

December 7, 2015

TO: Members of the MAG Bicycle and Pedestrian Committee

FROM: Jim Hash, Mesa, Chair of the MAG Bicycle and Pedestrian Committee

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Tuesday, December 15, 2015 at **1:00 p.m.**  
MAG Offices, Ironwood Room, Second Floor  
302 North First Avenue, Phoenix

A meeting of the MAG Bicycle and Pedestrian Committee will be held at the time and place noted above. If you are attending in person, please park in the garage under the building. Bring your ticket to the meeting as parking will be validated. For those using transit, the Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the parking garage.

Committee members may attend the meeting either in **person, by video conference or by telephone conference call**. Those attending by videoconference must notify the MAG site three business days before the meeting. Those attending by telephone conference call please contact MAG offices for conference call instructions.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

Please be advised that under procedures adopted by the MAG Regional Council on August 21, 2013, all MAG committees need to have a quorum to conduct business. A quorum is a simple majority of the membership based on the attendance of the three previous Bicycle and Pedestrian Committee meetings. If the Bicycle and Pedestrian Committee does not meet the quorum requirement, members who have arrived at the meeting will be instructed that a legal meeting cannot occur and will subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your jurisdiction to represent you. Please contact Jason Stephens at (602) 254-6300 or [jstephens@azmag.gov](mailto:jstephens@azmag.gov) if you have any questions or need additional information.

## TENTATIVE AGENDA

1. Call to Order

For the December 15, 2015 meeting, the quorum requirement is 11 committee members.

2. Approval of the November 17, 2015 Meeting Minutes of the Bicycle and Pedestrian Committee

2. For information, discussion and action to approve the meeting minutes of the November 17, 2015 Bicycle and Pedestrian Committee meeting.

3. Call to the Audience

An opportunity will be provided to members of the public to address the committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard. Please fill out blue cards for Call to the Audience and yellow cards for Action Items.

3. For information.

4. Staff and Member Agency Reports

Staff and committee members are invited to provide an update of pedestrian and bicycle-related activity in their agencies.

4. For information and discussion.

5. Programming Bicycle and Pedestrian Projects for MAG Federal Funding in the Draft FY2017-2021 MAG Transportation Improvement Program

5. Recommend approval of the list of FY 2018, 2019, and 2020 Congestion Mitigation and Air Quality Improvement Program and Transportation Alternative Program funded

Applications were made available August 10, 2015, were due at MAG on September 21, 2015, by 10:00 A.M. There were 37 complete Bicycle Pedestrian applications received. The MAG Bicycle and Pedestrian committee will review the final programming, make a recommendation then forward to the MAG Transportation Review committee. Please see attached materials.

6. Request for Future Agenda Items

Members will have the opportunity to suggest future agenda topics.

7. Next Meetings

All meetings will be on the third Tuesday of the month in the Ironwood Room at **1:00 p.m.**, except where otherwise noted.

Tuesday, January 19, 2015.

projects to be added to the FY 2014-2018 MAG Transportation Improvement Program, and to add the lists of FY 2018, 2019, and 2020 projects to the Draft FY 2017-2021 MAG Transportation Improvement Program, and 2035 Regional Transportation Plan as appropriate.

6. For information and discussion.

7. For information.

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
BICYCLE AND PEDESTRIAN COMMITTEE

Tuesday, November 17, 2015 at 10:00 a.m.  
MAG Office Building, Ironwood Room  
302 North First Avenue, Phoenix

MEMBERS ATTENDING

Jim Hash, Mesa, Chair of Bicycle and Pedestrian Committee	Steve Careccia, Goodyear
Jose Macias, El Mirage, Vice-Chair of Bicycle and Pedestrian Committee	Mike Gillespie, Litchfield Park
Michael Sanders, ADOT	* Ryan Wozniak, Maricopa
Raquel Schatz, Apache Junction	Angela Horn for Denise Lacey, Maricopa County
Alison Rondone, Avondale	Brandon Forrey, Peoria
Phil Reimer, Buckeye	Katherine Coles, Phoenix
* Stacy Bridge-Denzak, Carefree	* Sidney Urias, Queen Creek
* Ian Cordwell, Cave Creek	Susan Conklu, Scottsdale
Ann Marie Riley for Jason Crampton, Chandler	Stephen Chang, Surprise
Kristin Myers, Gilbert	Eric Iwersen, Tempe
Purab Adabala, Glendale	Amanda Leuker, Valley Metro
	* Robert Carmona, Wickenburg
	# Grant Anderson, Youngtown

\*Members neither present nor represented by proxy  
#Attended via audio-conference

OTHERS PRESENT

Margaret Boone, MAG	Charlene Reynolds, Phoenix
Teri Kennedy, MAG	Eileen Yazzie, Phoenix
Tim Strow, MAG	Jason Harrington, HPD
Kenneth Steel, MCDPH	Brian Fellows, AMEC Foster Wheeler
Laurel Arndt, Parsons Brinckerhoff	Kerry Wilcoxon, Phoenix
Scott Logan, Phoenix	Mark Melnychenko, Phoenix

1. Call to Order

Chair Jim Hash called the meeting to order at 10:00 a.m.

2. Approval of the October 20, 2015 Meeting Minutes of the Bicycle and Pedestrian Committee

Jose Macias noted that Chris Hauser's name had mistakenly been misspelled and needs to be corrected. Katherine Coles moved to approve the amended meeting minutes of the MAG Bicycle and Pedestrian Committee for October 20, 2015. Kristin Myers seconded the motion. The motion passed unanimously.

3. Call to the Audience

An opportunity was provided to members of the public to address the MAG Bicycle and Pedestrian Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public were requested not to exceed a three minute time period for their comments. A total of 15 minutes was provided for the Call to the Audience agenda item, unless the Bicycle and the Pedestrian Committee requests an exception to this limit. Those wishing to comment on action agenda items were given an opportunity at the time the item was heard.

4. Staff and Member Agency Reports

Susan Conklu stated that the City of Scottsdale's City Council approved the construction contract for the Arizona Canal Path project from Chaparral Road up to Indian Bend Wash. Susan Conklu also noted that the City of Scottsdale received a Bicycle Friendly Communities gold award from the League of American Bicyclists. Chair Jim Hash also stated that the City of Mesa was upgraded to a silver rating by the League of American Bicyclists and the City of Tempe was upgraded to a gold rating.

5. Transportation Improvement Program (TIP) Bicycle and Pedestrian Committee Application Presentations

Teri Kennedy stated that this item is on the agenda for information and discussion and explained that the Committee would be hearing the remaining 20 bicycle and pedestrian applications for the congestion mitigation air quality improvement program and the transportation alternatives infrastructure program. Teri thanked the committee members for all of their hard work on reviewing the applications and noted that this item is the overall 15% of the score that is included for the project evaluations. She asked if the committee members had received the score cards that were turned in at the last committee meeting on October 20<sup>th</sup>, 2015. Teri stated that the next steps in the project selection process is to collect all the final scores at the end of today's meeting, MAG staff will then place the scores into the project evaluation tool and present the programming and programming methodology for the bicycle and pedestrian projects at the December Bicycle and Pedestrian Committee Meeting.

Scott Logan, from the City of Phoenix presented on the City of Phoenix Bikeshare Expansion Project (2018). There were no questions from the Committee on this project.

Scott Logan, from the City of Phoenix presented on the City of Phoenix Bikeshare Expansion Project (2020). Following the presentation, Brandon Forrey asked when are the light rail extensions expected to be completed in the southern portions of Phoenix. Eileen Yazzie replied that the City of Phoenix Transportation Commission is scheduled to meet in December and they will help prioritize the transit plan. Eileen stated that the South Central transit project received tiger funds and the environmental analysis is currently underway. Eric Iwersen asked about the contract length the City of Phoenix has with Cycle Hopper. Charlene Reynolds replied that the City of Phoenix currently has a five-year contract and that they are in year two. Charlene stated that the contract also has one option for a five-year extension making the total contract 10 years.

Kerry Wilcoxon, from the City of Phoenix presented on the 2018 Phoenix Pedestrian and Bicycle HAWK Crossing Project. Following the presentation, Eric Iwersen asked if there was an average cost per HAWK that the City of Phoenix was assuming in the application cost estimates. Kerry replied that when using federal dollars it is always more expensive than using local funds. Kerry stated that there are additional costs associated with those types of funds specifically with additional infrastructure costs. Mike Gillespie asked Kerry to expand on the three City of Phoenix HAWK crossing project applications and asked if the applications were based on a City of Phoenix priority list and asked if safety was a deciding factor in project ranking. Kerry replied that in order for these projects to be on a priority list all of these locations must pass a HAWK warrant internally. He also stated that they are ranked on a priority list based on how easy they would be able to be constructed. Kerry stated that the difference in ranking between the 2018, 2019, and 2020 projects were based on if the project needed to acquire right-of-way. The 2018 HAWK crossing project does not require right-of-way acquisition so it is proposed earlier than the 2019 and 2020 projects which both need to acquire some level of right-of-way. Kristin Myers asked what makes the construction more expensive when it is the City of Phoenix implementing the projects. Kerry replied that the City of Phoenix construction costs are based on recent history and there is a difference in building a HAWK using federal funds verses using City of Phoenix funds. Kerry stated, that it is more expensive using federal dollars primarily because we are not using the City of Phoenix crews. Kerry stated that city staff will send out the projects to bid using the federal process making it more expensive and the primary reason for the higher cost.

Kerry Wilcoxon, from the City of Phoenix presented on the 2019 Phoenix Pedestrian and Bicycle HAWK Crossing Project. Following the presentation, Mike Gillespie asked if the City of Phoenix uses the same designs for all HAWK projects or are there any specific features that are specifically for bicyclists. Kerry replied that the HAWK designs are primarily always the same design especially these proposed projects since they are at school crosswalks. Kerry stated that the City does follow other ongoing projects looking for different designs and would use different designs if warranted.

Kerry Wilcoxon, from the City of Phoenix presented on the 2020 Phoenix Pedestrian and Bicycle HAWK Crossing Project. Following the presentation, Ann Marie Riley asked in regards to the three proposed locations of these projects will the crossing guards still remain after installation. Kerry replied that typically after a HAWK installation at a school crosswalk the crossing guard does remain in place and we modify the crossing agreement. Brandon Forrey asked if there was any concern or reason why at the 16<sup>th</sup> street location the city is replacing a Rapid Flash Beacon (RFB) with a HAWK design. Kerry replied that RFB's are an interim measure and they are difficult to identify on the street and use. The usage of the RFB is not as high as the HAWK's, so the City of Phoenix designs the RFB structure to be retrofitted for a hawk installation when warrants are met. Kristin Myers, from the Town of Gilbert asked in the application for this project if the City of Phoenix requested easement and right-of-way costs, and since the RFB's are designed to be retrofitted with a HAWK design why are these costs included in the proposal. Kerry replied that the costs are to connect the utilities.

Eileen Yazzie, from the City of Phoenix presented on Connecting the Gap on Roeser Road: 32<sup>nd</sup> Street to 36<sup>th</sup> Street Bicycle and Pedestrian Improvements Project. Following the presentation, Mike Gillespie asked if the right-of-way was park property. Eileen replied no, the right-of- way is the City of Phoenix Street Transportation not Parks and Recreation. Kenneth Steel commented that this park is a hub for physical activity and that this is a great project to complement the activity at the park.

Don Cross, from the City of Phoenix presented on the Friendly House Safe Streets, Safe Routes to School Project. Following the presentation, Susan Conklu asked what type of lighting is out there now. Don replied that very low lighting exists today. Don stated that part of the improvements would include lighting. Brandon Forrey asked if the project will include a street overlay to improve the street condition or would it be a total reconstruction that would include curb, sidewalk and street. Don replied that a part of the process will be to evaluate the street pavement and patch where needed, but the project will also include curb and sidewalk.

Mark Melnychenko, from the City of Phoenix presented on the Van Buren Street Pedestrian and Bicycle Improvements Project. Following the presentation, Brandon Forrey asked what are the Average Daily Trips (ADT) along this segment of Van Buren Street. Mark replied that the ADT along this segment of Van Buren Street is 17,900 per day. Brandon asked if the City of Phoenix conducted any public outreach to get support for the reduced travel land configuration. Mark replied that the configuration is part of the reinvent phoenix outreach process, however, the City of Phoenix will go back out and conduct additional outreach for this project as needed.

Don Cross, from the City of Phoenix presented on the Mountain View Safe Streets/Safe Routes to School Project. There were no questions from the Committee on this project.

Susan Conklu, from the City of Scottsdale presented on the McDowell Road Bike Lanes: Pima Road to 64<sup>th</sup> Street Project. Following the presentation, Brandon Forrey asked if the segment of this project had any recent road improvements completed prior to the application submittal. Susan replied no, the pictures for the application were deceiving due to the light.

Susan Conklu, from the City of Scottsdale presented on the Underpass at Chaparral Road and Indian Bend Wash Path Project. There were no questions from the Committee on this project.

Susan Conklu, from the City of Scottsdale presented on the Via Linda and Central Arizona Project (CAP) Canal Underpass and Path Project. There were no questions from the Committee on this project.

Susan Conklu, from the City of Scottsdale presented on the Osborn Road Complete Street: Hayden to Scottsdale Project. There were no questions from the Committee on this project.

Martin Lucero, from the City of Surprise presented on the Bullard Avenue Multi-Modal Corridor Enhancement Project. Following the presentation, Brandon Forrey asked if the golf cart lane was removed from this corridor. Martin replied that the golf cart lanes do exist as an electric vehicle travel lane but has not been designed yet. Brandon asked is the plan for the corridor to have a two-way cycle track or to have separated bike paths. Martin replied that the corridor will have dedicated cycle tracks on both sides of the road.

Martin Lucero, from the City of Surprise presented on the Grand Avenue Sidewalk Construction Project. Following the presentation, Mr. Chair Jim Hash asked why the budget was lower than the City of Phoenix proposed HAWK projects. Martin replied that this project does not have the same right-of-way costs that the City of Phoenix projects will incur, therefore, the total project cost will be less.

Martin Lucero, from the City of Surprise/El Mirage presented on the Pedestrian Enhancements at Greenway Road and Thompson Ranch Road Project. Following the presentation, Ann Marie Riley

asked how far do the school children have to walk to school. Martin replied approximately 0.7 miles. Katherine Coles, from the City of Phoenix asked if the local school districts are helping to fund these projects. Martin replied that the City of Surprise and the school district is working together to find the best solutions for the community.

Eric Iwersen, from the City of Tempe presented on the McClintock Drive Shared Use Path Underpass Project. Following the presentation, Susan Conklu asked what the traffic counts were along the corridor. Eric replied that the average daily traffic volumes range between 35,000 and 38,000 daily trips.

Eric Iwersen, from the City of Tempe presented on the Western Drive Shared Use Path Underpass Project. There were no questions from the Committee on this project.

Eric Iwersen, from the City of Tempe presented on the Alameda Drive Bicycle / Pedestrian Improvements Project. Following the presentation, Brandon Forrey asked if Eric had dimensions for the proposed cross-sections. Eric displayed a slide in his PowerPoint presentation that illustrated the different cross-section dimensions.

Eric Iwersen, from the City of Tempe presented on the North South Rail Spur Multi-Use Path Project. Following the presentation, Susan Conklu asked if the project will include lighting. Eric replied yes, the project will include lighting and a minimal amount of landscaping. Mike Gillespie asked if the project will include right-of-way costs. Eric replied that the project is working with right-of-way agreements but will include no costs.

Chair Jim Hash thanked everyone who presented and asked the Committee to fill in the score sheets with the final project scores and to turn them in to Teri Kennedy or Tim Strow.

Teri Kennedy thanked the Committee members for their diligence in evaluating a long list of applications, and reminded the committee to fill out the score card and to turn in the sheet prior to leaving the meeting. Teri notified the Committee that at the December meeting, the Committee will receive the application ranking sheet and discuss possible funding scenarios.

#### 6. Request for Future Agenda Items

Chair Jim Hash indicated that members of the Committee had the opportunity to request future agenda items to appear before the Committee.

#### 7. Next Meetings

All meetings will be on the third Tuesday of the month in the Ironwood Room at **1:00 p.m.**, except where otherwise noted.

Tuesday, December 15, 2015 1:00 p.m.

Chair Jim Hash adjourned the meeting at 1:00 p.m.

## **MARICOPA ASSOCIATION OF GOVERNMENTS INFORMATION SUMMARY... for your review**

**DATE:**

December 7, 2015

**SUBJECT:**

Programming for Bicycle and Pedestrian Projects utilizing the MAG Federal Congestion Mitigation and Air Quality Improvement Program, and Transportation Alternatives Program (Infrastructure) Funding in the Draft FY 2017-2021 MAG Transportation Improvement Program.

**SUMMARY:**

MAG is developing a new Fiscal Year (FY) 2017-2021 Transportation Improvement Program (TIP). The MAG Regional Transportation Plan (RTP) allocates MAG Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) and Transportation Alternatives (TAP-MAG) Infrastructure Program funds to specific modes and in some cases, identifies specific projects for the funds. Funding for all programs is currently estimated based on MAP-21 and the Arizona Department of Transportation (ADOT) estimated regional distribution of funding as of December 2014. MAG estimated federal funding projections were developed using current assumptions. Funding levels for the CMAQ programs in the MAG region are subject to change and will be updated as federal and state announcements are made. A Call for Projects was announced in August 2015 and the results from the evaluation process are included for the Bicycle and Pedestrian projects that are proposed to be funded with CMAQ and TAP funds. The Bicycle and Pedestrian committee will discuss project programming by year, and make a recommendation to be forwarded to the MAG Transportation Review Committee. By the rank order, in the base programming by year, FY 2019 is over programmed and at the meeting members will discuss projects that could voluntarily to move to FY 2018.

Applications were made available August 10, 2015. An overview and application process meeting was held on August 19, 2015. Two additional workshops were held on August 24, and September 14, 2015, to provide technical and staff assistance in completing applications and answering questions. Applications were due at MAG on September 21, 2015, by 10:00 A.M., 37 complete Bicycle Pedestrian applications were received, and one was withdrawn(combined). All information explained below pertains to on-time, complete, and eligible applications. Each CMAQ project must meet Federal Highway Administration (FHWA) eligibility criteria and one of the criteria is location. For PM-10 Bicycle and Pedestrian eligibility, projects must be located within the Nonattainment Area. For TAP eligibility, projects may be located anywhere within the MAG Planning Area. Each application received is displayed by mode on a map. See attachments.

All proposed FY 2018, 2019, and 2020 CMAQ projects are evaluated by MAG Air Quality staff and receive a cost-effectiveness number (AQ score) within each modal category. Where appropriate, the emission reduction benefits and cost-effectiveness of CMAQ eligible projects have been quantified using the Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, approved on September 30, 2011. The MAG Air Quality Technical Advisory Committee reviews proposed projects and makes the recommended ranking based on the evaluations. The recommended ranking and Air Quality evaluations are forwarded and

presented to the modal committee to be included for final consideration and programming of projects.

At the June 16, 2015 Bicycle and Pedestrian Committee meeting, the committee determined that it would be advantageous to combine the Bicycle Pedestrian CMAQ and TAP application process to reduce the amount of staff time in filling out duplicate information. All Bicycle and Pedestrian applications would be evaluated for CMAQ and for TAP funding based on eligibility and program criteria via a single application. At the July 21, 2015 committee meeting, the criteria was finalized for evaluation and weighting.

At the October and November Bicycle and Pedestrian committee meetings, the applicants presented their project requests for technical evaluation. The committee completed their technical evaluation using a customized evaluative tool and provided the last component for ranking the projects.

There were thirty seven complete project applications submitted, for a requested a total of \$48,566,790 in federal funds. There is \$23,635,734 of CMAQ funds available, and \$12,876,705 available for TAP Projects in FY 2018-2020. With the scenario included, eighteen projects are recommended for federal funding in the CMAQ program totaling \$21,107,232, with the balance of \$213,437 available to partially fund the Glendale 71<sup>st</sup> Ave and Orangewood improvements project at \$213,437 of their \$947,621 federal request. Eight projects totaling \$12,866,740 are included to be funded with TAP funding. A balance of \$9,965 will be included in the next Bicycle and Pedestrian TAP infrastructure, call for projects.

Reviewing the base programming by year scenario, FY 2018 is under programmed by \$1,743,644, FY 2019 is over programmed by \$2,493,860, and FY 2020 is under programmed by \$760,181. MAG programming staff would like to balance each year as close to the programming level as possible without splitting projects across years. It is suggested that if one of the FY 2019 selected projects could move to FY 2018, the program overall could be implemented and then would not negatively impact future year closeout processes.

For your review and discussion, four attachments are included. The attachments include the projects listed by final rank order for the CMAQ and TAP with a proposed funding award by rank order on the right hand side of each, a proposed base programming by year scenario, a map of project locations, and the memorandum from the Chair of the MAG Air Quality Technical Advisory Committee that details the evaluation process used for ranking the list of projects, and a ranking of projects in order of cost effectiveness of emission reductions (note that the AQ ranking was included in the Projects listed by final rank order document).

**PUBLIC INPUT:**

None.

**PROS & CONS:**

**PROS:** Approval of the funding for these projects will enable their inclusion in the Transportation Improvement Program (TIP) and will allow jurisdictions to develop their projects in a timely and integrated manner.

**CONS:** If these projects are not approved, the time to develop projects will be limited. Timely development of projects is needed to ensure that MAG federal funds are fully utilized, that all annual obligation authority is utilized, and to enhance opportunities for additional federal funds.

**TECHNICAL & POLICY IMPLICATIONS:**

**TECHNICAL:** Project selection criteria have been fully addressed by members of MAG technical advisory committees. Air Quality Emission Reduction scores were considered and integrated into the recommended listings based on updated funding availability, and the program is fiscally balanced. By adding the projects to the current TIP as well as the draft TIP, projects may advance their design work phase time lines.

**POLICY:** The MAG federally funded program has been developed in accordance with federal regulations and MAG policies.

**ACTION NEEDED:**

Approval of the list of Congestion Mitigation and Air Quality Improvement Program and Transportation Alternative Program funded projects to be added to the FY 2014-2018 MAG Transportation Improvement Program, and to add the lists of FY 2018, 2019, and 2020 projects to the Draft FY 2017-2021 MAG Transportation Improvement Program, and 2035 Regional Transportation Plan as appropriate.

**PRIOR COMMITTEE ACTIONS:**

None

**CONTACT PERSON:**

Teri Kennedy, (602) 254-6300

Project ID	Project Name	Applicant	Total Funding Requested	Cumulative Total {\$12,876,705}	TOTAL QUANTITATIVE WEIGHTED SCORE	QUANTITATIVE RANK	TOTAL QUALITATIVE WEIGHTED SCORE	QUALITATIVE RANK	TOTAL COMMITTEE WEIGHTED SCORE	COMMITTEE RANK	TOTAL COMBINED WEIGHTED SCORE	TOTAL COMBINED RANK	TAP Funding for Programming	Programming Cumulative Total {\$12,876,705}	Programming Notes
GLB-19-BPB-001	Western Powerline Trail Grade Separated Bicycle/Pedestrian Bridge	Gilbert	\$2,829,943	\$2,829,943	16.38	3	7.52	3	5.55	1	29.44	1	\$0	\$0	Selected for Both: fund with CMAQ
SCT-18-BPB-001	McDowell Road Bike Lanes: Pima Road to 64th Street	Scottsdale	\$3,152,449	\$5,982,392	13.81	6	8.12	1	3.45	15	25.38	2	\$0	\$0	Selected for Both: fund with CMAQ
PHX-18-BPB-002	City of Phoenix Bikeshare Expansion Project (2018)	Phoenix	\$918,426	\$6,900,818	16.81	1	4.74	21	3.75	13	25.29	3	\$0	\$0	Selected for Both: fund with CMAQ
TMP-18-BPB-004	Western Canal Multi-Use Path / The Missing Link	Tempe	\$793,063	\$7,693,881	12.10	9	7.02	4	5.25	3	24.37	4	\$0	\$0	Selected for Both: fund with CMAQ
PHX-20-BPB-003	City of Phoenix Bikeshare Expansion Project (2020)	Phoenix	\$918,426	\$8,612,307	16.81	1	4.69	23	2.55	21	24.04	5	\$0	\$0	Selected for Both: fund with CMAQ
TMP-18-BPB-002	McClintock Drive Shared Use Path Underpass	Tempe	\$1,231,275	\$9,843,582	11.73	11	6.99	5	4.80	6	23.52	6	\$0	\$0	Selected for Both: fund with CMAQ
PHX-18-BPB-005	2018 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$1,770,011	\$11,613,593	11.86	10	6.51	10	5.10	4	23.47	7	\$1,770,011	\$1,770,011	Selected for TAP: fund with TAP
TMP-20-BPB-003	North South Rail Spur Multi-Use Path Project	Tempe	\$2,315,065	\$13,928,658	14.42	5	6.19	14	2.70	19	23.31	8	\$0	\$1,770,011	Selected for Both (on cusp of both), Fund with CMAQ.
MES-19-BPB-003	South Canal Shared Use Path: Consolidated Canal Shared Use Path to McDowell Road	Mesa	\$2,003,013	\$15,931,671	10.88	13	7.78	2	4.65	7	23.31	9	\$2,003,013	\$3,773,024	Fund with TAP
SCT-20-BPB-002	Osborn Road Complete Street: Hayden to Scottsdale Road	Scottsdale	\$1,214,450	\$17,146,121	13.38	7	6.23	12	3.15	17	22.76	10	\$1,214,450	\$4,987,474	Fund with TAP
PHX-20-BPB-004	Van Buren Street Pedestrian and Bicycle Improvements	Phoenix	\$2,310,350	\$19,456,471	15.03	4	4.21	27	2.70	19	21.94	11	\$2,310,350	\$7,297,824	Fund with TAP
PHX-19-BPB-006	2019 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$830,783	\$20,287,254	11.31	12	6.17	15	4.05	11	21.53	12	\$830,783	\$8,128,607	HAWK: Selected for CMAQ, Fund with TAP.
PHX-20-BPB-007	2020 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$1,121,227	\$21,408,481	12.16	8	6.21	13	2.40	22	20.77	13	\$1,121,227	\$9,249,834	HAWK: Selected for CMAQ: Fund with TAP
SUR-19-BPB-001	Bullard Avenue Multimodal Corridor Enhancement Project	Surprise	\$1,551,235	\$22,959,716	8.80	17	6.85	7	4.95	5	20.60	14	\$0	\$9,249,834	Selected for CMAQ: Fund with CMAQ.
SCT-19-BPB-003	Underpass at Chaparral Road and Indian Bend Wash Path	Scottsdale	\$1,182,569	\$24,142,285	10.57	14	5.28	18	3.90	12	19.76	15	\$0	\$9,249,834	Selected for CMAQ: Fund with CMAQ.
TMP-19-BPB-001	Alameda Drive Bicycle / Pedestrian Improvements	Tempe	\$1,584,282	\$25,726,567	7.88	22	6.85	6	4.50	8	19.23	16	\$1,584,282	\$10,834,116	Fund with TAP
CHN-20-BPB-001	Chandler Boulevard Bike Lanes: I-10 to 54th Street	Chandler	\$454,597	\$26,181,164	8.98	16	6.26	11	3.60	14	18.84	17	\$0	\$10,834,116	Selected for CMAQ: Fund with CMAQ.
MES-19-BPB-001	Southeast Pathway (Phase 2): Elliot Road to Hawes Road	Mesa	\$2,032,624	\$28,213,788	8.01	20	6.69	8	2.25	23	16.95	18	\$2,032,624	\$12,866,740	Fund with TAP
PHX-19-BPB-001	Connecting the Gap on Roeser Road: 32nd Street to 36th Street Bicycle & Pedestrian Improvements	Phoenix	\$888,895	\$29,102,683	9.17	15	3.23	35	4.20	10	16.60	19	\$0	\$12,866,740	Selected for CMAQ: Fund with CMAQ.
APJ-18-BPB-001	Winchester Road Bicycle and Pedestrian Improvements	Apache Junction	\$1,289,994	\$30,392,677	6.97	27	6.52	9	3.00	18	16.48	20	\$0	\$12,866,740	Selected for CMAQ: Fund with CMAQ.
PEO-20-BPB-002	New River Multi-Use Path: Pinnacle Peak Road to Happy Valley Road	Peoria	\$539,622	\$30,932,299	6.42	29	4.08	29	4.35	9	14.85	21	\$0	\$12,866,740	Selected for CMAQ: Fund with CMAQ.
SCT-19-BPB-004	Via Linda and Central Arizona Project (CAP) Canal Underpass and Path	Scottsdale	\$1,735,830	\$32,668,129	8.19	19	5.16	19	0.75	32	14.10	22	\$9,965	\$12,876,705	Not funded
GLN-19-BPB-004	SR101L, Bethany Home Rd to Maryland Ave Pathway Improvements	Glendale	\$731,768	\$33,399,897	7.21	25	4.73	22	2.10	24	14.04	23	\$0		Not funded
MES-20-BPB-002	Southeast Mesa Shared Use Path (Phase 3): Power Road to Hawes Road	Mesa	\$2,806,072	\$36,205,969	6.54	28	5.97	16	1.50	28	14.01	24	\$0		Not funded
GLN-18-BPB-005	Camelback Road, 79th Ave to 83rd Ave Sidewalk Improvements	Glendale	\$257,156	\$36,463,125	7.27	24	5.37	17	1.05	31	13.69	25	\$0		Selected for CMAQ: Fund with CMAQ.
GLN-20-BPB-001	67th Avenue and Orangewood Avenue Sidewalk Improvements	Glendale	\$1,097,275	\$37,560,400	8.68	18	4.28	25	0.60	34	13.55	26	\$0		Selected for CMAQ: Fund with CMAQ.
GLN-19-BPB-002	Paradise Lane, 55th Avenue to 59th Avenue Sidewalk Improvements	Glendale	\$233,110	\$37,793,510	7.88	21	4.97	20	0.30	36	13.16	27	\$0		Not funded

Project ID	Project Name	Applicant	Total Funding Requested	Cumulative Total {\$12,876,705}	TOTAL QUANTITATIVE WEIGHTED SCORE	QUANTITATIVE RANK	TOTAL QUALITATIVE WEIGHTED SCORE	QUALITATIVE RANK	TOTAL COMMITTEE WEIGHTED SCORE	COMMITTEE RANK	TOTAL COMBINED WEIGHTED SCORE	TOTAL COMBINED RANK	TAP Funding for Programming	Programming Cumulative Total {\$12,876,705}	Programming Notes
PEO-18-BPB-001	83rd Avenue Sidewalk and Bike Lanes	Peoria	\$614,836	\$38,408,346	4.83	33	4.35	24	3.30	16	12.48	28	\$0		Selected for CMAQ: Fund with CMAQ.
SUR-19-BPB-003	Pedestrian Enhancements at Greenway Road and Thompson Ranch Road	Surprise/El Mirage	\$203,452	\$38,611,798	2.87	37	4.17	28	5.40	2	12.44	29	\$0		Not funded
PHX-20-BPB-008	Mountain View Safe Streets / Safe Routes to School Project	Phoenix	\$1,428,494	\$40,040,292	7.82	23	3.48	33	0.75	32	12.05	30	\$0		Selected for CMAQ, Fund with CMAQ.
GLN-20-BPB-003	71st Avenue and Orangewood Avenue Roadway Improvements	Glendale	\$947,621	\$40,987,913	7.15	26	4.23	26	0.15	37	11.53	31	\$0		Partially Funded in TAP
SUR-19-BPB-002	Grand Avenue Sidewalk Construction Project	Surprise	\$2,293,727	\$43,281,640	5.93	31	3.49	32	1.80	26	11.22	32	\$0		Not funded
PVY-19-BPB-001	Lincoln Drive Sidewalk Expansion	Paradise Valley	\$1,958,977	\$45,240,617	5.93	30	2.39	36	1.65	27	9.97	33	\$0		Selected for CMAQ: Fund with CMAQ.
ELM-18-BPB-001	Varney Road Sidewalk Connection	El Mirage	\$104,352	\$45,344,969	3.61	36	3.64	31	1.95	25	9.20	34	\$0		Not funded
AVN-18-BPB-001	Agua Fria Trail Phase II	Avondale	\$1,168,377	\$46,513,346	4.22	34	3.46	34	1.20	30	8.87	35	\$0		Not funded
QNC-19-BPB-001	Queen Creek Wash Trail Extension	Queen Creek	\$969,248	\$47,482,594	3.61	35	3.66	30	1.35	29	8.62	36	\$0		Not funded
PHX-19-BPB-009	Friendly House Safe Streets, Safe Routes to School Project	Phoenix	\$1,084,196	\$48,566,790	4.95	32	1.95	37	0.45	35	7.35	37	\$0		Not funded

8 projects funded

Total	\$12,866,740
Carry Forward	\$9,965
<b>Grand Total</b>	<b>\$12,876,705</b>

FY2018, 19, 20 TAP	12,629,055
Transfer from Non to Inf.	\$ 247,650
<b>Total for Programming</b>	<b>12,876,705</b>

Project ID	Project Name	Applicant	Total Funding Requested	Cumulative Total (\$23,635,734)	TOTAL QUANTITATIVE WEIGHTED SCORE	QUANTITATIVE RANK	TOTAL QUALITATIVE WEIGHTED SCORE	QUALITATIVE RANK	TOTAL AIR QUALITY SCORE	AIR QUALITY RANK	TOTAL COMMITTEE WEIGHTED SCORE	COMMITTEE RANK	TOTAL COMBINED WEIGHTED SCORE	TOTAL COMBINED RANK	CMAQ Funding for Programming	Programming: Cumulative Total (\$23,635,734)	Programming Notes
TMP-18-BPB-004	Western Canal Multi-Use Path / The Missing Link	Tempe	\$793,063	\$793,063	6.60	9	3.51	4	8.40	17	5.25	3	23.76	1	\$793,063	\$793,063	Selected for Both, Fund with CMAQ.
PHX-19-BPB-006	2019 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$830,783	\$1,623,846	6.17	12	3.09	15	9.60	14	4.05	11	22.90	2	\$0	\$793,063	HAWK: Selected for CMAQ, Fund with TAP
PHX-18-BPB-002	City of Phoenix Bikeshare Expansion Project (2018)	Phoenix	\$918,426	\$2,542,272	9.17	1	2.37	21	7.60	19	3.75	13	22.88	3	\$918,426	\$1,711,489	Selected for Both, Fund with CMAQ.
CHN-20-BPB-001	Chandler Boulevard Bike Lanes: I-10 to 54th Street	Chandler	\$454,597	\$2,996,869	4.90	16	3.13	11	11.20	10	3.60	14	22.83	4	\$454,597	\$2,166,086	Selected for CMAQ, Fund with CMAQ.
PHX-19-BPB-001	Connecting the Gap on Roeser Road: 32nd Street to 36th Street Bicycle & Pedestrian Improvements	Phoenix	\$888,895	\$3,885,764	5.00	15	1.61	35	12.00	8	4.20	10	22.81	5	\$888,895	\$3,054,981	Selected for CMAQ, Fund with CMAQ.
GLN-18-BPB-005	Camelback Road, 79th Ave to 83rd Ave Sidewalk Improvements	Glendale	\$257,156	\$4,142,920	3.97	24	2.69	17	14.80	1	1.05	31	22.50	6	\$257,156	\$3,312,137	Selected for CMAQ, Fund with CMAQ.
GLN-20-BPB-001	67th Avenue and Orangewood Avenue Sidewalk Improvements	Glendale	\$1,097,275	\$5,240,195	4.73	18	2.14	25	14.40	2	0.60	34	21.87	7	\$1,097,275	\$4,409,412	Selected for CMAQ, Fund with CMAQ.
GLB-19-BPB-001	Western Powerline Trail Grade Separated Bicycle/Pedestrian Bridge	Gilbert	\$2,829,943	\$8,070,138	8.93	3	3.76	3	3.60	29	5.55	1	21.84	8	\$2,829,943	\$7,239,355	Selected for Both, Fund with CMAQ.
SCT-19-BPB-003	Underpass at Chaparral Road and Indian Bend Wash Path	Scottsdale	\$1,182,569	\$9,252,707	5.77	14	2.64	18	8.80	16	3.90	12	21.11	9	\$1,182,569	\$8,421,924	Selected for CMAQ, Fund with CMAQ.
PEO-18-BPB-001	83rd Avenue Sidewalk and Bike Lanes	Peoria	\$614,836	\$9,867,543	2.63	33	2.18	24	12.80	6	3.30	16	20.91	10	\$614,836	\$9,036,760	Selected for CMAQ, Fund with CMAQ.
PHX-20-BPB-003	City of Phoenix Bikeshare Expansion Project (2020)	Phoenix	\$918,426	\$10,785,969	9.17	1	2.34	23	6.40	22	2.55	21	20.46	11	\$918,426	\$9,955,186	Selected for Both, Fund with CMAQ.
APJ-18-BPB-001	Winchester Road Bicycle and Pedestrian Improvements	Apache Junction	\$1,289,994	\$12,075,963	3.80	27	3.26	9	10.40	12	3.00	18	20.46	12	\$1,289,994	\$11,245,180	Selected for CMAQ, Fund with CMAQ.
SUR-19-BPB-001	Bullard Avenue Multimodal Corridor Enhancement Project	Surprise	\$1,551,235	\$13,627,198	4.80	17	3.42	7	7.20	20	4.95	5	20.37	13	\$1,551,235	\$12,796,415	Selected for CMAQ, Fund with CMAQ.
PHX-20-BPB-007	2020 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$1,121,227	\$14,748,425	6.63	8	3.11	13	8.00	18	2.40	22	20.14	14	\$0	\$12,796,415	Selected for CMAQ, Fund with TAP
PHX-20-BPB-008	Mountain View Safe Streets / Safe Routes to School Project	Phoenix	\$1,428,494	\$16,176,919	4.27	23	1.74	33	13.20	5	0.75	32	19.95	15	\$1,428,494	\$14,224,909	Selected for CMAQ, Fund with CMAQ.
SCT-18-BPB-001	McDowell Road Bike Lanes: Pima Road to 64th Street	Scottsdale	\$3,152,449	\$19,329,368	7.53	6	4.06	1	4.80	26	3.45	15	19.84	16	\$3,152,449	\$17,377,358	Selected for Both, Fund with CMAQ.
PVY-19-BPB-001	Lincoln Drive Sidewalk Expansion	Paradise Valley	\$1,958,977	\$21,288,345	3.23	30	1.20	36	13.60	4	1.65	27	19.68	17	\$1,958,977	\$19,336,335	Selected for CMAQ, Fund with CMAQ.
TMP-18-BPB-002	McClintock Drive Shared Use Path Underpass	Tempe	\$1,231,275	\$22,519,620	6.40	11	3.50	5	4.40	27	4.80	6	19.10	18	\$1,231,275	\$20,567,610	Selected for Both, Fund with CMAQ.
PEO-20-BPB-002	New River Multi-Use Path: Pinnacle Peak Road to Happy Valley Road	Peoria	\$539,622	\$23,059,242	3.50	29	2.04	29	9.20	15	4.35	9	19.09	19	\$539,622	\$21,107,232	Selected for CMAQ, Fund with CMAQ.
TMP-20-BPB-003	North South Rail Spur Multi-Use Path Project	Tempe	\$2,315,065	\$25,374,307	7.87	5	3.10	14	5.20	25	2.70	19	18.86	20	\$2,315,065	\$23,422,297	Selected for Both (on cusp of both), Fund with CMAQ.
PHX-18-BPB-005	2018 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	\$1,770,011	\$27,144,318	6.47	10	3.26	10	4.00	28	5.10	4	18.82	21	\$0	\$23,422,297	Selected for TAP, Fund with TAP.
GLN-20-BPB-003	71st Avenue and Orangewood Avenue Roadway Improvements	Glendale	\$947,621	\$28,091,939	3.90	26	2.12	26	12.40	7	0.15	37	18.57	22	\$213,437	\$23,635,734	Partial Funding if accepted.
GLN-19-BPB-004	SR101L, Bethany Home Rd to Maryland Ave Pathway Improvements	Glendale	\$731,768	\$28,823,707	3.93	25	2.36	22	10.00	13	2.10	24	18.40	23	\$0	\$23,635,734	Not funded
PHX-19-BPB-009	Friendly House Safe Streets, Safe Routes to School Project	Phoenix	\$1,084,196	\$29,907,903	2.70	32	0.98	37	14.00	3	0.45	35	18.13	24	\$0	\$23,635,734	Not funded
GLN-19-BPB-002	Paradise Lane, 55th Avenue to 59th Avenue Sidewalk Improvements	Glendale	\$233,110	\$30,141,013	4.30	21	2.49	20	10.80	11	0.30	36	17.89	25	\$0	\$23,635,734	Not funded
TMP-19-BPB-001	Alameda Drive Bicycle / Pedestrian Improvements	Tempe	\$1,584,282	\$31,725,295	4.30	22	3.43	6	5.60	24	4.50	8	17.83	26	\$0	\$23,635,734	Fund with TAP.
ELM-18-BPB-001	Varney Road Sidewalk Connection	El Mirage	\$104,352	\$31,829,647	1.97	35	1.82	31	11.60	9	1.95	25	17.34	27	\$0	\$23,635,734	Not funded
MES-19-BPB-003	South Canal Shared Use Path: Consolidated Canal Shared Use Path to McDowell Road	Mesa	\$2,003,013	\$33,832,660	5.93	13	3.89	2	2.00	33	4.65	7	16.47	28	\$0	\$23,635,734	Fund with TAP.
SCT-20-BPB-002	Osborn Road Complete Street: Hayden to Scottsdale Road	Scottsdale	\$1,214,450	\$35,047,110	7.30	7	3.11	12	2.40	32	3.15	17	15.96	29	\$0	\$23,635,734	Fund with TAP.

Project ID	Project Name	Applicant	Total Funding Requested	Cumulative Total (\$23,635,734)	TOTAL QUANTITATIVE WEIGHTED SCORE	QUANTITATIVE RANK	TOTAL QUALITATIVE WEIGHTED SCORE	QUALITATIVE RANK	TOTAL AIR QUALITY SCORE	AIR QUALITY RANK	TOTAL COMMITTEE WEIGHTED SCORE	COMMITTEE RANK	TOTAL COMBINED WEIGHTED SCORE	TOTAL COMBINED RANK	CMAQ Funding for Programming	Programming: Cumulative Total (\$23,635,734)	Programming Notes
SUR-19-BPB-003	Pedestrian Enhancements at Greenway Road and Thompson Ranch Road	Surprise/El Mirage	\$203,452	\$35,250,562	1.57	37	2.08	28	6.00	23	5.40	2	15.05	30	\$0	\$23,635,734	Not funded
SCT-19-BPB-004	Via Linda and Central Arizona Project (CAP) Canal Underpass and Path	Scottsdale	\$1,735,830	\$36,986,392	4.47	19	2.58	19	6.80	21	0.75	32	14.60	31	\$0	\$23,635,734	Not funded
PHX-20-BPB-004	Van Buren Street Pedestrian and Bicycle Improvements	Phoenix	\$2,310,350	\$39,296,742	8.20	4	2.11	27	1.20	35	2.70	19	14.21	32	\$0	\$23,635,734	Fund with TAP.
MES-19-BPB-001	Southeast Pathway (Phase 2): Elliot Road to Hawes Road	Mesa	\$2,032,624	\$41,329,366	4.37	20	3.35	8	0.80	36	2.25	23	10.76	33	\$0	\$23,635,734	Fund with TAP.
SUR-19-BPB-002	Grand Avenue Sidewalk Construction Project	Surprise	\$2,293,727	\$43,623,093	3.23	30	1.74	32	3.20	30	1.80	26	9.98	34	\$0	\$23,635,734	Not funded
MES-20-BPB-002	Southeast Mesa Shared Use Path (Phase 3): Power Road to Hawes Road	Mesa	\$2,806,072	\$46,429,165	3.57	28	2.99	16	0.40	37	1.50	28	8.45	35	\$0	\$23,635,734	Not funded
QNC-19-BPB-001	Queen Creek Wash Trail Extension	Queen Creek	\$969,248	\$47,398,413	1.97	35	1.83	30	2.80	31	1.35	29	7.95	36	\$0	\$23,635,734	Not funded
AVN-18-BPB-001	Agua Fria Trail Phase II	Avondale	\$1,168,377	\$48,566,790	2.30	34	1.73	34	1.60	34	1.20	30	6.83	37	\$0	\$23,635,734	Not funded

18.23 projects funded.

**2018 CMAQ funding**

Available: \$ 7,678,331

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	CMAQ Funding for Programming
TMP-18-BPB-004	Western Canal Multi-Use Path / The Missing Link	Tempe	1	\$ 793,063
PHX-18-BPB-002	City of Phoenix Bikeshare Expansion Project (2018)	Phoenix	3	\$ 918,426
GLN-18-BPB-005	Camelback Road, 79th Ave to 83rd Ave Sidewalk Improvements	Glendale	6	\$ 257,156
PEO-18-BPB-001	83rd Avenue Sidewalk and Bike Lanes	Peoria	10	\$ 614,836
APJ-18-BPB-001	Winchester Road Bicycle and Pedestrian Improvements	Apache Junction	12	\$ 1,289,994
SCT-18-BPB-001	McDowell Road Bike Lanes: Pima Road to 64th Street	Scottsdale	16	\$ 3,152,449
TMP-18-BPB-002	McClintock Drive Shared Use Path Underpass	Tempe	18	\$ 1,231,275
<b>CMAQ Total</b>				<b>\$ 8,257,199</b>

**2018 TAP-MAG funding**

Available: \$ 4,092,522

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	TAP Funding for Programming
PHX-18-BPB-005	2018 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	7	\$ 1,770,011
<b>TAP Total</b>				<b>\$ 1,770,011</b>

**2018 Federal Funding Summary**

2018	Total Programmed CMAQ	\$ 8,257,199
2018	Total Programmed TAP	\$ 1,770,011
2018	Total Programmed for FY2018	\$ 10,027,210
2018	Total Available	\$ 11,770,854
2018	Balance Carry Forward	\$ 1,743,644

**2019 CMAQ funding**

Available: \$ 7,899,112

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	CMAQ Funding for Programming
PHX-19-BPB-001	Connecting the Gap on Roeser Road: 32nd Street to 36th Street Bicycle & Pedestrian Improvements	Phoenix	5	\$ 888,895
GLB-19-BPB-001	Western Powerline Trail Grade Separated Bicycle/Pedestrian Bridge	Gilbert	8	\$ 2,829,943
SCT-19-BPB-003	Underpass at Chaparral Road and Indian Bend Wash Path	Scottsdale	9	\$ 1,182,569
SUR-19-BPB-001	Bullard Avenue Multimodal Corridor Enhancement Project	Surprise	13	\$ 1,551,235
PVY-19-BPB-001	Lincoln Drive Sidewalk Expansion	Paradise Valley	17	\$ 1,958,977
<b>CMAQ Total</b>				<b>\$ 8,411,619</b>

**2019 TAP-MAG funding**

\*Available: \$ 4,469,349

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	TAP Funding for Programming
MES-19-BPB-003	South Canal Shared Use Path: Consolidated Canal Shared Use Path to McDowell Road	Mesa	9	\$ 2,003,013
PHX-19-BPB-006	2019 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	12	\$ 830,783
TMP-19-BPB-001	Alameda Drive Bicycle / Pedestrian Improvements	Tempe	16	\$ 1,584,282
MES-19-BPB-001	Southeast Pathway (Phase 2): Elliot Road to Hawes Road	Mesa	18	\$ 2,032,624
<b>TAP Total</b>				<b>\$ 6,450,702</b>

**2019 Federal Funding Summary**

2019	Total Programmed CMAQ	\$ 8,411,619
2019	Total Programmed TAP	\$ 6,450,702
2019	Total Programmed for FY2018	\$ 14,862,321
2019	Total Available	\$ 12,368,461
2019	Balance Carry Forward	\$ (2,493,860)

\* Includes non-infrastructure balance of \$247,650, year for use is flexible.

**2020 CMAQ funding**

Available: \$ 8,058,291

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	CMAQ Funding for Programming
CHN-20-BPB-001	Chandler Boulevard Bike Lanes: I-10 to 54th Street	Chandler	4	\$ 454,597
GLN-20-BPB-001	67th Avenue and Orangewood Avenue Sidewalk Improvements	Glendale	7	\$ 1,097,275
PHX-20-BPB-003	City of Phoenix Bikeshare Expansion Project (2020)	Phoenix	11	\$ 918,426
PHX-20-BPB-008	Mountain View Safe Streets / Safe Routes to School Project	Phoenix	15	\$ 1,428,494
PEO-20-BPB-002	New River Multi-Use Path: Pinnacle Peak Road to Happy Valley Road	Peoria	19	\$ 539,622
TMP-20-BPB-003	North South Rail Spur Multi-Use Path Project	Tempe	20	\$ 2,315,065
GLN-20-BPB-003	71st Avenue and Orangewood Avenue Roadway Improvements	Glendale	22	\$ 213,437
<b>CMAQ Total</b>				<b>\$ 6,966,916</b>

**2020 TAP-MAG funding**

Available: \$ 4,314,833

Project ID	Project Name	Applicant	TOTAL COMBINED RANK	TAP Funding for Programming
SCT-20-BPB-002	Osborn Road Complete Street: Hayden to Scottsdale Road	Scottsdale	10	\$ 1,214,450
PHX-20-BPB-004	Van Buren Street Pedestrian and Bicycle Improvements	Phoenix	11	\$ 2,310,350
PHX-20-BPB-007	2020 Phoenix Pedestrian and Bicycle HAWK Crossing Project	Phoenix	13	\$ 1,121,227
<b>TAP Total</b>				<b>\$ 4,646,027</b>

**2020 Federal Funding Summary**

2020	Total Programmed CMAQ	\$ 6,966,916
2020	Total Programmed TAP	\$ 4,646,027
2020	Total Programmed for FY2018	\$ 11,612,943
2020	Total Available	\$ 12,373,124
2020	Balance	\$ 760,181

**Summary Funding all Years**

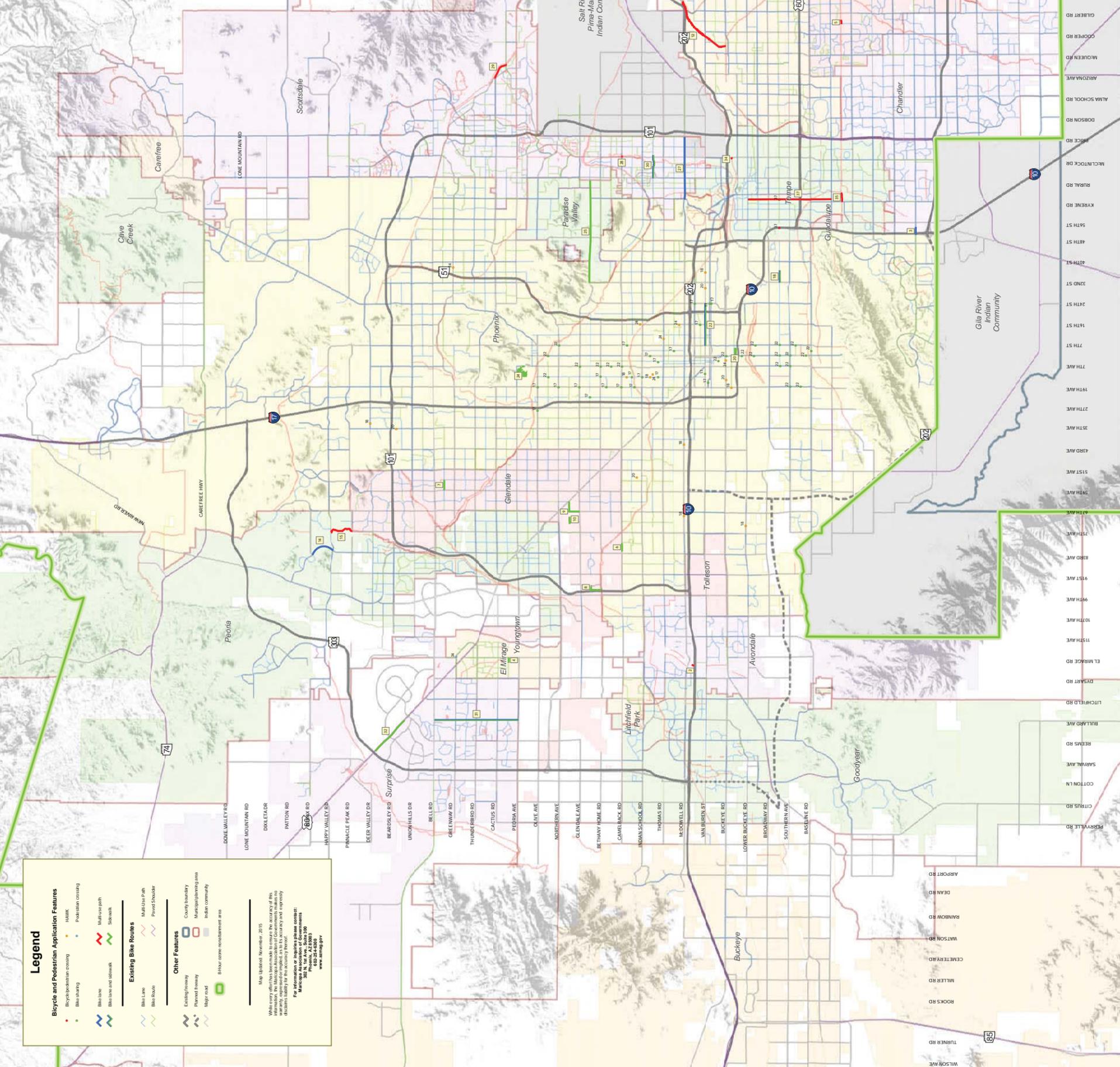
Total Programmed CMAQ	\$ 23,635,734
Total Available CMAQ	\$ 23,635,734
Carry Forward	\$ -

Total Programmed TAP	\$ 12,866,740
Total Available TAP	\$ 12,876,705
Carry Forward	\$ 9,965

<b>Funding Available By Program Years</b>		
	<b>CMAQ Bicycle/Ped</b>	<b>Transportation Alternatives Urban &amp; NU, Infrastructure</b>
*2017 Moved from nonInfr. to infrastructure	\$ -	\$ 247,650
<b>2018</b>	\$ 7,678,331	\$ 4,092,522
<b>2019</b>	\$ 7,899,112	\$ 4,221,699
<b>2020</b>	\$ 8,058,291	\$ 4,314,833
<b>Total</b>	<b>\$ 23,635,734</b>	<b>\$ 12,876,705</b>

# Bicycle and Pedestrian Projects FY 2018-2020

MAP ID	TIP ID	CATEGORY	PROJECT KEY	PROJECT LOCATION
1	APJ-18-BPB-001	Bike lane and sidewalk	Winchester Rd from Southern Ave and 76th Ave	Winchester Rd from Southern Ave and 76th Ave
2	AVN-18-BPB-001	Pedestrian/bike bridge	Agua Fria River east bank from north of I-10 to Friendship Park	Agua Fria River east bank from north of I-10 to Friendship Park
3	CNN-20-BPB-001	Bike lane	Chandler Blvd from I-10 and east of 54th St	Chandler Blvd from I-10 and east of 54th St
4	ELM-18-BPB-001	Sidewalk	Vanoy Rd < 1/4 mi west of El Mirage Rd	Vanoy Rd < 1/4 mi west of El Mirage Rd
5	GLB-19-BPB-001	Bike/ped bridge	Western Powerline Trail corridor on both sides of the Union Pacific RR	Western Powerline Trail corridor on both sides of the Union Pacific RR
6	GN-18-BPB-005	Sidewalk	Camelback Rd, 79th Ave to 83rd Ave	Camelback Rd, 79th Ave to 83rd Ave
7	GN-19-BPB-004	Sidewalk improvements	Paradise Ln, 55th Ave to 59th Ave	Paradise Ln, 55th Ave to 59th Ave
8	GN-19-BPB-004	Sidewalk improvements	SR-101L, Bethany Home Rd to Maryland Ave	SR-101L, Bethany Home Rd to Maryland Ave
9	GN-20-BPB-001	Sidewalk improvements	67th Ave from Glendale Ave to Orangewood Ave, then east to Grand Ave	67th Ave from Glendale Ave to Orangewood Ave, then east to Grand Ave
10	GN-20-BPB-003	Sidewalk	71st Ave, Myrtle Ave to Orangewood Ave, Orangewood Ave, 69th Ave to 72nd Ave	71st Ave, Myrtle Ave to Orangewood Ave, Orangewood Ave, 69th Ave to 72nd Ave
11	MES-19-BPB-001	Shared use path	Along San Tan Fwy from Elliot to Hawes Rds	Along San Tan Fwy from Elliot to Hawes Rds
12	MES-19-BPB-003	Shared use path	SRP Canal corridor from Consolidated Canal to McDowell Rd	SRP Canal corridor from Consolidated Canal to McDowell Rd
13	MES-20-BPB-002	Shared use path	Along San Tan Fwy from Power to Hawes Rds	Along San Tan Fwy from Power to Hawes Rds
14	PEO-18-BPB-001	Bike lane	83rd Ave from Happy Valley Rd to Jomax Rd	83rd Ave from Happy Valley Rd to Jomax Rd
15	PEO-20-BPB-002	Multi-use path	East bank of New River from Pinnacle Peak Rd to Happy Valley Rd	East bank of New River from Pinnacle Peak Rd to Happy Valley Rd
16	PHK-18-BPB-002	Bike sharing	22 locations along the existing and future light-rail station extensions	22 locations along the existing and future light-rail station extensions
17	PHK-18-BPB-005	Signal improvement	8 crosswalk locations across City of Phoenix	8 crosswalk locations across City of Phoenix
18	PHK-19-BPB-001	Bike lane and sidewalk	Roeser Rd from 32nd St to the San Francisco Canal	Roeser Rd from 32nd St to the San Francisco Canal
19	PHK-19-BPB-006	Signal improvement	4 crosswalk locations across City of Phoenix	4 crosswalk locations across City of Phoenix
20	PHK-19-BPB-009	Sidewalk	Streets near Friendly House (Academia Del Pueblo) school	Streets near Friendly House (Academia Del Pueblo) school
21	PHK-20-BPB-003	Bike sharing	22 locations along the existing and future light-rail station extensions	22 locations along the existing and future light-rail station extensions
22	PHK-20-BPB-004	Complete street	Van Buren St from 7th St to 24th St	Van Buren St from 7th St to 24th St
23	PHK-20-BPB-007	Signal improvement	6 crosswalk locations across City of Phoenix	6 crosswalk locations across City of Phoenix
24	PHK-20-BPB-008	Sidewalk improvements	Bounded by 7th Ave, 15th Ave, Peoria Ave, and Mountain View Rd	Bounded by 7th Ave, 15th Ave, Peoria Ave, and Mountain View Rd
25	PVY-19-BPB-001	Sidewalk	Lincoln Dr bwn 660 ft west of Scottsdale Rd and 32nd St	Lincoln Dr bwn 660 ft west of Scottsdale Rd and 32nd St
26	QNC-19-BPB-001	Multi-use path	Queen Creek Wash Trail from Crismon Rd to Ritterhouse Rd	Queen Creek Wash Trail from Crismon Rd to Ritterhouse Rd
27	SCR-18-BPB-001	Bike lane	McDowell Rd from Pima Rd to 64th St	McDowell Rd from Pima Rd to 64th St
28	SCR-19-BPB-003	Multi-use path underpass	Indian Bend Wash path at Chaparral Rd, east side of Hayden Rd	Indian Bend Wash path at Chaparral Rd, east side of Hayden Rd
29	SCR-19-BPB-004	Underpass and multi-use path	West/south side of CA9 Canal from Via Linda to Frank Lloyd Wright	West/south side of CA9 Canal from Via Linda to Frank Lloyd Wright
30	SCR-20-BPB-002	Complete street	Osborn Rd from Hayden Rd to Scottsdale Rd	Osborn Rd from Hayden Rd to Scottsdale Rd
31	SUR-19-BPB-001	Multimodal corridor	Bullard Ave from Bell Rd to Peoria Ave	Bullard Ave from Bell Rd to Peoria Ave
32	SUR-19-BPB-002	Sidewalk	Grand Ave from SR-303 to Yorkshire Dr	Grand Ave from SR-303 to Yorkshire Dr
33	SUR-19-BPB-003	Pedestrian crossing	Greenway Rd and Thompson Ranch Rd/El Mirage Rd	Greenway Rd and Thompson Ranch Rd/El Mirage Rd
34	TMP-18-BPB-002	Multi-use underpass	Rio Salado SLP at McClintock Dr	Rio Salado SLP at McClintock Dr
35	TMP-18-BPB-004	Multi-use underpass	Divot at Mineral Rd from Kyrone Rd to Western Canal	Divot at Mineral Rd from Kyrone Rd to Western Canal
36	TMP-19-BPB-001	Bike/ped underpass crossing	Alameda Dr from 48th St to Rural Rd	Alameda Dr from 48th St to Rural Rd
37	TMP-20-BPB-003	Multi-use path	Along Union Pacific RR corridor from University Dr to Baseline Rd	Along Union Pacific RR corridor from University Dr to Baseline Rd



**Legend**

**Bicycle and Pedestrian Application Features**

- Bicyclist/pedestrian crossing
- Bike sharing
- Bike lane
- Bike lane and sidewalk
- Multi-use path
- Multi-use path
- Sidewalk

**Existing Bike Routes**

- Bike Lane
- Bike Share
- Multi-Use Path
- Paved Shoulder

**Other Features**

- Existing freeway
- Proposed freeway
- Major road
- County boundary
- Municipal planning area
- Indian community
- Biker cover maintenance area

Map updated November 2015

While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, for the accuracy, timeliness, or completeness of this information.

For information or inquiries please contact:  
 300 N. 1st Ave., Suite 300  
 Phoenix, AZ 85003  
 Phone: 602.244.4300  
 www.maricopa.gov

October 22, 2015

TO: Members of the MAG Transportation Review Committee  
Members of the MAG Intelligent Transportation Systems Committee  
Members of the MAG Bicycle and Pedestrian Committee

FROM: Tim Conner, Scottsdale, Chair of the MAG Air Quality Technical Advisory Committee

SUBJECT: MAG AIR QUALITY TECHNICAL ADVISORY COMMITTEE RECOMMENDATION  
ON THE EVALUATION OF PROPOSED FY 2018, 2019, AND 2020 CMAQ  
PROJECTS FOR THE UPCOMING FY 2017-2021 MAG TRANSPORTATION  
IMPROVEMENT PROGRAM

On October 22, 2015, the MAG Air Quality Technical Advisory Committee made a recommendation to forward the air quality evaluation of proposed Congestion Mitigation and Air Quality Improvement (CMAQ) projects for fiscal years 2018, 2019, and 2020 sorted by cost-effectiveness to the MAG Transportation Review Committee and modal committees. This information is being provided to assist the committees in the project selection process. In addition, the recommendation included forwarding the Air Quality Projects for fiscal years 2018, 2019, and 2020 ranked in order of cost-effectiveness to the Transportation Review Committee for the upcoming FY 2017-2021 MAG Transportation Improvement Program.

The purpose of the CMAQ Program is to fund transportation projects or programs that will contribute to attainment or maintenance of the federal air quality standards. Federal CMAQ guidance requires that the project selection process include an assessment of the projects expected emission reduction benefits and cost-effectiveness. MAG staff conducted an evaluation of the proposed CMAQ projects using the CMAQ Methodologies, September 2011, and information provided in each project application.

If you have any questions, please contact Dean Giles, MAG, at (602) 254-6300.

Attachments

cc: Intergovernmental Representatives

OCTOBER 22, 2015 MAG AIR QUALITY TECHNICAL ADVISORY COMMITTEE RECOMMENDATION TO FORWARD THE EVALUATION OF PROPOSED CMAQ PROJECTS

Table 1 - Evaluation of Proposed AIR QUALITY Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
	MAG	Regionwide	Purchase PM-10 Certified Street Sweepers <sup>1</sup>	2018		0.00	0.00	1168.33	1168.33	\$283	\$846,985
	MAG	Regionwide	Trip Reduction Program <sup>2</sup>	2018		43.16	66.87	173.99	284.02	\$9,561	\$962,347
	MAG	Regionwide	Regional Rideshare Program <sup>3</sup>	2018		24.74	38.70	50.54	113.98	\$14,706	\$594,000
	MAG	Regionwide	Travel Reduction Program <sup>3</sup>	2018		0.27	0.43	1.12	1.82	\$209,560	\$135,000

Table 2 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLN-18-BPB-005	Glendale	Camelback Road, 79th Ave to 83rd Ave	Installation of new sidewalk and ADA ramps along the north side of Camelback Road to fill in pedestrian facility gaps. <sup>6</sup>	2018	0.5	0.04	0.02	2.90	2.97	\$12,108	\$257,156
PEO-18-BPB-001	Peoria	83rd Avenue	Project along the half-street of 83rd Avenue between Happy Valley Road and Jomax Road to widen the asphalt on the east side of the street to provide width for 6' bike lanes on both sides (with curb on the west side and without curb on the east side). Project will also include construction of 5'-8' (as space and conflicts permit) sidewalk along the west side attached to the existing curb and gutter. <sup>4</sup>	2018	1.2	0.01	0.01	2.49	2.51	\$45,073	\$614,836
ELM-18-BPB-001	El Mirage	Varney Road	The project is an unfinished segment of sidewalk in the City's right-of-way along a collector street. The project will complete and connect an exiting sidewalk. <sup>6</sup>	2018	0.25	0.05	0.02	0.02	0.09	\$221,364	\$104,352
APJ-18-BPB-001	Apache Junction	Winchester Road	The project will provide new sidewalks to fill-in gaps in the pedestrian network along Winchester Rd and install bicycle lanes on the roadway shoulders. In addition, the project will add a center continuous left turn lane to allow safer turning movements and prevent backups along Winchester Rd. <sup>4,5,6</sup>	2018	0.5	0.01	0.01	0.74	0.76	\$314,130	\$1,289,994
TMP-18-BPB-004	Tempe	Western Canal Multi-use Path	The Western Canal / Missing Link project is proposed to be a 10' wide concrete shared-use path and on-street facility running .5 miles connecting the Highline and Western Canal pathways. The project will link local and regional facilities, other canal paths, a bicycle boulevard (the "Brake" route in Tempe's BIKEiT system), the Tempe North South Rail Spur Path and run through a public golf course, a Salt River Project facility and across a major arterial. <sup>4,6</sup>	2018	0.5	0.04	0.03	0.05	0.12	\$930,041	\$793,063

OCTOBER 22, 2015 MAG AIR QUALITY TECHNICAL ADVISORY COMMITTEE RECOMMENDATION TO FORWARD THE EVALUATION OF PROPOSED CMAQ PROJECTS

Table 2 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
PHX-18-BPB-002	Phoenix	Downtown Phoenix	The project scope consists of the siting, procurement, and installation of bikeshare equipment to expand the Citywide GRID bikeshare program. As part of this scope, approximately 250 "bikeshare" bicycles, 360 bicycle racks, 13 large Sign Displays, and 10 bikeshare kiosks will be purchased to expand services for this program. This expanded system will compliment the City's existing bikeshare system launched in November, 2014. <sup>4</sup>	2018	12	0.07	0.06	0.14	0.27	\$1,075,971	\$918,426
SCT-18-BPB-001	Scottsdale	McDowell Road: Pima Road to 64th Street	This project will design and construct the unfinished segments of bicycle lanes on McDowell Rd in order to provide continuous bike lanes from 64th St to Pima Rd. The new bike lanes will be created by reducing the width of the median and travel lanes. <sup>4,5</sup>	2018	3	0.11	0.10	0.23	0.43	\$1,345,442	\$3,152,449
TMP-18-BPB-002	Tempe	Rio Salado Shared-use Path Underpass at McClintock	Construct ADA compliant bicycle/pedestrian shared use underpass path under McClintock Drive bridge along the south bank of the Rio Salado River. <sup>4,5,6</sup>	2018	0.1	0.03	0.02	0.04	0.10	\$1,362,723	\$1,231,275
PHX-18-BPB-005	Phoenix	Phoenix	2018 Phoenix Pedestrian and Bicycle HAWK Signalized Crossing Program. <sup>4,6</sup>	2018	0.1	0.08	0.06	0.10	0.24	\$1,367,342	\$1,770,011
AVN-18-BPB-001	Avondale	Agua Fria Trail	This project will construct a pedestrian/bike bridge across the ADOT drainage channel connecting Friendship Park to the existing trial trail head recently constructed with the Agua Fria I-10 Underpass project. <sup>4,6</sup>	2018	0.1	0.02	0.01	0.02	0.05	\$2,374,505	\$1,168,377

Table 3 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLN-18-ITS-001	Glendale	Citywide	Install emergency vehicle pre-emption (EVP) systems citywide at 48 arterial to arterial intersections, 5 signalized fire station access points, and 5 additional high priority signalized intersections (58 total locations). Purchase 58 radio units, 3 (EA) installation cables, and 57 vehicle equipment: 37 City of Glendale EMS vehicles and 20 additional units for neighboring jurisdictions that respond to Glendale emergencies. One (1) Central Management Software and one (1) CMS Maintenance Agreement will be required. Procurement of EVP equipment will use existing conduit with no ground disturbance. <sup>7</sup>	2018	153.00	15.13	10.23	0.00	25.36	\$9,432	\$399,832

Table 3 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
SUR-18-ITS-002	Surprise	Citywide	The project includes developing a planning document for ITS planning, deployment, and integration. The document will investigate mobility support, senior-living support, liveable/walkable/golf cart accessible communities. A communications section will focus on addressing issues of technology compatibility, upgrades to legacy equipment, and the integration of existing technology with new equipment and deployments within the City. <sup>7</sup>	2018	55.00	3.39	1.93	0.00	5.32	\$15,906	\$141,450
PHX-18-ITS-001	Phoenix	SR51 corridor	Procure and provision and integrate traffic data acquisition devices at intersections along corridors adjacent and parallel to as well as traversing the SR 51. Additionally traffic data acquisition devices will be deployed along and traversing corridors of media interest. <sup>7</sup>	2018	84.00	3.84	5.74	0.00	9.58	\$28,630	\$458,534
PEO-18-ITS-001	Peoria	Citywide	Purchase and install 72 four-section flashing yellow signal heads, new Peoria standard cabinet and controller at 12 signalized intersections in City of Peoria. <sup>7</sup>	2018	100.00	2.79	1.25	0.00	4.05	\$52,961	\$358,340
MMA-18-ITS-001	MCDOT	Citywide	This project will enhance the RADS database to allow for additional connectivity of agencies, and expanded capacity for information exchange and archiving. MCDOT and partners will identify required enhancements based on needs of ICM, decision support for arterial-reroutes due to freeway incidents, and other needed capabilities that stakeholders have identified. Requirements will be identified, and MCDOT (and any contractors) will follow the systems engineering process to design, implement, and test the RADS enhancements. <sup>7</sup>	2018	189.00	0.88	0.60	0.00	1.48	\$121,408	\$299,874
ELM-18-ITS-001	El Mirage	City Hall	Install approximately 6 miles of fiber optic cable within existing conduit and pull boxes that will be installed as part of currently approved ALCP projects. This cable will allow for the interconnection of six traffic signals and five CCTV cameras along El Mirage Road between Olive Avenue and Thunderbird Road. This infrastructure will be connected back to City Hall and the Police Department with possible connections to other City structures. The City will also discuss the feasibility of connecting to the adjacent networks with the appropriate agencies. <sup>7</sup>	2018	5.70	0.24	0.36	0.00	0.61	\$301,606	\$305,721

Table 3 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
MES-18-ITS-001	Mesa	West Mesa	Purchase, test and install new ATC traffic signal cabinets & controllers at 25 locations. Establish communications with new controllers to the TMC for enhanced traffic management and diagnostics capabilities. <sup>7</sup>	2018	1.00	0.26	0.40	0.00	0.66	\$353,847	\$390,000
MAR-18-ITS-001	Maricopa	Honeycutt Road from SR 357 to White & Parker & White and Parker to Honeycutt City Hall	The project will install 1-3 inch conduit with innerduct, trunk fiber, interconnect 3 traffic signals along the conduit path, install 3 CCTV cameras at the traffic signals, and install wireless radio connections to 3 additional traffic signals on Smith-Enke Road, one mile to the north. By making the fiber connection to the traffic signal at SR 347 and Maricopa Casa Grande Highway, just south of Honeycutt, the City will have a dedicated fiber link between their facilities at City Hall and the ADOT signals along SR 347. The project is included in the City of Maricopa Regional Transportation Plan Update. <sup>7</sup>	2018	3.00	0.22	0.35	0.00	0.57	\$416,220	\$400,000
TMP-18-ITS-001	Tempe	Citywide	Install a bi-directional Dynamic Message Sign (DMS), CCTV cameras, a high-speed wireless backbone link, intersection wireless radios, bicycle detection in mixed-use lanes and Emergency Vehicle Preemption networking. <sup>7</sup>	2018	36.00	0.18	0.12	0.00	0.30	\$776,336	\$392,010
SUR-18-ITS-001	Surprise	Citywide	Review current implemented ITS technology at signalized intersections at or adjacent to City fire stations. Provide implementation plan to improve efficiency communications, consistency throughout the system and safety to the travelling public. <sup>7</sup>	2018	7.00	0.03	0.02	0.00	0.05	\$1,230,285	\$94,300
CHN-18-ITS-001	Chandler	Chandler Blvd.	Procure bicycle detection systems for 20 signalized intersections in the City of Chandler with CMAQ grant. The field installation, wiring and configuration will be done by city employees and is not counted as part of the project cost. <sup>7</sup>	2018	5.50	0.14	-0.01	0.00	0.14	\$1,746,457	\$396,060
GDY-18-ITS-002	Goodyear	Phase 2: Cotton Ln - Estrella Pkwy to Lower Buckeye Rd; Estrella Pkwy - Elliot Rd to Cotton Ln; Elliot Rd - San Gabriel Dr to Estrella Pkwy	Purchase and install approximately 3,030 LF of 2-2" conduits, 330 LF of 3" conduit, 25,000 LF of 96 strand SMFO cable, 3,300 LF of 12 strand SMFO cable, 5 fiber optic splice enclosures, 4 field hardened ethernet switches, 4 video codecs and 4 CCTV cameras. The project will connect the City of Goodyear TMC to the four traffic signals along Cotton Lane, Estrella Parkway and Elliot Road. <sup>7</sup>	2018	1.00	0.05	0.03	0.00	0.09	\$2,088,656	\$301,482

Table 3 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLN-18-ITS-003	Glendale	Camelback Rd, 75th Ave to 91st Ave	Installation of conduit, fiber optic cable, communications equipment and CCTV cameras at intersections along Camelback to complete several last mile connections to expand the City's remote control and management capabilities of the signal system. Specifically 2 miles of conduit/fiber optics and 2 cameras. <sup>7</sup>	2018	2.00	0.06	0.03	0.00	0.08	\$2,862,259	\$400,000
BKY-18-ITS-2	Buckeye	Verrado Wy between Yuma Rd & Van Buren St; Verrado Wy between McDowell Rd & I-10	Complete current critical system gaps within major corridors to facilitate future installation of ITS. <sup>7</sup>	2018	1.00	0.04	0.00	0.00	0.04	\$3,438,071	\$225,977
GLN-18-ITS-002	Glendale	Camelback Rd, 51st Ave to 67th Ave	Installation of conduit, fiber optic cable, communications equipment and CCTV cameras at intersections along Camelback to complete several last mile connections to expand the City's remote control and management capabilities of the signal system. Specifically 2 miles of conduit/fiber optics and 2 cameras. <sup>7</sup>	2018	2.00	0.03	0.03	0.00	0.07	\$3,580,634	\$400,000
SCT-18-ITS-001	Scottsdale	Thomas Corridor	Purchase and install a total of 17 video detection cameras along Thomas Road from 60th Street to Pima Road and adjacent intersections with central control module/software at the TMC. The software would allow TMC operators within the city to set detection zones on cameras for dynamic traffic management purposes. <sup>7</sup>	2018	3.50	0.03	0.02	0.00	0.05	\$4,237,125	\$368,713
APJ-18-ITS-001	Apache Junction	Apache Trail from Meridian Road to Idaho Road and Ironwood Drive from Superstition to US-60	Purchase and install wireless radios and wireless radio tower to connect all Apache Junction traffic signals to the City of Mesa central control system. Purchase and install a total of nine (9) CCTV cameras. The City would integrate new traffic signals and new CCTV into the City of Mesa central system under a separate local project. This integration into the City of Mesa system would allow permissions control to specific departments within the City and other adjacent agencies via RCN to control the cameras for traffic and incident management purposes. <sup>7</sup>	2018	10.00	0.02	0.01	0.00	0.04	\$4,540,036	\$267,340
BKY-18-ITS-1	Buckeye	Yuma Rd between Miller Rd & Verrado Wy	Complete current critical system gaps within major corridors to facilitate future installation of ITS. <sup>7</sup>	2018	1.00	0.04	0.00	0.00	0.04	\$4,820,408	\$316,835

OCTOBER 22, 2015 MAG AIR QUALITY TECHNICAL ADVISORY COMMITTEE RECOMMENDATION TO FORWARD THE EVALUATION OF PROPOSED CMAQ PROJECTS

Table 3 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2018 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
AVN-18-ITS-001	Avondale	Dysart Rd	Procure, Construct and Install: Three (3) new ASC 3 controllers installed to replace existing to provide compatible ITS applications. Two CCTV cameras will be included for the Van Buren Street and Coldwater North intersections. Fiber backbone will be installed in Dysart Road roadway right-of-way from Van Buren to north of I-10. <sup>7</sup>	2018	0.50	0.01	0.02	0.00	0.03	\$5,455,548	\$278,279
GDY-18-ITS-001	Goodyear	Phase 1: Elwood Street - Cotton to Estrella; Cotton Lane - Commerce to Elwood	Purchase and install approximately 5,540 LF of 2-2" conduits, 5,540 LF of 3" conduit, 12,000 LF of 96 strand SMFO cable, 800 LF of 12 SMFO cable, 2 fiber optic splice enclosures, 2 field hardened ethernet switches, 2 video codecs and 2 CCTV cameras. The project will connect the City of Goodyear TMC to the two traffic signals along Cotton Lane and Sarival Avenue. <sup>7</sup>	2018	0.50	0.01	0.01	0.00	0.02	\$10,549,431	\$380,683

Table 4 - Evaluation of Proposed AIR QUALITY Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
	MAG	Regionwide	Purchase PM-10 Certified Street Sweepers <sup>1</sup>	2019		0.00	0.00	1168.33	1168.33	\$346	\$1,036,596
	MAG	Regionwide	Trip Reduction Program <sup>2</sup>	2019		40.34	59.68	179.56	279.59	\$9,713	\$962,347
	MAG	Regionwide	Regional Rideshare Program <sup>3</sup>	2019		23.14	34.57	52.26	109.97	\$15,243	\$594,000
	MAG	Regionwide	Travel Reduction Program <sup>3</sup>	2019		0.25	0.37	1.12	1.73	\$219,846	\$135,000

Table 5 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
PHX-19-BPB-009	Phoenix	Bounded by Mohave to the north, Durango to the south, 1st Street to the west and 5th Street to the east	Friendly House Safe Streets, Safe Routes to School Project: The neighborhood north of the school lacks sidewalk, curb and gutter, ADA ramps and lighting. The goal of the project would be to install these missing items. <sup>5,6</sup>	2019	0.6	0.01	0.00	10.10	10.11	\$19,746	\$1,084,196
PVY-19-BPB-001	Paradise Valley	Lincoln Drive	This project will install 6' wide meandering colored concrete sidewalks which will complete a safe pedestrian connection along Lincoln Drive between the town's western boundary with the City of Phoenix and the eastern boundary with the City of Scottsdale. <sup>5,6</sup>	2019	2	0.05	0.03	14.51	14.58	\$24,739	\$1,958,977
PHX-19-BPB-001	Phoenix	Connecting the Gap on Roeser Road: 32nd Street to 36th Street	Design and construct pedestrian improvements on south side and stripe bicycle lanes on both sides. <sup>4,5,6</sup>	2019	0.65	0.01	0.01	1.17	1.19	\$137,678	\$888,895

Table 5 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLN-19-BPB-002	Glendale	Paradise Lane, 55th to 59th Ave	New sidewalk and ADA ramps will be added to fill in bicycle and pedestrian facility gaps. <sup>6</sup>	2019	0.5	0.06	0.03	0.02	0.12	\$281,722	\$233,110
GLN-19-BPB-004	Glendale	SR101L, Bethany Home Rd to Maryland Ave	This project will include a multiuse pathway to extend the Grand Canal Linear Park multiuse path, widen existing sidewalk, and restripe Maryland Avenue to add bike lanes. <sup>4,6</sup>	2019	2	0.07	0.05	0.11	0.23	\$446,735	\$731,768
PHX-19-BPB-006	Phoenix	Phoenix	2019 Phoenix Pedestrian and Bicycle HAWK Signalized Crossing Program <sup>4,6</sup>	2019	0.1	0.07	0.05	0.10	0.23	\$679,327	\$830,783
SCT-19-BPB-003	Scottsdale	Underpass at Chaparral Road and Indian Bend Wash Path	This project will design and construct a north/south non-motorized underpass at Chaparral Road along the Indian Bend Wash Path. It will include connections to the paths, existing east/west tunnel, sidewalks, and crosswalk. <sup>4,6</sup>	2019	0.01	0.05	0.04	0.08	0.17	\$745,504	\$1,182,569
SUR-19-BPB-001	Surprise	Bullard Avenue Multimodal Corridor	The City envisions Bullard Avenue as a multimodal corridor with a raised landscaped median, one 11-ft vehicle travel lane, one 6-ft Neighborhood Electric Vehicle (NEV) travel lane, a buffer zone, a 5-ft raised cycle track, landscape strip, and sidewalks on each side of the roadway. Two HAWK signals are proposed at the intersections with Acoma Drive and with Sweetwater Avenue. <sup>4</sup>	2019	4	0.06	0.05	0.14	0.26	\$1,089,371	\$1,551,235
SCT-19-BPB-004	Scottsdale	Via Linda CAP Canal Underpass	Design and construct a non-motorized underpass at Via Linda and 1-mile long 10-foot concrete path along the south side of the Central Arizona Project Canal from Via Linda to the Cactus and Frank Lloyd Wright intersection. It will complete a local corridor gap along the regional CAP Trail. <sup>4,6</sup>	2019	1	0.05	0.04	0.08	0.17	\$1,094,286	\$1,735,830
SUR-19-BPB-003	Surprise	Greenway Road and Thompson Ranch Road	This joint project between the Cities of Surprise and El Mirage proposes to install a pedestrian crossing at or near the existing paved intersection of Greenway Road and Thompson Ranch Road/El Mirage Road. <sup>6</sup>	2019	0.1	0.02	0.01	0.01	0.03	\$1,304,995	\$203,452
TMP-19-BPB-001	Tempe	Alameda Drive	Design bicycle and pedestrian facility improvements on three miles of a collector street that will include improved street crossings, road diets, medians, buffered or protected bike lanes, landscaping, lighting, enhanced sidewalks and pedestrian amenities and upgrades to meet all Americans with Disabilities Act design requirements. <sup>4,6</sup>	2019	3	0.07	0.05	0.10	0.22	\$1,328,677	\$1,584,282

Table 5 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLB-19-BPB-001	Gilbert	Western Powerline Trail Grade Separated Bicycle/Pedestrian Bridge	This project will construct a grade-separated bike/ped bridge to provide safe, unobstructed passing for trail users. <sup>4,6</sup>	2019	0.22	0.06	0.04	0.09	0.19	\$1,628,137	\$2,829,943
SUR-19-BPB-002	Surprise	Grand Avenue Sidewalk	Construct approximately 2 miles of 10-foot wide shared use path on the southwest side of Grand Avenue from SR303 to Yorkshire Drive. The project will also fill in a missing segment of sidewalk (approximately 200 feet) in front of the Century Link building at 14541 W. Grand Avenue, approximately 2,200 feet south of W. Yorkshire Drive. <sup>4,6</sup>	2019	2	0.08	0.06	0.11	0.25	\$1,705,063	\$2,293,727
QNC-19-BPB-001	Queen Creek	Queen Creek Wash Trail Extension	The design and paving of approximately 73,000 square feet alongside the Queen Creek Wash to extend an existing multi-use trail from Crismon Road to Rittenhouse Road. <sup>4,6</sup>	2019	1.4	0.02	0.02	0.03	0.07	\$1,822,863	\$969,248
MES-19-BPB-003	Mesa	West-side of McDowell Road	South Canal Shared Use Path, which begins at the east side of the existing Consolidated Canal Shared Use Path, then extends northeasterly within the SRP South Canal ROW where it will join the SRP Eastern Canal terminating on the west-side of McDowell Road. <sup>4,6</sup>	2019	3.5	0.04	0.03	0.06	0.12	\$2,254,398	\$2,003,013
MES-19-BPB-001	Mesa	Southeast Pathway (Phase 2): Elliot Road to Hawes Road	This project is Phase 2 of the Southeast Shared Use Path, which begins at the east side of Power Road within the ADOT Loop 202 San Tan Freeway Right of Way (ROW), then extends northeasterly within the ADOT Loop 202 ROW where it will join and cross the RWCD Canal and EMF and then extends along the west-side of the ADOT ROW to Baseline Road. Phase 2 will construct the pathway segment from Elliot to Hawes Roads. <sup>4,6</sup>	2019	2.5	0.03	0.02	0.04	0.10	\$2,933,767	\$2,032,624

Table 6 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
MMA-19-ITS-002	MCDOT	Citywide	This project will enhance the RADS database to allow for additional connectivity of agencies, and expanded capacity for information exchange and archiving. MCDOT and partners will identify required enhancements based on needs of ICM, decision support for arterial-reroutes due to freeway incidents, and other needed capabilities that stakeholders have identified. Requirements will be identified, and MCDOT (and any contractors) will follow the systems engineering process to design, implement, and test the RADS enhancements. <sup>7</sup>	2019	279.50	2.14	1.35	2.43	5.92	\$12,389	\$122,590
SUR-19-ITS-004	Surprise	City Hall	Install the necessary equipment to upgrade video display monitors and video processors. This project would upgrade to LED video display technology, providing better performing equipment that uses less electricity. <sup>7</sup>	2019	55.00	3.07	1.62	3.69	8.38	\$22,560	\$315,905
PHX-19-ITS-003	Phoenix	SR51 corridor	Procure and provision and integrate traffic data acquisition devices at intersections along corridors adjacent and parallel to as well as traversing the SR 51. Additionally traffic data acquisition devices will be deployed along and traversing corridors of media interest. <sup>7</sup>	2019	84.00	3.84	5.74	0.00	9.58	\$28,380	\$454,526
CHN-19-ITS-002	Chandler	Ray Road	Procure bicycle detection systems for 20 signalized intersections in the City of Chandler with CMAQ grant. The field installation, wiring and configuration will be done by city employees and is not counted as part of the project cost. <sup>7</sup>	2019	8.50	0.26	-0.02	0.40	0.64	\$372,035	\$396,060
TMP-19-ITS-002	Tempe	Citywide	Install a bi-directional Dynamic Message Sign (DMS), CCTV cameras, a high-speed wireless backbone link, intersection wireless radios, bicycle detection in mixed-use lanes and Emergency Vehicle Preemption networking. <sup>7</sup>	2019	43.00	0.17	0.11	0.20	0.48	\$485,068	\$392,010

Table 6 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2019 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
APJ-19-ITS-002	Apache Junction	City Hall	Design conduit infrastructure and fiber along from City Hall at the intersection of Superstition Blvd and Idaho Rd along Superstition Rd west to Ironwood Dr and south along Ironwood Dr to Broadway Ave to connect the existing wireless backhaul radio tower. Infrastructure will connect to the City Hall complex as well as one of the two fire stations in the City. <sup>7</sup>	2019	2.50	0.14	-0.01	0.22	0.35	\$607,378	\$351,047
PHX-19-ITS-002	Phoenix	South Phoenix	Install fiber optic cable along Baseline Road from 51st Avenue to 7th avenue and procure and integrate ARID devices at signalized intersections along Baseline Road, Southern Avenue and Broadway Road. <sup>7</sup>	2019	10.00	0.13	0.08	0.15	0.37	\$1,211,640	\$749,067
MES-19-ITS-002	Mesa	East Mesa	Purchase, test and install new ATC traffic signal cabinets & controllers at 25 locations. Establish communications with new controllers to the TMC for enhanced traffic management and diagnostics capabilities. <sup>7</sup>	2019	1.00	0.06	0.04	0.07	0.18	\$1,330,808	\$390,000
MAR-19-ITS-002	Maricopa	Porter Road from Honeycutt Road to Maricopa Casa Grande Highway; from Porter Road to Stonegate, Honeycutt/Garvey from SR 347 to Maricopa Public Works Building	The project will install 1-3 inch conduit with innerduct, trunk fiber, interconnect 7 traffic signals along the conduit path, install CCTV cameras at each of the 7 traffic signals, and install wireless radio connections to 2 additional traffic signals on MCG and Bowlin Road. <sup>7</sup>	2019	1.70	0.05	0.07	0.05	0.17	\$1,385,773	\$400,000
SUR-19-ITS-003	Surprise	Greenway Road	Install CCTV cameras at 2 intersections along Greenway Road. In addition, install vehicle detection at 9 intersections along Greenway Road. This project is a priority for the City in order to implement a future Adaptive Signal Control technology along Greenway. <sup>7</sup>	2019	5.00	0.03	0.02	0.04	0.09	\$2,288,773	\$353,625
GDY-19-ITS-003	Goodyear	Citywide	The selected consultant will revise the existing Goodyear Intelligent Transportation Systems Strategic Plan with emphasis on future infrastructure improvements, future funding changes and roles and responsibilities for implementation and for maintenance and operations. <sup>7</sup>	2019	2.50	0.01	0.01	0.01	0.02	\$4,724,458	\$188,600
AVN-19-ITS-002	Avondale	Van Buren St	Procure, Construct and Install: Two (2) new ASC 3 controllers installed to replace existing to provide compatible ITS applications. Fiber backbone will be installed in Van Buren Street roadway right-of-way. <sup>7</sup>	2019	0.75	0.00	0.00	0.01	0.01	\$14,487,390	\$301,477

Table 7 - Evaluation of Proposed AIR QUALITY Projects for the Federal Fiscal Year 2020 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
	MAG	Regionwide	Purchase PM-10 Certified Street Sweepers <sup>1</sup>	2020		0.00	0.00	1168.33	1168.33	\$392	\$1,173,303
	MAG	Regionwide	Trip Reduction Program <sup>2</sup>	2020		37.01	54.42	184.59	276.02	\$9,839	\$962,347
	MAG	Regionwide	Regional Rideshare Program <sup>3</sup>	2020		21.23	31.54	53.82	106.59	\$15,725	\$594,000
	MAG	Regionwide	Travel Reduction Program <sup>3</sup>	2020		0.22	0.33	1.12	1.66	\$229,094	\$135,000

Table 8 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2020 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
GLN-20-BPB-001	Glendale	67th Ave and Orangewood Ave	New sidewalk and ADA ramps will be added to fill in pedestrian facility gaps. New curb and gutter and driveways will be added for access control along business frontages, collecting drainage runoff and protecting overhead power poles. <sup>4,5,6</sup>	2020	1	0.03	0.02	11.53	11.58	\$13,240	\$1,097,275
PHX-20-BPB-008	Phoenix	Neighborhood west of Mountain View Elementary	Mountain View Safe Streets/Safe Routes to School Project: To install missing and incomplete sections of sidewalk, curb and gutter, ADA ramps and Lighting. <sup>5,6</sup>	2020	0.6	0.01	0.01	6.70	6.72	\$39,128	\$1,428,494
GLN-20-BPB-003	Glendale	71st Ave & Orangewood Ave	New sidewalk, ADA ramps and curb and gutter will be added to fill in pedestrian facility gaps. Bike lanes will be provided on 71st Avenue and Orangewood Avenue. <sup>4,5,6</sup>	2020	0.25	0.02	0.01	2.90	2.93	\$59,571	\$947,621
CHN-20-BPB-001	Chandler	Chandler Boulevard: I-10 to 54th Street	This project will add bike lanes on Chandler Blvd. between I-10 and just east of 54th St. (0.4 miles) by restriping and/ or relocating curb and gutter. <sup>4,5</sup>	2020	0.37	0.07	0.06	0.18	0.32	\$261,332	\$454,597
PEO-20-BPB-002	Peoria	Pinnacle Peak Road to Happy Valley Road	Project to connect two missing segments along the New River Multi-use Path from Pinnacle Peak Road to Happy Valley Road. <sup>4,6</sup>	2020	1	0.03	0.02	0.05	0.11	\$706,053	\$539,622
PHX-20-BPB-007	Phoenix	Phoenix	2020 Phoenix Pedestrian and Bicycle HAWK Signalized Crossing Program. <sup>4,6</sup>	2020	0.1	0.06	0.05	0.10	0.21	\$963,448	\$1,121,227
PHX-20-BPB-003	Phoenix	Downtown Phoenix	City of Phoenix Bikeshare Expansion Project (2020). <sup>4</sup>	2020	12	0.06	0.05	0.14	0.25	\$1,183,081	\$918,426
TMP-20-BPB-003	Tempe	North South Rail Spur	Construct 4.1 miles of ADA compliant bicycle/pedestrian shared use path along the Union Pacific Railroad corridor from University Drive to Baseline Road. <sup>4,6</sup>	2020	4	0.07	0.05	0.12	0.24	\$1,332,838	\$2,315,065

Table 8 - Evaluation of Proposed Bicycle and Pedestrian Projects for the Federal Fiscal Year 2020 Sorted by Cost Effectiveness

Project Number	Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (CMAQ dollars/metric ton)	CMAQ Funds Requested
SCT-20-BPB-002	Scottsdale	Osborn Road: Hayden to Scottsdale Road	This will add bike lanes and sidewalk to Osborn Road from Hayden Road to Scottsdale Road downtown. It will include connections to Osborn Park and Indian Bend Wash Path as well as a roundabout with geometric speed control to slow vehicles and pedestrian refuges at the Miller Road intersection. <sup>4,5,6</sup>	2020	1	0.03	0.03	10.14	0.11	\$2,120,886	\$1,214,450
PHX-20-BPB-004	Phoenix	Van Buren Street	This projects seeks to repurpose the Van Buren Corridor into a complete street, enhancing walkability, bikeability, public transit use and economic revitalization opportunities. Safety can be improved along the street with the addition of bicycle lanes, narrowed street configuration, slower traffic speeds, signage, and an improved pedestrian environment. <sup>4,5,6</sup>	2020	2	0.06	0.04	0.08	0.18	\$2,392,970	\$2,310,350
MES-20-BPB-002	Mesa	Power Road to Hawes Road	Phase 3 will construct the pathway segment from Power to Hawes Roads. Users will have the benefit of a 10-foot shared use path and comfort amenities such as lighting, nodes, trailhead and way findings signs. This project will connect residential and business areas as well as providing a safe lit recreational pathway for users. <sup>4,6</sup>	2020	3.5	0.01	0.01	0.02	0.04	\$9,782,947	\$2,806,072

Notes:

<sup>1</sup>Supports the Measure in the Serious Area PM-10 Plan and MAG 2012 Five Percent Plan for PM-10: "PM-10 Efficient Street Sweepers"

<sup>2</sup>Supports the TCM in the Serious Area PM-10 Plan and CO Maintenance Plan: "Trip Reduction Program"

<sup>3</sup>Supports the TCMs in the Serious Area PM-10 Plan and CO Maintenance Plan: "Areawide Public Awareness Program" and "Employer Rideshare Program Incentives"

<sup>4</sup>Supports the TCM in the Serious Area PM-10 Plan and CO Maintenance Plan: "Development of Bicycle Travel Facilities"

<sup>5</sup>These projects also include shoulder paving which supports the measure in the Serious Area PM-10 Plan: "Curbing, Paving or Stabilizing Shoulders on Paved Roads"

<sup>6</sup>Supports the TCM in the Serious Area PM-10 Plan and CO Maintenance Plan: "Encouragement of Pedestrian Travel"

<sup>7</sup>Supports the TCMs in the Serious Area PM-10 Plan and CO Maintenance Plan: "Coordinate Traffic Signal Systems" and "Develop Intelligent Transportation Systems"