



# Executive Summary

## Capital Improvement Program Overview

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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 Fee (TIF), formerly the Traffic Impact Mitigation (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. A TIF is a fee levied by a local government or public agency to ensure that new development projects pay for all or a portion of the costs of providing public infrastructure or services to the new development. Since 1984, the County has adopted and updated various TIM Fee programs to ensure that new development on the western slope pays the costs of constructing and improving county and state roads necessary to serve new development. The TIF is paid at the time of issuance of a building permit (e.g., for single family home or non-residential buildings) or whenever appropriate if no building permit is being issued. TIF's are calculated pursuant to Government Code 66000 et. seq. and the County's General Plan policy. Generally, fees are based on the type of land use, quantity, location, impact on roads, and level of service (LOS). TIF's are assessed by one of three designated zone in which the development occurs. The TIF Program will receive a minor update in 2023 to reflect future changes.

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

**Typical Major Five-Year CIP Update Cycle**

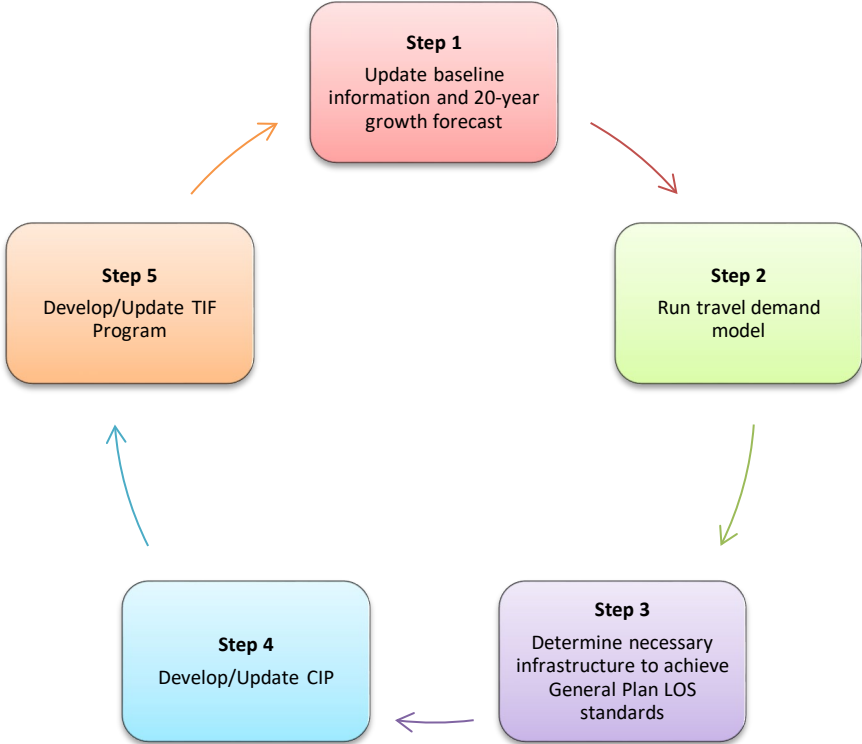


Figure 1-1: Typical Major Five-Year Update Cycle

**Acronyms:**  
BOS: Board of Supervisors  
CIP: Capital Improvement Program  
LOS: Level of Service  
TDM: Travel Demand Model

## Typical Annual CIP Update Cycle

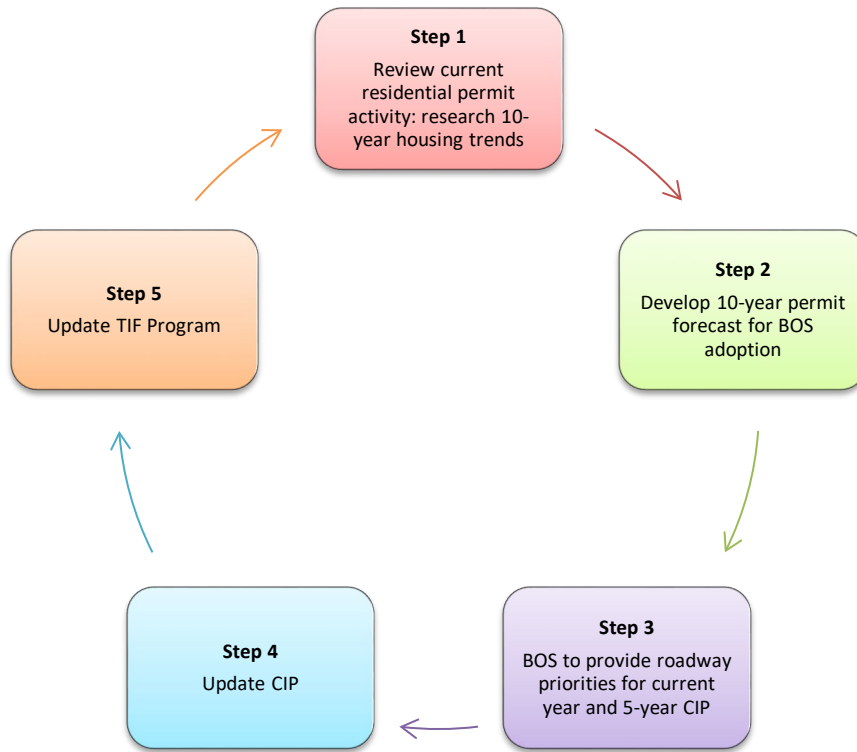


Figure 1-2: Typical Annual Update Cycle

## CIP Book Format

### ***Indexes***

Indexes in Section 1 provide alternate ways to locate detailed project summaries – alphabetically, and by project number.

### ***Cash Proformas***

Section 3 includes cash proformas for the TIF 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 2023 CIP Book includes four capital programs:

- ❖ West Slope Road/Bridge (CIP)
- ❖ Tahoe Environmental Improvement Program (EIP)
- ❖ 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, and cost and revenue information. The “Revenues” section of each project summary lists the various funding sources for each project, including TIF 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, as well as the cost of physically constructing a project. “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, the TIM Fee Program Technical Update Resolution 077-2018, or TIF Resolution 196-2020.

### ***Unfunded Projects***

In addition to the funded CIP projects (using TIM/TIF, 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 or previous CIP or TIM/TIF programs which are no longer eligible for TIF funding under the updated TIF program.
- Projects suggested by the public or County staff.
- Projects included in various plans and reports, including but not limited to the following:
  - *El Dorado County Active Transportation Plan 2020.*
  - *Green Valley Road Final Corridor Analysis Report, 2014.*
  - *Diamond Springs-El Dorado Area Mobility and Livable Community Plan, 2014.*
  - *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 TIF 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

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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 Fees (TIF) 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) 2023/24 or 2024/25 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 obtain 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 that have a minimum span greater than 20 feet are inspected by Caltrans every two years. Ratings are given based upon a number of factors.
  - Bridge projects eligible for rehabilitation or replacement must be rated in poor condition. Rehabilitation funding is recommended for major reconstruction of the bridge to meet current standard needs for a minimum of ten years into the future. Replacement funding is requested by the local agency and is determined with Caltrans.

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**

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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.

## **Capital Overlay and Rehabilitation Program**

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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, Sacramento Municipal Utility District 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 for asphalt concrete grind out and replacement.

### **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.

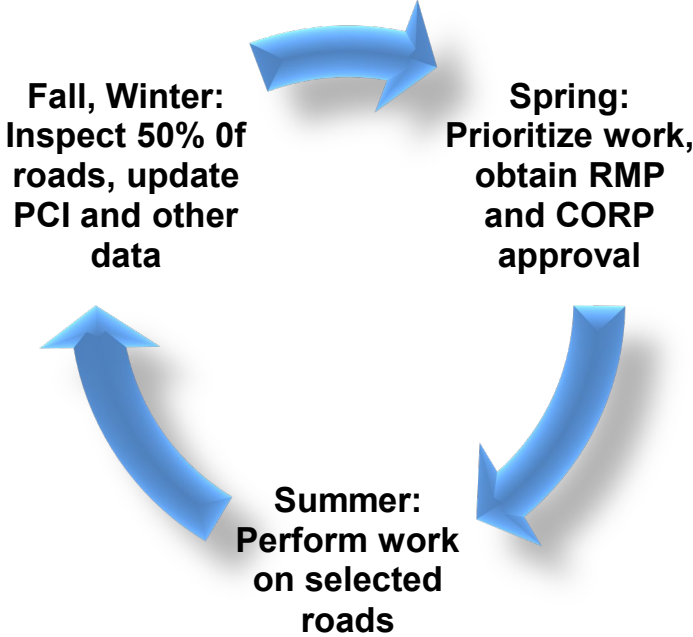
Table1-1: CORP Infrastructure Investment Options List

<b>Project</b>	<b>Start</b>	<b>End</b>	<b>Length</b>	<b>ADT</b>	<b>PCI</b>
Sly Park Road	Mt. Aukum Road	Sierra Springs Drive	25,399	2,971	67
Sly Park Road	Sierra Springs Drive	Mormon Emigrant Trail	9,766	2,059	76
South Shingle Road	Latrobe Road	U.S. Highway 50	47,203	1,300 - 9,751	58-82
Country Club Drive	Tierra de Dios	Cambridge Road	5808	2,836	59-95
Ice House Road Phase 3	U.S. Highway 50	Peavine Ridge Road	33,634	1,646	78
Mt. Aukum Road	Pleasant Valley Road	Cedar Creek Road	60,720	1,833-3,921	43-73

**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

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The Airports Division of the Planning and Building Department 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. The FAA requires the County to provide upfront funding for preliminary scoping, surveys, and other analyses required for the preparation of Categorical Exclusions and other environmental documentation to satisfy National Environmental Policy Act (NEPA) requirements for obstruction removal, beacon and tower replacement, and other ACIP projects. Ninety percent of eligible project costs should be reimbursed by the FAA in future ACIP grant cycles.

The County can apply for State of California Department of Transportation (Caltrans) Division of Aeronautics ACIP matching grant funds, which, if successful in obtaining these competitive grant funds, 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. Caltrans has provided matching grant funds for ACIP projects in past years. State funding will continue to be pursued; however, State matching funds were not programmed in the 2023 ACIP, as these competitive funds have become unreliable. Therefore, the ACIP projects include 10% ACO matching funds (except where the County is required to provide upfront funding for project environmental documentation).

## **Annual Updating Process**

All CIPs are reviewed and updated annually, including revenue estimates, project costs, and schedules. In the case of the ACIP, the Airports Division drafts a proposed list of projects and submits it to the FAA each fall (typically 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.

ACIP projects are prioritized based on several criteria including safety, security, and capacity. The FAA consults with the Airports Division on project ranking and funding eligibility, provides direction to staff regarding which projects it is likely to fund, and requests that the Airports Division submit an updated ACIP and grant pre-applications in late November, with final grant applications submitted by April so that projects can be initiated during the summer months. Projects may be authorized for planning, design, and/or construction work.