



Executive Summary

Capital Improvement Program Overview

Purpose

The El Dorado County Community Development Agency (CDA) engages in a number of activities to assess and plan for the short and long term needs of the community. The Capital Improvement Program (CIP) represents the CDA's strategy for infrastructure development and maintenance. The CIP is a planning document that identifies capital projects and provides a schedule and funding options. It provides a means for the El Dorado County Board of Supervisors (Board) to determine capital priorities.

Key criteria used for project consideration and prioritization include: health and safety, project costs and funding, community support, consistency with the General Plan, and ongoing maintenance costs. Potential new projects are reviewed by CDA staff and presented to the Board for discussion and inclusion in the CIP. The CIP is a planning tool that the CDA updates annually as new information becomes available regarding priorities, funding sources, project cost estimates and timing.

The CDA's goals for the CIP are to:

- Maintain and upgrade existing infrastructure to support existing residences and businesses.
- Develop new capital projects to help meet the highest priority community growth needs.
- Align capital budgets with adopted policies and plans.
- Link the County's development and fiscal planning processes.
- Broaden public participation in the budget process by providing documentation and scheduling hearings early in the process.
- Increase coordination between internal departments and public agencies.

Background

General Plan Policy TC-Xb and Implementation Measure TC-A require the County to prepare a CIP for the West Slope Road/Bridge Program specifying expenditures for roadway improvements within the next ten years.

General Plan Policy TC-Xb and Implementation Measure TC-A also require a major CIP 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 is required to prepare and adopt a priority list of road and highway improvements for the CIP based on a horizon of ten years, pursuant to implementation of Measure TC-A. In addition, the CIP must contain identification of funding sources sufficient to develop the improvements identified.

CIP Overview

The CIP serves as a planning and implementation tool for the development, construction, rehabilitation and maintenance of the County's infrastructure. Capital improvements are projects that provide tangible long-term improvements or additions of a fixed or permanent nature, have value and can be depreciated. The CIP process includes identifying, prioritizing

and developing funding for needed projects. The CIP includes ongoing projects started in previous years and new projects starting in the current and future fiscal years.

The CIP is constrained by limited available funding sources that have specific restrictions on how they can be used. Currently, the County's infrastructure needs in the twenty-year time frame exceed available resources, which results in competing priorities for limited funds. In order to resolve this issue, the CDA uses outside funding sources (Federal, State and other grants) whenever possible, in addition to County funds.

The CIP makes up over 40% of the total CDA budget, and over half of the Transportation Division's budget. The CDA coordinates the development of the capital budget with the development of the operating budget, so that future operating costs are projected in alignment with the capital infrastructure.

CIP Format

The 2015 CIP Book includes five capital programs:

- ❖ West Slope Road/Bridge (CIP)
- ❖ Tahoe Environmental Improvement Program (EIP)
- ❖ Airport Capital Improvement Program (ACIP)
- ❖ Transportation Facilities Improvement Program (TFIP)
- ❖ Capital Overlay and Rehabilitation Program (CORP)

These programs are separated into the following sections:

West Slope Road and Bridge Program and ACIP

- ❖ Current Year work plan (Fiscal Year 2015/16)
- ❖ Five-Year CIP (Fiscal Years 2015/16 through 2019/20)
- ❖ Ten-Year CIP (Fiscal Years 2020/21 through 2024/25)
- ❖ Twenty-Year CIP (Fiscal Years 2025/26 through 2034/35)

Tahoe EIP and CORP

- ❖ Current Year work plan
- ❖ Five-Year EIP/CIP

Projects that span several years may be listed in more than one funding segment of the CIP, depending on when funds are spent. Projects are included in a funding segment if any funds are estimated to be spent during any of the segment's fiscal years.

These programs were reviewed and discussed with the Board of Supervisors during a workshop held on March 31, 2015. The Board provided guidance on the CIP and requested staff to return with the completed CIP for Board adoption in June, 2015.

CIP Annual Updating Process

All Transportation programs are reviewed and updated annually, including revenue estimates, project scopes, costs and schedules. Proposed changes to the CIP are presented to the Board for discussion through the months of February to April and finalized upon Board adoption in June. The CIP current work plan is developed concurrently with the CDA budget for the upcoming fiscal year. The CIP/Budget cycle is shown in Figure 1-1.



Figure 1-1: CIP/Budget Cycle

The Airport CIP and the Tahoe EIP have additional review requirements, primarily tied to their specific funding sources. The Airport CIP is tied directly to the FAA's (Federal Aviation Administration) annual grant cycle and the Tahoe EIP is tied directly to TRPA's (Tahoe Regional Planning Agency) annual planning cycle.

The following figures and tables list projects in the Current Year work plan:

- Table 1-1: projects currently in construction or scheduled to begin in FY 2015/16.
- Table 1-2: projects scheduled to be in planning, design, right of way or environmental monitoring phases in FY 2015/16.
- Figure 1-2: map of all West Slope Road/Bridge projects currently in process or scheduled to begin work in FY 2015/16.
- Figure 1-3: map of all Tahoe EIP projects currently in process or scheduled to begin work in FY 2015/16.

Table 1-1: Projects Currently In Construction or Scheduled to Begin in FY 2015/16

Project Type	Project Description		Total Cost (\$M)¹
West Slope Road/Bridge	#77123	Alder Drive at EID Canal – Bridge Replacement	1.56
	#72309	Class II Bikeway – Green Valley Road from Loch Way to Signalized Entrance to Pleasant Grove Middle School	0.40
	#73360	Cold Springs Road Realignment	1.98
	#72375	Diamond Springs Parkway – Phase 1A – SR49 Realignment	9.83
	#97012	El Dorado Trail – Los Trampas to Halcon	1.05
	#77114	Green Valley Road at Weber Creek – Bridge Replacement	10.34
	#73151	Green Valley Road Traffic Signal Interconnect	0.32

¹ Costs are estimated, and rounded to the nearest hundredth of \$1 million.

Table 1-1: Projects Currently in Construction or Scheduled to Begin in FY 2015/16 (Cont.)

Project Type	Project Description		Total Cost (\$M)¹
West Slope Road/Bridge	#77140	Happy Valley Cutoff Road at Camp Creek – Bridge Maintenance Project	0.20
	#72369	Hollow Oak Road Drainage	0.98
	#72187	Ice House Road Rehabilitation	5.80
	#77131	Ice House Road at Jones Fork Silver Creek Bridge Maintenance Project	0.76
	#77141	Mosquito Road at South Fork American River – Bridge Maintenance Project	0.21
	#73358	Pleasant Valley Road at Oak Hill Road Intersection Improvements	1.23
	#73362	Salmon Falls Road South of Glenesk Lane Realignment	1.48
	#72141	Silva Valley Parkway/Serrano Parkway Traffic Circulation Improvement	0.50
	#77124	Silver Fork at South Fork American River - Bridge - Replacement	2.35
	#71328	U.S. 50/Silva Valley Parkway Interchange – Phase 1	57.60
	#71359	U.S. 50/Missouri Flat Road Interchange – Phase 1B2	1.50
	#71346	U.S. 50/Missouri Flat Road Interchange 1C – Riparian Restoration	1.77
Tahoe EIP	#95196	CSA #5 Erosion Control Project	0.74
	#95163	Lake Tahoe Blvd Erosion Control Project	0.82
	#95175	Lake Tahoe Boulevard Stream Environment Zone Project	0.57
	#95186	Lake Tahoe Blvd Bike Trail Project	1.75
	#95179	Meyers Erosion Control Project	1.52
	#95172	Montgomery Estates Area 3 Erosion Control Project	0.52
	#95192	Sawmill 2B Bike Path and Erosion Control Project	2.88
	#95171	Tahoe Hills Erosion Control Project	0.83
CORP	#72189	Bass Lake Overlay	0.90
	#72188	Black Bart Avenue, Barbara Avenue and Martin Avenue Overlay	0.75
	#72119	Gold Hill Overlay	0.75
	#72190	Patterson Drive and Pleasant Valley Road Overlay	0.88
TFIP	#81134	Headington Wash Rack Facility Project	1.31
Airports - Placerville	#93129	Crack Seal and Remark Runway 5-23, Taxiways, Aprons and Tee Hangar Taxilanes - 2015	0.32

Table 1-2: Projects in Planning, Design or Right of Way Phase in FY 2015/16

Project Type	Project Description		Total Cost (\$M)¹
West Slope Road/Bridge	#77128	Bassi Road at Granite Creek – Bridge Replacement	4.08
	#77119	Blair Road at EID Canal – Bridge Replacement	1.44
	#77116	Bucks Bar Road at the North Fork Cosumnes River – Bridge Replacement	7.81
	#77138	Clear Creek Road at Clear Creek (PM 1.82) – Bridge Replacement	4.59
	#77139	Clear Creek Road at Clear Creek (PM 0.25) – Bridge Replacement	4.59
	#72334	Diamond Springs Parkway – Phase 1B	32.54
	#97015	El Dorado Trail – Missouri Flat Road Bike/Pedestrian Overcrossing	2.71
	#97014	El Dorado Trail – Missouri Flat Road to El Dorado Road	4.17
	#77137	Greenstone Road at Slate Creek – Bridge Replacement	3.51
	#77127	Green Valley Road at Indian Creek – Bridge Replacement	4.50
	#77136	Green Valley Road at Mound Springs Creek – Bridge Replacement	4.50
	#77125	Hazel Valley Road at PG&E Canal – Bridge Replacement	2.69
	#77135	Hanks Exchange at Squaw Hollow Creek – Bridge Replacement	3.92
	#77126	Mosquito Road Bridge at South Fork American River	30.58
	#77129	Mount Murphy Road at South Fork American River – Bridge Replacement	20.54
	#77122	Newtown Road at South Fork of Weber Creek– Bridge Replacement	5.57
	#72308	New York Creek Trail East – Phase 3	1.50
	#77134	Oak Hill Road at Squaw Hollow Creek – Bridge Replacement	3.95
	#72310	Silva Valley Parkway Class 1 and Class 2 Bike Lanes (Harvard to Green Valley Road)	1.68
	#76108	Silver Springs Parkway to Bass Lake Road (south segment)	8.78
	#77115	Sly Park Road at Clear Creek Crossing – Bridge Replacement	5.75
Tahoe EIP	#73120	Apache Avenue/US 50 Intersection Signalization	12.81
	#95191	Country Club Heights Erosion Control Project	0.70
	#95176	Golden Bear Erosion Control Project	0.42
	#95708	Highway 89 Class 1 Trail	2.11
	#95177	Oflying Erosion Control Project	0.79
Airports - Placerville	#93130	Taxiway Edge Lights	0.42
	#93131	Update Pavement Maintenance/Management Program	0.04
Airports - Georgetown	#93527	Crack Seal, Joint Seal and Mark Runway	0.49
	#93528	Update Airport 2013 Layout Plan with Program Narrative Report	0.07

Table 1-2: Projects in Planning, Design or Right of Way Phase in FY 2015/16 (Cont.)

Project Type	Project Description		Total Cost (\$M)¹
Airports - Georgetown	#93503	Obstruction Survey	0.05
	#93534	Update Pavement Maintenance/Management Program	0.04

Figure 1-2

WEST SLOPE ROAD/BRIDGE CURRENT YEAR WORK PLAN

LEGEND

ECONOMIC DEVELOPMENT AREAS
(IDENTIFIED BY ECONOMIC
DEVELOPMENT COORDINATOR)

PROJECTS CURRENTLY IN PROCESS OR TO BEGIN IN FY 15/16 *

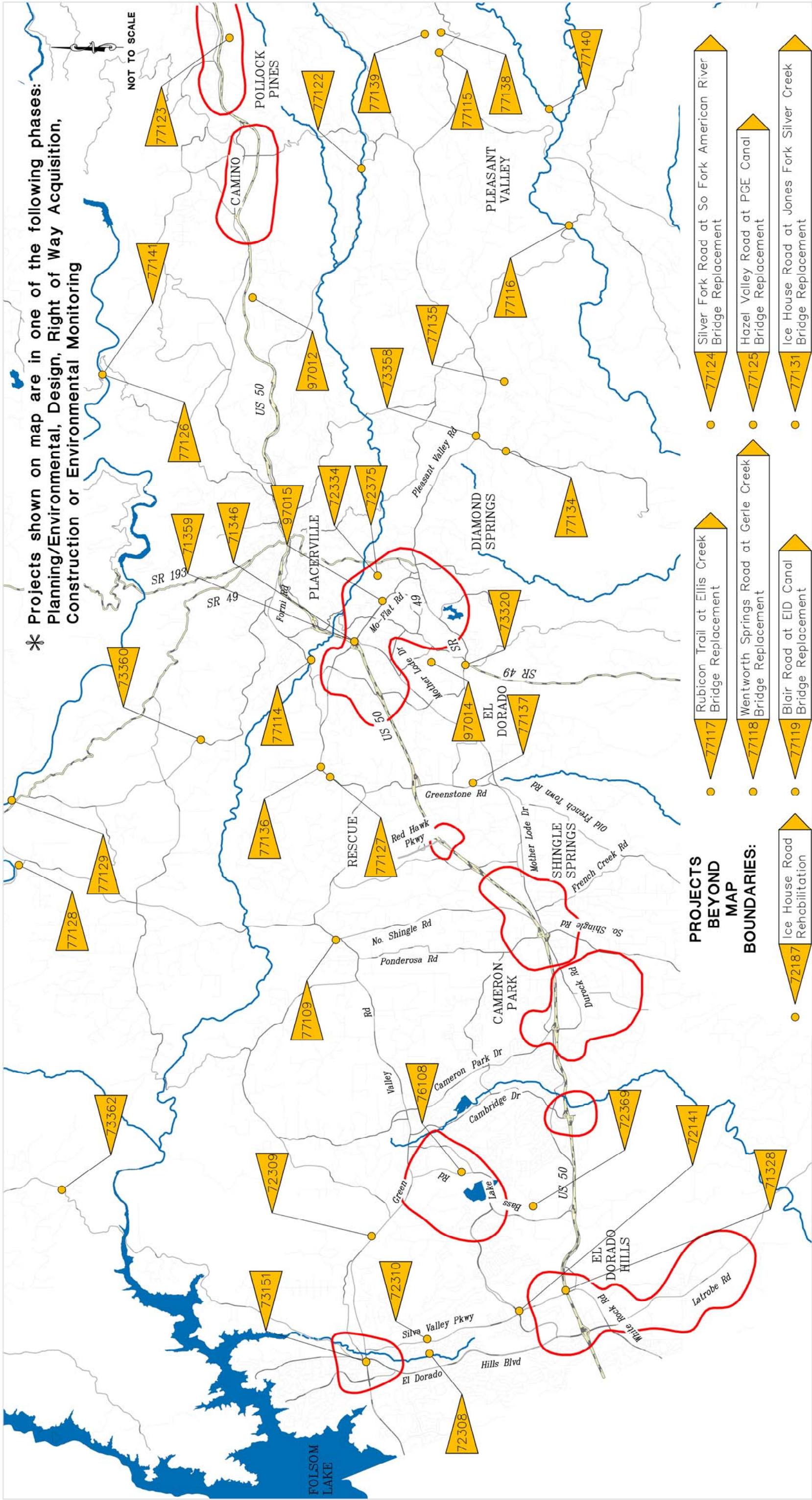
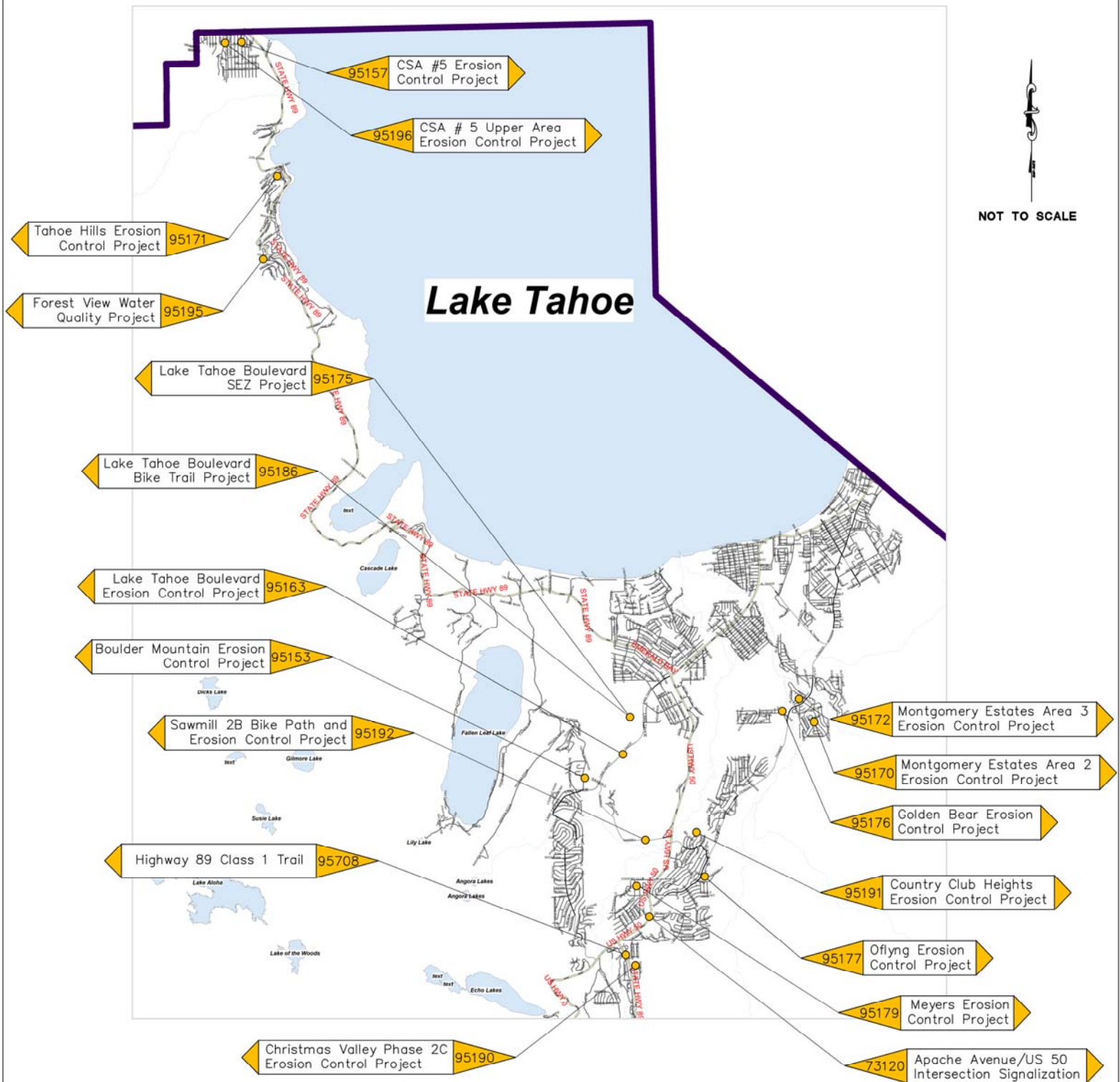


Figure 1-3

SOUTH LAKE TAHOE CURRENT YEAR WORK PLAN

PROJECTS CURRENTLY IN PROCESS OR TO BEGIN IN FY 15/16



Drawing Name: \\CDADData\CDAD-Long Range Planning\Transportation\CIP\2015 CIP\2015 CIP Book\CADD\Workplan_SLT EIP Map_Current yr_05-11-15_v1.dwg, Layout Tab: SLT_Curr Yr Work Plan, Last Saved: Tue, 19 May 2015 - 11:11am, jmelchor



West Slope Road/Bridge Capital Improvement Program Overview

A Capital Improvement Program (CIP) is a planning document that identifies capital improvement projects (e.g. roads and bridges) a local government or public agency intends to build over a certain time horizon (usually between five and twenty years). CIPs typically provide key information for each project, including delivery schedule, cost and revenue sources. The County's CIP provides a means for the Board to determine capital improvement project and funding priorities over a 20-Year horizon.

In order to maintain the integrity of the County's roadway network, the County is required to implement General Plan Policy TC-Xb and Implementation Measures TC-A and TC-B. These measures require the development of a 10- and 20-Year CIP. These policies also require an update of the 20-year growth forecast every five years.

The forecast is needed to update the CIP and Traffic Impact Mitigation Fee (TIM) Fee Program. Forecasting growth is an iterative and ongoing process – forecasts are reviewed and adjusted annually as well as every five years. Routinely verifying and updating growth forecasts allows the County to account for new information and adjust its assumptions and plans accordingly.

The 5-Year Major Update to the West Slope CIP and TIM Fee Program process has been initiated. The study includes an updated baseline year of 2015 and an updated growth projection through 2035. Based on General Plan policies, this information is used to identify existing and future deficiencies in the transportation network and the types of transportation projects and costs that would be required to mitigate them. Figure 1-4 illustrates the 5-Year Major Update cycle.

Major 5-Year Update Cycle

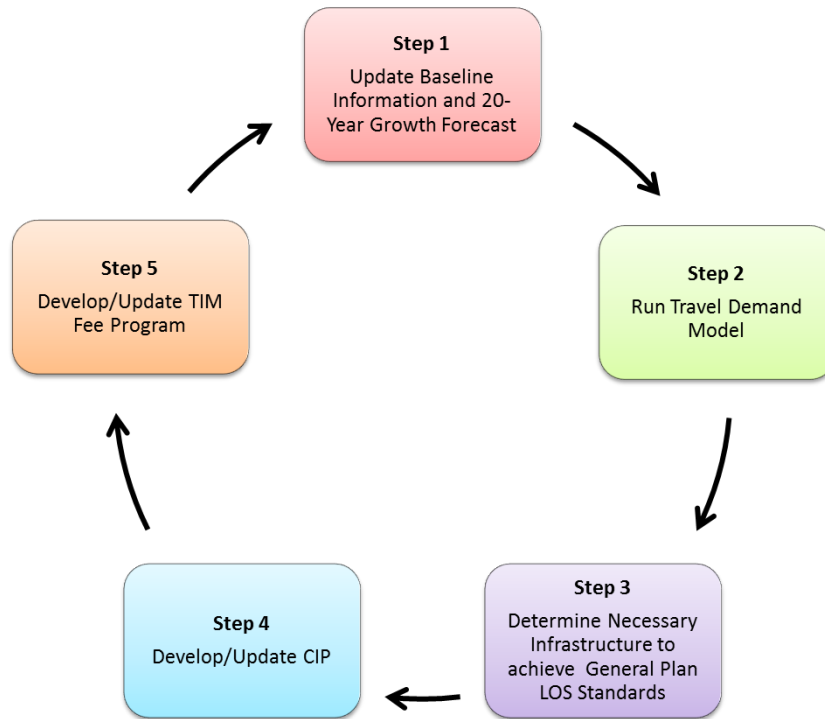


Figure 1-4

The 2015 CIP Book includes Current and Five-Year West Slope Road/Bridge CIP work plans in addition to the required Ten- and Twenty-Year plans. See the “Project Summary Table” in Section 2 for a breakdown of the Current, Five-, Ten- and Twenty-Year CIP work plans. In some cases (e.g., Ponderosa Interchange), projects only have funding currently available to work on limited phases of the projects, such as design and environmental. Consequently, construction for these projects may be pushed out to the Ten- or Twenty-Year CIP, when funding becomes available. Figure 1-5 illustrates the annual CIP update cycle.

Annual CIP Cycle

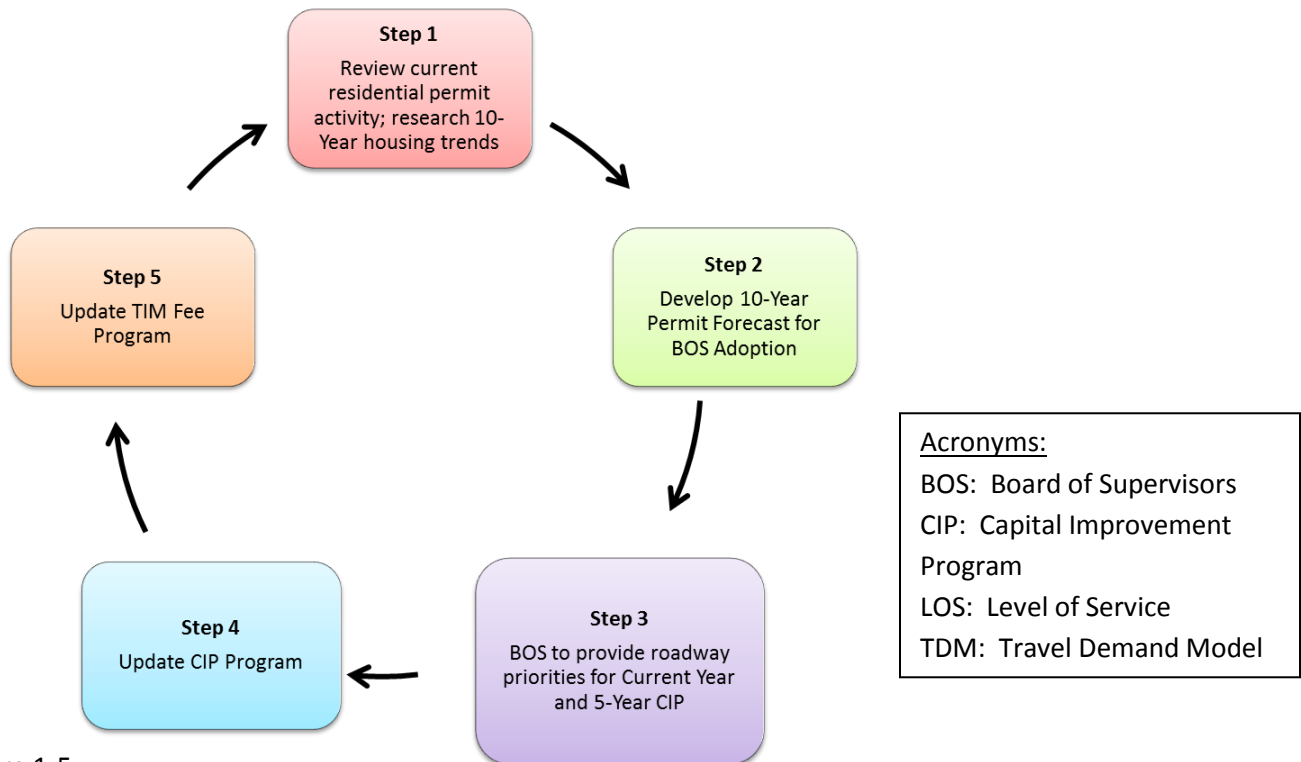


Figure 1-5

Project Prioritization

The CDA uses several criteria to prioritize road improvement projects including:

- **Estimated Construction Start**
 - The first fiscal year the project is planned to be in construction.
 - Projects estimated to start construction in fiscal year (FY) 2015/16 or 2016/17 are more desirable.
- **Supports Economic Development in the County of El Dorado**
 - Projects that would help create connections to pave the way for new commercial development are more desirable.
 - For projects with proposed scopes that don't include construction, the CDA denotes that these projects will support economic development once constructed.
- **Safety Ranking**
 - Projects are rated High, Medium, or Low based on the likelihood that they would improve safety conditions once constructed (High = higher likelihood of the proposed project improving safety).
 - For projects with proposed scopes that don't include construction, the CDA estimates the safety rating once the project is constructed.
 - Projects with Medium or High rankings are more desirable.
- **Capacity/Traffic Relief**
 - Average Daily Trip (ADT) traffic counts are reviewed for existing roads to provide a relative sense of how heavily they are used.

- For proposed new roads, projected ADTs are provided from recent traffic studies.
- Projects on roads with ADTs around 10,000 or higher are more desirable.
- **Funding/Grant Leveraging**
 - Projects are ranked High, Medium, or Low based on their ability to attract grant funding (High = higher likelihood of attracting grant funding).
 - Projects with Medium or High rankings are more desirable
- **Caltrans Sufficiency Rating (applicable to Bridge projects)**
 - Caltrans' bridge sufficiency ratings are based on a scale of 1-100: bridges with scores between 0 and 50 are eligible for replacement; bridges with scores between 51 and 80 are eligible for rehabilitation; and bridges with scores between 81 and 100 are eligible for maintenance.
 - Bridge projects eligible for rehabilitation or replacement are a higher priority.

In addition to prioritizing projects in or near construction, the CDA prioritizes projects the Board has previously expressed an interest in moving forward. On March 31, 2015, the Board approved additions and changes to the proposed 2015 CIP.

The CDA has continued to pursue potential Federal grants for rural bridge rehabilitation or replacement, which require little or no matching funds. This effort facilitates delivering these bridge projects now, avoiding the need for maintenance or replacement at a future date when grant funding may no longer be available.

Twenty-Year CIP Total Expenditures

The CDA's projected expenditures for the West Slope Road/Bridge Twenty-Year CIP are approximately \$850,000,000, which includes funding from all sources. CIP Revenue sources as of FY 2015/16 are displayed in Figure 1-6.

Sources of Revenue for Transportation CIP - FY 2015/16

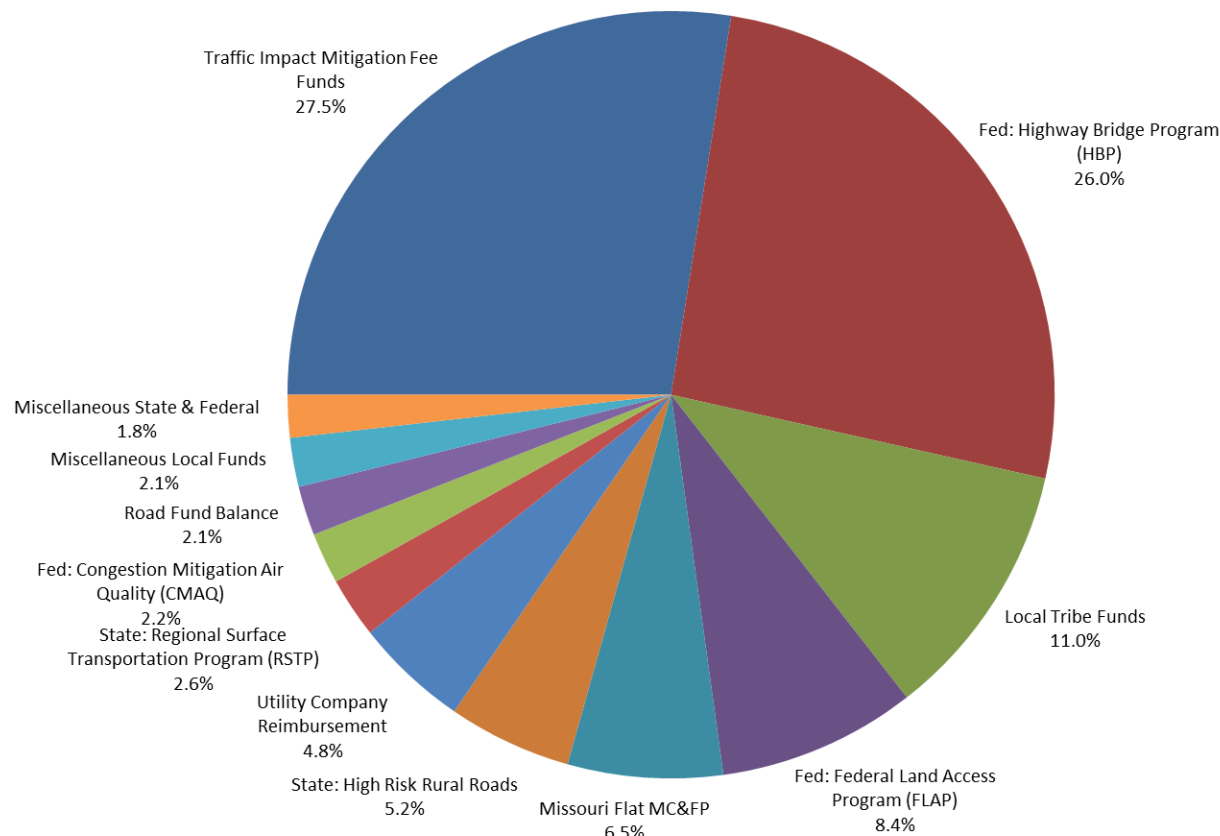


Figure 1-6

CIP Book Format

Maps and Indexes

Maps of project locations are included in Section 2, and for each segment in the West Slope Road/Bridge CIP. These maps also identify economic development areas in the County.

The “Project Summary Table” in Section 2 lists projects in the Twenty-Year CIP. This table illustrates which phase of a project will occur in each fiscal year of the CIP.

Indexes in Section 2 provide alternate ways to locate detailed project summaries – alphabetically, by project number, by project type and by Supervisor district.

West Slope Road/Bridge Sections

The West Slope Road/Bridge CIP is separated into the following sections:

- ❖ Current year work plan (Fiscal Year 2015/16)
- ❖ Five-Year CIP (Fiscal Years 2015/16 through 2019/20)
- ❖ Ten-Year CIP (Fiscal Years 2020/21 through 2024/25)
- ❖ Twenty-Year CIP (Fiscal Years 2025/26 through 2034/35)

Projects may be included in more than one funding segment of the CIP, depending on the duration of the project and when funds are expected to be spent. Projects are listed in a segment if funds are estimated to be spent in any stage (planning, design, Right of Way, or construction). The timing, costs and revenues for projects in the Twenty-Year West Slope Road/Bridge CIP are rough approximations at this time.

Project indexes are located in the following sections:

- ❖ Section 4.1 - Index for Current Year projects
- ❖ Section 5.1 - Index for Five-Year projects
- ❖ Section 6.1 - Index for Ten-Year projects
- ❖ Section 7.1 - Index for Twenty-Year projects
- ❖ Section 8.1 - Individual Project Summaries for each project in the West Slope Road/Bridge CIP

Individual Projects - Grouped by Project Type

Individual Project Summaries are provided for each segment of the CIP, in alphabetical order. The summaries provide detailed descriptions, location maps, schedule, cost and revenue information. The “Revenues” section of each project summary lists the various funding sources for each project, including TIM Fee funds, State and Federal grants, developer advances, etc. The “Expenditures” section of each project summary includes the various types of costs planned to be incurred for each project (i.e., Planning/Environmental, Design, Right of Way, Construction and Environmental Monitoring.)

The “Project Schedule” section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)
2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project plans, specifications and engineer’s cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. “Design – Staff” refers to the cost for CDA staff time, while “Design – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants, etc.)
3. **Right of Way:** This phase includes expenditures for “Right of Way – Staff”, “Right of Way – Acquisition”, and “Right of Way – Consultant”. The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase.

“Right of Way – Staff” refers to the cost for CDA staff time; “Right of Way – Acquisition” refers to the cost of land; and “Right of Way – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

4. **Construction:** This phase includes expenditures for “Construction Mgmt – Staff”, “Construction Mgmt – Consultant” and “Direct Construction Costs”. This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. “Construction Mgmt – Staff” refers to the cost for Division staff time, while “Construction Mgmt – Consultant” includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) “Direct Construction Costs” refers to the actual cost to build the project.
5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for “Env Monitoring – Staff” and “Env Monitoring – Consultant”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

For projects in the Current to Ten-Year segments of the CIP, the project initiation date is the date that coincides with the project engineer's original estimate. For projects in the Twenty-Year CIP, the project initiation date either coincides with the date of the project engineer's initial estimate or the date of Board adoption of 2004 General Plan TIM Fee Program Resolution 266-2006.

Cash Proformas

Section 3 includes cash proformas for the TIM Fee Program, Local Funds – Tribe, and the Missouri Flat Corridor Master Circulation and Funding Program. The cash proformas show how funding source revenues are used and what is left in each fund at the end of each year. Pending and approved reimbursements are also noted in this section, as well as a description of revenue sources and their potential uses.



Tahoe Environmental Improvement Program Overview

The Lake Tahoe Basin has long been at the forefront of environmental improvements at Federal, State and Local levels. The Community Development Agency (CDA), Transportation Division's Tahoe Engineering Unit (TEU) is solely grant funded, and is primarily responsible for capital projects identified in the Tahoe Environmental Improvement Program (EIP) to improve the environmental quality of Lake Tahoe. Projects are aimed at implementing improvements in the Lake Tahoe watershed, airshed and the lake itself. The TEU's projects address the EIP threshold categories of Water Quality, Soil Conservation/Stream Environment Zone, Air Quality/Transportation, Fisheries and Recreation. These environmental threshold carrying capacities are defined as environmental standards necessary to maintain significant scenic, recreational, educational, scientific or natural values of the Lake Tahoe Region, or to maintain public health and safety within the region.

As tourism and summer outdoor recreation become more important in the Lake Tahoe Basin, more bike trail projects are appearing in the Tahoe EIP. The TEU's Five-Year EIP includes construction of four to five projects per construction season. The construction season in Tahoe is limited to May 1 through October 15, per regulatory ordinances. Since the TEU's environmental improvement projects are dependent on grant funds, the projects included in this EIP represent the TEU's best project delivery forecast at this time.

Tahoe EIP Annual Updating Process

The EIP program is reviewed and updated annually, including revenue estimates and project costs and schedules. The EIP is developed concurrently with the CDA's budget for the upcoming fiscal year. Figure 1-7 illustrates the annual EIP update cycle.

In the case of the EIP, the needs of granting agencies are reviewed during July through November, and project costs and anticipated revenues are updated. TEU staff identifies the needs of granting agencies, updates the Federal/State/Local grant forecast and revises projects in the Tahoe EIP based on latest cost and grant information. This list is then submitted to the Tahoe Regional Planning Agency (TRPA) for review in December. Project costs, funding sources and delivery priorities are reviewed, updated and presented to the Board of Supervisors (Board) for discussion and adoption in February.

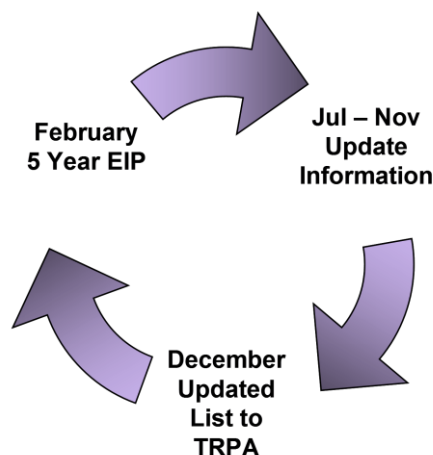


Figure 1-7: Tahoe EIP Annual Updating Process

Individual Projects - Grouped by Project Type

Individual project summaries are located in Section 8.2, and provide detailed descriptions, schedule, cost and revenue information. Projects are listed in alphabetical order within this section. The “Revenues” section of each project summary lists the various funding sources for each project, and can include many different grants, including California Tahoe Conservancy (CTC), TRPA, U.S. Forest Service (USFS), etc. The “Expenditures” section of each project summary includes the various types of costs expected for each project (i.e., Planning/ Environmental, Design, Right of Way, Construction and Environmental Monitoring).

The “Project Schedule” provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)
2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project plans, specifications and engineer’s cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. “Design – Staff” refers to the cost for CDA staff time, while “Design – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)
3. **Right of Way:** This phase includes expenditures for “Right of Way – Staff”, “Right of Way – Acquisition”, and “Right of Way – Consultant”. The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. “Right of Way – Staff” refers to the cost for CDA staff time; “Right of Way – Acquisition” refers to the cost of land; and “Right of Way – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)
4. **Construction:** This phase includes expenditures for “Construction Mgmt – Staff”, “Construction Mgmt – Consultant” and “Direct Construction Costs”. This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. “Construction Mgmt – Staff” refers to the cost for Division staff time, while “Construction Mgmt – Consultant” includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) “Direct Construction Costs” refers to the actual cost to build the project.

5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure impacts are mitigated. This phase includes expenditures for “Env Monitoring – Staff” and “Env Monitoring – Consultant”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs. “Plant Establishment – Staff” and “Plant Establishment – Consultant”: Typically done at the end of construction, environmental improvement projects include re-establishment of vegetation that may have been removed or damaged during the construction phase. This step includes all costs related to planting, watering and maintaining the new or disturbed vegetation until it becomes established. “Plant Establishment – Staff” refers to the cost for CDA staff time while “Plant Establishment – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date coincides with the date funding becomes available through the award of grant funds.

Tahoe EIP Format

The Tahoe EIP is separated into the following sections:

- ❖ Current Year work plan (Fiscal Year 2015/16)
- ❖ Five-Year EIP (Fiscal Years 2015/16 through 2019/20)

Projects may be listed in more than one funding segment of the EIP, depending on the duration of the project and when funds are expected to be spent. Projects are listed in a segment if funds are estimated to be spent in any phase of the project delivery schedule. An index for the Current Year EIP projects is located in Section 4, and an index for the Five-Year EIP projects is located in Section 5. Individual project summaries are located in Section 8.2.



Airport Capital Improvement Program Overview

The CDA is responsible for operating the Placerville and Georgetown Airports, which includes developing and implementing the Airport Capital Improvement Program (ACIP) for both airports. The Federal Aviation Administration (FAA) reviews, authorizes and funds the ACIPs. Thus, the ACIPs are developed in partnership with the FAA. The FAA funds 90% of most ACIP project costs. A 5-Year ACIP for Georgetown and Placerville Airports was recently completed in cooperation with the FAA, entitling the CDA to pursue FAA grants for projects occurring during FY 2015/16 to 2019/20. The State has provided matching funds for Airport projects in past years. However, State matching funds have not been programmed in the 2015 ACIP, as these funds have become unreliable. State funding will continue to be pursued.

ACIP projects are prioritized based on several criteria including safety, security, and capacity.

Annual Updating Process

All CIP programs are reviewed and updated annually, including revenue estimates, project costs and schedules. In the case of the ACIP, the CDA drafts a proposed list of projects and submits it to the FAA in December for discussion. The FAA reviews the Airport Layout Plan (ALP) for compliance with aviation design standards, and proposes revisions to the ALP and ACIP. The FAA consults with the CDA in project ranking and funding eligibility. The FAA circulates the draft ACIP for potential funding to California Transportation Commission, Federal and State aviation divisions.

In January, the CDA updates the ACIP and submits it to the FAA. The FAA provides direction to staff regarding which projects it will fund, and requests the CDA submit grant applications in March so that projects can be initiated in June/July. Projects may be authorized for planning, design, and/or construction work.

Simultaneously, the CDA presents its CIP recommendations to the Board of Supervisors (Board) for discussion and adoption. The budget for next year's potential projects is then updated, based on Federal and state budget constraints. Figure 1-8 illustrates the ACIP Annual Updating Process.

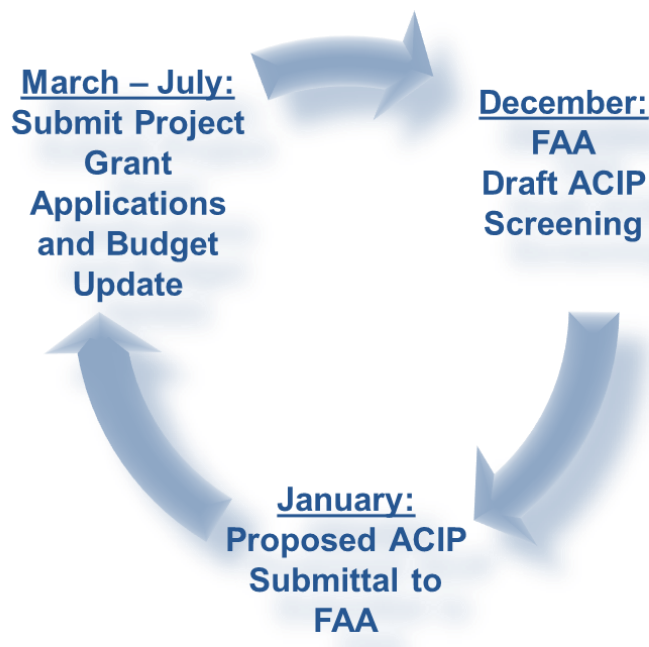


Figure 1-8: ACIP Annual Updating Process

Airport CIP Projects

In past years, the CIP book included several projects focused on further development of the airports. These projects were scheduled in future years with no secured funding. CDA staff recently learned from its airport consultant that the FAA does not fund development or expansion projects; its focus is on safety projects at airports. Therefore, the following development projects will not be included in the 2015 CIP book.

Placerville Airport:

- Tee Hangar Site Development Phase 2 (CIP #93126)
- 13 Unit Nested Tee Hangar (CIP #93128)

Georgetown Airport:

- West Taxiway Phase 1 (CIP #93524)
- West Side Development Phase 1 (CIP #93525)
- West Side Development Phase 2 (CIP #93529)
- West Access Road (CIP #93531)
- West Taxiway Phase 2 (CIP #93532)
- Nested Hangars (CIP #93533)

The CDA is currently working with its airport consultant on an update to the Airport Layout Plan with Program Narrative Report for the Georgetown Airport. The 5-year ACIP for the Placerville Airport recently completed in cooperation with the FAA includes a similar update currently anticipated for FY 2016/17. Each Updated Airport Layout Plan will include updated plans to provide appropriate criteria and guidelines for future airport projects and will generate an updated project list.

In conjunction with the CDA's FY 2015/16 Business Plan development, the CDA requested Chief Administrative Office and Board consideration of an economic development study for

the County's airports, led by the County's Economic Development Division with CDA support. The goals of the study would include determining the size and scope of potential future development at County airports, as well as identifying potential funding sources or returns on County investment.

The CDA proposes to work on several projects, subject to FAA grant funding. On March 31, 2015, the Board supported the inclusion of the projects as shown in Table 1-4 in Fiscal Year (FY) 2015/16.

Table 1-3: 2015 ACIP Projects

Airport	Proposed Const. Year	Description	Total Project Cost		FAA Grants		Local Funds	
			FY 14/15	FY 15/16	FY 14/15	FY 15/16	FY 14/15	FY 15/16
Placerville	2015/16	Crack Seal and Remark Runway 5-23, Taxiways, Aprons, and Tee Hangar Taxilanes (93129)	\$26,800	\$269,000	\$24,120	\$242,100	\$2,680	\$26,900
Placerville	2015/16	Update Pavement Maintenance/Management Program (93131)	\$10,000	\$30,000	\$9,000	\$27,000	\$1,000	\$3,000
Placerville	2016/17	Remove and Install Taxiway Edge Lights (93130)		\$45,000		\$40,500		\$4,500
Georgetown	2014/15	Airport Layout Plan with Program Narrative Report (93528)	\$53,475		\$48,128		\$5,347	
Georgetown	2015/16	Update Pavement Maintenance/Management Program (93534)	\$10,000	\$30,000	\$9,000	\$27,000	\$1,000	\$3,000
Georgetown	2017/18	Crack Seal, Joint Seal & Mark Runway, Taxiways, Aprons, & Tee Hangar Taxilanes; Change Runway End ID (93527)		\$5,000		\$4,500		\$500
		Totals	\$100,275	\$379,000	\$90,248	\$341,100	\$10,027	\$37,900

Individual Projects - Grouped by Project Type

Individual Project Summaries are provided in Section 8.3 for each segment of the ACIP, grouped by airport, and provide detailed descriptions, timing, cost and revenue information. Projects are listed in alphabetical order within each segment of the ACIP. The "Revenues" section of each project summary includes anticipated grants from the FAA along with matching funds from ACO or airport operations (i.e., "Enterprise funds"). The "Expenditures" section of each project summary includes the various types of costs planned to be incurred for each project (i.e., Design and Construction).

The "Project Schedule" section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for "Planning/Env – Staff" and "Planning/Env – Consultant". Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. "Planning/Env – Staff" refers to the cost for CDA staff time, while "Planning/Env – Consultant" includes all other costs (e.g., staff time from non-

CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project plans, specifications and engineer’s cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. “Design – Staff” refers to the cost for CDA staff time, while “Design – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)
3. **Right of Way:** This phase includes expenditures for “Right of Way – Staff”, “Right of Way – Acquisition”, and “Right of Way – Consultant”. The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. “Right of Way – Staff” refers to the cost for CDA staff time; “Right of Way – Acquisition” refers to the cost of land; and “Right of Way – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)
4. **Construction:** This phase includes expenditures for “Construction Mgmt – Staff”, “Construction Mgmt – Consultant” and “Direct Construction Costs”. This Construction phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. “Construction Mgmt – Staff” refers to the cost for Division staff time, while “Construction Mgmt – Consultant” includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) “Direct Construction Costs” refers to the actual cost to build the project.
5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for “Env Monitoring – Staff” and “Env Monitoring – Consultant”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date is the date that coincides with the project engineer's original budget.

ACIP Format

The ACIP program is separated into the following sections:

- ❖ Current year work plan (Fiscal Year 2015/16)
- ❖ Five-Year CIP (Fiscal Years 2015/16 through 2019/20)
- ❖ Ten-Year CIP (Fiscal Years 2020/21 through 2024/25)
- ❖ Twenty-Year CIP (Fiscal Years 2025/26 through 2034/35)

Projects may be listed in more than one funding segment of the ACIP, depending on the duration of the project and when funds are expected to be spent. Projects are listed in a segment if funds are estimated to be spent in any phase of the project delivery schedule.

An index for the Current Year projects is located in Section 4; an index for the Five-Year projects is located in Section 5; an index for the Ten-Year projects is located in Section 6 and an index for the Twenty-Year projects is located in Section 7. Individual Project Summaries for each project in the ACIP are located in Section 8.3. The timing, costs and revenues for projects in the Twenty-Year ACIP are rough approximations at this time.



Transportation Facilities Improvement Program Overview

The CDA is responsible for constructing, repairing and maintaining County Transportation Division facilities. The Transportation Facilities Improvement Program (TFIP) includes capital maintenance projects, which are prioritized based on several criteria, including health and safety, ongoing maintenance costs and state or Federal requirements.

In 2014, the CDA plans to construct one Facilities project – the installation of a Wash Rack and Sewer Connection Project (CIP #88134) at the Transportation Division Headington Corporation Yard. The project improvements include construction of a covered vehicle wash building, electrical power supply, relocation of water supply line, a sand/oil separator and new sewer line. The purpose of the project is to replace the existing uncovered wash rack for County fleet vehicles to decrease runoff and improve water quality of discharge. This improvement is necessary to meet requirements of the State Water Resource Control Board and Regional Water Quality Control Board.

On March 18, 2014, the Board supported the inclusion of the Headington Wash Rack and Sewer Connection Project in the 2014 CIP. The cost of the project is currently estimated at \$1,300,000, to be funded by the Road Fund.

Individual Projects - Grouped by Project Type

A Project Summary is provided in Section 8.3 for the TFIP project, which provides a detailed description, schedule, cost and revenue information. The “Revenues” section of the project summary includes anticipated revenue for the project. The “Expenditures” section of the project summary includes the various types of costs planned to be incurred for each project (i.e., Planning/Environmental, Design, Construction and Environmental Monitoring).

The “Project Schedule” section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, etc.)
2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project plans, specifications and engineer’s cost estimates to make a project bid-ready. “Design – Staff” refers to the cost for CDA staff time, while “Design – Consultant” includes all other costs.
3. **Construction:** This phase includes expenditures for “Construction Mgmt – Staff”, “Construction Mgmt – Consultant”, “Direct Construction Costs”, The Construction

phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction.

“Construction Mgmt – Staff” refers to the cost for CDA staff time, while “Construction Mgmt – Consultant” includes all other costs. “Direct Construction Costs” refers to the actual cost to build the project.

4. **Environmental Monitoring:** This phase includes expenditures for “Env Monitoring – Consultant” and “Env Monitoring – Staff”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs.

The original budget is the project engineer's initial estimate of all project costs required to plan, design and construct a project. This level estimate is done when the engineer has sufficient knowledge of the project details to create a preliminary budget. The project can then be programmed in the Five-Year TFIP work plan. Project costs can change over time for a number of reasons, such as expanded or reduced project scope, inflation in costs of materials or labor, and funding changes. The latter can cause a portion of a project to be advanced or delayed as funding becomes more or less available.

The project initiation date is the date that coincides with the project engineer's original budget.

TFIP Format

The TFIP program is separated into the following sections:

- ❖ Current year work plan (Fiscal Year 2014/15)
- ❖ Five-Year CIP (Fiscal Years 2014/15 through 2018/19)

Projects may be listed in more than one funding segment of the TFIP, depending on the duration of the project and when funds are expected to be spent. Projects are listed in a segment if funds are estimated to be spent in any phase of the project delivery schedule.

An index for the Current Year projects is located in Section 4, and an index for the Five-Year projects is located in Section 5. The Individual Project Summary for the TFIP project is located in Section 8.4.



Capital Overlay and Rehabilitation Program Overview

Asphalt Concrete (AC) overlay projects are very visible improvements that have positive impacts in El Dorado County. They are an efficient use of one time revenues, with lower planning, environmental, and design costs than other transportation projects (e.g., bridges, road widening projects, etc.). The Community Development Agency, Transportation Division (Transportation) is able to get overlay projects on the ground very quickly. AC overlays are considered to be capital projects if they are one-inch (1") or more in thickness. Overlays typically have a long useful life (15+ years), and permanently increase the roadway structure.

Transportation plans to overlay and rehabilitate as many of the roads as possible on its project priority list given available funding. Past asphalt concrete overlay projects have been funded by Regional Surface Transportation Program Exchange Funds, Proposition 1B, American Recovery and Reinvestment Act funds, and some contributions from the General Fund. The Road Fund is generally used for maintenance work (e.g., brushing, ditching, chip seal, etc.) and not for asphalt concrete overlays.

Pavement Management Program (PMP)

Information provided by the Pavement Management Program (PMP) drives the Road Maintenance Program (RMP) and CORP programs. The PMP is a tool used to assist in monitoring the condition of all paved roads within the County. It maintains a history of surface treatment and overlay work performed on the roads. The PMP also assists in funding procurement by demonstrating use of proper maintenance strategy with existing funds.

The PMP allows staff to evaluate and monitor the condition of pavement to enable the Transportation to use its limited resources in the most efficient manner possible. Ideally, each road should be inspected every other year. Surface treatment and overlay data is entered upon completion of work, and used to prioritize maintenance and overlay work plans.

The PMP inspection process has two components.

In the field:

- For every 1,000 feet of roadway, 100 feet are inspected on foot.
- Each inspection looks for 19 different potential deficiencies.
- Each deficiency encountered is measured and evaluated for severity.
- Inspectors must be trained to identify deficiencies and properly evaluate severity.
- Inspection is quantitative and statistics-based.

In the office:

- Data is entered into the StreetSaver program.
- Pavement Condition Index (PCI) is calculated and updated.
- Roads are prioritized for maintenance or overlay work.

Over the past seven years, Transportation has spent approximately \$7,127,500 on chip seal work and \$10,530,000 on asphalt concrete overlay projects. The PMP will enable staff to focus on common-sense preventative maintenance, which will maximize the useful life of the County's roadway infrastructure.

CORP Annual Updating Process

Transportation prioritizes CORP projects based on several criteria, including pavement condition, traffic volume, traffic circulation and funding. Between October and February, staff performs pavement inspections (Tahoe inspections are performed prior to snow season). Upon completion of pavement inspections, the PMP database is updated. Between February and April, staff uses PMP data to set priorities for surface treatment and to determine which CORP projects to include in the CIP. During the period from April to October, staff or contractors perform overlay work.

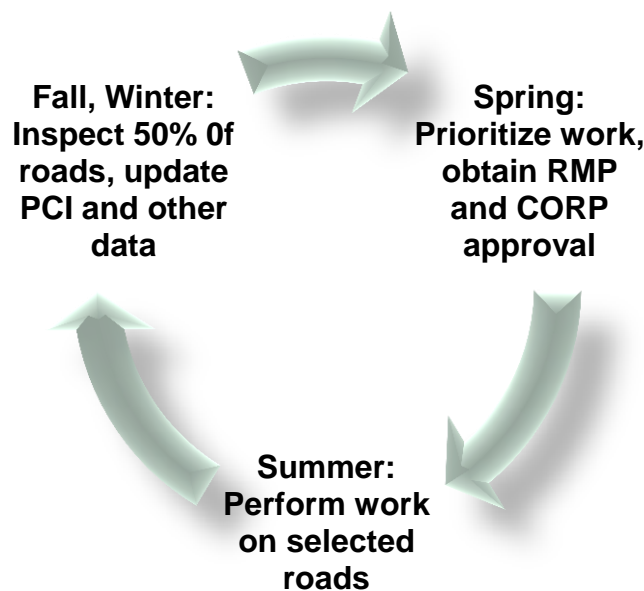


Figure 1-9: CORP Annual Updating Process

CORP Projects

Based on Average Daily Traffic (ADT) and existing pavement conditions, the CDA's highest priority CORP project is the AC overlay of Black Bart Avenue, Barbara Avenue and Martin Avenue in the South Lake Tahoe area. This project began construction in Fiscal Year (FY) 2014/15, and will be completed in FY 2015/16.

On June 10, 2014, the Board authorized staff to add the Bass Lake Road Overlay project upon receipt of Urban Regional Surface Transportation Program funding. This project was expected to be completed in FY 2014/15, but is now expected to be completed in FY 2015/16.

On August 5, 2014, the Board approved the Gold Hill Overlay project as part of the Maintenance Program Funding Augmentation from Local Funds-Tribe. This project will replace failed roadway structural sections in various locations along Gold Hill Road between Cold Springs Road and State Route 49. Construction of the two-inch asphalt concrete overlay will improve drainage on the adjacent roadway.

On March 31, 2015, Transportation presented options for using the \$2,500,000 in Local Funds-Tribe annual funding for Fiscal Year 2015/16. The Board directed that \$1,250,000 million of the \$2,500,000 be allocated to road maintenance within the prescribed map within Local Funds-Tribe area.

As part of the \$1,250,000 Local Funds-Tribe annual funding, Transportation will overlay Pleasant Valley Road (from Oriental Street to Mother Lode Drive) and Patterson Drive (from State Route 49 to Solstice Circle) in the 2015 CIP.

CORP projects scheduled for FY 2015/16 are listed in Table 1-4.

Table 1-4: Current Year CORP Projects

Year Construction to Begin	Description	Authorized Funding	Estimated Cost
2015/16	Bass Lake Road Overlay	Urban Regional Surface Transportation Program – FY 2014/15	\$900,000
2014/15	Black Bart Avenue, Barbara Avenue and Martin Avenue Overlay	General Fund and Road Fund – FY 2014/15	\$750,000
2015/16	Gold Hill Overlay	Local Funds – Tribe – FY 2014/15	\$750,000
2015/16	Pleasant Valley Road and Patterson Drive Overlay	Local Funds – Tribe – FY 2015/16	\$850,000
		Total	\$3,250,000

Individual Projects - Grouped by Project Type

Individual Project Summaries are provided for each segment of the CORP, and provide detailed descriptions, timing, cost and revenue information. Projects are listed in alphabetical order within each segment of the CORP. The “Revenues” section of each project summary lists the various funding sources for each project. The “Expenditures” section of each project summary includes the various types of costs expected for each project (i.e., Design and Construction.) CORP projects do not normally have Planning/Environmental, Right of Way or Environmental Monitoring costs.

The “Project Schedule” section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)
2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project

plans, specifications and engineer's cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. "Design – Staff" refers to the cost for CDA staff time, while "Design – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

3. **Right of Way:** This phase includes expenditures for "Right of Way – Staff", "Right of Way – Acquisition", and "Right of Way – Consultant". The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. "Right of Way – Staff" refers to the cost for CDA staff time; "Right of Way – Acquisition" refers to the cost of land; and "Right of Way – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)
4. **Construction:** This phase includes expenditures for "Construction Mgmt – Staff", "Construction Mgmt – Consultant" and "Direct Construction Costs". This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. "Construction Mgmt – Staff" refers to the cost for Division staff time, while "Construction Mgmt – Consultant" includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) "Direct Construction Costs" refers to the actual cost to build the project.
5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for "Env Monitoring – Staff" and "Env Monitoring – Consultant". "Env Monitoring – Staff" refers to the cost for CDA staff time while "Env Monitoring – Consultant" includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date is the date that coincides with the project engineer's original budget.

CORP Format

The CORP is separated into the following sections:

- ❖ Current Year work plan (Fiscal Year 2015/16)
- ❖ Five-Year CIP (Fiscal Years 2015/16 through 2019/20)

Projects may be listed in more than one funding segment of the CIP, depending on the duration of the project and when funds are expected to be spent. Projects are listed in a segment if funds are estimated to be spent in any phase of the project delivery schedule. An index for Current Year CORP projects is located in Section 4, and an index for Five-Year CORP Projects is located in Section 5. Individual project summaries are located in Section 8.5.