

Attachment A: Staff Report



COMMUNITY DEVELOPMENT AGENCY LONG RANGE PLANNING

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March 28, 2017

To: Board of Supervisors

From: Bard Lower, Director, Transportation Division
Claudia Wade, Senior Civil Engineer, Long Range Planning Division

Subject: 2017 Capital Improvement Program

PURPOSE AND SUMMARY:

Community Development Agency (CDA), Long Range Planning Division and Transportation Division recommending the Board authorize changes outlined in Items 1 through 6 listed below into the proposed 2017 Capital Improvement Program (CIP). Staff will return to the Board for adoption of the 2017 CIP book in June 2017. Staff is also recommending the Board add 22 emergency projects to the 2016 CIP, to address infrastructure problems caused by recent storms (Item 7 below). These projects will extend into future fiscal years, and therefore will also be included in the 2017 CIP Book.

West Slope Road and Bridge Program:

1. Approve additions and changes to West Slope Road/Bridge Capital Improvement Program (CIP) projects for inclusion in the 2017 CIP, as described in this staff report and Attachment B.
2. Diamond Springs Parkway: include \$8,000,000 in funds from the Missouri Flat Master Circulation and Funding Plan (MC&FP) and decrease Shingle Springs Band of Miwok Indians (Tribe) funding by \$8,000,000.

Tahoe Environmental Improvement Program (EIP):

3. Approve additions and changes to the Five-Year Tahoe EIP as described in this staff report and Attachment B.

Transportation Facility Improvement Program (TFIP):

4. Headington Wash Rack and Sewer Connection Project: Complete work as described in this staff report

Airport CIP (ACIP):

5. Continue to fund FY 2017/18 ACIP projects with Federal Aviation Administration (FAA) grants and local matching funds, as shown in this staff report and Attachment B.

Capital Overlay and Rehabilitation Program (CORP):

6. Continue to use external funds as they become available for CORP projects on the Infrastructure Investment Options list (Attachment C).

Emergency Projects for Addition to 2016 CIP:

7. Authorize the addition to the 2016 CIP of 22 emergency projects that address infrastructure problems caused by recent storms.

BACKGROUND

The CIP is the long-range plan for all individual capital improvement projects, including cost estimates, schedules and funding sources. It provides strategic direction for capital projects over a current year, 5-, 10- and 20-Year horizon. The CIP is used as a planning tool, and is updated annually as new information becomes available regarding Board priorities, funding sources, project cost estimates and timing.

In order to ensure that growth consistent with the General Plan does not exceed available roadway capacity, the County is required to implement General Plan Policy TC-Xb and Implementation Measure TC-A. General Plan Policy TC-Xb and Implementation Measure TC-A require the County to prepare and adopt an annual CIP for the West Slope Road/Bridge Program specifying expenditures for roadway improvements within the next 10 years.

General Plan Policy TC-Xb and Implementation Measure TC-A also require a Major CIP and Traffic Impact Mitigation (TIM) Fee Program update every five years, in line with the major review of the General Plan, specifying expenditures for roadway improvements within the next 20 years.

The County recently completed a Major 5-Year Update (Major Update) to the CIP and TIM Fee Programs. For background information on the Major Update, refer to the Board meeting of February 10, 2015, Item 27, Attachment 7D.

The Board adopted the Major Update to the CIP and TIM Fee Program on December 6, 2016 (Item 46), and further adopted the final 2016 CIP Book that incorporates the changes made to the CIP during the Major Update (Attachment 22D).

Considering that the Major Update was adopted in December of 2016, this annual 2017 CIP update will not include major changes to most projects. Attachment B provides a table listing projects with changes to construction start date or changes in cost of over \$100,000. The 2017 CIP book will incorporate changes to existing projects and include new proposed projects as described in the Discussion section.

Considering that the Major Update was adopted in December of 2016, this annual 2017 CIP update will not include major changes to most projects. Attachment B provides a table listing projects with changes to construction start date or changes in project cost over \$100,000. The 2017 CIP book will incorporate changes to existing projects and include new proposed projects as described in the Discussion section.

DISCUSSION

The proposed 2017 CIP Book includes the following five programs:

- West Slope Road/Bridge CIP
- Tahoe EIP
- ACIP
- TFIP
- CORP

Taking into consideration all five programs, the CDA's goals for the 2017 CIP Book are to:

1. Include new projects, or changes to existing projects, as directed by the Board; and
2. Make any other necessary revisions pursuant to Board direction.

The following discussion describes each program proposed for inclusion in the 2017 CIP Book.

West Slope Road/Bridge CIP:

CIP projects are prioritized based on a number of factors (in no particular order), such as:

- Operational Deficiencies
- Available funding
- Economic development
- Site Limitations
- Capacity
- Development projects' conditions of approval
- Regulatory requirements
- General Plan policies (e.g., TC-Xa)

A list of projects completed between 2001 and 2016 is included as Attachment D.

Projects listed in Attachment B have had changes in cost or schedule since the 2016 CIP was adopted in December 2016. Cost or schedule modifications have been made as a result of refinements made during the FY 2017/18 budget process. Staff recommends the Board direct staff to include the changes specified in Attachment B in the 2017 CIP Book.

In addition to the proposed changes as detailed in Attachment B, staff is also recommending additional changes to the Diamond Springs Parkway funding. During the Board Hearings for the adoption of the 2016 CIP Major Update, a discussion was held on September 20, 2016 (Legistar No. 14-0245) to remove MC&FP revenue from the Diamond Springs Parkway funding. Although Diamond Springs Parkway was identified as part of MC&FP Phase I, the decision was made in an effort to make a conservative response to the recently approved Measure E as well as to explore the use of MC&FP funds for roadway maintenance purposes due to the decline of available road funds. See Attachment 3B of Legistar No. 15-0048 for a complete historical

background on the MC&FP. As a result of the September 20, 2016 Board discussion, the MC&FP funding was removed from the Diamond Springs Parkway and the MC&FP Phase II Study.

In a more recent presentation held on January 24, 2017 by the Chief Administrative Office, CDA Transportation Division and County Counsel, County Counsel informed the Board that Measure J, a previous voter initiative passed in November 2000, allows the Board the discretion to continue using MC&FP funding. Additionally, the Board expressed the desire to continue funding projects identified in MC&FP Phase I.

Based on the Board's decision to keep the MC&FP mechanism and use it as intended, staff proposes to continue the use of the MC&FP revenue for Diamond Springs Parkway (as detailed below). Staff also proposes to continue the use of the MC&FP revenue for the MC&FP Phase II Study, which will be discussed in a separate Board item.

Diamond Springs Parkway:

In order to avoid increasing TIM Fees in Zones 2 and 3, the only funding sources that can vary are MC&FP and the Tribe funding source. Given this, staff is proposing three alternatives for funding the Diamond Springs Parkway.

- Alternative 1: No change to existing 2016 CIP - include revenue from TIM Fees, Tribe funding, and Utility Agencies, but not MC&FP revenue.

Alternative 2: Include \$8,000,000 from MC&FP and decrease Tribe funding by \$8,000,000. This option allows for use of Tribe funds for other County priorities. Staff recommends this option as it reinstates the original intent of MC&FP funds for Diamond Springs Parkway.

- Alternative 3: Include \$13,300,000 from MC&FP and no contribution from Tribe funds. Because the MC&FP revenue is approximately one million dollars per year, by increasing the MC&FP contribution, this scenario extends the project schedule out by a minimum of five to six years to ensure there is adequate revenue.

New Projects for 2017 CIP:

The CDA has recently received grants from the El Dorado County Transportation Commission (EDCTC) and Caltrans Local Programs to completely fund two County projects. Upon Board approval, the following projects will be included in the 2017 CIP:

1. **Safety Countermeasures at Various Locations (CIP # TBD):** Systematic application of road safety counter measures to include the following: Installation of high friction surface treatment, new thermoplastic striping with enhanced wet night visibility, raised pavement markers and advance warning signs.

Estimated Project Cost: \$2,784,600

Funding Source: Highway Safety Improvement Program (HSIP) – 100% Funded

2. Bicycle – Pedestrian Counters and Bicycle Route Signs (CIP # TBD):

Purchase and install up to eight permanent bicycle/pedestrian trip counters on Class I pathways and other strategic locations, and approximately thirty Class III bicycle route signs. The project includes the purchase of four portable bicycle and pedestrian counters. Locations for the signs and counters will be determined with assistance from EDCTC, and will be consistent with the 2010 El Dorado County Bicycle Transportation Plan.

Estimated Project Cost: \$328,500.

Funding Source: Urban Surface Transportation Block Grant Program - 100% funded

Tahoe EIP:

In 2016, CDA's Tahoe Engineering Group (TEG) completed the following project, as summarized in Attachment E:

- CSA 5 Erosion Control Project

The TEG is solely grant funded, and is primarily responsible for constructing erosion control, water quality, and stream environment zone enhancement projects. However, more bike trail projects are being included in the Tahoe EIP, as tourism and summertime outdoor recreation become more important in the Lake Tahoe Basin. In order to align Tahoe projects to the limited construction season, smaller projects are being developed. The TEG's proposed Five-Year EIP includes construction of one to two projects per season. Projects in the Tahoe EIP are included in Attachment B. Staff proposes to construct the following projects this summer:

- Country Club Heights Erosion Control Project
- Meyers Stream Environment Zone / Erosion Control Project

As a result of new grant funding and the readjustment of priorities for the Meyers highway corridor, the TEG is proposing three new/revised projects for the EIP. Upon Board approval, the following projects will be included in the 2017 CIP:

1. Meyers Corridor Operational Improvement Project (CIP # 73120)

(Formerly Apache Avenue/US Highway 50 Intersection Signalization Project) The project includes the planning, design, and construction of a multimodal complete streets strategy within the 1.3 mile stretch of the Meyers corridor along US Highway 50/State Route 89. It will accomplish complete streets by adding lighting, signage, landscaping and reducing reliance on the private automobile. It will provide multimodal transportation improvements like visible crosswalks for bicycle and pedestrian movements, provide for future growth for transit facilities to enhance circulation, and provide opportunities to experience Meyers as a pedestrian or cyclist. Other components of the project will be phased to align improvement needs, construction staging within the highway corridor, and available funding. Phases include the Apache Avenue/US Highway 50

Intersection Improvement Project and the Pioneer Trail/US Highway 50 Intersection Safety Improvement Project.

Estimated Project Cost: \$325,534.

Funding Source: Regional Surface Transportation (RSTP) Exchange Funds - \$304,168 and Congestion Mitigation and Air Quality Program (CMAQ) - \$21,366 - 100% funded.

2. Apache Avenue/US Highway 50 Intersection Improvement Project (CIP # 72380)

The current intersection at Apache Avenue/US Highway 50 is not consistent with best practices for a pedestrian/school crossing on a high speed roadway. Currently, there exists a midblock school crossing approximately 150 feet southwest of the Apache Avenue intersection. The proposed project aims to implement sustainable mobility improvements to provide a safe walkable and bikeable roadway. The project will help support the Walk to School Day, Bike to School Day, and other activities in cooperation with the school district and the Meyers community.

Estimated Project Cost: \$510,000.

Funding Source: RSTP Exchange Funds - \$75,000, Tahoe Regional Planning Agency (TRPA)/Air Quality - \$75,000 and Safe Routes to School - \$360,000 - 100% funded.

3. Pioneer Trail/US Highway 50 Intersection Safety Improvement Project (CIP # 72379)

This project was identified as a needed safety improvement in the Federal Highway Administration (FHWA) Resource Center's 2015 Meyers Road Safety Audit, is a priority intersection location in the TRPA 2016 Active Transportation Plan, and is a project of the TRPA Environmental Improvement Program. In-depth analysis for this improvement was conducted as part of TRPA's On Our Way Grant Program. This multi-agency effort included direct participation from the County, TRPA, FHWA, Caltrans Headquarters, Caltrans District 3, and community participation from the Meyers Community Foundation.

Estimated Project Cost: \$4,502,489.

Funding Source: HSIP - \$2,932,840, RSTP Federal Funds (Urban) - \$745,000, TRPA/Air Quality - \$584,560 and CMAQ - \$240,089 - 100% funded.

4. San Bernardino Water Quality Project (CIP # 95198)

(Formerly San Bernardino Erosion Control Project) This project will treat eroding cut and fill slopes in County right-of-way. Retain and treat the 25YR-1HR storm. The project also includes revegetation of disturbed areas. It will comply with future Total Maximum Daily Load requirements.

Estimated Project Cost: \$750,500.

Funding Source: TRPA/Water Quality - \$29,000 and United States Forest Service Site Improvement Grant - \$721,500 - 100% funded.

5. Cold Creek Fisheries Enhancement Project (CIP # 95187)

The original Project scope was to complete a comprehensive stream corridor restoration effort that included a one-mile reach of Cold Creek, the South Tahoe Public Utility District access road, the culvert at Pioneer Trail, and the City of South Lake Tahoe Globin Ponds. An existing Conditions Analysis Report was completed in May of 2006 that described the majority of the problems within this corridor and opportunities and constraints for Project alternatives. Upon Technical Assistance Center review of the Report and further discussions with respect to the scope of work it was decided to reduce the scope of work for the County Project to just the culvert at Pioneer Trail. Therefore, the current Project includes addressing the culvert at Pioneer Trail with respect to fish passage only. The goals of this Project are to enhance/improve fisheries and riparian habitat along a portion of Cold Creek, reduce sediment load from adjacent road and reduce sediment load from adjacent slopes.

Estimated Project Cost: \$1,570,000.

Funding Source: California Department of Fish and Wildlife - \$1,470,000 and TRPA/ Stream Environmental Zone - \$100,000 - 100% funded.

6. Delaware Water Quality Project (CIP # 95197)

This Project encompasses the Tahoe Paradise Units No. 20, 22, 23, and 24 subdivisions, which include Delaware Street, Kiowa Drive, and Kickapoo Street. The primary goal of the Project is to improve the clarity of Lake Tahoe by reducing detrimental water quality impacts that are a result of the development of Tahoe Paradise Units No. 20, 22, 23, and 24. The objective of the Project is the reduction of the transport of fine sediment from the Project area to the Upper Truckee River by construction water quality Best Management Practices.

Estimated Project Cost: \$750,500.

Funding Source: TRPA/Water Quality - \$29,000 and United States Forest Service Site Improvement Grant - \$721,500 - 100% funded.

TFIP:

The TFIP section of the 2017 CIP Book includes one Facilities project – the Headington Wash Rack Facility Project (CIP #81134). The project is designed to meet requirements of the State Water Resource Control Board and Regional Water Quality Control Board, and includes the installation of an automated water treatment reclamation/recycling wash rack system at the Headington Corporation Yard.

The improvements include construction of a covered vehicle wash building, electrical power supply, automated treatment recycle system (with treatment equipment and holding tanks), rainwater storage tanks, plumbing of water systems, and disconnecting from the existing sewer line. The purpose of this project is to replace and improve the existing uncovered wash rack for County fleet vehicles, thereby eliminating runoff and sewer discharges, decreasing use of domestic water for equipment maintenance and greatly improving water quality and environmental impacts.

Construction costs have been extended from FY 2016/17 to also include FY 2017/18, due to a delay in the schedule caused by an extended bidding period.

ACIP:

The CDA is responsible for operating the Placerville and Georgetown Airports, which includes developing and implementing the ACIP for both airports. Projects in the 2017 ACIP are included in Attachment C. The FAA reviews, authorizes and funds the ACIPs. Thus, the ACIPs are developed in partnership with the FAA. The Federal Aviation Administration's (FAA) Airport Capital Improvement Program (ACIP) funds 90% of most ACIP project costs. The County can apply for State of California Department of Transportation (Caltrans) Division of Aeronautics ACIP matching grant funds, which, if successful in obtaining, would fund 5% of the FAA grant amount (4.5% of the total project cost). That leaves 5.5% of the project costs that the Local Accumulative Capital Outlay (ACO) fund would need to cover.

Caltrans has provided matching funds for ACIP projects in past years. However, State matching funds were not programmed in the 2017 ACIP, as these funds have become unreliable. The projects include 10% ACO matching funds. State funding will continue to be pursued.

Placerville Airport projects included in the 2017 CIP book:

- Airport Layout Plan Update and Obstruction Survey (CIP #93132)
- Crack Seal and Remark Runway 5-23, Taxiways, Aprons and T-Hangar Taxilanes (CIP #93133)
- Taxiway Edge Lights (CIP #93130)

Georgetown Airport projects included in the 2017 CIP book:

- Crack Seal, Joint Seal and Mark Runway, Taxiways, Aprons and Tee Hangar Taxilanes; Change Runway End ID (CIP #93527)
- Obstruction Survey (CIP #93503)
- Airport Layout Plan 2024 Update (CIP #93523)
- Construction of AWOS (CIP #93520)
- Crack Seal and Remark Runway, Taxiways, Aprons and T-Hangar Taxilanes (CIP #93535)

The CDA is currently working with its airport consultant to initiate the Airport Layout Plan Update and Obstruction Survey Project for the Placerville Airport, which will include updated plans to provide appropriate criteria and guidelines for future airport projects and will generate an updated project list.

The CDA is currently working with the FAA and its airport consultant to finalize an update to the Airport Layout Plan with Program Narrative Report for the Georgetown Airport. To meet current FAA design standards, this updated Airport Layout Plan identified three needed safety projects. Upon Board direction, the following three Georgetown Airport projects will be added to the 2017 CIP:

1. Runway Pavement Closure for Runway Safety Area (CIP #93537)

The Runway Safety Area (RSA) located on the departure end of Runway 34 does not meet FAA design standards for the length beyond the runway end due to the terrain. Previously, a displaced threshold was marked on the runway to provide the necessary RSA length. In conjunction with the publication of declared distances (distances the airport owner declares available for use in meeting an airplane's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements), the displaced threshold was intended to address the RSA deficiency. However, given the current and forecasted fleet mix (no jet operations) that operates at the airport, the FAA would not approve the use of declared distances. To meet current FAA design standards, the purpose of this project is to remove or re-mark 190 feet of pavement located on the approach end of Runway 16. If pavement is re-marked instead of removed, it will be marked as unusable for aircraft arrival and departure operations.

Estimated Project Cost: \$555,550

Funding Source: FAA Funding -\$497,700, ACO Match - \$57,800 – Approximately 90% FAA funding anticipated, with approximately 10% local ACO Matching funds required.

2. Relocate Taxiway A Connector (CIP #93536)

The current runway centerline to taxiway centerline separation distance does not meet current FAA design standards for a B-I (small) airport. To meet current FAA design standards, the purpose of this project is to relocate the Taxiway A connector to the aircraft parking apron and to remove excess pavement located north of the relocated Taxiway A.

Estimated Project Cost: \$583,500

Funding Source: FAA Funding - \$522,900, Local ACO Match - \$60,600 – Approximately 90% FAA funding anticipated, with approximately 10% local ACO Matching funds required.

3. Runway Protection Zone Land Acquisition (CIP #93538)

The Runway Protection Zone (RPZ) on the approach end of Runway 16 extends off airport property. To meet current FAA design standards, the purpose of this project is to acquire land or obtain an avigation easement over portions of adjacent property in order for the County to maintain control of the RPZ.

Estimated Project Cost: \$185,000

Funding Source: FAA Funding - \$166,500, Local ACO Match - \$18,500 – 90% FAA funding anticipated, with approximately 10% local ACO Matching funds required.

CORP:

CORP projects are roadway rehabilitation projects that require an improvement to the roadway structural integrity. Transportation's strategy has been to fund CORP projects primarily with external funding. Projects on the Infrastructure Investment Options list (Attachment C) could be constructed if the Board wishes to approve additional General Fund revenue, continue allocating some Tribe funding, or redirect revenue currently

recommended for West Slope Road/Bridge Projects. CORP accomplishments for the years 2001-2016 are included in Attachment D.

There will be one project in the CORP section of the 2017 CIP Book - Patterson Drive and Missouri Flat Road Overlay. This project is complete, but is funded in the 2017 CIP to cover project closeout costs and any remaining warranty work.

Emergency Projects for 2016 CIP:

El Dorado County has recently seen a significant amount of rain and snow fall. The rain and snow fall has caused infrastructure problems countywide. Upon Board direction, staff will add 18 emergency projects to the 2016 CIP. Staff expects these projects to begin in FY 2016/17 and extend into future fiscal years. Staff is anticipating that Federal and State funding sources will cover the majority of the costs for these potential CIP projects. Upon Board direction, staff will add the following projects to the 2016 CIP:

1. **Cosumnes Mine Road Bridge - Bridge Approach Wash Out** (CIP# 78700) - Estimated Project Cost: \$1,109,250
2. **Cosumnes Mine Road 1 - Slip Below Road** (CIP# 78701) - Estimated Project Cost: \$1,796,750
3. **Fort Jim Road - Culvert Damage** (CIP# 78702) - Estimated Project Cost: \$920,000
4. **Kyburz Drive - Slide Dumped On Road** (CIP # 78703) - Estimated Project Cost: \$200,000
5. **Grizzly Flat Road - Culvert Damage and Slip Below Road** (CIP #78704) - Estimated Project Cost: \$506,750
6. **String Canyon Road - Slip Below Road** (CIP #78705) - Estimated Project Cost: \$532,500
7. **Newtown Road - Slip Below Road** (CIP #78706) - Estimated Project Cost: \$505,000
8. **Green Valley Road - Slip Below Road** (CIP #78707) - Estimated Project Cost: \$1,205,000
9. **Peavine Ridge Road - Slip Below Road and Culvert Damage** (CIP #78708) - Estimated Project Cost: \$740,000
10. **Sciaroni Road - Slip Below Road** (CIP #78709) - Estimated Project Cost: \$849,750
11. **Cable Road - Culvert Damage** (CIP #78710) - Estimated Project Cost: \$305,000

- 12. White Meadows Road - Slide Dumped On And Shifted Road (CIP #78711) -**
Estimated Project Cost: \$655,000
- 13. Cosumnes Mine Road - Slip Below Road (CIP #78712) -** Estimated Project
Cost: \$1,096,750
- 14. Mt Aukum Road - Sink Hole (CIP #78713) -** Estimated Project Cost: \$1,310,000
- 15. Mosquito Road - Culvert Damage (CIP #78714) -** Estimated Project Cost:
\$1,005,000
- 16. Starkes Grade Road - Slip Below Road (CIP #78715) -** Estimated Project Cost:
\$500,000
- 17. Bucks Bar Road – Sink Hole (CIP #78716) -** Estimated Project Cost: \$400,000
- 18. Airport Road - Slip Below Road (CIP #78717) -** Estimated Project Cost:
\$255,000
- 19. Pony Express Road Slipout (CIP #78718) –** Estimated Project Cost: \$600,000
- 20. Elks Club Drive – Flooding Damage (CIP #TBD) –** Estimated Project Cost:
\$210,000
- 21. Happy Valley Road – Slip Below Road (CIP #TBD) –** Estimated Project Cost:
\$300,000
- 22. Arapahoe Sink Hole (CIP #TBD) –** Estimated Project Cost: \$50,000

RECOMMENDATION

Staff is recommending the Board approve Items 1 through 7 listed below:

West Slope Road and Bridge Program:

1. Approve additions and changes to West Slope Road/Bridge CIP projects for inclusion in the 2017 CIP, as described in this staff report and Attachment B.
2. Diamond Springs Parkway: include \$8,000,000 in funds from MC&FP and decrease Tribe funding by \$8,000,000.

Tahoe EIP:

3. Approve additions and changes to the Five-Year Tahoe EIP as described in this staff report and Attachment B.

TFIP:

4. Headington Wash Rack and Sewer Connection Project: Complete work as described in this staff report

ACIP:

5. Continue to fund FY 2017/18 ACIP projects with FAA grants and local matching funds, as shown in this staff report and Attachment B.

CORP:

6. Continue to use external funds as they become available for CORP projects on the Infrastructure Investment Options list (Attachment C).

Emergency Projects for Addition to 2016 CIP:

7. Authorize the addition to the 2016 CIP of 22 emergency projects that address infrastructure problems caused by recent storms. These projects will extend into FY 2017/18, and therefore will also be included in the 2017 CIP Book.

NEXT STEPS

Staff will return to the Board for adoption of the 2017 CIP book in June 2017.

CONTACT

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