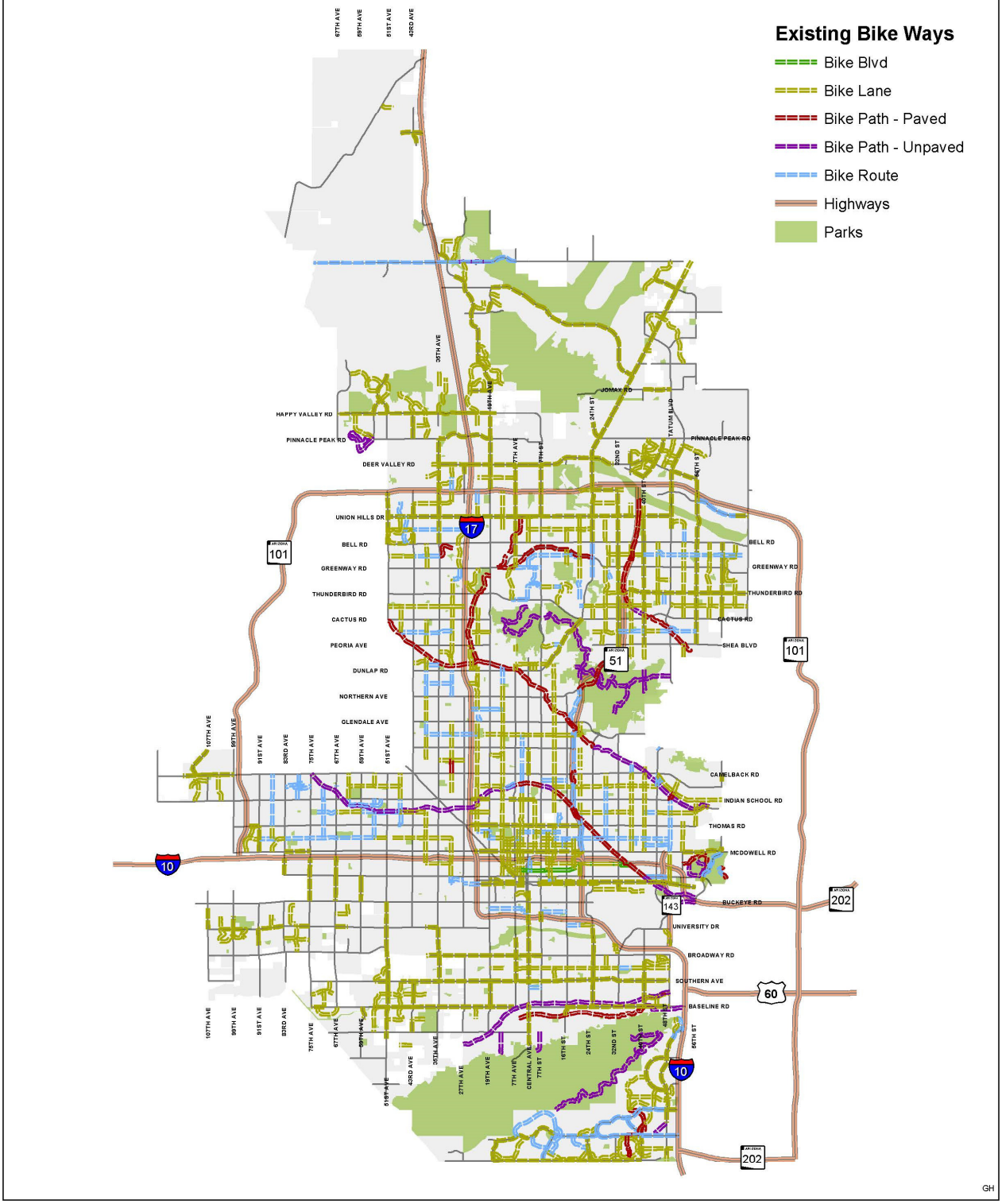
- In 2015, the City completed the Reinvent PHX planning effort that focuses on creating action plans for five distinct areas in the City. **Reinvent PHX** was a collaborative partnership between the City of Phoenix, the U.S. Department of Housing and Urban Development, Arizona State University, St. Luke's Health Initiatives (now Vitalyst Health Foundation) and numerous other organizations committed to developing walkable, opportunity-rich communities connected to light rail. Reinvent PHX created action plans for districts along the light rail system. The plans establish a community-based vision for the future and identify investment strategies to improve the quality of life for all residents. This process establishes a new, transit-oriented model for urban planning and development along the city's light rail system.

- On August 25, 2015, Phoenix voters approved Proposition 104 or Transportation 2050 (T2050), and made a strong statement about the importance of expanding investment in Phoenix for bus service, light rail construction and street improvements. The previous transit plan, known as T2000, was a voter-approved tax that primarily funded transit service in Phoenix. Now broader and more comprehensive, the T2050 plan places additional emphasis on street needs including; street maintenance, new pavement, bike lanes, sidewalks and ADA accessibility which will all compliment the increase in transit services.

This significant commitment to construct new bicycle and pedestrian facilities in the T2050 Plan, 135 miles of new sidewalks and 1,080 miles of new bike lanes led to the creation of a separate T2050 Mobility Improvements Program. The T2050 Mobility Improvements Program was established to implement additional projects that increase Americans with Disabilities Act (ADA) accessibility and mobility through construction of new sidewalks and multi-modal connectivity through provision of new bicycle facilities.

The result of planning efforts, policy direction, and investments have led the Street Transportation Department to establish a Bicycle Project Team consisting of over a dozen staff members to plan, design, manage and implement projects. Team members from all Street Transportation divisions meet regularly to discuss project funding, priorities, schedules, and other bicycle-related efforts. Project planning, design, and construction work has been initiated along several corridors slated for bikeway improvements citywide and are documented in this Draft Five-Year Bicycle Program – *Shifting Gears*.

Map #1 – Existing Bicycle Facilities



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

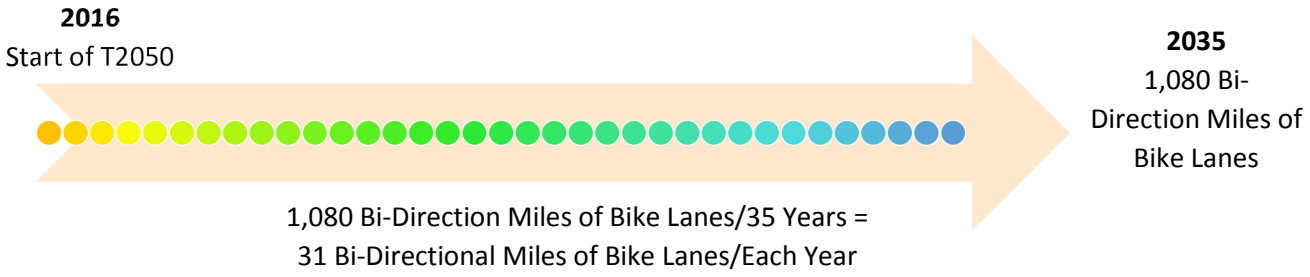
Existing Bike Facilities

NORTH

Section I. Overview

The Five-Year Bicycle Program - *Shifting Gears* (Program) is a compilation of work efforts that will be initiated by the City of Phoenix Street Transportation Department to compliment the 2014 City of Phoenix Bicycle Master Plan. It will also be used to complete additional bicycle facilities that will help meet the goal of Proposition 104 by completing 1,080 bi-directional miles of bicycle lanes by 2050.

To meet the goal of installing 1,080 bi-direction miles of new bicycle lanes over a 35-years, 31 bi-directional miles of bicycle lanes per year. In addition to bicycle lanes, the City is committed to complete holistic improvements as appropriate that include bicycle detection, multi-use paths, safe crossings, protected bicycle lanes, and other bicycle facilities that are explained in Section II.



This Program reports on the implementation and installation of the City's bicycle facilities. This effort comes from six distinct, yet collaborative work efforts completed by actions from different divisions and sections of the Street Transportation Department:

1. Neighborhood Traffic Management (NTMT)
2. Pavement Maintenance Program
3. Capital Improvement Program Projects
4. Developer & Partner Agency Projects
5. Bicycle Master Plan
6. Mobility Program

As projects complete the design process and bicycle facilities are installed, this report may have inadvertently missed documenting a new bicycle facility. This is not intentional, and the Street Transportation Department will update its project tracking system in the next year to help in the quality control efforts of data collection.

Section II. Bicycle Facilities

While the goal of T2050 measures bicycle lane miles, the bicycle network is and will be comprised of a variety of different treatments and facilities. This Program provides information about the different facilities that have been completed, and are planned to be implemented in the future. While there are dozens of different types of bicycle facilities that are available to install, the city has not installed every type of facility just yet, but uses these options to find the best fit. Table 1 explains the different type of facilities and provides pictures of the possibilities.

Table 1 - Bicycle Facility List	
Bike Facility Type	**Description**
Bike Lane	A Bike Lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists.
Extend Bike Lane to Intersection	A continuation of a bike lane that has previously terminated over 50 feet before the intersection.
Through Bike lanes with Intersection Road Diet	A continuation of a bike lane to the intersection that includes a lane reduction on approaching sides
Buffered Bike Lane	Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.
'Protected' Bike Lanes/One -Way Cycle Track	Protected bike lanes are at street level and use a variety of methods for physical distinction beyond paint from passing traffic. A protected bike lane may be combined with a parking lane or other barriers (flexible delineators, turtle bumps, oblong bumps, pre-cast curb, planters, bollards, medians, etc.) between the bicycle lane and the motor vehicle travel lane.

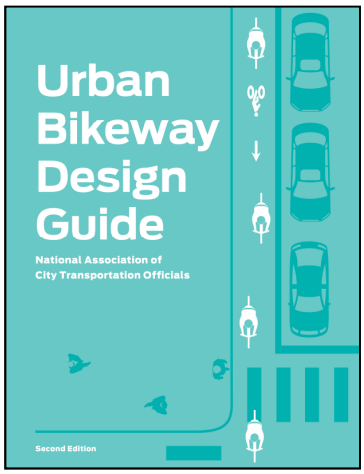
CONTINUED Table 1 - Bicycle Facility List	
Bike Facility Type	**Description**
Two-Way Protected Bike Lanes/ Two-Way Cycle Track	Two-way protected bike lanes are at street level and use a variety of methods for physical protection from passing traffic. A two-way protected bike lane may be combined with a parking lane or other barriers (flexible delineators, turtle bumps, oblong bumps, pre-cast curb, planters, bollards, medians, etc.) between the bicycle lane and the motor vehicle travel lane. Two-way protected bike lanes allow bicycle movement in both directions on one side of the road.
Contra-Flow Bike Lane	Contra-flow bicycle lanes are designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic.
Left-Side Bike Lane	Left-side bike lanes are conventional bike lanes placed on the left side of one-way streets or two-way median divided streets.
Raised Cycle Track	Raised cycle tracks are bicycle facilities that are vertically separated from motor vehicle traffic.
Bike Box	A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.
Intersection Crossing Markings	Intersection crossing markings indicate the intended path of bicyclists.
Two-Stage Turn Que Boxes	Two-stage turn queue boxes offer bicyclists a safe way to make left turns at multi-lane signalized intersections from a right-side cycle track or bike lane, or right turns from a left side cycle track or bike lane.
Median Refuge Island	Median refuge islands are protected spaces placed in the center of the street to facilitate bicycle and pedestrian crossings.
Bicycle Detection	Bicycle detection is used at actuated signals to alert the signal controller of bicycle crossing demand on an approach. Bicycle detection occurs either using push-buttons or by automated means (e.g., in-pavement loops, video, microwave, etc.).
Bicycle HAWK	A hybrid beacon, also known as a High-intensity Activated Crosswalk (HAWK), consists of a signal-head with two red lenses over a single yellow lens on the major street, and pedestrian and/or bicycle signal heads for the minor street.
Through Bike lanes	A through bike lane is present in the approach to a part of the road with a turn bay to the right or left.
Through Bike lanes with Intersection Road Diet	A through bike lane is added at near side and far side of the intersection by removing add/drop lanes.
Combined Bike Lane / Turn Lane	A combined bike lane/turn lane places a suggested bike lane within a portion of a right turn or left turn only lane. Shared lane markings are typically installed and bicyclists move forward instead of turning.

CONTINUED Table 1 - Bicycle Facility List	
Bike Facility Type	**Description**
Cycle Track Intersection Approach	An approach to an intersection from a cycle track that is designed to reduce turn conflicts for bicyclists and/or to provide connections to intersecting bicycle facility types.
Bicycle Boulevard	A bike route which has a combination of shared lane markings, directional markings for wayfinding and traffic control devices that prioritize travel by bicycle.
Shared Lane Marking (Sharrow)	A marking used to indicate a shared lane environment for bicycles and automobiles typically installed in a lane that is 14' wide or less.
Green Colored Pavement	Colored pavement within a bicycle lane increases the visibility of the facility, identifies potential areas of conflict, and reinforces priority to bicyclists in conflict areas and in areas with pressure for illegal parking.
Bike Route	A bike route is an undefined portion of roadway without pavement markings but may have a sign or stripe to promote use by bicyclists.
Shared Use Path	A paved surface for people walking, riding bicycles, riding horses and other manually operated equipment.
Multi-Use Trail	An UNPAVED surface for people walking, riding bicycles, riding horses and other manually operated equipment, typically built from stabilized decomposed granite.
Bridge / Underpass	A crossing of a heavily traveled thoroughfare or barrier that is not at grade.
Shoulder	The area to the right side of a road or street that is usually paved but is not typically driven upon by powered vehicles. It is sometimes called a breakdown lane.

Context Sensitive Solutions

When initiating projects, the Street Transportation department asks, 'is there an opportunity for this street/road to become more of a complete street and include bicycle infrastructure?'. The City has five classifications of roadways: major arterials, arterials, collectors, minor collectors, and local/neighborhood streets. These streets and various elements (sidewalk, bike lanes, street lights, landscaping, etc.) range in width from 28 feet to 140 feet. The City also has numerous data sets ranging from transit ridership, crash information, traffic signal timing, pavement condition, and many others that are brought into the project initiation process. The City uses public involvement through a variety of facets, to gain input from residents, employers, and the traveling public when developing projects. Additionally, the adjacent land uses and the placement of structures is the other integral component that is evaluated for multi-use facilities. Other considerations include a reduction in speeds, narrowing of traffic lanes, signage, and protected crossings. With this said, the projects that are moved forward to construction are based on the variety of tools the Department uses to develop a context sensitive solution.

NACTO



Related to context sensitive solutions, the City of Phoenix has been a member of the National Association of City Transportation Officials (NACTO) for nearly 10 years. NACTO's mission *"is to build cities as places for people with safe, sustainable, accessible and equitable transportation choices that support a strong economy and vibrant quality of life."* Since inception, NACTO has released six guidebooks: Urban Street Design Guide, Global Street Design Guide, Urban Bikeway Design Guide, Transit Street Design Guide, Urban Street Stormwater Guide, and the Bike Share Station Siting Guide. The designs presented in these guidebooks are fresh approaches to maximize the right of way for inclusion of all users of a street: transit, pedestrians, bicyclists, and vehicles. The City of Phoenix and 49 other cities (Member and Affiliate Member Cities) have embraced the different ideas for use of the roadway. City staff and consultants use these guidelines when reviewing and developing project concepts and designs.

Protected Bicycle Lanes

As corridors and streets are identified for bicycle improvements, they are evaluated to determine what type of facility makes the most sense for all users of the street. When a street is identified for a bicycle lane, or there is an existing bicycle lane, the City investigates if a buffered (striped spacing) bicycle lane and/or a protected facility can be provided as well. The City is now including buffered bike lanes in various future projects such as the 3rd Street and the Van Buren Street improvements. Consideration on when and how to include protection into bicycle lanes in order impacts to street maintenance and vehicle access to adjacent land uses.

City of Chicago, Kinzie Street

Tables 4 and Appendices A - F identify the specific projects and miles of buffered and protected bicycle lanes to be completed in the next five years. The City is proposing a series of specific protected areas for bicyclists in key areas of conflict on: Oak Street, 3rd Avenue, 5th Avenue, 3rd Street, Colter/SR-51 intersection area, Sweetwater Road, 24th Street, and 20th Street.

The Street Transportation Department is using an evaluation tool to assess more locations for the possibility of protection. The protected bicycle lane tool evaluates nine factors: speed, average daily traffic (ADT), street classification, driveway spacing, number of intersections in a mile, buffer conditions, on-street parking, transit stops, and bicycle crashes in a three-year period to see if a location is a good candidate for protected bike lanes. This effort is underway (as of August 2017,) and additional locations for protection will be included in future drafts. To identify additional locations, the bicycle team will:

- Review the identified bicycle lanes and buffered bicycle lanes in 2018 – 2021 pavement management plan
- Review other identified bicycle lanes and buffered bicycle lanes in the five-year bicycle program
- Assess new locations based on evaluation factors

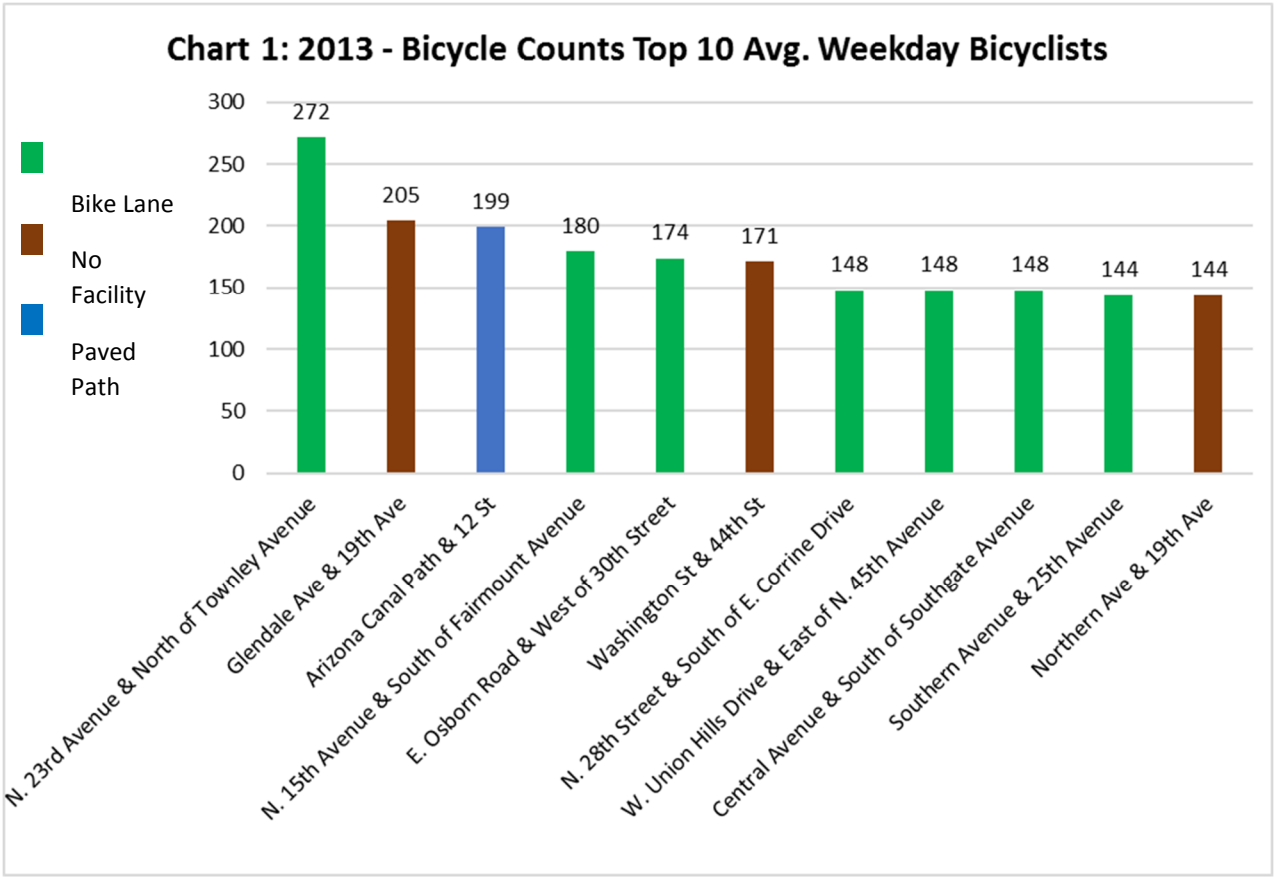
Section III. Assessing Information for Bicycle Needs

The City uses a variety of tools to assess and prioritize corridors, streets, neighborhoods, and crossings for bicycle improvements. The Department is focusing on implementing the corridors outlined in the Bicycle Master Plan, while using additional opportunities through other work efforts (explained in Section IV) to complete additional bicycle facilities, and utilize the collectors, minor collectors, canals, neighborhood streets, and some arterials to create a low stress network. In addition to using the existing plans and programs in place, the department uses information from count data, crash information, and a gap analysis to identify future projects.

Bicycle Counts

The City of Phoenix completed bicycle counts at 55 locations in 2013, and an additional 28 in 2016. Unfortunately, the City's data collection efforts in 2016 provided inconclusive data, which can't be used. Additionally, in 2013, the Maricopa Association of Governments (MAG) launched their regionwide *Bicycles Count* work effort. MAG purchased bicycle counters, and selected 42 locations regionwide, 15 in Phoenix, to count bicycles. This work effort began in 2013 and continued through 2016. Map #2 reflects the 2013 bicycle count data from both the City and MAG efforts.

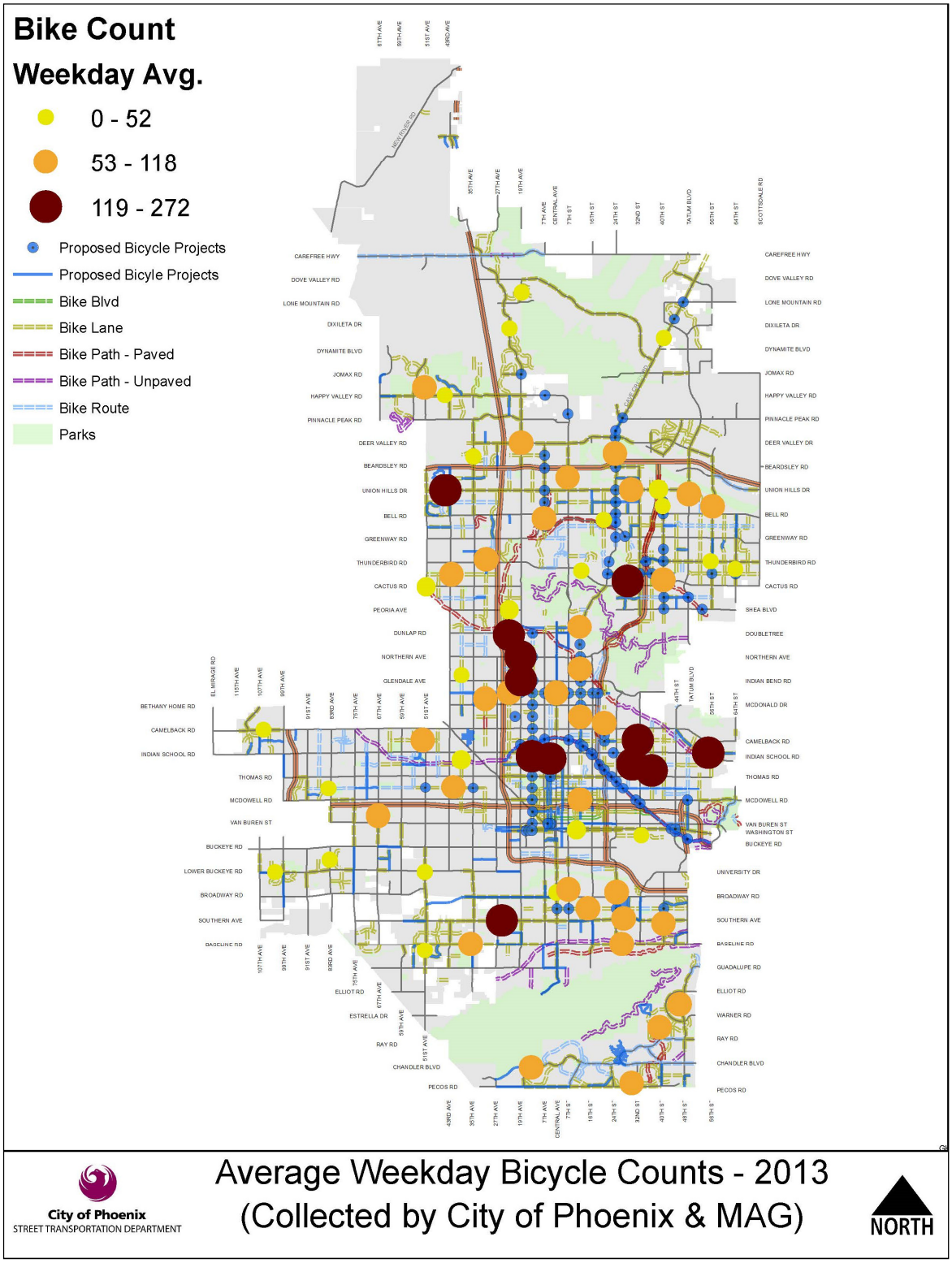
In 2013, both MAG and the City collected bicycle count data at 70 locations. Chart 1 highlights the top 10 locations that have the highest bicycle riders during the week. Weekend trips look similar in ridership, with half of the locations being in the top 10 locations for weekend trips. The colors in



the charts delineate if there is a bike lane, no facility or a paved path on the canal.

Map #2 reflects the 2013 bicycle count data from both the City and MAG efforts.

Map #2 – Average Weekday Day Bicycle Counts - 2013



Bicycle Collision Information

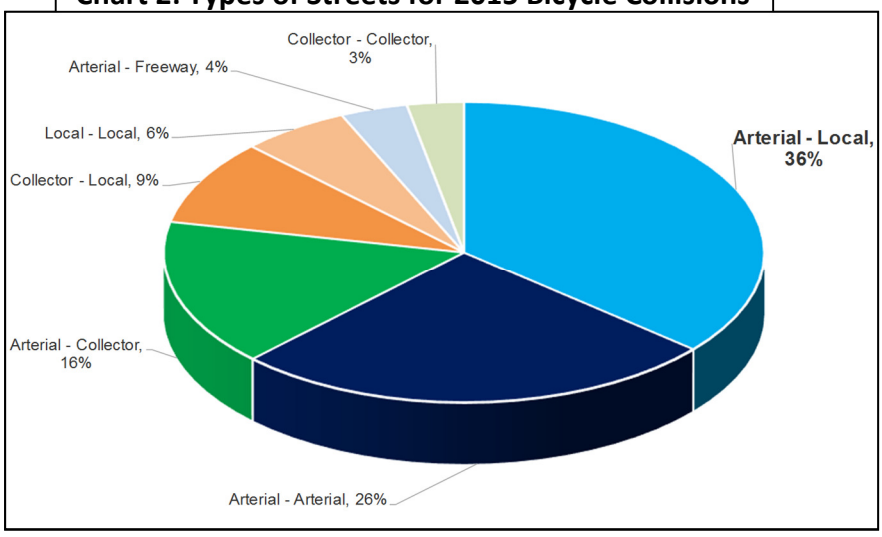
The most current set of data the City has available is 2015. In general, data lags between 1-2 years behind the current year due to the needed evaluation and data control. For a more detailed report, please visit the Department's website at : https://www.phoenix.gov/streets/safety-topics.

The information below provides a 'facts-at-a-glance' highlighting the summary information about Bicycle Collision that occurred in 2015:

453
collisions
409
injuries
9
deaths

- Bicycle collisions are on a four-year decreasing trend.
- Nearly 8 out of 10 collisions occurred at or within 150 feet of an intersection.
- More than 8 out of 10 non-intersection-related collisions occurred on an arterial street.
- Many collisions occurred while the motorist was making a right-hand turn.
- Only 7% of bicyclists involved in a collision are not injured.
- Bicycle collisions in 2015 accounted for nearly 2% of all traffic collisions, 3% of all injuries, and 5% of all fatalities.
- 15% of bicyclist collisions were children below the age of 18 (1% higher than 2014).
- 30% of all collisions occurred in an intersection crosswalk and 20% at driveways.
- 46 school-age bicyclists (5 to 18 years old) were hit during school hours (Monday – Friday, 7 AM – 4 PM).
- Only 25% of all bicycle collisions occurred at night, including twilight, but 67% of all bicyclist fatalities occurred at night.
- Bicycle collisions occurred most frequently between the hours of 3 PM and 6 PM and on Thursdays.
- August had the highest number of bicycle collisions (44).

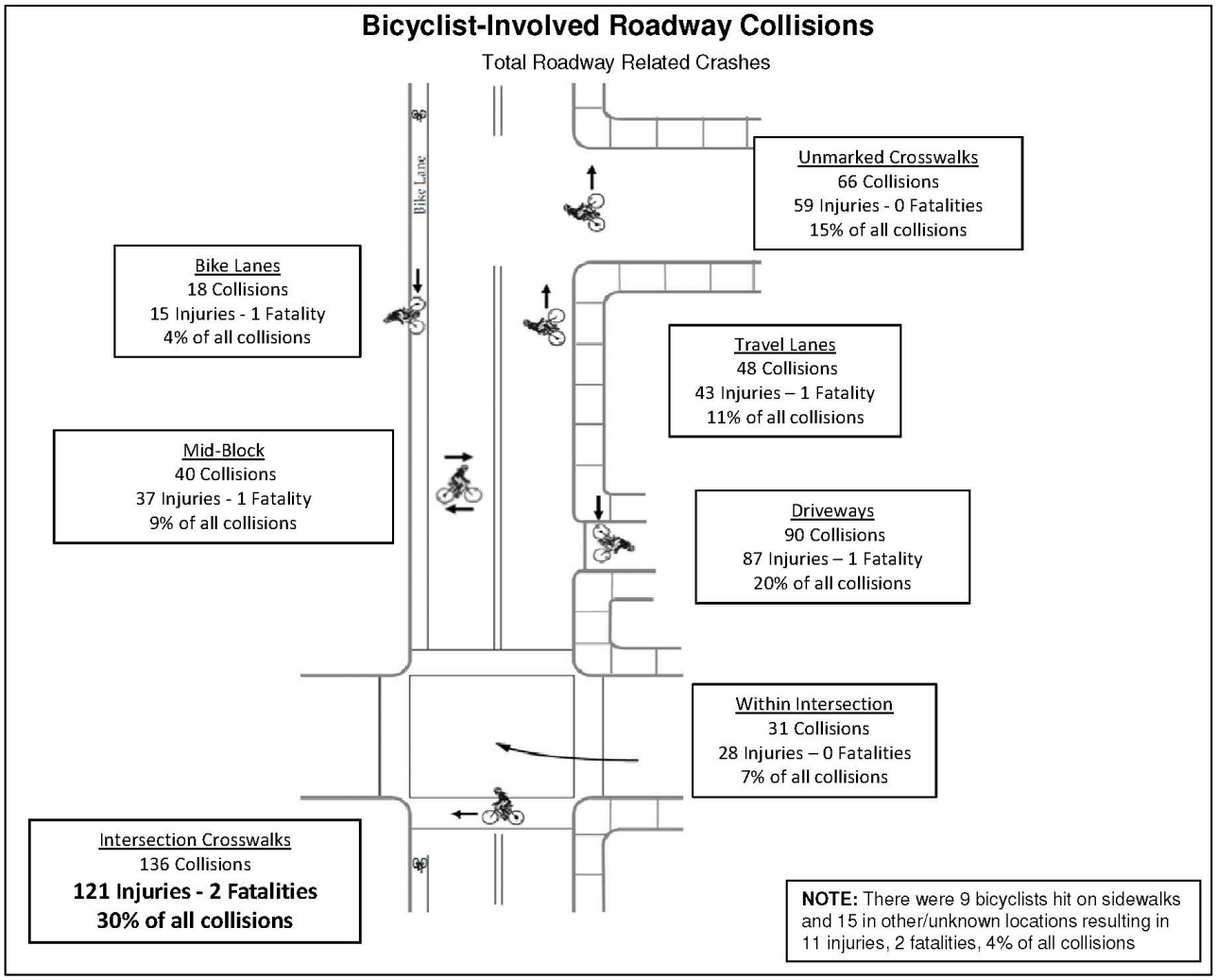
Chart 2: Types of Streets for 2015 Bicycle Collisions



- 45% of all bicycle collisions occurred at uncontrolled locations.

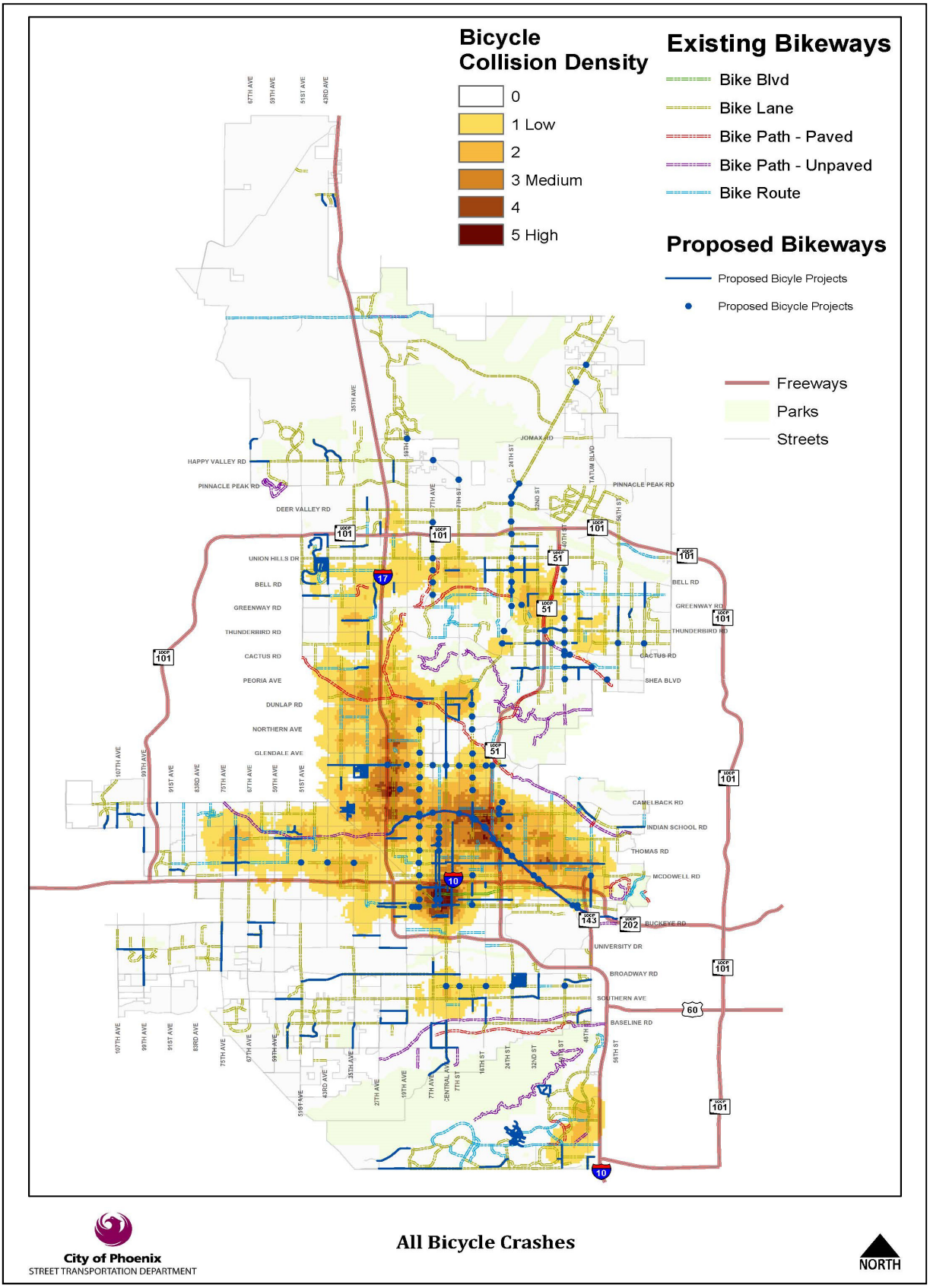
- There were 70 hit and run collisions involving bicycles.
- Chart 2 shows information about where the bicyclist involved collisions occur by street classification. Over half of the collisions occur where arterial and arterials (26%), and arterial to local street (36%) connect.

The infographic below depicts the location, amount, and severity of bicyclist-involved roadway collisions for 2015. About half of all bicycle collisions occur at intersection crosswalks (30%) and at driveways (20%).



Map #3 is a 'heat' map that shows the location of bicycle collisions over a 5-year period (2011 – 2015), the existing bikeways, and the bike facilities proposed in the next 5 years.

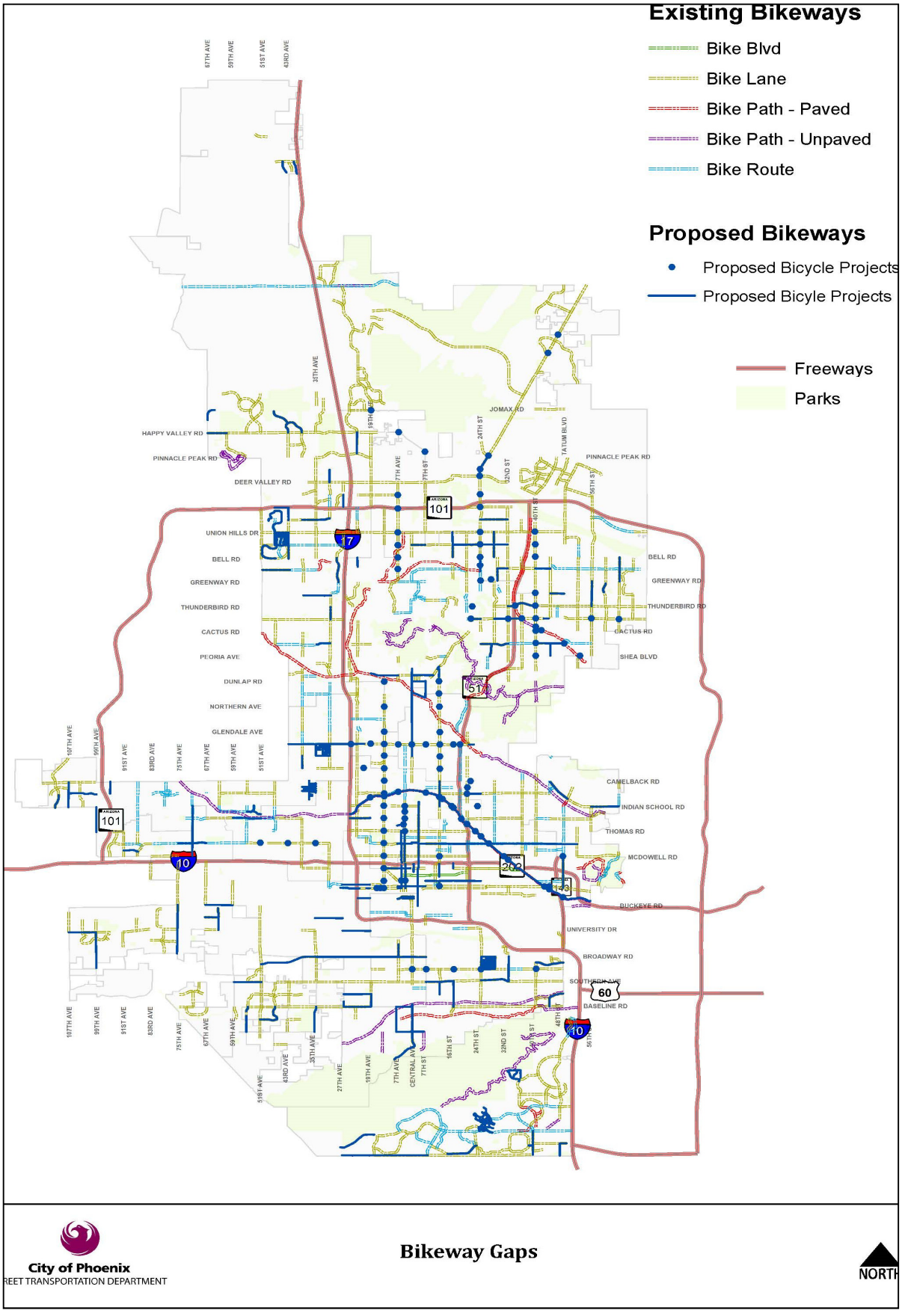
Map #3 – Density and Location of Bicycle Collisions from 2011 to 2015



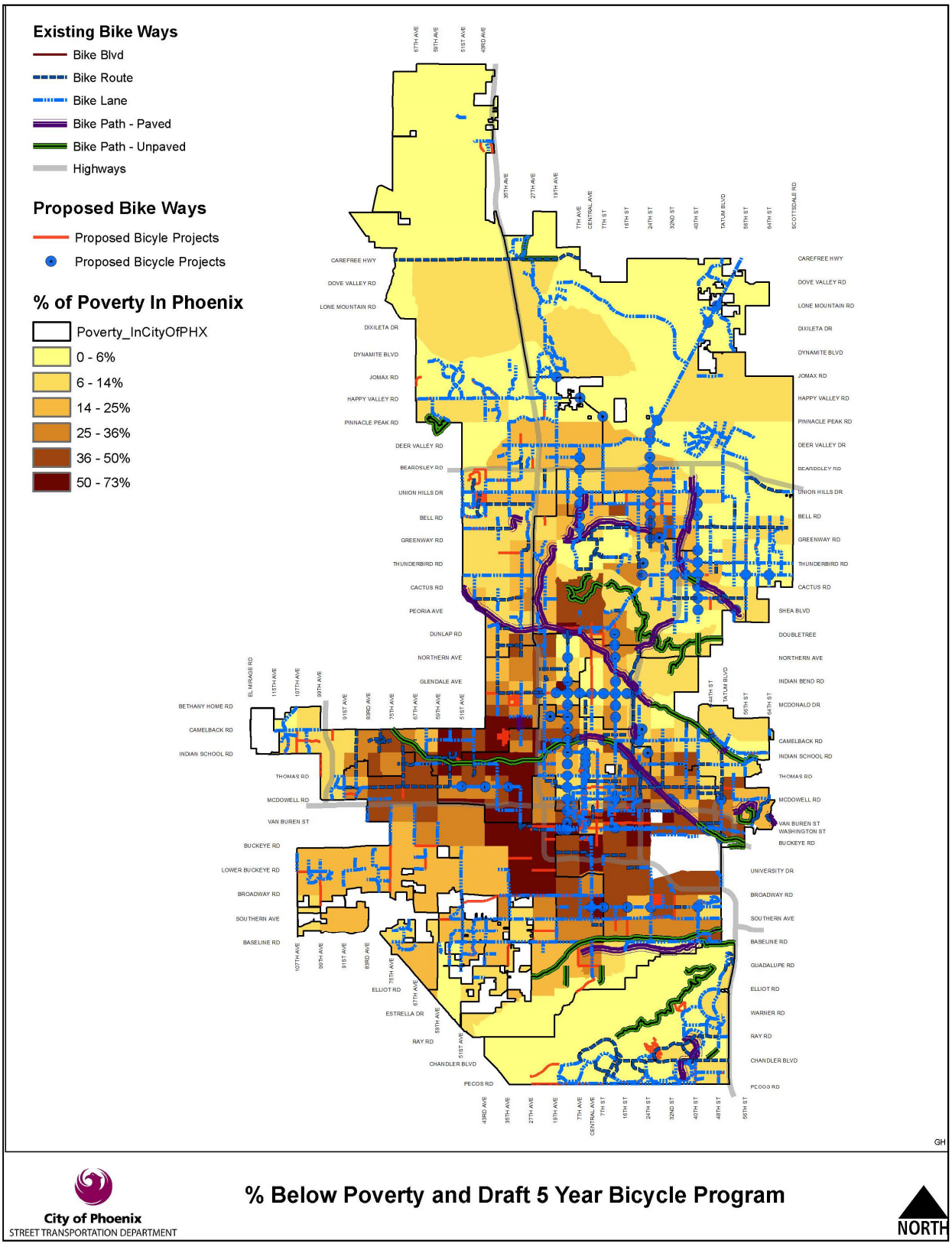
Reviewing Poverty and Gaps in the System

Two other considerations of where to install bicycle facilities is assessing gaps in the system and reviewing information such as where people in poverty live in the City. Map #4 outlines the current and proposed bicycle facilities and removes the street layer of the map. This exercise shows connections and disconnections in the bicycle system. Map #5 shows the different percentage of households in poverty (by Census blocks), the existing bicycle network, and the proposed bicycle facilities in the next five years.

Map #4 – Gaps and Connections in Bicycle Facilities



Map #5 – Percent of Households in Poverty



Section IV. Five Year Bicycle Program Work Efforts

The six main work efforts that make up the Program are not derived from a single plan. Each program, plan, and project initiation is developed from different priorities, data input, community involvement, and other factors; yet resources and information are pooled together to make informed decisions about projects moving forward. Information about each program and how projects are initiated are explained in this section.

Neighborhood Traffic Management (NTMT) Program

The Neighborhood Traffic Management program is dedicated to provide safe movement of vehicles, bicycles, and pedestrians throughout the City. Staff assists and educates residents on a variety of traffic safety issues. The projects completed by this program are developed through neighborhood requests, data analysis, warrants, school needs, and community support. The program has annual funding to support near term projects based on needs.

Pavement Maintenance Program

Phoenix has a comprehensive roadway network of more than 4,850 miles of public streets. The Street Transportation Department's Street Maintenance Division is responsible for the planning, programming and execution of the City's street maintenance program. This entails maintaining all roadways within the City's jurisdictional limits and does not include private streets, state routes maintained by ADOT and roads maintained by Maricopa County. The pavement maintenance program uses a variety of pavement treatment and maintenance options, that include: crack seal, tire rubber modified surface seal (TRMSS), micro-seal, slurry seal, fractured aggregate surface treatment (FAST), and mill and overlay, which provide multiple benefits to the pavement preservation program.

Since the 1980s, the Department has utilized the pavement maintenance program as an integral tool to deliver bicycle facilities. The program provides an opportunity to incorporate new bicycle facilities, when the roadway receives either an overlay or micro-seal treatment. Crack seal and TRMSS treatments do not provide post-application opportunities for changing the existing roadway striping configuration to include new bike facilities.

As roadways are identified for maintenance, staff assesses five main factors to determine the feasibility of including bicycle facilities:

1. Type of pavement maintenance treatment
2. Existing bicycle facilities
3. Connecting bicycle facilities and bicycle master plan priority
4. Existing roadway geometry: rights of way, lane widths, signalization at intersections and signage
5. Vehicle volumes and posted speed limits

Capital Improvement Program Projects

The Street Transportation Department's Capital Improvement Program (CIP) includes a comprehensive pavement maintenance program, improvements to existing streets for mobility and safety issues, technology upgrades to signals, building new street and drainage infrastructure, expanding roadways, and much more. The five-year program provides over $750 million in improvements to street transportation infrastructure.

The Department has identified five major areas to guide future investment of capital funding: 1) Major Streets Pavement Maintenance Program (50%); 2) New and Expanded Major Streets Program (35%); 3) Mobility Improvements (15%); 4) Technology Enhancements; (5%) and 5) Flood Control Projects. These prioritized areas will ensure the CIP is best able to be responsive to the public's expectations, as well as supporting traffic, development, and drainage needs throughout the City.

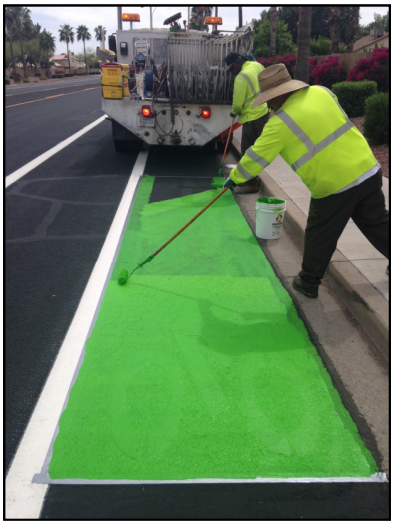
The CIP covers a five-year period that is updated annually with a new year added. Projects are derived from adopted plans, studies, data analysis, and requests. Projects are then evaluated during the fall of every year. The current CIP can be accessed here: https://www.phoenix.gov/streets/projects.

Developer & Partner Agency Projects

The Street Transportation Department coordinates with the Planning and Development Department and reviews private development project plans pertaining to right-of-way dedications and improvements. Depending on the proposed development project locations and existing conditions, the department can require additional right-of-way dedications and/ or roadway improvements to meet the required street cross-sections as per the approved Street Classification Map. Typically, the improvements in the public right-of-way is to conform to the proposed roadway as depicted in the Street Classification Map which includes additional travel lanes, curb and gutter, ADA ramps, sidewalk, bicycle lanes, street lights, landscaping, etc. Various street types are designed and built to serve all public users, including pedestrians and bicyclists, automobile, bus transit, and light rail transit.

There are several roadway segments and freeway interchanges throughout the City that come under the jurisdiction of other agencies, such as the Arizona Department of Transportation (ADOT) and the Maricopa Department of Transportation (MDOT). The Street Transportation Department coordinates with these agencies on right-of-way and infrastructure improvement items to make sure that required right-of-way and improvements are obtained from the developers to make streets contiguous across the jurisdiction. Further, the Street Transportation Department makes efforts to partner with other agencies and the development communities to complete any gaps in the existing infrastructure, as applicable.

Comprehensive Bicycle Master Plan



The 2014 Comprehensive Phoenix Bicycle Master Plan is a 20-year vision for improvements to the biking infrastructure in Phoenix. One of the primary achievements of the Bicycle Master Plan is to set forth a blueprint for extending bicycle facilities throughout the city to enhance bicycling as an appropriate and healthful transportation choice for the community. As part of this plan, over 400 projects were identified to improve bicycle facilities along 39 corridors throughout the City. The projects range in complexity from simple inexpensive lane striping adjustments to bike bridge construction estimated at several million dollars. The original BMP prioritized projects into three tiers to be completed by 2035. The first five years are more specific, while the remainder of the plan is generally divided into groups of years. Table 2 outlines the original priority from the BMP, locations and the adjusted tier for implementation. The details of projects, segments and years of work are outlined in Appendix E.

Table 2 - Bicycle Master Plan Original and Revised Tiers & Priorities

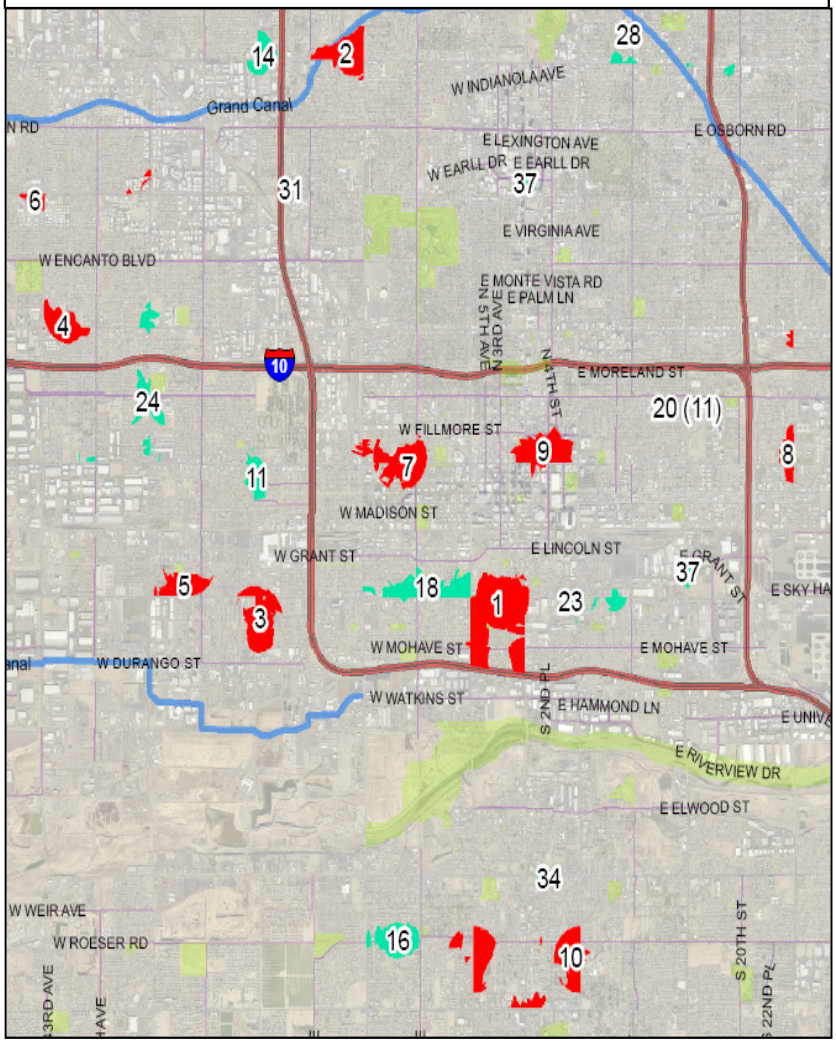
New Priority to Implement	Bicycle Master Plan Original Priority & Location	Type of Roadway
1	1) 3rd Street from Steele Indian School Park (Indian School Road) to Buckeye Road	Collector
1	4) 20th Street from Grand Canal Trail to Glendale Avenue	Collector
1	6) 12th Street from Cave Creek Road to Washington Street	Collector
1	7) 15th Ave from Dunlap Avenue to Jefferson Street	Collector
1	8A) Washington Street from 27th Avenue to 56th Street	Arterial
1	8B) Jefferson Street from 27th Avenue to 26th Street	Arterial
1	10) ReInventPHX Eastlake Bicycle Infrastructure and Intersection Projects (Van Buren Street)	Arterial
1	11) Maryland Ave from 43rd Avenue to 22nd Street	Collector
1	12B) 5th Avenue from Thomas Road to Washington Street	Collector
1	13) Encanto Boulevard / Oak Street from 19th Avenue to 52nd Street	Collector
1	14) 7th Avenue from Coral Gables Drive to Deer Valley Road	Arterial
1	17A) Missouri Ave from 43rd Avenue to 19th Avenue	Collector
1	19) Indian Bend Wash from SR 51 to East City Limits (Mountain View Road)	Canal/Wash
1	20) 40th Street from Shea Boulevard to Union Hills Drive	Collector
1	23) Sweetwater Avenue from 20th Street to Scottsdale Road	Collector

Continued Table 2 - Bicycle Master Plan Original and Revised Tiers & Priorities		
New Priority to Implement	**BMP Original Priority & Location**	**Type of Roadway**
1	24) 32nd Street from Rose Garden Lane (CAP Canal) to Puget Avenue	Arterial
1	25) Cave Creek Wash from Arizona Canal to 7th Street	Canal/Wash
1	26) Roeser from 19th Avenue to 48th Street	Collector
1	34) Cave Creek Road from 7th Street / Dunlap Road to Carefree Highway	Arterial
1	37) Encanto Boulevard from 95th Avenue to 31st Avenue	Collector
1 & 2	3) Central Avenue from Mountain View Road to South Mountain Park	Arterial
1 & 2	12A) 3rd Avenue from Arizona Canal to Jefferson Street	Collector
1 & 2	31) Chandler Boulevard from 27th Avenue to I-10*	Arterial
1 & 2	33) Western Canal from 27th Avenue to 48th Street	Canal
1 & 2	35) Broadway Road from 99th Avenue to 48th Street	Arterial
1, 2 & 3	15) Grand Canal from 75th Avenue to East City Limits (SR 202)	Canal
2	9) ReInventPHX Gateway Bicycle Infrastructure and Intersection Projects (Van Buren)	Arterial
2	18) 48th Street from Baseline Road to Pecos Park	Arterial
2	21) Union Hills Drive from 51st Avenue to Tatum Boulevard	Arterial
2	27) Baseline Road from 75th Avenue to 48th Street	Arterial
2	36) Deer Valley Road from 35th Avenue to 56th Street	Arterial
2	38) 44th Street from Sky Harbor Airport to University Drive	Arterial
2 &3	28) Arizona Canal from 51st Avenue to east city limits (60th Street)	Canal
2 &3	29) Highline Canal from Dobbins Road to Arizona Grand Parkway	Canal
2 &3	39) CAP Canal from West City limits (6700 W) to Scottsdale Road	Canal
3	2) 24th Street from Van Buren Street to Baseline Road	Arterial
3	5) Osborn Road from I-17 to 40th Street	Collector
3	16) Ray Road from Chandler Boulevard to I-10	Arterial
3	17B) Missouri Avenue from 19th Avenue to 24th Street	Collector
3	22) 19th Avenue from Jomax Road to Thunderbird Road	Arterial
3	30) Southern Avenue from 75th Avenue to 48th Street	Arterial
3	32) Dobbins Road from 51st Avenue to 20th Street	Collector

Mobility Program

While a portion of the new sidewalk and bicycle facilities commitments will be achieved through the pavement maintenance program and the new and expanded major streets program, the Mobility Improvements Program is allocated 15% of the Street Transportation Department's T2050 funds. This allocation will be utilized to meet the T2050 commitments to install 135 miles of new sidewalks and 1,080 miles of new bike lanes by 2050.

Map #6 –Mobility Improvement Areas for Assessments



In 2016 and 2017, the Citizen's Transportation Commission (CTC) has provided guidance related to factors that helped define the prioritization process for implementing Mobility Improvements Program sidewalk projects scoping and areas for further multi-modal project scope identification and prioritization analysis. Street Transportation staff analyzed 11 data sets focusing on where people walk and ride bicycles most often throughout the City, and where there are existing system deficiencies and/or gaps in bicycle, sidewalk, and transit infrastructure.

As of May 2017, the Citizens Transportation Commission, the Transportation & Infrastructure Subcommittee, and City Council recommended two primary focus areas for Mobility Improvement projects and further analysis:

1. Major Street Sidewalk Improvements - Conduct additional project assessments for major street sidewalk improvements for ADA non-accessible bus stops.
2. Mobility Improvement Areas for Further Study - Move forward with 11 areas for mobility assessments that will focus on safe pedestrian and bicycle facilities improvements funded by T2050.

Depending on the result of the two study efforts noted above, an additional focus may be needed for bicycle lanes.

Additional Programs

Bike Safety Campaign

As the City expands its bikeway system and continues to promote biking as an alternate transportation mode and healthier lifestyle, the Street Transportation department also strives to improve traffic safety for our current and new bicycle riders. The Bike Safe Phoenix campaign encourages drivers and bicyclists to be more aware of their environment and follow basic "rules of the road". The efforts are focused on reducing the number of collisions and conflicts between motor vehicles and bicycles.

As part of the campaign, citizens are encouraged to become safer drivers and bicyclists by taking a "Bike Safe Phoenix" pledge: https://www.phoenix.gov/streetssite/Pages/Bicycle-Safety-Pledge.aspx. This pledge is a commitment to be courteous and cautious when travelling along City streets, obey traffic laws, yield to pedestrians, maintain safe distances, and be alert for bicyclists and pedestrians.

The Bike Safe Phoenix campaign team also initiated a new program to install "wrong-way" stickers on the backs of existing street signs. These stickers are intended to remind bicyclists to ride with the traffic flow to be more easily seen by motorists who are turning from driveways and intersections.

Safe Routes to School Program

The Street Transportation Department's School Safety Section provides leadership, assistance and training to schools across the city to help ensure safety for students who walk or bicycle to school. The section also carries out various programs and initiatives to practice safe behaviors near school zones.

The section is responsible for reviewing and responding to pedestrian and traffic related concerns that affect all public, charter, private and parochial K-12 schools in Phoenix.

The section works directly with City management, Police, Neighborhood Services, Fire, Parks, other city departments, parents and residents to address concerns and ensure student safety.

Future Planning Efforts

Over the next two years, the City will implement two new planning efforts: Pedestrian Safety Action Plan and the Key Corridors Master Plan. The Key Corridors Master Plan will analyze corridors of significant economic and social importance within the community for identification of transportation improvement options. The Pedestrian Safety Action Plan will analyze previous pedestrian crash data, outline a plan of action for the City, and identify improvements at specific locations.

The City will also attempt to maximize resources by linking with related projects and leveraging funding opportunities in project areas. As an example, the City is merging efforts along Van Buren Street by combining the upcoming Van Buren Street Improvement Project, Choice Neighborhood Planning Grant, and the T2050 Mobility Assessment area.

Energy Saving Street Light Project

Energy Saving Street Light Project to Ameresco under the enhanced capital proposal to replace up to 100,000 street lights with new Light Emitting Diode (LED) at 2,700 Kelvin citywide. The project is slated to start with an initial roll out in mid-August 2017 with completion in late 2018 or early 2019. This program is expected to enhance visibility for all users of the public street network.

Section V. Five Year Bicycle Program

Information from the six work efforts varies and is dependent on how far in advance projects are scheduled per program. Table 3 outlines the availability of project specific information per fiscal year (FY) for each plan/program. A fiscal year runs from July 1st of the one year to June 30th of the next year. Understanding the limits of each program sets the parameters for the data analysis. The Pavement Maintenance Program, the Capital Improvement Program and the Bicycle Master plan have identified projects, funding, and scope per year until 2021. The Mobility Program will be a five-year program as it advances through the project and mobility assessments. The developer and neighborhood projects are not planned in future years because they are identified on an ongoing basis.

Additionally, it is recognized that planning, pre-design work, and implementation are cyclical and that the result of new bicycle facilities will change from year to year depending on these efforts.

Table 3 - Years that Projects are Identified in Each Plan/Program

Plan/Program	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Traffic Services – Neighborhood Program	✓	n/a	n/a	n/a	n/a	n/a
Pavement Maintenance Program	✓	✓	✓	✓	✓	TBD**
Capital Improvement Program Projects	✓	✓	✓	✓	✓	✓
Developer Projects	n/a	n/a	n/a	n/a	n/a	n/a
Bicycle Master Plan Lifecycle	✓	✓	✓	✓	✓	✓
Mobility Program	n/a	n/a	n/a	n/a	n/a	n/a

* The Mobility Program will be a five-year program after project and area assessments are complete and a five-year plan is recommended by the Citizen's Transportation Commission.

** FY2022 Pavement Maintenance Program is expected to be recommended and approval in FY2018.

Bicycle Facilities per Plan/Program

Tables 4 and 5 outline the bicycle facilities per program and in total, that the City has completed (2017) and is planning to complete by FY2022. Information for FY2017 documents the work efforts installed to date, and FY2018-2022 is a forecast that still provides the City with opportunities to do more.

The most recent fiscal year (FY2017) completed 17.5 miles of new bicycle lanes. This number is lower than projected originally, which is due to two projects (Missouri Avenue: 19th Avenue to 24th Street and Osborn Rd: between 19th Avenue to 20th Street and 36th To 40th Streets) not moving forward.

Looking forward to FY2018 – 2021, the City will utilize the Pavement Maintenance Program to its fullest extent in coordinating installation of new facilities; 69 bi-directional miles of bike lanes and extending bicycle lanes to the intersection at 27 locations. The FY2022 pavement maintenance program and schedule has not yet been approved.

The Bicycle Master Plan will also see completion of 128 individual projects that include full improvements to the Grand Canal between the City limits and the I-17. Bicyclists will be able to ride on 26 miles of new shared use path and cross streets safely with a variety of treatments that include HAWKs, rapid flashing beacons, and crosswalks.

The information about bicycle lanes and facilities related to the Mobility program is yet to be defined. The Street Transportation Department is actively working on planning efforts and evaluating potential projects. Once this effort is complete, the bike facilities will be included in this report.

Detailed reports per year, per program, location, and type of new bicycle facility are noted in the related appendices: Appendix A - 2017, Appendix B - 2018, Appendix C – 2019, Appendix D - 2020, Appendix E – 2021, and Appendix F – 2022.

Table 4 - Bike Facilities per Program per Fiscal Year						
Neighborhood Traffic Management Program						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)	6.5					
Buffered Bike Lanes (Bi-Dir. Miles)	n/a					
Protected Bike Lanes	n/a					
Extending bike lanes to intersections (# of Improvements)	n/a					
Shared Use Paths (Bi-Dir. Miles)	n/a					
Bicycle Detection (# of Improvements)	n/a					
Pavement Maintenance						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)	6.08	8	19.5	27.8	11.8	
Buffered Bike Lanes (Bi-Dir. Miles)	n/a	n/a	n/a	n/a	n/a	
Protected Bike Lanes	n/a	n/a	n/a	n/a	n/a	
Extending bike lanes to intersections (# of Improvements)	2	6	8	6	5	
Shared Use Paths (Bi-Dir. Miles)	n/a	n/a	n/a	n/a	n/a	
Bicycle Detection (# of Improvements)	TBD	TBD	TBD	TBD	TBD	
Capital Improvement Program						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)	2	2.66	2	0	4	TBD
Buffered Bike Lanes (Bi-Dir. Miles)	n/a	n/a	n/a	n/a	n/a	TBD
Protected Bike Lanes	n/a	n/a	n/a	n/a	n/a	TBD
Extending bike lanes to intersections (# of Improvements)	n/a	n/a	n/a	n/a	n/a	TBD

Shared Use Paths (Bi-Dir. Miles)	n/a	n/a	n/a	n/a	n/a	TBD
Bicycle Detection (# of Improvements)	TBD	TBD	TBD	TBD	TBD	TBD
Developer Projects						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)						
Buffered Bike Lanes (Bi-Dir. Miles)						
Protected Bike Lanes						
Extending bike lanes to intersections (# of Improvements)						
Shared Use Paths (Bi-Dir. Miles)						
Bicycle Detection (# of Improvements)						
BMP Projects						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)	3	27.6	18.16	16.34	7.84	25.84
Shared Lane Markings	0.24	9.38	1.7	3	n/a	n/a
Buffered Bike Lanes (Bi-Dir. Miles)	n/a	1	n/a	n/a	n/a	n/a
Protected Bike Lanes	n/a	n/a	2.9	2	n/a	n/a
Extending bike lanes to intersections (# of Improvements)	1	17	9	19	2	30
Shared Use Paths (Bi-Dir. Miles)	n/a	n/a	21.1	n/a	n/a	5
Bicycle Detection (# of Improvements)	TBD	TBD	TBD	TBD	TBD	TBD
Mobility Program Projects						
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Bike Lanes (Bi-Dir. Miles)						
Buffered Bike Lanes (Bi-Dir. Miles)						
Protected Bike Lanes						
Extending bike lanes to intersections (# of Improvements)						
Shared Use Paths (Bi-Dir. Miles)						
Bicycle Detection (# of Improvements)						

Section VI. Shifting Gears

The Five-Year Bicycle Program compiles the information about the City's efforts to include bicycle facilities in a comprehensive manner. Through FY2022, the T2050 annual target of installing 31 bi-directional miles of bicycle lanes per year equals 186 bi-directional bicycle lane miles. As noted in Table 5, in FY 2022, the City is on track to install just over 187 miles of new bi-directional bicycle lanes, plus an additional 5 miles of protected bicycle lanes for a total of 194 miles (Table 6). Map #7 details the existing and the five-year plan.

Table 5 - Total Bike Facilities per Program							
Total of Six Plans/Programs							
Bike Facility	**FY2017**	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**Total - FY2017-2022**
Bike Lanes (Bi-Dir. Miles)	17.58	38.26	39.66	44.14	23.64	25.84	189.12
Buffered Bike Lanes (Bi-Dir. Miles)	0	1	0	0	0	0	1
Protected Bike Lanes	0	0	2.9	2	0	0	4.9
Extending bike lanes to intersections (# of Improvements)	3	23	17	25	7	30	102
Shared Use Paths (Bi-Dir. Miles)	0	0	21.1	0	0	5	26.1
Bicycle Detection (# of Improvements)	0	0	0	0	0	0	0

Annually, the total miles fluctuate due to projects finishing final design, project schedules, and planning efforts being completed. Looking individually at fiscal years, FY2018, FY 2019, and FY2020 exceed the annual T2050 Target of 31, while FY2017, 2021 and 2022 are under the target as documented in Table 6.

Table 6 - Total Bike Facilities per Program							
Total of Six Plans/Programs							
	FY2017	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**Total - FY2017-2022**
Total Bike Lanes (Bi-Dir. Miles) including Buffered and Protected Lanes	17.58	38.26	42.56	46.14	23.64	25.84	194.02
T2050 Annual Target	31	31	31	31	31	31	186
Over/(Under) Target	**(13)**	**7**	**12**	**15**	**(7)**	**(5)**	8.02

As shown in Chart 3, bicycle miles come from the projects of different plan/programs. Map #7 is included to show what is completed, what is planned in the next five years as the Five-Year Bicycle Program moves forward. This number will change and most likely have a positive influence on this program and bicycle lane miles will increase. Overall, the Five-Year Bicycle Program demonstrates that the City is *Shifting Gears* for a more complete transportation system.

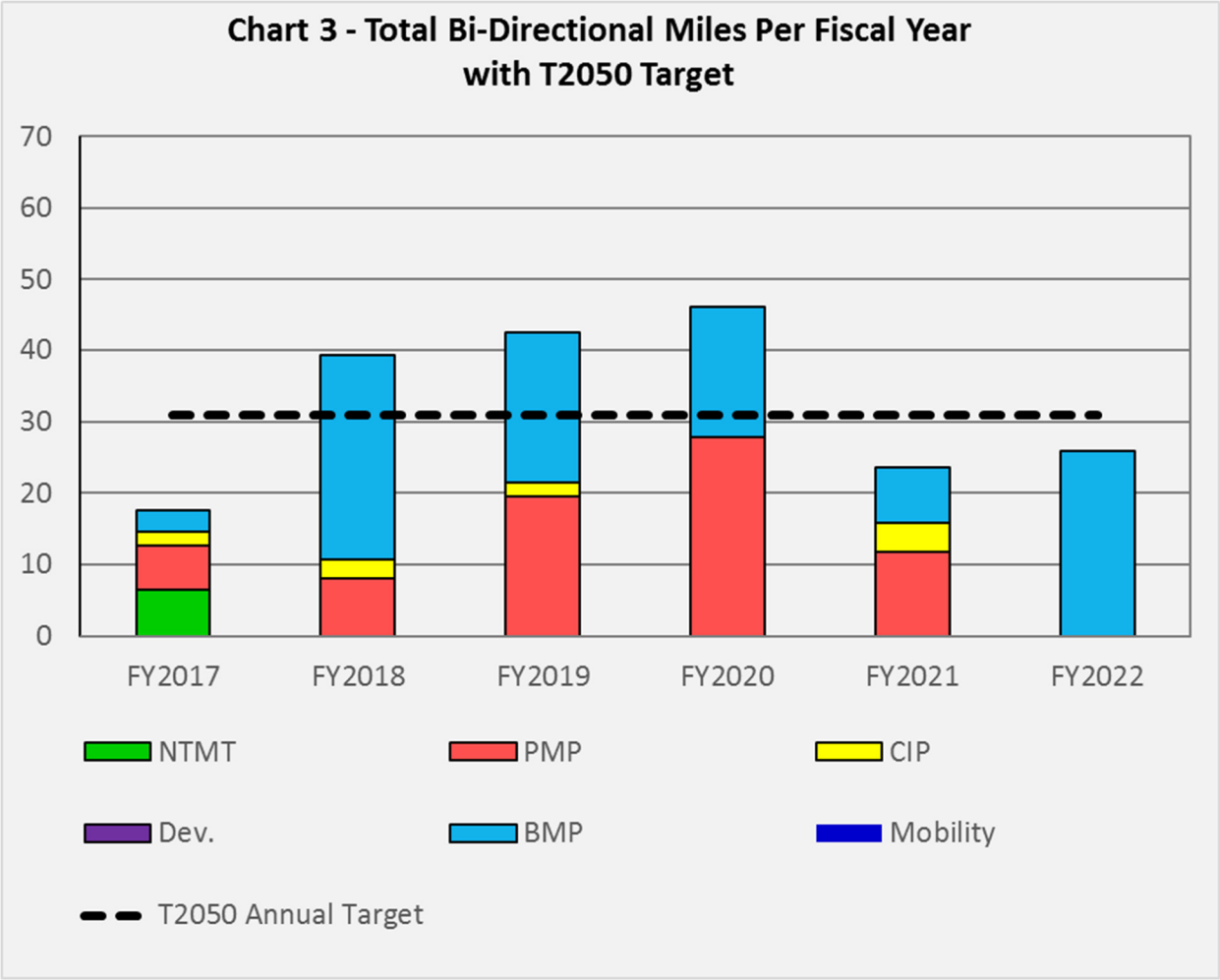
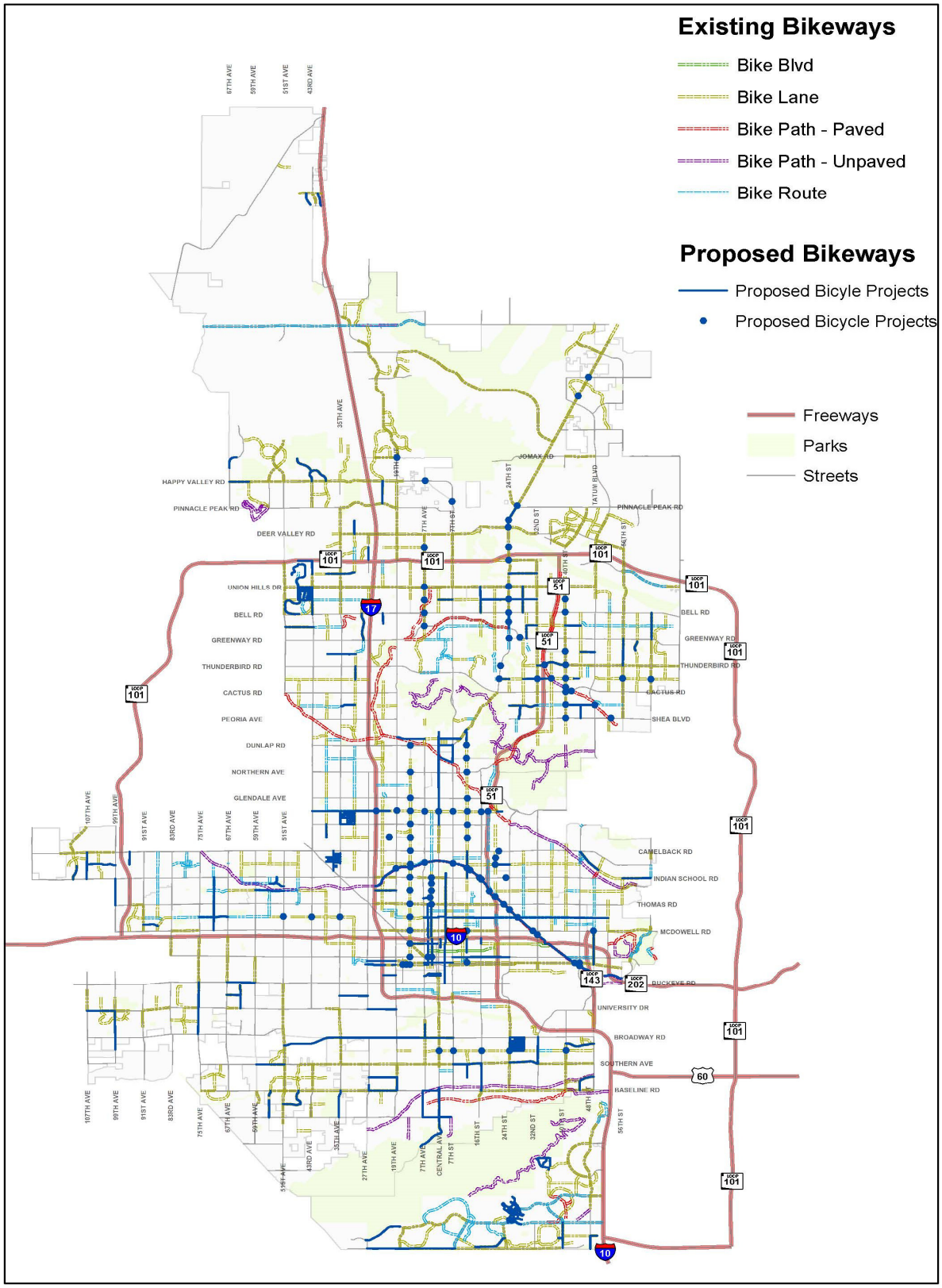


Chart 3 - Total Bi-Directional Miles Per Fiscal Year
with T2050 Target
70
60
50
40
30
20
10
0
FY2017
FY2018
FY2019
FY2020
FY2021
FY2022
NTMT
PMP
CIP
Dev.
BMP
Mobility
T2050 Annual Target

Map #7 – Existing and Proposed Bicycle Facilities



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Draft 5 Year Bicyle Program

NORTH

APPENDICES A - F

APPENDIX A - FY2017

FY2017 - Neighborhood Traffic Management Program							
Location	**From**	**To**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***
44th Street	Shea Blvd.	Cholla Street	0.5	1	None	4-6 Foot Bike Lane	NTMT
Campbell Avenue	99th Avenue	107th Avenue	1	2	None	4-6 Foot Bike Lane	NTMT
Cholla Street	40th Street	Tatum Boulevard	0.75	1.5	None	4-6 Foot Bike Lane	NTMT / BMP
Lafayette Blvd.	56th Street to 64th Street	64th Street	1	2	None	4-6 Foot Bike Lane	NTMT
		Total New Bicycle Lanes	3.25	6.5			
		Total New Shared Lane Markings					
		Total New Protected Bicycle Lanes					
		Total New Buffered Bicycle Lanes					

FY2017 - Pavement Maintenance Management Program							
Location	**To**	**From**	**Distance (Mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***
Clarendon Avenue	55th Avenue	Indian School Road	0.44	0.88	None	Bike Lane	PMP
Maryvale Pkwy	Clarendon Avenue	51st Avenue	1.1	2.2	None	Bike Lane	PMP
Grovers Avenue	16th Street	Cave Creek Road	0	0	4-6 Foot Bike Lane	Intersection Treatment	PMP
Liberty Lane	15th Street	24th Street	0	0	4-6 Foot Bike Lane	Intersection Treatment	PMP
Cholla Street	35th Avenue	31st Avenue	0.5	1	No Bike Lanes	4-6 Foot Bike Lane	PMP
Grovers Road	Cave Creek Road	32nd Street	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP
		Total New Bicycle Lanes	3.04	6.08			
		Total New Shared Lane Markings					
		Total New Protected Bicycle Lanes					
		Total New Buffered Bicycle Lanes					

CIP Program (projects that are in the CIP and are Bicycle Master Plan projects are accounted for in the Bicycle Master Plan Program)							
Location	**From**	**To**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***
Avenida Rio Salado/Broadway Road	51st Avenue	43rd Avenue	1	2	None	4-6 Foot Bike Lane	CIP Program
		Total New Bicycle Lanes	1	2			
		Total New Shared Lane Markings					
		Total New Protected Bicycle Lanes					
		Total New Buffered Bicycle Lanes					

FY2017 - Bicycle Master Plan								
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**
8.1	BMP-08A.A	Adams Street between 27th Ave and 19th Ave	27th Avenue	19th Avenue	1	2	None	4-6 Foot Bike Lane
8.2	BMP-08B.A	Jefferson Street between 27th Ave and 22nd Ave	27th Avenue	22nd Avenue	0.5	1	Bike Route	4-6 Foot Bike Lane
8.2	BMP-08B.C	Jefferson Street between 20th Ave and 19th Ave	20th Avenue	19th Avenue	0.12	0.24	None	Shared Lane Markings
13	BMP-13K	Encanto Blvd. at 15th Ave Intersection	at 15th Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
				Total New Bicycle Lanes	1.5	3		
				Total New Shared Lane Markings	0.12	0.24		
				Total New Protected Bicycle Lanes				
				Total New Buffered Bicycle Lanes				

APPENDIX B - FY2018

FY2018 - Pavement Maintenance Management Program								
Location	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***	**FY of Completion**
Durango Street	27th Avenue	35th Avenue	1	2	No Bike Lane	4-6 Foot Bike Lane	PMP	2018
16 St	N/O Bell Rd	S/O Union Hills Dr	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
32 St	N/O Southern Ave	S/O Broadway Rd	1	2	No Bike Lane	Shared Lane Markings	PMP	2018
56 St	N/O Thunderbird Rd	S/O Greenway Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
64 St	N/O Greenway Pkwy	S/O Bell Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
Cave Creek Rd	N/O Deer Valley Rd	S/O Pinnacle Peak Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
Dobbins Rd	7 Ave	7 St	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP	2018
Durango St	E/O 27 Ave	W/O 35th Ave	1	2	No Bike Lane	4-6 Foot Bike Lane	PMP	2018
Hatcher Rd	19 Ave	7 Ave	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP	2018
Hatcher Rd	E/O 7 St	W/O Cave Creek Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
Hatcher Rd	W/O Central Ave	W/O 7 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2018
		Total New Bicycle Lanes	4	8				
		Total New Shared Lane Markings	1	2				
		Total New Protected Bicycle Lanes						
		Total New Buffered Bicycle Lanes						

CIP Program (projects that are in the CIP and are Bicycle Master Plan projects are accounted for in the Bicycle Master Plan Program)								
Location	**From**	**To**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***	**Fiscal Year**
1st Street	Mckinley Street	Moreland Street	0.33	0.66	None	4-6 Foot Bike Lane	CIP Program	2018
Avenida Rio Salado/Broadway Road	43rd Avenue	35th Avenue	1	2	None	4-6 Foot Bike Lane	CIP Program	2018
		Total New Bicycle Lanes	1.33	2.66				
		Total New Shared Lane Markings						
		Total New Protected Bicycle Lanes						
		Total New Buffered Bicycle Lanes						

FY2018 - Bicycle Master Plan								
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**
3	BMP-03A	Central Avenue	Mountain View Road	Ruth Avenue	0	0	None	Bicycle Route Signage
3	BMP-03B	Central Avenue	Ruth Avenue	Bethany Home Road	2.69	5.38	None	Shared Lane Markings
3	BMP-03G	Central Avenue	Western Canal	Mineral Road	0.2	0.4	Bike Lanes	Extend Bike Lanes to Intersection
3	BMP-03H	Central Avenue	Mineral Road	Phoenix South Mountain Park	1.2	2.4	None	Extend Bike Lanes to Intersection
6	BMP-06F	12th Street	Osborn Road	Thomas Road	0	0	None	Bike HAWK
7	BMP-07D	15th Avenue	Van Buren St	Harrison St.	0.5	1	None	Buffered Bicycle Lanes
7	BMP-07R	15th Avenue	Harrison St.	I-17	1	2	None	Bicycle Lane
8.1	BMP-08A.C	Washington Street	7th Avenue	7th Street	1.01	2.02	None	Shared Lane Markings
8.1	BMP-08A.E	Washington Street	at 44th Street		0	0	No bike lanes	Extend Bike Lanes to Intersection
8.2	BMP-08B.F	Jefferson Street	7th Avenue	5th Street	0.89	1.78	None	4-6 Foot Bike Lane
8.2	BMP-08B.H	Jefferson Street	at 17th Avenue		0	0	No Bike Lane	Extend Bike Lanes to Intersection
8.2	BMP-08B.I	Jefferson Street	at 16th Avenue		0	0	No Bike Lane	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
8.2	BMP-08B.J	Jefferson Street	at 15th Avenue		0	0	No Bike Lane	Extend Bike Lanes to Intersection
12.1	BMP-12A.D	3rd Avenue	Van Buren Street	Jefferson Street	0.3	0.6	None	4-6 Foot Bike Lane
12.1	BMP-12A.J	3rd Avenue	at Van Buren Street		0	0	No Bike Lane	Extend Bike Lanes to Intersection
12.2	BMP-12B.B	5th Avenue	Van Buren Street	Washington Street	0.22	0.44	None	4-6 Foot Bike Lane
12.2	BMP-12B.F	5th Avenue	at Van Buren Street		0.2	0.4	No Bike Lane	Through Bike lanes with intersection road diet
13	BMP-13G	Oak Street	24th Street	32nd Street	0.99	1.98	Parking	Shared Lane Markings
13	BMP-13H	Oak Street	32nd Street	47th Place / Cross-cut Canal	1.98	3.96	Bike Route	4-6 Foot Bike Lane
13	BMP-13I	Oak Street	48th Street	52nd Street	0.49	0.98	None	4-6 Foot Bike Lane
13	BMP-13J	Oak Street	52nd St	56th St	0.5	1	None	4-6 Foot Bike Lane
19	BMP-19A	Indian Bend Wash	at Thunderbird Road		0	0	Underpass	Wayfinding
19	BMP-19B	Indian Bend Wash	at 36th Street		0	0	Crosswalk	Wayfinding
19	BMP-19C	Indian Bend Wash	at 40th Street		0	0	Underpass	Wayfinding
19	BMP-19D	Indian Bend Wash	at Cactus Road		0	0	Underpass	Wayfinding
19	BMP-19E	Indian Bend Wash	at Tatum Blvd		0	0	Underpass	Wayfinding
19	BMP-19F	Indian Bend Wash	at Shea Blvd		0	0	Underpass	Wayfinding
31	BMP-31A	Chandler Blvd	27th Avenue	18th Avenue	0.8	1.6	None	4-6 Foot Bike Lane
34	BMP-34I	Cave Creek Road	at Sweetwater Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34J	Cave Creek Road	at Sharon Drive		0	0	No Bike Lanes	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
34	BMP-34K	Cave Creek Road	at Greenway Road		0	0	No SB Bike Lane	Extend Bike Lanes to Intersection
34	BMP-34L	Cave Creek Road	at Greenway Parkway		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34M	Cave Creek Road	at Grandview Road		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34N	Cave Creek Road	at Bell Road		0	0	No Bike Lanes	Combined Bike Lane / Turn Lane
34	BMP-34O	Cave Creek Road	at Grovers Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34P	Cave Creek Road	at Union Hills Drive		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34Q	Cave Creek Road	at Beardsley Road		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34R	Cave Creek Road	at Rose Garden Lane		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
35	BMP-35F	Broadway Road	51st Avenue	19th Avenue	4.03	8.06	None	4-6 Foot Bike Lane
35	BMP-35G	Broadway Road	19th Avenue	7th Street	2.02	4.04	None	4-6 Foot Bike Lane
			Total New Bicycle Lanes		13.83	27.66		
			Total New Shared Lane Markings		4.69	9.38		
			Total New Protected Bicycle Lanes					
			Total New Buffered Bicycle Lanes		0.5	1		

APPENDIX C - FY2019

CIP Program (projects that are in the CIP and are Bicycle Master Plan projects are accounted for in the Bicycle Master Plan Program)								
Location	**From**	**To**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***	**Fiscal Year**
107th Avenue	Camelback Road	Indian School Roads	1	2	None	4-6 Foot Bike Lane	CIP Program	2019
		Total New Bicycle Lanes	1	2				
		Total New Shared Lane Markings						
		Total New Protected Bicycle Lanes						
		Total New Buffered Bicycle Lanes						

FY2019 - Pavement Maintenance Management Program								
Location	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	**Program**	**FY of Completion**
29 Ave	Greenway Rd	Bell Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
31 Ave	N/O Sweetwater Ave	S/O Thunderbird Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
35 Ave	Dobbins Rd	Baseline Rd	0.9	1.8	Partial Bike Lanes (.1 Mile)	New .9 Miles Of 4-6 Foot Bike Lane	PMP	2019
43 Ave	Bell Rd	Union Hills Dr	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
45 Ave	Grovers Ave	Union Hills Dr	0.5	1	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019

7 Ave	N/O Broadway Rd	S/O Elwood St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
71 Ave	N/O Mcdowell Rd	S/O Indian School Rd	2	4	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
75 Ave	N/O Broadway Rd	S/O Lower Buckeye Rd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
Baseline Rd	E/O 7 Ave (N Bnd)	W/O Central Ave	0.5	1	No Bike Lane	4-6 Foot Bike Lane	PMP	2019
Cotton Center Blvd	40 St	48 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
Encanto Blvd	E/O 75 Ave	W/O 67 Ave	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Grant St	E/O Black Canyon Frwy	W/O 19 Ave	0.45	0.9	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Happy Valley Rd	E/O 67 Ave	W/O 61 Ave (S/Bnd)	0.2	0.4	4-6 Foot Bike Lane Partially Exist	4-6 Foot Bike Lane	PMP	2019
Mountain Gate Pass	E/O Cave Creek Rd	E/O Cave Creek Dam Rd	0.5	1	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Oak St	E/O 7 St	W/O 14 St	0.75	1.5	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019

Osborn Rd	E/O 59 Ave	W/O 51 Ave	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Palm Ln	E/O 91 Ave	W/O 86 Dr	0.5	1	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Roosevelt St	E/O 7 Ave	W/O 1 Ave	0.45	0.9	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
Southern Ave	E/O 7 St	W/O 16 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
Sweetwater Ave	E/O 32 St	W/O 36 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2019
Utopia/Yorkshire Dr	E/O Cave Creek Rd	E/O 32 St	1	2	No Bike Lanes	4-6 Foot Bike Lane	PMP	2019
		Total New Bicycle Lanes	9.75	19.5				
		Total New Shared Lane Markings						
		Total New Protected Bicycle Lanes						
		Total New Buffered Bicycle Lanes						

FY2019 - Bicycle Master Plan								
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**
1	BMP-01A	3rd Street	Indian School	Roosevelt Street	2.1	4.2	None	4-6 Foot Bike Lane
1	BMP-01A	3rd Street	Indian School	Roosevelt Street	0.5	1	None	Protected Bike Lane
1	BMP-01B	3rd Street	Roosevelt Street	Filmore Street	0.29	0.58	None	4-6 Foot Bike Lane
12.1	BMP-12A.C	3rd Avenue	Thomas Road	Van Buren Street	1.5	3	Bike Lane	4-6 Foot Bike Lane
12.1	BMP-12A.C	3rd Avenue	Thomas Road	Van Buren Street	0.5	1	Bike Lane	Protected Bike Lane
12.2	BMP-12B.A	5th Avenue	Thomas Road	Van Buren Street	1.98	3.96	Bike Lane	4-6 Foot Bike Lane

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
13	BMP-13E	Oak Street	3rd Street	16th Street	1	2	None	4-6 Foot Bike Lane
13	BMP-13E	Oak Street	3rd Street	16th Street	0.25	0.5	None	Protected Bike Lane
13	BMP-13F	Oak Street	16th Street	24th Street	1.01	2.02	Bike Route	4-6 Foot Bike Lane
13	BMP-13C	Encanto Blvd.	7th Avenue	Central Avenue	0.52	1.04	None	Shared Lane Markings
13	BMP-13D	Encanto Blvd.	Central Avenue	3rd Street	0.33	0.66	Discontinuous	Shared Lane Markings
15	BMP-15B	Grand Canal	I-17	15th Avenue	1.5	3	Not Paved	Shared Use Path
15	BMP-15C	Grand Canal	15th Avenue	16th Street	2.75	5.5	Not Paved	Shared Use Path
15	BMP-15D	Grand Canal	16th Street	36th Street	3.5	7	Not Paved	Shared Use Path
15	BMP-15E	Grand Canal	36th Street	40th Street	0.6	1.2	Not Paved	Shared Use Path
15	BMP-15F	Grand Canal	40th Street	PHX/Tempe Border	2.2	4.4	Not Paved	Shared Use Path
15	BMP-15S	Grand Canal	at Indian School Road (2250 W)		0	0	None	Crosswalk
15	BMP-15U	Grand Canal	at 15th Avenue		0	0	None	Rapid Flashing Beacon
15	BMP-15V	Grand Canal	at 7th Avenue		0	0	None	Bike HAWK
15	BMP-15X	Grand Canal	at 7th Street		0	0	None	Crosswalk
15	BMP-15Y	Grand Canal	at 12th Street		0	0	None	Rapid Flashing Beacon
15	BMP-15Z	Grand Canal	at Longview Avenue		0	0	None	Crosswalk
15	BMP-15ZA	Grand Canal	at Indian School Road (1550 E)		0	0	None	Bike HAWK
15	BMP-15ZB	Grand Canal	at 16th Street		0	0	None	Bike HAWK

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
15	BMP-15ZC	Grand Canal	at Osborn Road		0	0	None	Rapid Flashing Beacon
15	BMP-15ZD	Grand Canal	at 20th Street		0	0	None	Rapid Flashing Beacon
15	BMP-15ZE	Grand Canal	at Thomas Road		0	0	None	Crosswalk
15	BMP-15ZF	Grand Canal	at 24th Street		0	0	None	Bike HAWK
15	BMP-15ZG	Grand Canal	at Oak Street		0	0	None	Crosswalk
15	BMP-15ZH	Grand Canal	at McDowell Road		0	0	None	Bike HAWK
15	BMP-15ZI	Grand Canal	at 32nd Street		0	0	None	Bike HAWK
15	BMP-15ZK	Grand Canal	at Washington Street		0	0	None	Crosswalk
15	BMP-15ZL	Grand Canal	at 44th Street		0	0	Refuge Island	Rapid Flashing Beacon
15	BMP-15ZN	Grand Canal	at 48th Street		0	0	None	Crosswalk
15	BMP-15T	Grand Canal	at 19th Avenue		0	0	None	Bike HAWK
23	BMP-23C	Sweetwater Avenue	42nd Street	Paradise Village Pkwy	1	2	None	Bicycle Lane
23	BMP-23C	Sweetwater Avenue	42nd Street	Paradise Village Pkwy	0.2	0.4	None	Protected Bike Lane
23	BMP-23E	Sweetwater Avenue	at Cave Creek Road		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
23	BMP-23F	Sweetwater Avenue	at 32nd Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
23	BMP-23G	Sweetwater Avenue	at 40th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
23	BMP-23H	Sweetwater Avenue	at 56th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
23	BMP-23I	Sweetwater Avenue	at 64th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
25	BMP-25A	Cave Creek Wash	at Peoria Avenue		0	0	Underpass	Wayfinding
25	BMP-25B	Cave Creek Wash	at Cactus Road		0	0	Underpass	Wayfinding
25	BMP-25C	Cave Creek Wash	at Thunderbird Road		0	0	Underpass	Wayfinding
25	BMP-25E	Cave Creek Wash	at 7th Avenue		0	0	Underpass	Wayfinding
25	BMP-25F	Cave Creek Wash	at 7th Street		0	0	Underpass	Wayfinding
34	BMP-34S	Cave Creek Road	at Deer Valley Road		0.2	0.4	No SB Bike Lane	Through Bike lanes with intersection road diet
34	BMP-34T	Cave Creek Road	at Mountain Gate Pass		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
34	BMP-34U	Cave Creek Road	at Desert Peak Pkwy		0	0	No SB Bike Lane	Extend Bike Lanes to Intersection
34	BMP-34V	Cave Creek Road	at Desert Willow E / W Pkwy		0	0	No Bike Lanes	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
34	BMP-34W	Cave Creek Road	at Lone Mountain Road		0	0	No Bike Lane NB	Combined Bike Lane / Turn Lane
				Total New Bicycle Lanes	9.08	18.16		
				Total New Shared Lane Markings	0.85	1.7		
				Total New Protected Bicycle Lanes	1.45	2.9		
				Total New Buffered Bicycle Lanes				

APPENDIX D - FY2020

FY2020 - Pavement Maintenance Management Program								
Location	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***	**FY of Completion**
41 Dr	End Of Road	Anthem Way	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
47 Ave/Topeka R	N/O Union Hills Dr	N/O Yorkshire Dr	0.7	1.4	No Bike Lanes	4-6 Foot Bike Lane	PMP	2020
Campbell Ave	E/O 20 St	W/O 24 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
Dobbins Rd	E/O 51 Ave	W/O 43 Ave	1	2	No Bike Lane	4-6 Foot Bike Lane	PMP	2020
Earll Dr	E/O 7th Ave	E/O 3rd Ave	0.2	0.4	No Bike Lanes	4-6 Foot Bike Lane	PMP	2020
Grovers Ave	E/O Central Ave	W/O 7 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
Lower Buckeye R	E/O 107 Ave	W/O 99 Ave	0.5	1	Partial Bike Lanes (.5 Mile)	4-6 Foot Bike Lane	PMP	2020
Paradise Ln	W/O 51 Ave	E/O 43 Ave	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
Southern Ave	59 Ave	51 Ave	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
Thunderbird Rd	W/S 32 St	E/S 40 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	PMP	2020
Cave Creek Rd	S/O Greenway Rd	N/O Bell Rd	0.98	1.96	None	4-6 Foot Bike Lane	PMP	2020

06-35	Ahwatukee Ct / Mountain Preserve	Mountain Preserve / Blackfoot Dr	1.49	2.98	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 1-23/1-24	Baseline Rd / Vineyard Rd	27 Ave / 19 Ave	1	2	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 23-32	Glendale Ave / Orangewood Ave	Sr 51 Frwy / 24 St	0.6	1.2	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 48-13	Prickly Pear Trl / Pyramid Peak Prkwy	Pyramid Peak Prkwy / Mountain Preserve	0.42	0.84	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 38-18	Grovers Ave / Union Hills Dr	47 Ave / 43 Ave	1.06	2.12	Bike Lane & Route	4-6 Foot Bike Lane	PMP	2020
Quarter Section 26-28	Las Palmaritas Dr / Dunlap Ave	Central Ave / 7 St	1	2	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 18-20/17-20	Glenrosa Ave / Camelback Rd	39 Ave / 35 Ave	0.77	1.54	None	4-6 Foot Bike Lane	PMP	2020
12 St	N/O Vineyard Rd	S/O Southern Ave	0.5	1	None	4-6 Foot Bike Lane	PMP	2020
Quarter Section 21-21	Maryland Ave / Bethany Home Rd	35 Ave / 31 Ave	1	2	Bike Lane & Route	4-6 Foot Bike Lane	PMP	2020
7 Ave	N/O Dobbins Rd	S/O Baseline Rd	0.5	1	Partial Bike Lane	Complete 4-6 Foot Bike Lane	PMP	2020
Acoma Dr	E/O 39 Ave	W/O 31 Ave	1	2	None	4-6 Foot Bike Lane	PMP	2020

Lindner Dr	Bell Rd / Grovers Ave	51 Ave / 47 Ave	0.38	0.76	Partial Bike Lane	Complete 4-6 Foot Bike Lane	PMP	2020
Quarter Section 4-33	Roeser Rd / Broadway Rd	24 St/28 St	0.5	1	Partial Bike Lane	Complete 4-6 Foot Bike Lane	PMP	2020
95 Ave	Minnezona Ave	S/O Camelback Rd	0.34	0.67	None	4-6 Foot Bike Lane	PMP	2020
		Total New Bicycle Lanes	13.94	27.88				
		Total New Shared Lane Markings						
		Total New Protected Bicycle Lanes						
		Total New Buffered Bicycle Lanes						

FY2020 - Bicycle Master Plan								
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**
1	BMP-01C	3rd Street	Filmore Street	Washington Street	0.43	0.86	None	4-6 Foot Bike Lane
1	BMP-01D	3rd Street	Washington Street	Lincoln Street	0.42	0.84	None	4-6 Foot Bike Lane
1	BMP-01E	3rd Street	Lincoln Street	Buckeye Road	0.37	0.74	None	4-6 Foot Bike Lane
4	BMP-04A	20th Street	Glendale	Maryland	1	2	None	4-6 Foot Bike Lane
4	BMP-04C	20th Street	Clarmont	Bethany Home	0.5	1	None	Shared Lane Markings
4	BMP-04D	20th Street	Missouri Ave	Camelback	0.5	1	Bike Lanes	Protected Bike Lanes
4	BMP-04E	20th Street	Camelback	Highland	0.5	1	Bike Lanes	Protected Bike Lanes
4	BMP-04F	20th Street	Highland Avenue		0	0	No Bike Lanes NB	Through Bike lanes with intersection road diet
12.1	BMP-12A.E	3rd Avenue	Indian School Road		0	0	No Bike Lane	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
12.1	BMP-12A.F	3rd Avenue	Clarendon Avenue		0	0	No Bike Lane	Extend Bike Lanes to Intersection
12.1	BMP-12A.G	3rd Avenue	Osborn Road		0	0	No Bike Lane	Through Bike lanes with intersection road diet
12.1	BMP-12A.H	3rd Avenue	Earll Drive		0	0	No Bike Lane	Extend Bike Lanes to Intersection
12.1	BMP-12A.I	3rd Avenue	Thomas Road		0	0	No Bike Lane SB	Extend Bike Lanes to Intersection
14	BMP-14B	7th Avenue	Melinda Lane	Deer Valley Road	0.11	0.22	None	Extend Bike Lanes to Intersection
14	BMP-14C	7th Avenue	Greenway Parkway		0.2	0.4	No Bike Lanes	Through Bike lanes with intersection road diet
14	BMP-14D	7th Avenue	Bell Road		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
14	BMP-14E	7th Avenue	Grovers Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
14	BMP-14F	7th Avenue	Union Hills Drive		0	0	No Bike Lanes	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
14	BMP-14G	7th Avenue	Beardsley Road (SR 101)		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
14	BMP-14H	7th Avenue	Rose Garden Lane		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
17	BMP-17A	Missouri Avenue	43rd Avenue	35th Avenue	1.02	2.04	None	Shared Lane Markings
17	BMP-17C	Missouri Avenue	27th Avenue	23rd Avenue	2.5	5	Detour	4-6 Foot Bike Lane
17	BMP-17D	Missouri Avenue	23rd Avenue	19th Avenue	0.5	1	None	Extend Bike Lanes to Intersection
25	BMP-25D	Cave Creek Wash	19th Avenue		0	0	None	Bike HAWK
26	BMP-26D	Roeser Road	32nd Street	36th Street	0.51	1.02	Bike Route	4-6 Foot Bike Lane
26	BMP-26F	Roeser Road	at Central Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
26	BMP-26G	Roeser Road	at 7th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
26	BMP-26H	Roeser Road	at 16th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
26	BMP-26I	Roeser Road	at 24th Street		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
26	BMP-26J	Roeser Road	at 40th Street		0	0	No Bike Lane EB	Extend Bike Lanes to Intersection

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility
37	BMP-37B	Encanto Blvd.	91st Avenue	87th Avenue	0.45	0.9	None	4-6 Foot Bike Lane
37	BMP-37C	Encanto Blvd.	87th Avenue	86th Drive	0.24	0.48	None	4-6 Foot Bike Lane
37	BMP-37E	Encanto Blvd.	83rd Avenue	75th Avenue	0.99	1.98	None	4-6 Foot Bike Lane
37	BMP-37F	Encanto Blvd. between 75th Ave and 67th Ave	75th Avenue	67th Avenue	2.48	4.96	None	4-6 Foot Bike Lane
37	BMP-37F	Encanto Blvd. between 67th Ave and 55th Ave	67th Avenue	55th Avenue	2.48	4.96	None	4-6 Foot Bike Lane
37	BMP-37H	Encanto Blvd. between 51st Ave and 49th Ave	51st Avenue	49th Avenue	0	0	None	Bike Detection
37	BMP-37J	Encanto Blvd. at 51st Ave Intersection	at 51st Avenue		0	0	No Bike Lanes EB	Bike Detection
37	BMP-37K	Encanto Blvd. at 43th Ave Intersection	at 43th Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
37	BMP-37L	Encanto Blvd. at 35th Ave Intersection	at 35th Avenue		0	0	No Bike Lanes	Extend Bike Lanes to Intersection
				Total New Bicycle Lanes	8.17	16.34		
				Total New Shared Lane Markings	1.52	3.04		
				Total New Protected Bicycle Lanes	1	2		
				Total New Buffered Bicycle Lanes				

APPENDIX E - FY2021

CIP Program (projects that are in the CIP and are Bicycle Master Plan projects are accounted for in the Bicycle Master Plan Program)							
Location	**From**	**To**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	***Program***
Buckeye Road	67th Avenue	59th Avenue/Loop202	1	2	None	4-6 Foot Bike Lane	CIP Program
Lower Buckeye Road	27th Avenue	19th Avenue	1	2	None	4-6 Foot Bike Lane	CIP Program
		Total New Bicycle Lanes	2	4			
		Total New Shared Lane Markings					
		Total New Protected Bicycle Lanes					
		Total New Buffered Bicycle Lanes					

FY2021 - Bicycle Master Plan								
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**
2	BMP-02A	24th Street	Van Buren St	Sky Harbor Cir	0.83	1.66	None	4-6 Foot Bike Lane
2	BMP-02B	25th Street	Sky Harbor Circle	I-10	1.09	2.18	None	4-6 Foot Bike Lane
10	BMP-10	Van Buren Road	7th Street	24th Street	2	4	None	4-6 Foot Bike Lane
			Total New Bicycle Lanes		3.92	7.84		
			Total New Shared Lane Markings					
			Total New Protected Bicycle Lanes					
			Total New Buffered Bicycle Lanes					

FY2021 - Pavement Maintenance Management Program							
Location	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	**FY of Completion**
23 Ave	N/S Pinnacle Peak Rd	S/S Happy Valley Rd	0.5	1	Partial Bike Lanes (W Side)	Full 4-6 Bike Lanes	2021
27 Ave	N/S Agua Fria Frwy	N/S Rose Garden Ln	0.25	0.5	No Bike Lane	4-6 Foot Bike Lane	2021

Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
40 St	S/O Pecos Rd	N/O Chandler Blvd	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	2021
Osborn Rd	W/O Black Canyon Frwy	E/O 19 Ave	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	2021
Paradise Ln	W/O 40 St	E/O 44 St	0.5	1	No Bike Lanes	4-6 Foot Bike Lane	2021
Southern Ave	E/O 24 St	W/O 32 St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	2021
Sweetwater Ave	E/O 28th St	W/O 32nd St	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	2021
Yorkshire Dr	W/O 39 Ave	E/O 31 Ave	0	0	4-6 Foot Bike Lane	Intersection Treatments Needed	2021
16 St	N/O Baseline Rd	S/O Southern Ave	1	2	None	4-6 Foot Bike Lane	2021
99 Ave	N/O Broadway Rd	N/O Lower Buckeye Rd	0.77	1.54	Partial Bike Lane	Complete 4-6 Foot Bike Lane	2021
99 Ave	Mobile Ln (Cop Bndy)	N/O Broadway Rd	0	0	None	4-6 Foot Bike Lane	2021
99 Ave (E 1/2)	S/O Thomas Rd	N/O Indian School Rd	1	2	None	4-6 Foot Bike Lane	2021

Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
Quarter Section 09-32/09-33/010-33	Ray Rd / Rockledge Rd	22 St / Rocky Slope Dr	1.42	2.84	Partial Bike Lane	Complete 4-6 Foot Bike Lane	2021
Quarter Section 40-18/40-17	Yorkshire Dr / Beardsley Rd	47 Ave / 43 Ave	0.49	0.98	Partial Bike Lane	Complete 4-6 Foot Bike Lane	2021
23 Ave	N/O Grandview Rd	S/O Bell Rd	0	0	None	4-6 Foot Bike Lane	2021
45 Ave	N/O Opportunity Wy	S/O Anthem Wy	0	0	None	4-6 Foot Bike Lane	2021
Total New Bicycle Lanes			5.93	11.86			
Total New Shared Lane Markings							
Total New Protected Bicycle Lanes							
Total New Buffered Bicycle Lanes							

APPENDIX F -FY2022

FY2022 - Bicycle Master Plan									
BMP Proj. No.	**Segment ID**	**Location**	**To**	**From**	**Distance (mi.)**	**Bi-Directional**	**Existing Facility**	**Post Facility**	**FY of Completion**
9	BMP-09	ReInventPHX Gateway Van Buren	24th Street	44th Street	2.5	5	No Bike Lane	4-6 Foot Bike Lane	2022
12.1	BMP-12A.A	3rd Ave	Arizona Canal	Roma Ave	0	0	None	Bike HAWK	2022
21	BMP-21B	Union Hills Drive	27th Ave	23rd Ave	0.5	1	None	4-6 Foot Bike Lane	2022
21	BMP-21D	Union Hills Drive	51st Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21E	Union Hills Drive	47th Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21F	Union Hills Drive	43rd Ave		0	0	No Bike Lanes	Combined Bike Lane / Turn Lane	2022
21	BMP-21G	Union Hills Drive	39th Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21H	Union Hills Drive	35th Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21I	Union Hills Drive	19th Ave		0	0	No Bike Lane WB	Combined Bike Lane / Turn Lane	2022
21	BMP-21J	Union Hills Drive	15th Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21K	Union Hills Drive	7th Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
21	BMP-21L	Union Hills Drive	Central Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21M	Union Hills Drive	7th St		0	0	No Bike Lane EB	Extend Bike Lanes to Intersection	2022
21	BMP-21N	Union Hills Drive	12th St		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21O	Union Hills Drive	16th St		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21P	Union Hills Drive	17th Way		0	0	No Bike Lane EB	Extend Bike Lanes to Intersection	2022
21	BMP-21Q	Union Hills Drive	Union Hills Drive at 20th St Intersection		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21R	Union Hills Drive	Cave Creek Rd		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21S	Union Hills Drive	28th St		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21T	Union Hills Drive	32nd St		0	0	No Bike Lane EB	Combined Bike Lane / Turn Lane	2022
21	BMP-21U	Union Hills Drive	34th St		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
21	BMP-21V	Union Hills Drive	40th St		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
21	BMP-21W	Union Hills Drive	Tatum Blvd		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
24	BMP-24C	32nd Street	Hartford Ave	Mountain View	4.67	9.34	None	Bicycle Lane	2022
24	BMP-24E	32nd Street	Grovers Ave		0	0	No Bike Lane SB	Extend Bike Lanes to Intersection	2022
24	BMP-24F	33rd Street	Michigan Ave		0	0	No Bike Lane SB	Extend Bike Lanes to Intersection	2022
24	BMP-24G	34th Street	Union Hills Dr		0	0	No Bike Lane SB	Extend Bike Lanes to Intersection	2022
24	BMP-24H	35th Street	Utopia Rd		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
26	BMP-26A	Roeser	19th Ave	15th Ave	0	0	Bike Route	Extend Bike Lanes to Intersection	2022
26	BMP-26A	Atlanta	15th Ave	7th Ave	0	0	Bike Route	Extend Bike Lanes to Intersection	2022
31	BMP-31C	Chandler Blvd	Desert Foothills Pkwy	26th St	1.58	3.16	Bike Route with edge line stripe	4-6 Foot Bike Lane	2022
31	BMP-31D	Chandler Blvd	26th St	I-10	3.27	6.54	None	4-6 Foot Bike Lane	2022

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
31	BMP-31E	Chandler Blvd	Desert Foothills Pkwy		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
34	BMP-34A	Cave Creek Road	7th St / Dunlap Rd	8th St	0.2	0.4	None	4-6 Foot Bike Lane	2022
34	BMP-34E	Cave Creek Road	Hatcher Rd		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
34	BMP-34F	Cave Creek Road	Mountain View Rd		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
34	BMP-34G	Cave Creek Road	Peoria Ave		0	0	No Bike Lanes	Extend Bike Lanes to Intersection	2022
34	BMP-34H	Cave Creek Road	Cactus Rd /Thunderbird Rd		0.2	0.4	No Bike Lanes	Through Bike lanes with intersection road diet	2022
33	BMP-33A	Western Canal	Central	24th Street	2.5	5	Not Paved	Shared Use Path	2022
33	BMP-33J	Western Canal at Central Ave Intersection			0	0	None	Bike HAWK	2022
33	BMP-33K	Western Canal at Jesse OwenPkwy Intersection			0	0	None	Crosswalk	2022
33	BMP-33L	Western Canal at 7th St Intersection			0	0	None	Bike HAWK	2022

BMP Proj. No.	Segment ID	Location	To	From	Distance (mi.)	Bi-Directional	Existing Facility	Post Facility	FY of Completion
33	BMP-33M	Western Canal at 10th St Intersection			0	0	None	Crosswalk	2022
33	BMP-33N	Western Canal at 16th St Intersection			0	0	None	Bike HAWK	2022
33	BMP-33O	Western Canal at 24th St Intersection			0	0	None	Bike HAWK	2022
		Total New Bicycle Lanes			12.92	25.84			
		Total New Shared Lane							
		Total New Protected Bicycle							
		Total New Buffered Bicycle							