

SCOTTSDALE TRANSPORTATION COMMISSION REPORT



To: Transportation Commission
From: Phillip Kercher, Traffic Engineering Manager
Meeting Date: November 19, 2015
Subject: Draft Transportation Capital Improvement Program (CIP) Budget

ITEM IN BRIEF

Purpose:

Preliminary review and comment on the Draft Transportation Capital Improvement Program (CIP) Projects.

Key Considerations:

Transportation Fiscal Year 2016/2017 to 2020/2021 CIP Budget

Per City ordinance, the Transportation Commission is charged with reviewing and recommending to the City Council a 1- and 5-year capital budget, including an analysis of funding resources. Transportation staff has begun working with Financial Services and Capital Project Management to review the projects that are currently included in the 5-Year Capital Improvement Program (CIP), make modifications to these projects as needed to conform to identified funding levels, and identify new projects to be considered for inclusion in the Transportation Capital Improvement Program. The project requests will be prioritized by Transportation staff to assist the project evaluation process.

The purpose of this presentation and discussion is to obtain direction from the Transportation Commission regarding which projects should be considered to be programmed into in the Capital Improvement Program. Also, to obtain direction from the Commission regarding the staff recommended project priorities.

A. Transportation Bond Projects Recommended for the Capital Improvement Program

Five transportation projects were included in the recent General Obligation Bond election that was recently defeated. Three of these projects are recommended to be reconsidered for the Capital Improvement Program:

1. Happy Valley Road: Pima Road to Alma School Parkway – Widen Happy Valley Road to provide two lanes in each direction with a landscaped median and sidewalk. \$4,875,000 (30% of total project cost)
2. Hayden Road and Chaparral Road Intersection Improvements – Extend the northbound right turn lane, extend the existing underpass on the south leg of the intersection. \$425,000
3. Downtown Sidewalk Improvements – Construct missing sidewalk segments and improve pedestrian mobility in the Downtown area. \$1,200,000

B. Transportation Projects Recommended for the Capital Improvement Program

The following transportation projects are recommended by Transportation staff to be added to the Capital Improvement Program:

1. Miller Road: Pinnacle Peak Road to Happy Valley Road – This project would connect Miller Road from Pinnacle Peak Road to Happy Valley Road with construction of a bridge at the Rawhide Wash. \$4,140,000
2. 128th Street and Via Linda Intersection Improvement – Construct roundabout or traffic signal at the intersection to address school traffic issues, provide traffic control, and improve the pedestrian crossing of Via Linda. \$800,000 (cost share with Scottsdale Unified School District)
3. 2nd Street Bikepath Connection – Construct bikepath from Indian Bend Wash to Downtown along the 2nd Street alignment. \$300,000

4. 112th Street and Shea Boulevard Path and Sidewalk – Construct multi-use path along the south side of Shea Boulevard from 112th Street to 114th Street, and construct sidewalk along 112th Street from Mountain View to Shea Boulevard. \$700,000
5. Pinnacle Peak Road, Miller Road to Pima Road – Design and construct Pinnacle Peak Road to a four-lane minor arterial with raised median and intersection improvements. \$11,000,000
6. Via Linda Sidewalk, Mountain View Road to Lakeview Drive – Construct sidewalk along north side of Via Linda along park and Senior Center frontage. \$250,000
7. CAP Canal Path: Horizon Park to Stonegate Equestrian Park Underpass – Construction of a path along the CAP Canal to connect Horizon Park to the Stonegate Equestrian Park, including a grade separated crossing at Via Linda. \$5,000,000
8. 126th Street and Via Linda Intersection Improvement – Construct roundabout or traffic signal at intersection to address school traffic issues, provide traffic control, and improve the pedestrian crossing of Via Linda. \$800,000 (cost share with Scottsdale Unified School District)

C. Transportation Projects Recommended for the Capital Improvement Program

Transportation Projects requested by Scottsdale residents to be added to the Capital Improvement Program:

1. North Area Street Improvements – Widen incomplete streets and construct sidewalk or trails for streets in the Pima Road and Westland Drive area (83rd Street, 84th Street, Black Mountain Road, Westland Drive). \$2,200,000
2. Legacy Drive Temporary Extension – Construct Legacy Drive extension as a temporary two-lane roadway from Hayden Road to Hualapai Drive through State Land owned property. \$2,000,000
3. 96th Street and Thunderbird Road – Construct single-lane roundabout at the 96th Street and Thunderbird Road intersection, similar to the existing roundabouts along the 96th Street corridor. \$650,000
4. Jomax Road Improvements East of Pima Road – Improve Jomax Road to a local collector roadway from Pima Road to 94th Street with improved trail along the south side. \$2,000,000

D. Other Transportation Projects

A list of all transportation projects that could be considered for inclusion in the Transportation Capital Improvement Program, including those currently recommended by staff, is attached. This project list has been updated from the “Implementation Plan” list of projects that was included in the 2008 Transportation Master Plan.

E. Transportation Bond Projects Recommended for Removal from the Capital Improvement Program

The following transportation projects that were included in the recent General Obligation Bond election are recommended by Transportation staff to be removed from consideration for addition to the Capital Improvement Program at this time:

1. McDowell Road Bicycle Lanes (Bond Project) – Modify the existing McDowell Road cross section from Scottsdale Road to 64th Street to add bicycle lanes. \$3,100,000
2. Highland Avenue: Scottsdale Road to Goldwater Boulevard (Bond Project) – Improvement of the pedestrian facilities along Highland Avenue with the addition of traffic control at the Goldwater Boulevard intersection to provide a pedestrian crossing. \$2,100,000

F. Transportation Projects Recently Added to the Capital Improvement Program

Funding was allocated for the following transportation capital projects with the approval of the 2015/16 to 2019/20 City of Scottsdale Capital Budget. Funding for these projects could be reallocated to other projects if these are no longer considered a priority.

1. 98th Street: West Half Street Improvement – Complete 98th Street to full width adjacent to WestWorld frontage north of McDowell Mountain Ranch Road. \$1,000,000
2. Alma School Parkway and Jomax Road Improvements – Completion of Alma School Parkway to four lanes from Jomax Road to Pinnacle Vista Road with improvements to the Jomax Road intersection. \$3,000,000 (partially funded in CIP at \$1,100,000)

3. Miller Road Underpass at the 101 Freeway – Conceptual design of underpass on Miller Road alignment at the 101 Freeway \$300,000 (30% of total project cost)
4. Pima Road, Krail Street to Chaparral Road – Design and construct a four-lane minor arterial roadway with raised, landscaped median and sidewalk. \$1,623,000 (12% of total project cost)
5. Pima Road, Pinnacle Peak Road to Happy Valley Road – Improvement of Pima Road to three lanes in each direction with a landscaped median, sidewalk, and bike lanes. - \$2,458,000 (30% of total project cost)
6. Pinnacle Vista and 56th Street Intersection Improvements – Design and construct intersection improvements to add capacity and pedestrian facilities. \$350,000
7. Transit Stop Improvements – Funding to construct transit shelters. \$200,000

Attachments:

- Summary table of recommended projects for the Transportation Capital Improvement Program with preliminary priority ranking.
- List of potential transportation capital projects, previously referred to as the “Implementation Plan.”

Staff Contact: Phillip Kercher, Traffic Engineering Manager, 480-312-7645, pkercher@scottsdaleaz.gov
George Williams, Principal Traffic Engineer, 480-312-7623, gwilliams2@scottsdaleaz.gov

RECOMMENDED TRANSPORTATION CAPITAL IMPROVEMENT PROJECTS

Priority	Project Name	Project Description	Cost Est.	Comments
1	Happy Valley - Pima Rd. to Alma School Parkway	Widen to four lanes plus landscaped median and sidewalk	\$4,875,000	Bond project; also Arterial Life Cycle Program project; City pays only 30% of total cost.
2	Miller Road - Pinnacle Peak to Happy Valley	Connect existing street sections over Rawhide Wash	\$4,140,000	Provides alternative route during Scottsdale Road and Pima Road construction.
3	128th Street & Via Linda Intersection Improvement	Construct a roundabout or traffic signal to address school traffic issues.	\$800,000	Partner with SUSD
4	Downtown Sidewalk Improvements	Construct missing sidewalk segments and improve pedestrian mobility in the Downtown area	\$1,200,000	Bond project; scaled back from Bond proposal.
5	2nd Street Bikepath Connection	Construct a bikepath from the Indian Bend Wash to Downtown along the 2nd Street alignment	\$300,000	Provides a needed bikepath connection form main path to Downtown.
6	112th Street and Shea Boulevard Path and Sidewalk	Construct a path along the south side of Shea Boulevard from 112th Street to 114th Street, and construct a sidewalk along 112th Street from Mountain View to Shea	\$700,000	Preliminary design has been completed.
7	Hayden & Chaparral Intersection Improvements	Extend northbound right-turn lane; examine the feasibility of underpass on the east leg of the intersection	\$425,000	Bond project; scaled back from Bond proposal.
8	Pinnacle Peak: Miller Road to Pima Road	Design and construct Pinnacle Peak as a 4 lane arterial w median from Miller Road to Pima Road with intersection improvements at Miller, Hayden and Williams including ped crossings, bike lanes.	\$11,000,000	Preliminary design (30%) was completed in 2007.
9	Via Linda Sidewalk: Via Linda Senior Center to Mt View Park	Complete sidewalk gap along Via Linda from Via Linda Senior Center to Mt View park including pedestrian refuge on Via Linda.	\$250,000	Removes sidewalk gap in area of high pedestrian activity.
10	CAP Canal Path: Horizon Park to Stonegate Equestrian Park Underpass	Construction of a path along the CAP Canal to connect Horizon Park to the Stonegate Equestrian Park, including a grade separated crossing at Via Linda	\$5,000,000	May be better to split into several projects.
11	North Area Street Improvements	Widen incomplete streets and construct sidewalk or trails for streets in the Pima Road and Westland Drive area	\$2,200,000	Requested by area residents.
12	Legacy Drive Temporary Extension	Construct a Legacy Drive extension as a temporary two-lane roadway from Hayden Road to Hualapai Drive through State Land owned property	\$2,000,000	Requested by area resident; roadway would be on State Land property.
13	96th Street and Thunderbird Road	Construct a single lane roundabout at the 96th Street and Thunderbird Road intersection, similar to the existing roundabouts along the 96th Street corridor	\$650,000	Requested by area resident.
14	Jomax Road Improvements East of Pima Road	Improve Jomax Road to a local collector roadway from Pima Road to 94th Street with improved trail along the south side	\$2,000,000	Requested by area resident.
15	126th Street & Via Linda Intersection Improvement	Construct a roundabout or traffic signal to address school traffic issues.	\$800,000	Partner with SUSD

TRANSPORTATION CAPITAL PROJECT LIST

Rank	Project Name/Location	Description	Cost (millions)
1	Miller Rd: Pinnacle Peak Rd to Happy Valley Rd, Bridge over Rawhide Wash	Construct new bridge or culverts over Rawhide Wash, improve existing two-lane roadway from Pinnacle Peak Rd to Rawhide Wash, and connect to existing roadway in Pinnacle Reserve subdivision.	4.14
2	128th and Via Linda Intersection Improvement	Install roundabout or traffic signal to address school traffic issues; cost share with SUSD.	0.8
3	Downtown sidewalk improvements	Construct missing sidewalk segments and improve pedestrian mobility in the Downtown area	1.2
4	2nd Street Bikepath Connection to Greenbelt	Connect Indian Bend Wash bikepath to Downtown along 2nd Street alignment.	0.4
5	Via Linda (south side): 122nd St to 124th St	Complete missing sidewalk west of Desert Mountain High School and Mountainside Middle School. Plus right turn bay and smooth out intersection dips.	0.65
6	Shea path: 112 to 114th & 112 sidewalk: Shea to Mt View	Provide path to close gap in Shea path/sidewalk system & Provide sidewalk so peds can walk outside of street	0.8
7	Pinnacle Peak Rd: Miller Rd to Pima Rd	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, and sidewalks. Roadway will include drainage structures to eliminate existing dip crossings.	11.00
8	Hayden & Chaparral Intersection Improvements	Extend northbound right-turn lane; examine the feasibility of underpass on the east leg of the intersection	0.43
9	McDowell Road Bike Lanes: 64th St to Pima Road	Add bike lanes to locations to provide contiguous bike lane facilities along entire corridor.	3.10
10	Highland Ave: Scottsdale Rd to Goldwater Blvd	Improve capacity of corridor; add pedestrian facilities; make Goldwater more accessible for drivers entering from Highland.	0.80
11	CAP Path: Horizon Park to Stonegate Equestrian Park underpass at Via Linda	Connect parks, paths and schools to other system elements for approximately 5 miles.	5.00
12	126th Street and Via Linda Intersection Improvements	Roundabout to address school traffic issues; cost share with SUSD.	0.7
13	Via Linda Sidewalk - Mt. View to Lakeview	Close gap in path/sidewalk along Via Linda in front of Via Linda senior Center Mountain View Park	0.3
14	124th St Path: Shea Blvd to Via Linda	Multi-use path to connect three schools, library, trailhead and underpass. (Under design w Trail project)	0.50
15	Thomas Rd: 60th St to 73rd St	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Full intersection improvements at Thomas Rd & 64 St and at Thomas Rd & 68th St.	9.78
16	Osborn and Miller Intersection Improvement	Roundabout design and construction; possible CMAQ funding.	0.8
17	Connect schools into main Indian Bend Wash and Upper Camelback Wash path system	Create or improve connection paths for schools to wash path systems.	5.00
18	Dynamite Blvd: Scottsdale Rd to Pima Rd	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, and sidewalks. Roadway will include drainage structures to eliminate existing dip crossings.	16.23
19	Scottsdale Rd: Earll Dr to Chaparral Rd	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Project will encourage pedestrian movement and maximize shade.	15.40
20	Miller Rd Streetscape: McDowell Rd to Jackrabbit Trail	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Project will encourage pedestrian movement and maximize shade.	11.86
21	Dynamite Blvd: 56th St to Scottsdale Rd	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, and sidewalks. Roadway will include drainage structures to eliminate existing dip crossings.	14.41
22	68th St: Thomas Rd to Indian School Rd	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Project will encourage pedestrian movement and maximize shade. Left-turn lanes may be included.	8.47
23	North Area street improvements	Black Mountain Road and 94th Street area: complete roads and half streets including trails.	2.00
24	Legacy Drive Extension: Hayden to Water Campus	Extend Legacy Drive as a temporary 2 lane facility from hayden Road to the Water Campus to help alleviate Pima interchange traffic	2.00
25	96th Street and Thunderbird Road	Construct a single lane roundabout at the 96th Street and Thunderbird Road intersection, similar to the existing roundabouts along the 96th Street corridor and improve Main IBW path gap issues.	0.65
26	Jomax Road Improvements East of Pima Road	Improve Jomax Road to a local collector roadway from Pima Road to 94th Street with improved trail along the south side	2.00

TRANSPORTATION CAPITAL PROJECT LIST

Rank	Project Name/Location	Description	Cost (millions)
27	Westland Rd: Hayden Rd to Pima Rd	Complete corridor from Hayden to Pima.	4.50
28	Black Mtn-84th Street area streets	Complete several small street projects in this area	2.00
29	Osborn Rd: 64th St to Hayden Rd	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Projects will encourage pedestrians and maximize shade opportunities.	5.08
30	Pima Path: Shea to FLW	Extend Pima Path to CAP path at FLW along west side of Loop 101	4
31	Via Linda Path	Pima Path to 90th street under loop 101 via existing bridge	0.5
32	Dynamite Blvd: 114th St to 136th St	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, and sidewalks. Roadway will include drainage structures to eliminate existing dip crossings.	21.16
33	Happy Valley Rd: Scottsdale Rd to Pima Rd	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, and sidewalks. Roadway will include drainage structures to eliminate existing dip crossings.	21.03
34	Thomas Rd at 64th St	Provide full intersection improvements, including left-turn and right-turn bays for all directions. May be considered Thomas Rd Streetscape Phase 2.	1.73
35	Loop 101 Pima/Princess	Improve Loop 101 Pima/Princess interchange and associated freeway corridor from Frank Lloyd Wright Blvd to Pima Rd/Princess Rd.	27.00
36	Mt View sidewalk: 8200 to 8600	sidewalk gap project near school and park to connect to regional path system	0.30
37	Hayden Rd: McKellips Rd to Indian School Rd	Complete street with landscaping, sidewalks, street furniture, and other hardscape improvements. Project will encourage pedestrian movement and maximize shade.	12.71
38	Downtown Couplet: Lane reductions and Scottsdale Rd transitions	One northbound lane for east couplet and one southbound lane for the west couplet will be removed. Roadway modification will include pedestrian and bicycle improvements as well as streetscape elements.	6.13
39	Second bridge on Thompson Peak Pkwy at Reata Pass Wash	Construct new bridge to match existing bridge. Traffic from existing four-lane roadway currently uses the existing two-lane bridge.	3.85
40	118th St (northern extension of Happy Valley Rd): Jomax Rd to Dynamite Blvd	Construct new two-lane roadway.	9.63
41	56th St: Pinnacle Vista Rd to Jomax Rd	Construct new two-lane roadway on east side.	3.15
42	Oak St Streetscape: Scottsdale Rd to Miller Rd	Complete street with landscaping, sidewalks, street furniture and other hardscape improvements. Project will encourage pedestrian movement and maximize shade.	1.69
43	Legacy Bridge at 9600 East Reata Pass Wash	Construct new bridge to match existing bridge. Traffic from existing four-lane roadway currently uses the existing two-lane bridge.	2.75
44	Roosevelt Rd Streetscape: Scottsdale Rd to 86th St	Complete street with landscaping, sidewalks, street furniture and other hardscape improvements. Project will encourage pedestrian movement and maximize shade.	5.93
45	Miller/Hayden Rd: Happy Valley Rd to Dynamite Blvd	Construct new two-lane roadway that will traverse future Preserve property and terminate at Dynamite Blvd.	18.77
46	64th St at Shea Blvd	Northbound right-turn lane.	0.50
47	Dirt road paving	Pave existing dirt roads as continuing program.	0.50 annually
48	92nd St: Sweetwater Ave to Frank Lloyd Wright Blvd	Remove one existing lane, provide trails, landscaping and street furniture.	8.51
49	100th St loop: Frank Lloyd Wright Blvd to Frank Lloyd Wright Blvd.	Remove one existing lane, provide trails, landscaping and street furniture.	5.30
50	Sweetwater Ave: 90th St to 96th St	Remove one existing lane, provide trails, landscaping and street furniture.	3.98
51	Hayden Rd: Mayo Blvd to Legacy Dr	Improve existing four-lane cross section to six lanes with bike lanes. Install right turn lanes.	7.87
52	HOV ramps from Loop 101 to Northsight Blvd/Thunderbird Rd	Provide HOV Ramps with direct HOV-lane access. Existing walls and limited space may cause constructability issues.	18.38
53	Redfield Rd: Frank Lloyd Wright Blvd to 92nd St	Remove one existing lane, provide trails, landscaping, and street furniture.	3.98
54	CAP path: Northsight Blvd to 90th St	Construct shared use path.	10.00
55	Airpark streets - West side. Paradise Ln: Scottsdale Rd to Hayden/Greenway Loop	Install roundabout at 74th St., 76th St. and 78th St.	0.85

PROPOSITION 400 FUNDED PROJECTS

Rank	Project Name/Location	Description	Cost (millions)
1	Happy Valley Rd: Pima Rd to Alma School Rd	Widen existing two-lane cross section to four lanes with bike lanes, landscaped median, sidewalks, and roundabout at Alma School Pkwy.	16.3174
2	Frank Lloyd Wright Blvd – Loop 101 Traffic Interchange	Signal modifications and traffic operations improvements. Add storage turn lane.	5.63
3	Scottsdale Rd: Thompson Peak Pkwy to Pinnacle Peak Rd	Improve Scottsdale Rd to add capacity and alleviate flooding.	44.95
4	Carefree Highway: 60th Street to Scottsdale Road	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	11.45
5	Pima Road: Happy Valley Road to Dynamite Boulevard.	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	33.92
6	Miller Rd : Princes Blvd to Center Drive, includes crossing under Loop 101	Construct a new four-lane roadway from Princess Blvd to Center Dr. This will include an underpass for the Loop 101.	33.92
7	Scottsdale Road: Pinnacle Peak to Jomax	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	44.95
8	Legacy Drive: Hayden to 88th St, between water campus	Construct a new four lane roadway that will connect Legacy Drive to Pima Road. The new roadway will be located between sections of the Water Campus.	12.72
9	Shea Boulevard ITS and Intersection Improvements	Various intersection improvements along Shea Boulevard from Loop 101 to SR 87.	2.46
10	Scottsdale Road: Jomax to Dixileta Dr	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	36.68
11	Hayden Road Loop 101 Interchange Improvements	Construct ramps to enable westbound and southbound free flow from Loop 101 to Hayden Road.	16.38
12	Scottsdale Road: Dixileta Dr to Ashler Hills Dr	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	27.51
13	Pima Road: Dynamite Boulevard to Stagecoach Pass	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	37.89
14	Scottsdale Road: Ashler Hills to Carefree Highway	Improve existing four-lane cross section to six lanes with bike lanes, landscaped median and sidewalks. Roadway will include drainage structures to eliminate dip crossings.	27.51
15	101 Frontage Road: Hayden Road to Pima/Princess	Construct a new two-lane, one-way, frontage road on the north side of the Loop 101.	10.43

Measures/Considerations

Complete Streets	<ul style="list-style-type: none">• Incorporates multiple modes of transportation• Increases non-automobile capacity• Increases transportation system's continuity and efficiency
Safety	<ul style="list-style-type: none">• Reduces number and severity of collisions• Results in improved facility design, increased capacity, and decreased collision potential• Provides separated facilities for pedestrians, bicyclists, and/or trail users
Cost/Benefit	<ul style="list-style-type: none">• Overall costs are justified by system benefits• Includes the ability to leverage external funding• Considers potential increases to operating and maintenance costs• Enhances economic vitality
Connectivity	<ul style="list-style-type: none">• Provides connections to the regional system• Is complementary to other improvement projects• Connects to existing transportation facilities• Connects neighborhoods and employment centers to community facilities
Quality of Life Enhancements	<ul style="list-style-type: none">• Enhances environmental sustainability by trip reduction, emissions reduction and ability to utilize green materials/design• Increases access and convenience• Adds green space, reduces noise, and improves aesthetics• Improves system capacity, decreasing travel time