To: Board of Supervisors

From: Rafael Martinez, Director, Department of Transportation
Natalie Porter, P.E., T.E., Senior Civil Engineer

Subject: 2019 Capital Improvement Program

PURPOSE AND SUMMARY:
Department of Transportation (DOT) recommending the Board authorize changes outlined in Items 1 through 8 listed below into the proposed 2019 Capital Improvement Program (CIP). Staff will return to the Board for adoption of the 2019 CIP book in September 2019. Staff is also recommending the Board add six new and two potential West Slope projects, and one Tahoe project to the 2018 CIP, and one Airport project to the 2019 CIP.

West Slope Road and Bridge Program:
1. Approve additions and changes to West Slope Road/Bridge Capital Improvement Program (CIP) projects for inclusion in the 2019 CIP, as described in this staff report and Attachment B (Project Change Table).

Tahoe Environmental Improvement Program (EIP):
2. Approve additions and changes to the Five-Year Tahoe EIP as described in this staff report and Attachment B.

Transportation Facility Improvement Program (TFIP):
3. Headington Wash Rack Facility Project: Included in 2019 CIP as described in the TFIP section of this staff report.

Airport CIP (ACIP):
4. Continue to fund Fiscal Year (FY) 2019/20 ACIP projects with Federal Aviation Administration (FAA) grants and local matching funds, as shown in this staff report and Attachment B.

Capital Overlay and Rehabilitation Program (CORP):
5. Continue to use external funds as they become available for CORP projects on the Infrastructure Investment Options list (Attachment C).

Projects for Addition to 2018 CIP:
6. Authorize seven projects for addition to the 2018 CIP. These projects will extend into future fiscal years, and therefore will also be included in the 2019 CIP Book:
   • Henningsen Lotus Park Streambank Restoration (CIP# 99454)
   • Latrobe Railroad Track Washout Repairs (CIP# 99455)
   • Intersection Safety/Pedestrian Safety Improvement (CIP# 72196)
   • Intersection Safety/Sight Triangle Improvement (CIP# 72197)
   • Road Safety Improvement Various Location (CIP# 72195)
Projects for Addition to 2018 CIP upon Receipt of Grant Funding:
7. Authorize two projects for addition to the 2018 CIP upon receipt of grant funding:
   • Ponderosa Road (Class 2 and Sidewalk) (CIP# 97018)
   • Pony Express (Class 2 and Sidewalk) (CIP# 97019)

Projects for Addition to 2019 CIP:
8. Authorize one project for addition to the 2019 CIP:
   • Airport Beacon (Replacement) at the Placerville Airport (Design & Construct)
     (CIP #93134)

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

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

General Plan Policy TC-Xb and Implementation Measure TC-A also require a Major CIP and Traffic Impact Mitigation (TIM) Fee Program update every five years, in line with the major review of the General Plan, specifying expenditures for roadway improvements within the next 20 years. The Major Update to the CIP and TIM Fee Program was completed in December, 2016. An Annual Update is planned for May, 2019.

Attachment B provides a table listing projects with changes to construction start date or changes in cost of over $100,000. The table will also include new projects described in this staff report. The 2019 CIP book will incorporate changes to existing projects and include new proposed projects as described in the Discussion section.

DISCUSSION
The proposed 2019 CIP Book includes the following five programs:
   • West Slope Road/Bridge CIP
   • Tahoe EIP
   • ACIP
   • TFIP
   • CORP

Taking into consideration all five programs, the goals for the 2019 CIP Book are to:
1. Include new projects and changes to existing projects, as directed by the Board; and
2. Make any other necessary revisions pursuant to Board direction.
The following discussion describes each program proposed for inclusion in the 2019 CIP Book.

**West Slope Road/Bridge CIP:**
CIP projects are prioritized based on a number of factors (in no particular order), such as:

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

A list of projects completed between 2001 and 2019 is included as Attachment D.

Projects listed in Attachment B have had changes in cost or schedule since the 2018 CIP Book was adopted in June 2018. Cost or schedule modifications have been made as a result of refinements made during the FY 2019/20 budget process. Staff recommends the Board direct staff to include the changes specified in Attachment B in the 2019 CIP Book.

**Changes to Existing Projects for 2019 CIP:**

In addition to the proposed changes detailed in Attachment B, staff is also recommending changes to the following projects: Bass Lake Road – US Highway 50 to North of Realigned Country Club Drive (CIP #72BASS); Country Club Drive Realignment – Bass Lake Road/Old Bass Lake Road to Tierra de Dios Drive (CIP #71360); and Country Club Drive Realignment – Tong Road to Bass Lake Road/Old Bass Lake Road (CIP #71361).

1. Bass Lake Road – US Highway 50 to North of Realigned Country Club Drive, CIP #72BASS (Formerly Bass Lake Road – US Highway 50 to Serrano Parkway): the limits of this project have traditionally been between US Highway 50 and Serrano Parkway. The latest update of the Traffic Impact Fee (TIM) Fee Program identified a forecasted deficiency on Bass Lake Road to LOS E just north of US Highway 50. It was brought to Transportation’s attention that LOS E is acceptable in the community region and therefore, the limits of the widening should be only in the rural region of Bass Lake Road. The rural region/community region boundary line is approximately 1,500 feet north of US Highway 50, just south of City Lights Drive. The new northern limit of the Bass Lake Road widening is proposed to be the rural/community region boundary line, not including tapers.

2. Country Club Drive Realignment – Bass Lake Road/Old Bass Lake Road to Tierra de Dios Drive, CIP #71360: staff proposes to increase the funding for construction based on the latest cost estimate for the project. The costs for the portions of the renamed Bass Lake Road – US Highway 50 to North of Realigned Country Club Drive project (CIP #72BASS), and the Country Club Drive Realignment – Tong Road to Bass Lake Road/Old Bass Lake Road, (CIP #71361) that are included in the 71360 realignment project will be reallocated to the 71360 project. These costs
include grading, tapers, and bike path on Bass Lake Road, and the signal installation from the 71361 project.

**New West Slope Projects for 2018 CIP:**

DOT is proposing six West Slope projects for addition to the 2018 CIP. Upon Board approval, the following projects will also be included in the 2019 CIP:

1. **Henningsen Lotus Park Streambank Restoration (CIP# 99454):**
   This proposed project will repair several locations where the riverbank was damaged during the January 2017 winter storms near Henningsen Lotus Park.

   Estimated Project Cost: $370,000
   Funding Source: Federal Emergency Management Agency (FEMA) – Anticipated and Obligated, Office of Emergency Services (OES) - Anticipated, General Fund - Anticipated

2. **Latrobe Railroad Track Washout Repairs (CIP# 99455):**
   This project will repair several locations where railroad track, embankment, and drainage systems were damaged during the January 2017 winter storms near Latrobe Creek.

   Estimated Project Cost: $370,000
   Funding Source: FEMA – Anticipated and Obligated, OES - Anticipated, General Fund - Anticipated

3. **Intersection Safety/Pedestrian Safety Improvement (CIP# 72196):**
   This project includes improvement of pedestrian safety crossing at the intersections of Pleasant Valley Road and Oriental Street, Pleasant Valley Road and Church Street, Pleasant Valley Road and Racquet Way, along Pleasant Valley Road between Toyan Drive and Pearl Place. The improvement also includes installation of speed feedback signs to reduce speeds of vehicles entering the developed area.

   Estimated Project Cost: $492,000
   Funding Source: Highway Safety Improvement Program (HSIP), RSTP

4. **Intersection Safety/Sight Triangle Improvement (CIP# 72197):**
   This project includes improvement of sight triangle for traffic safety at the intersections of Pleasant Valley Road and Hanks Exchange Road, Pleasant Valley Road and Leisure Lane, Pleasant Valley Road and Cedar Ravine Road, Pleasant Valley Road and Zandonella West/Big Cut Road, and Pleasant Valley Road and Newtown Road. The improvement also includes installation of warning signs with flashing beacons near high crash intersections.

   Estimated Project Cost: $536,000
   Funding Source: HSIP, RSTP

5. **Road Safety Improvement Various Location (CIP# 72195):**
   This project includes installation of high friction treatment and installation of thermoplastic traffic striping at fifteen different locations throughout the unincorporated area of El Dorado County.
Estimated Project Cost: $1,799,000
Funding Source: HSIP

6. US 50 / EB Bass Lake Rd - Signalization (CIP# 73367):
This project includes installation of traffic signal at Highway 50/Bass Lake Road east bound off ramp. The improvement may also include utility relocations and adjustments.

Estimated Project Cost: $1,150,000
Funding Source: TIM Fees, Developer Funding

Potential West Slope Projects for 2018 CIP:
Two proposed projects are candidates for Congestion Mitigation and Air Quality Improvement (CMAQ) Program grants. Staff is requesting Board direction to incorporate the following projects in the 2018 CIP, once CMAQ grants are received.

1. Ponderosa Road (Class 2 and Sidewalk) (CIP# 97018):
This proposed project includes approximately 0.72 miles of Class II bike lanes, 0.36 miles of sidewalk, Americans with Disability Act (ADA) ramps, and improved delineation on Ponderosa Road between Foxwood Lane and Ponderosa High School.

Estimated Project Cost: $1,710,000
Funding Source: Congestion Mitigation and Air Quality Program (CMAQ) – Anticipated, Regional Surface Transportation Program (RSTP), Anticipated Funding

2. Pony Express (Class 2 and Sidewalk) (CIP# 97019):
This proposed project includes approximately 4,600 feet of pedestrian path, 1.7 miles of Class II bike lanes, ADA ramps, flashing beacons and improved pavement delineation on Pony Express Trail between Sanders Drive and Sly Park Road in Pollock Pines.

Estimated Project Cost: $1,776,000
Funding Source: CMAQ – Anticipated, RSTP, Anticipated Funding

Tahoe EIP:
In 2018, the DOT Tahoe Engineering Group (TEG) completed the following projects:

- Country Club Heights Erosion Control Project (Phases 1 and 2)
- Elks Club Drive Capital Overlay and Rehabilitation Project
- 2018 Elks Club Emergency Road Repair Project
- Lakeview Drive Road Repair Project

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

- Guardrail Upgrade Project - Tahoe

**New Tahoe Projects for 2018 CIP:**
Transportation is proposing one project for addition to the 2018 CIP:

1. **Guardrail Upgrades – Tahoe (CIP# 72198):**
   This proposed project will include replacement and upgrade of various existing metal guardrail systems within the Tahoe basin. The final scope and budget will be determined through further DOT analysis and prioritization.

   Estimated Project Cost: $610,600
   Funding Source: HSIP

**TFIP:**
The TFIP section of the 2019 CIP Book includes one Facilities project – the Headington Wash Rack Facility Project (CIP #81134). The project is for an automated water treatment reclamation/recycling wash system for heavy equipment at the Headington Maintenance Yard. This facility project is designed to meet the objectives of the Clean Water Act and the County’s Storm Water Management Program and reduce future operational costs.

The purpose of this project is to replace the existing uncovered wash facility for County fleet vehicles and maintenance equipment. The improvements include construction of a covered vehicle wash building, water recycling treatment system, rainwater collection and storage tanks, and disconnecting from the existing sewer line.

Due to the significant amount of Transportation’s resources being diverted to emergency repairs on the 2017 storm damage, this project has been temporarily delayed until adequate funding can be authorized. The Wash Rack Facility Project had previously been funded with Road Fund. However, Transportation staff is pursuing Prop 1 water grant funds for additional funding for this project.

**ACIP:**
Community Development Services (CDS) 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 2019 ACIP, as these funds have become
unreliable. Therefore, the ACIP projects include approximately 10% ACO matching funds. State funding will continue to be pursued.

CDS staff is proposing one new ACIP project for addition to the 2019 CIP. Upon Board direction, the following Placerville Airport project will be added to the 2019 CIP:

1. **Airport Beacon (Replacement) at the Placerville Airport (Design & Construct) (CIP #93134)**

   The existing beacon and its tower are outdated. The beacon should be replaced with a more energy-efficient version, and the newer, more efficient tip-down type tower should replace the existing tower.

   Estimated Project Cost: $153,000
   Funding Source: FAA Funding (Anticipated) - $135,000, Local ACO Match - $18,000

Placerville Airport projects included in the 2019 CIP book:
- Airport Beacon (Replacement) at the Placerville Airport (Design & Construct) (CIP #93134)
- Airport Layout Plan Update and Obstruction Survey (CIP #93132)
- AWOS III (Design) (CIP #93121)
- Crack Seal, Seal Coat & Remark Runway 5-23, Taxiways, Aprons, and T-Hangar Taxilanes (CIP #93133)
- Taxiway Edge Lights (CIP #93130)

Georgetown Airport projects included in the 2019 CIP book:
- Airport Layout Plan 2024 Update (CIP #93523)
- Construction of AWOS (CIP #93520)
- Crack Seal and Remark Runway, Taxiways, Aprons and T-Hangar Taxilanes (CIP #93535)
- New Airport Beacon (Design & Construct) (CIP #93539)
- Obstruction Survey (CIP #93503)
- Relocate Taxiway A Connector (CIP #93536)
- Runway Pavement Closure for Runway Safety Area (CIP #93537)
- Runway Protection Zone Land Acquisition (CIP #93538)

**CORP:**

CORP projects are roadway rehabilitation projects that require an improvement to the roadway structural integrity. DOT’s strategy has been to fund CORP projects primarily with external funding. Two CORP projects will be included in the 2019 CIP: El Dorado Hills Boulevard Overlay (CIP #72191) and Elks Club Drive Overlay – Boca Raton to Pioneer Trail (CIP #72192). Projects on the Infrastructure Investment Options list (Attachment C) could be constructed if the Board wishes to approve additional General Fund revenue, continue allocating some Tribe funding, or redirect revenue currently recommended for West Slope Road/Bridge Projects. CORP accomplishments for the years 2001-2019 are included in Attachment D.
RECOMMENDATION
Staff is recommending the Board approve Items 1 through 8 listed below:

West Slope Road and Bridge Program:
1. Approve additions and changes to West Slope Road/Bridge CIP projects for inclusion in the 2019 CIP, as described in this staff report and Attachment B.

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

TFIP:
3. Headington Wash Rack Facility Project: Included in 2019 CIP, as described in the TFIP section of this staff report.

ACIP:
4. Continue to fund FY 2019/20 ACIP projects with Federal Aviation Administration (FAA) grants and local matching funds, as shown in this staff report and Attachment B.

CORP:
5. Approve additions and changes to the CIP as described in this staff report and Attachment B. Continue to use external funds as they become available for CORP projects on the Infrastructure Investment Options list (Attachment C).

Projects for Addition to 2018 CIP:
6. Authorize seven projects for addition to the 2018 CIP:
   • Henningsen Lotus Park Streambank Restoration (CIP# 99454)
   • Latrobe Railroad Track Washout Repairs (CIP# 99455)
   • Intersection Safety/Pedestrian Safety Improvement (CIP# 72196)
   • Intersection Safety/Sight Triangle Improvement (CIP# 72197)
   • Road Safety Improvement Various Location (CIP# 72195)
   • US 50 / EB Bass Lake Rd - Signalization (CIP# 73367)
   • Guardrail Upgrades – Tahoe (CIP# 72198)

Projects for Addition to 2018 CIP Upon Receipt of Grant Funding:
7. Authorize two projects for addition to the 2018 CIP upon receipt of grant funding:
   • Ponderosa Road (Class 2 and Sidewalk) (CIP# 97018)
   • Pony Express (Class 2 and Sidewalk) (CIP# 97019)

Projects for Addition to 2019 CIP:
8. Authorize one project for addition to the 2019 CIP:
   • Airport Beacon (Replacement) at the Placerville Airport (Design & Construct) (CIP #93134)

NEXT STEPS
An Annual TIM Fee Update is planned for May, 2019. A Major Update to the CIP and TIM Fee Program will begin earlier than planned, in 2019. Staff will return to the Board for adoption of the 2019 CIP Book in September 2019.