



Executive Summary

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 5- 10- and 20-Year CIP. These policies also require an update of the twenty-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.

Figures 1-1 and 1-2 illustrate the CIP Update cycles.

Typical Major Five-Year CIP Update Cycle

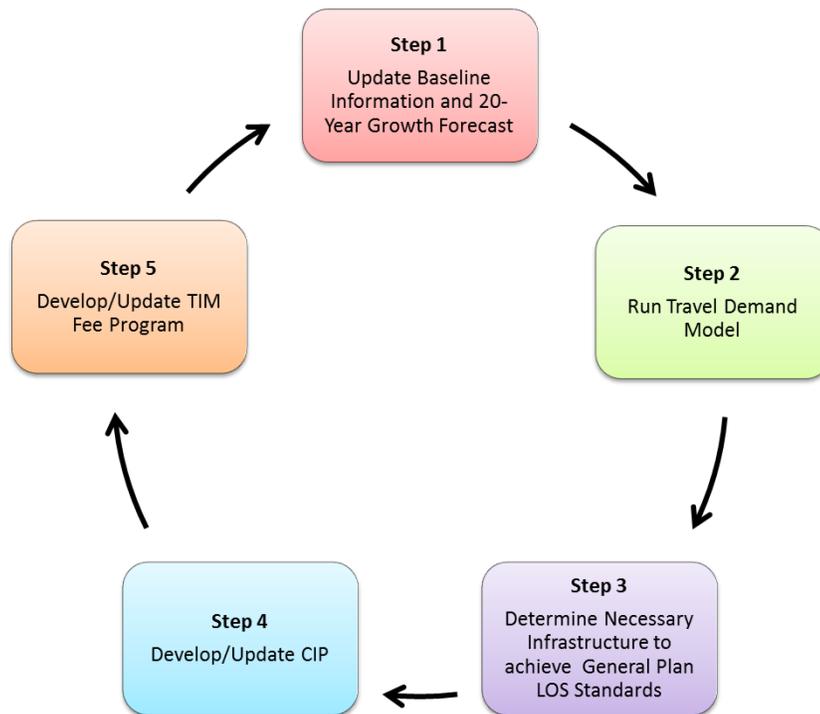


Figure 1-1: Typical Major Five-Year Update Cycle

Typical Annual CIP Update Cycle

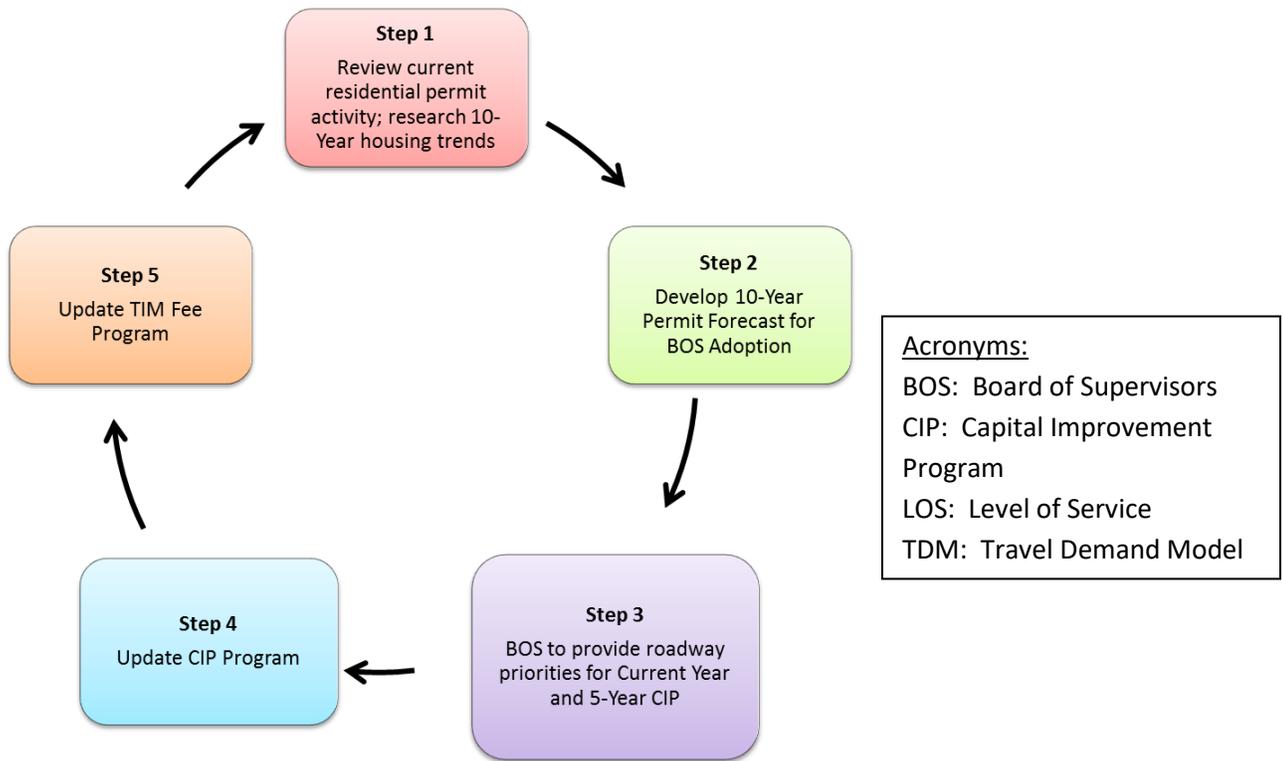


Figure 1-2: Typical Annual Update Cycle

CIP Book Format

Indexes

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

Cash Proformas

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

Individual Projects

The 2020 CIP Book includes five capital programs:

- ❖ West Slope Road/Bridge (CIP)
- ❖ Tahoe Environmental Improvement Program (EIP)
- ❖ Transportation Facilities Improvement Program (TFIP)

- ❖ Capital Overlay and Rehabilitation Program (CORP)
- ❖ Airport Capital Improvement Program (ACIP)

Individual project summaries are provided in alphabetical order in Section 4 for each project in the CIP. 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 Transportation staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non- Transportation 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 Transportation staff time, while “Design – Consultant” includes all other costs (e.g., staff time from non- Transportation 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 CIP project, and 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 Transportation 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- Transportation 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 Transportation staff time, while “Construction Mgmt – Consultant” includes all other labor costs (e.g., staff time from non- Transportation 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 Transportation staff time while “Env Monitoring – Consultant” includes all other costs (e.g., staff time from non- Transportation departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

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, TIM Fee Ordinance No. 5045 and the accompanying TIM Fee Resolution 191-2016, or the TIM Fee Program Technical Update Resolution 077-2018.

Unfunded Projects

In addition to the funded CIP projects (using TIM Fees, state/federal grants and other local funding), an unfunded list is included in the CIP Book after the funded projects. The unfunded list was compiled using various sources, including:

- Projects in the current CIP or TIM Fee programs which are no longer eligible for TIM Fee funding under the updated TIM Fee program.
- Projects suggested by the public.
- Projects included in the *El Dorado County Bicycle/Pedestrian Plan 2010*.
- Projects suggested by the *Green Valley Road Final Corridor Analysis Report, 2014*, *Diamond Springs-El Dorado Area Mobility and Livable Community Plan, 2014* and *Cameron Park Community Transportation Plan, 2015*.

For further clarification, the unfunded list includes projects that were suggested by the public. These suggested projects may be partially included in the CIP or TIM Fee Program. Unfunded projects may be added to the CIP by the Board as funding becomes available. "Safety" projects requested by the public during the outreach process of the CIP Major Update adopted in 2016 have not officially been identified as "Safety Projects" by County staff.



Department of Transportation

Capital Improvement Program Overview

El Dorado County Department of Transportation (Transportation) 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 Transportation's strategy for infrastructure development and maintenance.

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 Transportation staff and presented to the Board for discussion and inclusion in the CIP. The CIP is a planning tool that Transportation updates annually as new information becomes available regarding priorities, funding sources, project cost estimates and schedule.

Transportation'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.

CIP Overview

The CIP serves as a planning and implementation tool for the development, construction, rehabilitation and maintenance of the County's transportation 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, Transportation uses outside funding sources (Federal, State and other grants) whenever possible, in addition to County funds (e.g., Traffic Impact Mitigation (TIM) Fees, General Fund).

The CIP makes up over half of Transportation's budget. Transportation 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.

Project Prioritization

Transportation 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) 2020/21 or 2021/22 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.
- **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).
 - Projects with Medium or High rankings are more desirable.
- **Capacity/Traffic Relief**
 - Traffic volumes are counted and are reviewed for existing roads to provide a relative sense of how heavily they are used.
 - For proposed new roads, projected traffic volumes are provided from recent traffic studies.
 - Projects which improve roadway capacity in growing areas 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, Transportation prioritizes projects the Board has previously expressed an interest in moving forward. Transportation 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.

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 usually finalized upon Board adoption in June. The CIP current work plan is developed concurrently with the Transportation budget for the upcoming fiscal year.

The typical CIP/Budget cycle is shown in Figure 1-3.



Figure 1-3: Typical CIP/Budget Cycle

The Airport CIP and the Tahoe EIP have additional review requirements which are 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.

Tahoe Environmental Improvement Program

The Lake Tahoe Basin has long been at the forefront of environmental improvements at Federal, State and Local levels. Transportation's Tahoe Engineering Unit (TEU) is solely grant funded, and is primarily responsible for capital projects identified in the Tahoe 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. 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 construction season in Tahoe is limited to May 1 through October 15, per regulatory ordinances. Since TEU's environmental improvement projects are dependent on grant funds, the projects included in this EIP represent 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 Transportation's budget for the upcoming fiscal year.

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.

Transportation Facilities Improvement Program

Transportation is responsible for constructing, repairing and maintaining County Transportation 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.

Capital Overlay and Rehabilitation Program

Capital Overlay and Rehabilitation Program (CORP) projects are roadway rehabilitation projects which require an improvement to the roadway structural integrity. CORP 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.).

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 contributions from the General Fund and Tribal Funds. 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 CORP. 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 strategies with existing funds.

The PMP allows staff to evaluate and monitor the condition of pavement to enable Transportation to use its limited resources in the most efficient manner possible. Ideally, each road should be inspected every other or every third 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 (on a scale of 0 to 100) and updated.
- Roads are prioritized for maintenance or overlay work.

The PMP enables staff to focus on common-sense preventative maintenance, which will maximize the useful life of the County’s roadway infrastructure.

Project Prioritization

CORP projects are prioritized based on several criteria, including pavement condition, traffic volume, traffic circulation and funding.

Transportation’s strategy has been to fund CORP projects primarily with external funding. Table 1-1, the Infrastructure Investment Options List, includes projects staff has prioritized in no particular order. Projects on this list could be constructed if the Board wishes to approve additional General Fund revenue, continue allocating some Tribe revenue, or redirect revenue currently recommended for West Slope Road/Bridge Projects.

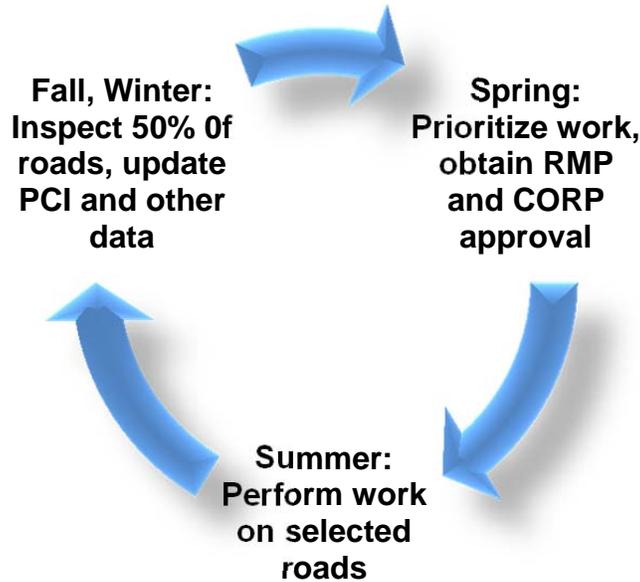
Table1-1: CORP Infrastructure Investment Options List

Project	Start	End	Length	ADT	PCI
Greenwood Road	Marshall Road	State Highway 193	26,400	1,679	70
Sly Park Road	Mt. Aukum Road	Sierra Springs Drive	25,399	2,971	69
Sly Park Road	Sierra Springs Drive	Mormon Emigrant Trail	9,766	2,059	78
South Shingle Road	Latrobe Road	U.S. Highway 50	47,203	1,044 - 9,751	67
Meder Road	Carousel Lane	Ponderosa Road	8,796	4,213	59
Country Club Drive	Tierra de Dios	Cambridge Road	5808	2836	74

CORP Annual Updating Process

CORP projects are reviewed and updated annually. 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 Capital Improvement Program. During the period from April to October, staff or contractors perform overlay work.

Figure 1-4: CORP Annual Updating Process





Airport Capital Improvement Program Overview

The Chief Administrative Office Airports Administration (CAO) 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's ACIP funds 90% of most ACIP project costs (this excludes preparation of Categorical Exclusions to satisfy National Environmental Policy Act [NEPA] requirements). 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 total FAA grant eligible project costs). The remaining 5.5% of the project costs would need to be covered by the Local Accumulative Capital Outlay (ACO) fund, which would also need to fund Categorical Exclusions to satisfy NEPA requirements.

Caltrans has provided matching grant funds for ACIP projects in past years. However, State matching funds were not programmed in the 2020 ACIP, as these funds have become unreliable. Therefore, the ACIP projects include approximately 10% ACO matching funds. State funding will continue to be pursued.

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

Annual Updating Process

All CIPs are reviewed and updated annually, including revenue estimates, project costs and schedules. In the case of the ACIP, the CAO drafts a proposed list of projects and submits it to the FAA each fall (September to November) for discussion. The FAA reviews the proposed project list with the Airport Layout Plan (ALP) for compliance with aviation design standards, and proposes revisions to the ACIP if needed.

The FAA consults with the CAO in project ranking and funding eligibility, provides direction to staff regarding which projects it is likely to fund, and requests that the CAO submit an updated ACIP and grant pre-applications in December, with final grant applications submitted by May so that projects can be initiated during the summer months. Projects may be authorized for planning, design, and/or construction work.

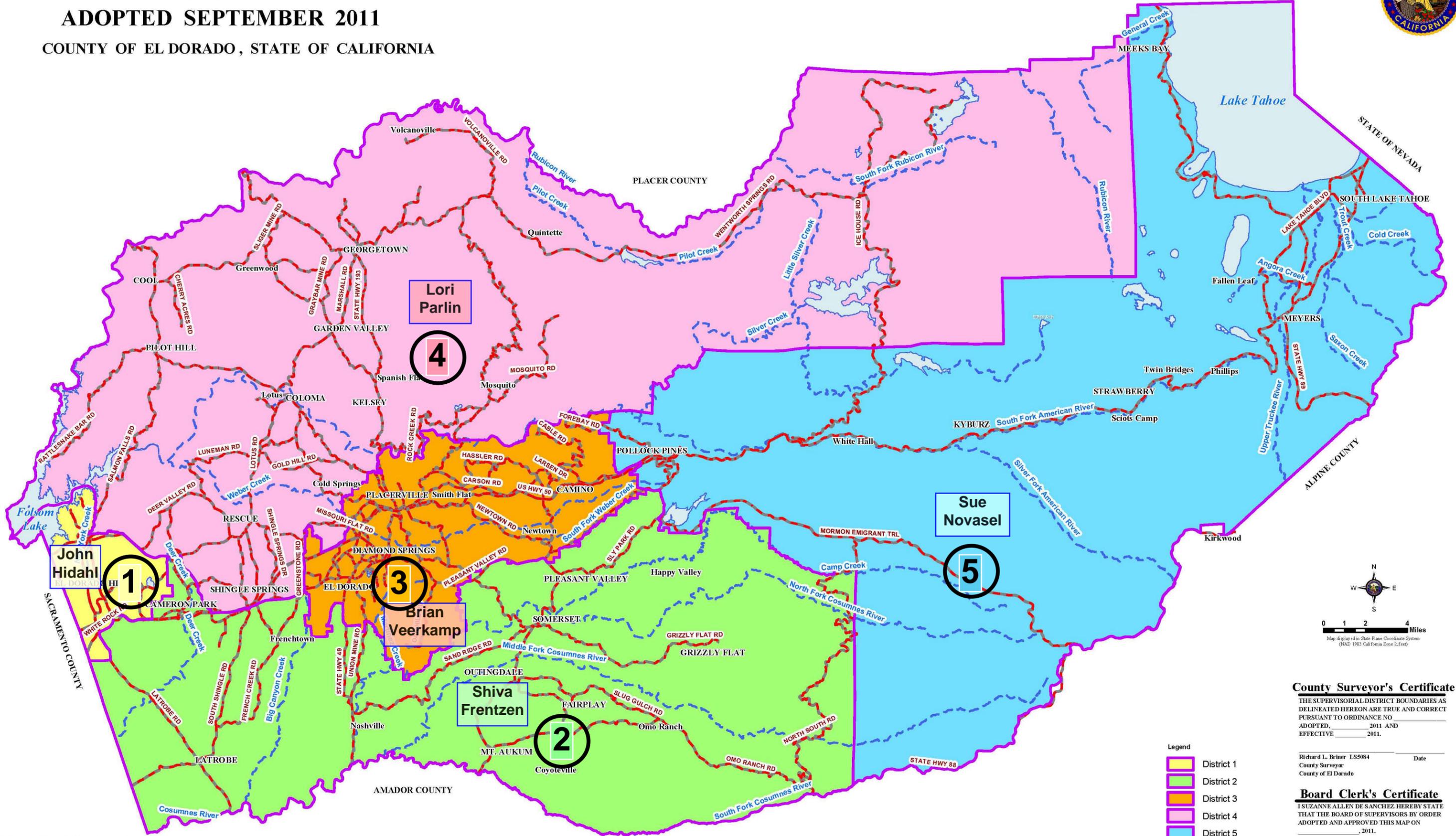
Simultaneously, the CAO presents its CIP recommendations to the Board of Supervisors for discussion and adoption. The budget for next year's potential projects is then updated, based on Federal and State budget constraints.

Airport CIP Projects

The CAO has recently updated its Airport Layout Plan with Program Narrative Report for the Georgetown Airport and an Airport Layout Plan Update for the Placerville Airport is underway. Each Airport Layout Plan includes updated plans to provide appropriate criteria and guidelines for future airport projects and will generate an updated project list.

OFFICIAL MAP SUPERVISORIAL DISTRICT BOUNDARIES ADOPTED SEPTEMBER 2011

COUNTY OF EL DORADO, STATE OF CALIFORNIA



- Legend**
- District 1
 - District 2
 - District 3
 - District 4
 - District 5
 - Major Roads
 - Rivers & Creeks

County Surveyor's Certificate

THE SUPERVISORIAL DISTRICT BOUNDARIES AS DELINEATED HEREON ARE TRUE AND CORRECT PURSUANT TO ORDINANCE NO. _____ ADOPTED, _____ 2011 AND EFFECTIVE _____ 2011.

Richard L. Briner LS5084 _____ Date
County Surveyor
County of El Dorado

Board Clerk's Certificate

I SUZANNE ALLEN DE SANCHEZ HEREBY STATE THAT THE BOARD OF SUPERVISORS BY ORDER ADOPTED AND APPROVED THIS MAP ON _____ 2011.

Suzanne Allen De Sanchez _____ Date
Clerk of the Board of Supervisors
County of El Dorado

NOTE: The official GIS map #5935 has not been revised. The Supervisor names and district number identifiers were added at the request of CDA Director Steve Pedretti for clarity.
NOTE: The official Supervisorial boundaries delineated on this map were developed from the conceptual map entitled "KNIGHT/NUTTING ALTERNATIVE 1" selected by the Board on August 08, 2011.
GIS ID: 5935