



# Transportation Department

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TO: Board of County Commissioners

FROM: George Gerstle, Director

DATE: July 25, 2018

RE: **2018 Transportation Department Capital Improvement Program**

The purpose of this resolution is for the Board of County Commissioners (BOCC) to take action on the attached 2018 transportation projects and programs and preview the anticipated 2019 CIP pending the approval of the 2019 Budget.

This year's presentation of the Capital Improvement Program is later than in past years due to some uncertainty surrounding the on-going federal reimbursements of 2013 flood costs and their potential impact on our 2018 program. While much of the uncertainty surrounding the federal reimbursements remains, we are now presenting the 2018 capital plan along with an informational presentation of the draft 2019 CIP, pending final adoption of the 2019 Budget by the Board of Commissioners.

The 2019 CIP expenditures are closely linked to this year's work and a portion of those 2019 projects will likely start before we present the 2019 plan in the second quarter of next year.

**Action Requested: Approval by resolution of the 2018 Capital Improvement Program (CIP) for Transportation.**

## **Summary**

The proposed \$54,850,000 transportation 2018 CIP (see table 2) comprises 82 percent of the \$68.5 million 2018 Transportation expenditure budget, the remaining consists of Road and Bridge operations and general fund expenditures. Over half of the projected 2018 capital expenses are for the on-going recovery from the September 2013 Flood.

The 2018 Capital Improvement Program (CIP) is consistent with the 2018 Transportation budget approved by the Board in November 2017.

Anticipated revenue for the CIP (see table 1), totals \$61.3 million, of which \$32 million is available on January 1. An additional \$23.3 million will be available in July and \$5.4 million is anticipated to come from state, federal, and other local jurisdictions. Funding for facility repairs and replacements related to the 2013 flood is expected to be \$35.6 million, of which \$17.8 million is budgeted for projects started in January.

The remaining non-flood CIP is budgeted from three sources of revenue: Road and Bridge revenues (primarily state gas tax, specific ownership tax, county road and bridge mill levy and the State FASTER funds); the Countywide Transportation 0.1% Sales Tax; and Federal, state and other grant funding for specific projects and programs.

- Total revenues for 2018 road and bridge capital fund and the countywide sales tax fund are anticipated to exceed expenditures by \$6.4 million which will be carried over to the 2019 CIP budget.

- When 2019 projects are added to the needs of 2018, the funding for both the road and bridge fund and road sales tax is balanced within one percent.
- Because the 2018 and 2019 CIP expenditures are so closely linked together and since a significant portion of the 2019 projects will be under contract early in the year, the expenditure tables in this report show planned expenditures for both the 2018 and 2019 CIP.

The 2018 CIP also includes a portion of the General Fund used for the Regional Trails program which is funded through a fifteen percent set-aside from the Transportation Sales Tax ballot approved by the voters in 2001, and extended for fifteen years in 2007. That fund is also anticipated to have funds remaining at the end of 2018 that will be used to fund 2019 projects.

Revenues and expenditures for the proposed capital improvement program are summarized in the following six tables included in this memo. State statute restricts counties from budgeting more than one year at a time. For that reason revenue estimates are shown for 2018 only. However, 2019 expenditures are included in order to show planned expenditures over a two-year period.

- **Table 1** lists the total amount of 2018 revenues allocated to fund the transportation related activities of the Department, including those specifically allocated to fund capital improvements.
- **Table 2** summarizes the planned 2018 expenditures by investment category along with the percentages of overall transportation funding going towards the CIP and non-CIP programs.
- **Table 3** identifies the county's current funding commitment to state and federal grants as they relate to expenditures.
- **Table 4** lists a series of performance measures (Measures Of Effectiveness) that together illustrates progress on the goals and objectives set by the county's multiple capital plans.
- **Table 5** compares the total estimated capital needs for the transportation program compared to our current estimated expenditures over the next five years (2018-2022).
- **Table 6** lists the proposed 2018 Capital Improvement Program by project along with an estimate of 2019 needs for each project or program.

Funding from the County General Fund, state and federal grants, and on-going road & bridge maintenance operations are included in Tables 1 through 3 to provide an overview of the entire Transportation Department budget and provide context for the CIP discussion.

### **Background**

The annual capital program is based on several long-range transportation plans and programming documents developed by the county over the past several years. The Capital Improvement Program (CIP) as described herein reflects the goals, objectives and policies in these policy documents.

The following documents guide the capital program:

- **The *Comprehensive Plan*** identifies goals, objectives and policies for the county transportation system. In 2009, the County Planning Commission and the Board of Commissioners adopted an update to the Transportation Element of the County

Comprehensive Plan and incorporated that update into the County Land Use Code in 2010.

- The **County Transportation Master Plan (2012)** provides a vision, goals and strategies for the county transportation system over the next 20 years. Approved by the Board of County Commissioners in December 2012, the TMP serves as the guiding document for development and maintenance of the county's transportation system.
- The **Countywide Transportation Sales Tax Phasing Plan (attached)** lists the 43 road and bridge projects, thirteen transit projects and twenty trails projects that are to be completed with transportation sales tax funds. Each project shows an approximate timeline for implementation along with an indication of current status.
- The **County Road 5-Year Resurfacing Plan** identifies a schedule for resurfacing 272 miles of paved county roads, both the 243 miles of the primary network and the 27 miles of Community Use roads constructed as part of subdivision development. The plan includes recommendations for annual pavement overlays and preventative "chip seal" based on a life-cycle assessment of pavements and on budget allocations dedicated to the rehabilitation of Community Use roads.
- The **Alternative Modes Facilities Maintenance Inventory** is an assessment of existing alternative modes facilities and their approximate maintenance needs over the next five to ten years.
- The **CDOT Off-system Bridge Inventory** reports on the structural and functional integrity of 78 county road structures and two additional structures that are not owned by the county but cross our roadways.
- The **2017 Minor Structures Inventory Report** identifies ten structures as "critical" for replacement due to deteriorated condition and weakened structures capacity. These critical needs are in addition to the six structure replacements needed from the 2013 inventory.
- The **Fleet Replacement Plan for Road Maintenance** is a ten-year projection of maintenance equipment costs and replacement needs. Last updated in 2016, the plan recommends replacing the county's 264 plows, graders, and other road equipment at an average rate of \$2.2 million per year over the next ten years.

### **Revenue Assumptions**

The 2018 Transportation budget and proposed Capital Improvement Program (CIP) are based on revenue assumptions generated by the County Budget Office. The accuracy of these estimates is dependent on the economic conditions that will exist over the coming year. Because the Road and Bridge is a dedicated fund, any revenues not spent in any particular year carry over into the next year's budget. These estimates of carryover funds are based on 2017 expenditures and are anticipated to be available in the road and bridge fund in the third quarter of 2018.

**Table 1** (next page) summarizes anticipated revenues from county sources that were approved for transportation purposes as part of the 2018 Budget Approval process; in either past or future supplemental budget approvals; or are anticipated to be carried over from unspent 2017 revenues dedicated to transportation improvements.

The shaded portions of Table 1 are those funds available for capital improvements along with implementation of transit, transportation demand management, and other mobility programs. It

**Table 1  
2018 Transportation – Budgeted Revenues**

	<b>Category</b>	<b>2018 Adopted Budget</b>	<b>Carryover from 2017*</b>	<b>Federal /Other Funds Exp.</b>	<b>Total Funding</b>
	General Fund	\$ 4,142,790	\$ 137,200	\$ 340,000	\$ 4,619,990
	Road and Bridge - Operations	\$ 8,980,095	\$ --	\$ --	\$ 8,980,095
<b>C I P  F U N D</b>	Road and Bridge - Capital	\$ 7,389,513	\$ 2,890,000	\$ ,000	\$ 10,569,513
	R&B – Subdivision Paving	\$ 955,159	\$ 365,000	\$ --	\$ 1,320,159
	Subdivision Paving Incentive	\$ 809,313	\$ --	\$ --	\$ 809,313
	Road and Bridge – Flood**	\$ 17,800,000	\$ 14,900,000	\$ 2,900,000	\$ 35,600,000
	Transportation Sales Tax	\$ 4,805,800	\$ 4,290,000	\$ 1,450,000	\$ 10,545,800
	Trails Sales Tax (GenFund)	\$ 847,845	\$ 840,000	\$ 760,000	\$ 2,447,845
		<b>Total CIP Revenues</b>	<b>\$ 32,607,630</b>	<b>\$ 23,285,000</b>	<b>\$ 5,400,000</b>
	<b>Total Transportation Revenues</b>	<b>\$ 45,730,515</b>	<b>\$ 23,422,200</b>	<b>\$ 5,740,000</b>	<b>\$ 74,892,715</b>

\* based on preliminary estimates. Carryover amounts for each fund are finalized in June. Flood costs in "carryover" column represents estimate of potential budget needed in Q3 and Q4 expenditures. "Fed" funds represents anticipated CDBG-DR flood funds. Does not include FEMA reimbursements.

is important to note that these revenue projections are estimates. As actual revenues and project costs are realized, the projects identified in the CIP will have to be adjusted, either through changes in scope or by the acceleration or delay of projects. Table 1 does not reflect any unallocated fund balances that are typically carried over year-to-year to fund emergency Road and Bridge fund expenditures.

Funding for repairs to the transportation system stemming from the 2013 Flood comes from an allocation funded through a combination of state and federal cost reimbursements and a temporary sales tax approved by voters in 2014. These revenue assumptions assume that expenditures on flood repairs will be reimbursed by a combination of federal and state funds and an annual transfer from the General Fund of flood costs not reimbursed by the state and federal sources. The 2018 Budget adopted in November 2017, allocates \$17.8 million to these uses. We anticipate an additional \$2.9 million in funding from the Community Development Block Grant Disaster Recovery program to fund two flood recovery projects. Current projections of project costs indicate that another \$14.9 million will needed for flood repairs before the end of the fiscal year. These funds will be requested as the timing of these additional needs is refined.

The 2018 budgeted funds are appropriated to the following primary categories:

- **Road and Bridge (R&B) Fund – Capital** represents the portion of Road and Bridge revenue dedicated to capital improvements not directly related to daily maintenance activities, including hourly project support staff and the salary for the pavement

engineer. Both the R&B Operations and R&B Capital expenditures are funded primarily from state gas tax, specific ownership tax, state vehicle registration funds, and the Road and Bridge property tax mill levy.

- **Road and Bridge Fund – Subdivision Paving** represents Road and Bridge revenue set aside for the rehabilitation of public paved community use roads in unincorporated county subdivisions. Funding for 2018 includes \$809,000 remaining from the \$1,000,000 Incentive Fund dedicated to matching property owner-funded local subdivision paved road reconstruction.
- **Road and Bridge Fund – Flood** includes funding for ongoing repairs to county roads and bridges damaged by the 2013 flood. A large portion of flood repair costs are being reimbursed to Boulder County by either the Federal Emergency Management Agency (FEMA), the state of Colorado; the Federal Highway Administration (FHWA), or the Housing and Urban Development Community Development Block Grant Disaster Recovery program (HUD CDBG-DR). Since these funds are only available on a reimbursable basis, they must first be budgeted and expended before any reimbursements are actually received by the county.
- **Transportation Sales Tax** is a 0.1 percent countywide sales tax dedicated to a specific list of capital improvements and programs, including transit services, shoulder construction, road projects, intersection improvements, pedestrian facilities, and trails. The sales tax funds three planning positions that are responsible for implementation of the trails, transit, and road projects respectively.
  - **Road and Transit Sales Tax – Road and Bridge Fund.** Eighty-five percent of the sales tax revenue resides in the County Road and Bridge Fund.
  - **Trails Sales Tax – General Fund** comprises 15 percent of the Transportation Sales Tax revenue and is required to be used for planning, design and construction of regional trails. These funds reside in the General Fund as funds for trail construction cannot be housed within the Road and Bridge fund.
  - **Sales Tax Carryover** includes \$5.1 million in carryover between the Transportation Sales Tax and Trails Sales Tax funds. This large carryover amount is the result of recent increases in sales tax revenue due to the improved economy and the focus on flood-related repairs. Carryover of sales tax funds is down compared to 2016 and is projected to continue to decline as these projects are implemented.
- **Federal, State, and Other Grant Funding** includes \$ 5.4 million in anticipated new and existing federal grants, state grants, and funding from project partners that are forecast to be expended on specific 2018 projects for roadway, transit, and trail capital projects. Though these grants are received in a particular year, most are multi-year in nature and expenditures occur over a number of years as projects are designed, constructed and implemented. A full list of all existing transportation grants for all years is shown in Table 3 (page 7).
- **Road and Bridge Carryover** includes \$3.3 million in carryover in the Road and Bridge fund from 2017, including \$365,000 remaining for repaving of subdivision community use roads.

### **2018 Budget Analysis - Expenditures**

**Table 2** (next page) summarizes the 2018 Transportation budget by major investment category, based on the proposed capital program expenditures. Specific funding allotments are highlighted below.

**Table 2**  
**2018 Transportation Investment Category Summary**

<b>Investment Categories</b>	<b>Amount</b>	<b>% of Budget</b>	<b>% of CIP</b>
1. Road & Bridge Ongoing Maint. & Operations	\$ 8,980,000	13%	-
2. General Fund Administration	\$ 4,620,000	7%	-
3. Road & Bridge Flood Repairs	\$ 35,600,000	52%	65%
4. Road & Bridge Long-Term Rehabilitation	\$ 9,110,000	13%	17%
5. Roadway Shoulder / Safety	\$ 3,695,000	5%	7%
6. Regional Trails	\$ 2,620,000	4%	5%
7. Early Project Planning/Preliminary Engineering	\$ 2,050,000	>3%	4%
8. Transit / TDM programs	\$ 1,775,000	>3%	3%
<b>Total 2018 Transportation CIP</b>	<b>\$ 54,850,000</b>	<b>80%</b>	<b>100%</b>
<b>Total 2018 Transportation Investments</b>	<b>\$ 68,450,000</b>	<b>100%</b>	

- **Flood Repairs – Sixty-five percent (65%)** of the CIP is allocated to repairs of county roads and bridges that were damaged in the September 2013 Flood. Includes expenditures on two new flood recovery efforts funded with \$2.9 million in Community Development Block Grant funds allocated to the County in 2017.
- **Road & Bridge Long Term Rehabilitation- Seventeen percent (17%)** of capital funds are programmed for the long-term maintenance and reconstruction of the county roadway system). These reconstruction and rehabilitation expenditures include the programmed rehabilitation of all county roads, including a specific allocation towards the paving of major community use roads within subdivisions.
- **Roadway Shoulders and Safety – Seven percent (7%)** of Capital funds are programmed to improve road safety and add shoulders to the county roads that do not have them.
- **Regional Trails–Five percent (5%)** of CIP funds are programed out of the Countywide Transportation Sales Tax for development of the regional trails system.
- **Transit / TDM – Four percent (4%)** of the CIP comes from the Countywide Sales Tax and is dedicated to transit support and Travel Demand Management programs that help reduce demand on transportation facilities and infrastructure.
- **Early Project Planning and Preliminary Engineering – Three percent (3%)** of the CIP funds are programed for the planning and development of future projects.

### **State and Federal Funding**

A portion of the expenditures listed above include funding commitments to match state or federal grants on specific projects. In total, \$22.9 million in state, federal, and local funding is currently committed towards these projects.

**Table 3** (following page) lists the county's current transportation-related grants that have either already been allocated, or have been awarded and are expected to be funded in the

next year. Each grant amount is shown along with the matching funds from county funding sources or, in some cases the commitment includes funding from project partners. Funds expended represent the amount of project funds already used in design and construction of these projects. The funds remaining amount is the amount of all funding left to complete the project.

**Table 3**  
**Summary of County's Federal & State Transportation Grants**

Project	Grant Amount	Local Match*	Amount Completed (12/31/17)	Funds Remaining (1/1/18)
<b>General Fund Grants</b>				
Williams Fork Multi-use Path	\$ 630,000	\$ 160,000	\$ --	\$ 790,000
Resiliency Study Grant (HUD)	\$ 180,000	\$ --	\$ --	\$ 180,000
Trip Tracker (Safe Routes grant)	\$ 90,000	\$ 20,000	\$ 5,000	\$ 105,000
Mobility 4 All (JARC)	\$ 45,000	\$ 10,000	\$ --	\$ 55,000
<b>Total Grants Fund</b>	<b>\$ 945,000</b>	<b>\$ 190,000</b>	<b>\$ 5,000</b>	<b>\$ 1,130,000</b>
<b>Road and Bridge Grants</b>				
<b>Match from Non-sales tax R&amp;B Funding</b>				
Boulder Canyon Trail	\$ 4,375,000	\$ 1,095,000	\$ 370,000	\$ 5,100,000
Brainard Lake Road Const.	\$ 3,440,000	\$ 860,000	\$ 620,000	\$ 3,680,000
Boulder County Quiet Zones	\$ 1,390,000	\$ 370,000	\$ 20,000	\$ 1,740,000
South Heatherwood Pedestrian	\$ 350,000	\$ 90,000	\$ --	\$ 440,000
Niwot Connectivity w/ LID	\$ 100,000	\$ 250,000	\$ 330,000	\$ 20,000
<b>Total R&amp;B Capital Fund</b>	<b>\$ 9,655,000</b>	<b>\$ 2,665,000</b>	<b>\$ 1,340,000</b>	<b>\$ 10,980,000</b>
<b>Match from Sales Tax R&amp;B Funding (Roads &amp; Transit)</b>				
95 <sup>th</sup> Street Intersections	\$ 950,000	\$ 105,000	\$ 1,055,000	\$ --
US287 / Isabelle Intersection	\$ 2,625,000	\$ 295,000	\$ --	\$ 2,920,000
South Boulder Rd (Lafayette)	\$ 2,195,000	\$ 620,000	\$ --	\$ 2,815,000
71 <sup>st</sup> Street Multi-use Path	\$ 860,000	\$ 215,000	\$ --	\$ 1,075,000
"L" Transit Service	\$ 1,665,000	\$ 415,000	\$ 625,000	\$ 1,455,000
"FLEX" Extension to Boulder	\$ 1,155,000	\$ 290,000	\$ 450,000	\$ 995,000
Bus-then-Bike TAP	\$ 450,000	\$ 115,000	\$ 100,000	\$ 465,000
SH7 BRT Study & Design	\$ 400,000	\$ 50,000	\$ 150,000	\$ 300,000
Bus-then-Bike Larimer County	\$ 370,000	\$ --	\$ 105,000	\$ 265,000
Countywide Bus Stop Improv.	\$ 220,000	\$ 55,000	\$ 150,000	\$ 125,000
Real-time Transit Marketing	\$ 55,000	\$ 15,000	\$ 45,000	\$ 25,000
Lafayette Transit Support	\$ 80,000	\$ 40,000	\$ 100,000	\$ 20,000
Public Information Displays	\$ 310,000	\$ 55,000	\$ --	\$ 365,000
<b>Total Sales Tax Grants</b>	<b>\$ 11,335,000</b>	<b>\$ 2,270,000</b>	<b>\$ 2,780,000</b>	<b>\$ 10,825,000</b>
<b>Total Grants</b>	<b>\$ 21,935,000</b>	<b>\$ 5,125,000</b>	<b>\$ 4,125,000</b>	<b>\$ 22,935,000</b>

\* "Local Match" includes funding from project partners (CDOT, cities and towns) and from previous years.

- **New grants** for 2018 include federal funds to construct an improved pedestrian crossing of 75th Street at the southern entrance to the Heatherwood subdivision and federal funds for a Transportation Resiliency Study to identify ways to better protect the County's transportation infrastructure.
- **Continuing grants** include state funding for an extension of the Boulder Canyon Trail; the reconstruction of Brainard Lake Road; a new multiuse path along 71st Street; a multiuse path along Williams Fork Trail; operational support for the "L", and the FLEX transit services; and continuing federal funds for the Mobility 4 All program.
- **Completed grants.** The 95th Street Intersections Hazard Elimination grant was completed in 2017. As such it is included with a zero in the "Funds Remaining" column.

### **2018 Capital Improvement Program**

**Table 6** (page 15) lists the projects for the 2018 Boulder County Transportation Department Capital Improvement Program (CIP) along with those anticipated in 2019. The CIP is separated into major investment categories in order to more easily understand how available transportation funds are programmed. Major activities within each investment category are highlighted below.

1. **Road and Bridge Long-Term Rehabilitation** funded from the Road and Bridge fund, includes the following activities and programs that are necessary to maintain the transportation system:

- **Facility Maintenance/ Equipment Replacement** includes activities to operate and maintain paved roads including striping, repairing and replacing guardrail; repairs to sidewalks, curbs and gutters; transit stops; and concrete paths along with ongoing replacement of major capital equipment such as snowplows, speed trailers, trucks, and road graders. Capital equipment purchases were originally approved during the 2018 budget process. (*see attached Equipment Replacement List*).

***Proposed Equipment replacement for 2019*** consists of four all-wheel-Drive snow plows that are used to plow mountain roads. Because these plows have a long lead time from order to purchase, we are requesting approval to order those plows in 2018. Payment is due when equipment is delivered which is likely to be late in 2019.

2. **Bridge / Minor Structure Rehabilitation** includes design and rehabilitation of bridges to ensure their continued structural and operational safety through an ongoing bridge inspection and management system.

- **Asphalt Overlays / Resurfacing:** Paved roads must receive regular additional layers of asphalt or chip seal in order to optimize the pavement life; this effort is guided by a multi-year long-term resurfacing plan that incorporates life-cycle expectation of the county roadway and forecasts resurfacing needs.
- **Subdivision Community-Use Road Rehabilitation:** Starting in 2014, the Transportation Department began a targeted rehabilitation program to restore roads within subdivisions that serve a community use such as schools, playgrounds, parks, and places of worship.
- **Subdivision Paving Incentive Fund.** The SPIF fund is a specific allocation created to assist individual neighborhoods that form Public Improvement Districts (PIDs) in order to fund the on-going resurfacing needs of their subdivision roads. The incentive fund



contributes a one-time portion of the initial cost to reconstruct all the roads within the district.

- Contingency/ Reserves: A reserve is maintained in order to address unexpected expenses such as cost over-runs, unanticipated emergency repairs, and new minor projects and initiatives including needed repairs to traffic signals and guardrails.
3. **Road and Bridge Flood Repairs** includes design, permitting and construction of flood repairs to county facilities damaged by the September 2013 Flood. Because all flood repairs are currently either designed or under design, the implementation schedules are based largely on which projects are ready to go and which require additional design, permitting, and/or right of way acquisition.

Flood repairs are categorized on the following basis:

- ***Priority 1: Complete Construction of Contracted Projects.*** Seven flood projects are currently under construction or under contract to be constructed in the first half of 2018. These include completing the reconstruction of Four Mile Canyon Drive above Gold Run; Gold Run Road through Salina; Wagon Wheel Gap Road; two James Canyon projects; the Old South St. Vrain bridge; and East County Line over Boulder Creek.
  - ***Priority 2: Start Construction on 2018 Projects.*** Begin construction on Lower Four Mile Canyon Drive; the Logan Mill Bridge replacement over Four Mile Creek; the Lefthand Canyon Drive at Glendale Gulch road repair, and repair of Lefthand Drive road embankment in Ward.
  - ***Priority 3: Complete Design, Permitting, and Right of Way Acquisition for remaining flood repairs.*** After the end of 2018, Boulder County anticipates having three flood projects remaining for advertisement and construction: the Utica/Lefthand Retaining Wall; the Sugarloaf Wall Reconstruction; and the Reconstruction of North County Line Road over the Little Thompson (2015 Event). Boulder County plans to complete design, right-of-way acquisition and permitting for these projects by the end of 2018.
4. **Roadway Safety Improvements and Transit Projects** funded from the Road and Bridge fund and the Transportation Sales Tax fund includes new projects and activities that improve safety and mobility. This category consists of:
- Transit/TDM includes support of enhanced transit service along with related transit education and pass support programs on the “Y” (Lyons to Boulder), CLIMB to Gold Hill, FLEX (Boulder/Longmont to Fort Collins), and “L” (Longmont to Denver) routes. The Mobility-4-All program provides improved transportation options to low-income families, the Trip Tracker program provides incentives to elementary and middle school students in the St. Vrain Valley School District. . The Hessie Shuttle is funded through the County general fund.
  - Road/ Bikeway Safety includes shoulders and overlay of roads to increase safety of both bikers and motorists, intersection improvements, and improved bicycle facilities along roadways within the county.
  - Planning and Preliminary Engineering includes scoping, planning, coordination, and preliminary design of projects that are anticipated for implementation in future years.

5. **Regional Trails Projects** include construction of a new section of the LOBO trail along Williams Fork Trail in Gunbarrel, the initiation of a master plan for a proposed soft-surface trail along the RTD right-of-way between Boulder and Erie; the design of new trails along the St. Vrain Greenway and Jay Road east of Boulder and the construction and upkeep of infrastructure to facilitate the use of the regional trail system.

### **Countywide Transportation Sales Tax**

While capital improvements for Boulder County are budgeted on an annual basis, the multi-year nature of planning, designing, permitting, and constructing transportation projects requires a long-term plan for program implementation.

The **Countywide Transportation Sales Tax Phasing Plan (attached)** lists the 43 road and bridge projects and 13 transit projects that are to be completed with the sales tax funds, along with the 20 projects to be completed with the Trails portion of the sales tax-funded program. Each project is listed with an approximate timeline for implementation along with an indication of current status. A map of each of the Transportation Sales Tax projects is also attached.

Transportation is presenting the annual update of the Countywide program to the Consortium of Cities Board at the August meeting and will provide a report to the Board on the outcome of that meeting..

### **Measures of Effectiveness for Capital Program**

The 2018 CIP is based on several long-range capital plans which each establish goals and objectives for the element for which the plan was developed. **Table 4** (following page) lists six measures of effectiveness (MOEs) that indicate Boulder County's progress with their Transportation Capital program.

1. **Complete Flood Repairs.** The long term repairs to road and bridge facilities damaged by the September 2013 flood event have taken many years of design, permitting, and construction to complete. To date, Boulder County has completed twenty-eight of the original forty-two road and bridge flood repair projects. Two new projects: the Lefthand Creek crossing of Lefthand Canyon Drive at Glendale Gulch and the repairs to Utica Street in the Town of Ward were added in 2017 in response to the availability of new recovery funding from the Federal Housing and Urban Development Agency.

Only five projects are anticipated to remain at the end of 2018: work on Glendale Gulch Flood repairs; completion of the Ward/Utica Street project; North County Line Road over Little Thompson (2015 Event); Four Mile Canyon Drive and the Sugarloaf Wall repairs.

2. **Road Resurfacing.** In order to maintain pavement quality at the most cost effective level for the primary network (arterials, collector roads, and local roads outside of subdivisions), Boulder County needs to resurface between eight to ten miles of roads per year. This equates to four percent (4%) of the 248 miles of paved roads in the county's primary network and assumes a 25-year pavement life. Based on averages over the past seven years, Boulder County has been meeting this resurfacing goal. Much of our success has been due to the resurfacing of roads associated with project work related to the 2013 flood. Of the 27 miles of County roads paved in the past two years (2016 and 2017), 38 percent (11 miles) were completed as a necessary part of the County's flood recovery efforts. This trend continues through 2018, as over half of the planned seven miles of resurfacing is a result of the flood recovery efforts.

**Table 4  
Transportation CIP – Measures of Effectiveness**

CIP Objectives	2015		2016		2017		2018		2019		2020		2021		2022	
			<i>actual</i>				<i>proposed</i>				<i>forecasted</i>					
<b>1. Complete Flood Projects in 5 yrs.</b>																
<i>Flood Projects Remaining at end-of-year</i>	30		23	16*			5	2								
<i>Total Flood Expenditures (\$M each year)</i>	\$ 6.8		\$ 36.6	\$ 24.3			\$ 35.6	\$ 7.4								
<i>Percent Complete (running total)**</i>	16%		42%	64%			91%	97%								
<b>2. Overlay Primary Network**</b>																
<i>10 miles per year (miles)</i>	6.8		13.2	13.6			7.1	6.4								
<i>7-Year Running Average (miles)</i>	8.5		7.7	8.5			8.5	8.2								
<i>Pavement Condition – primary network</i>	7.8		7.5	7.5			7.4	--								
<b>3. Re-stripe 1/3 of all Roads</b>																
<i>83 miles per year (miles)</i>	90		74	63			87	62								
<i>4-Year Running Average (%)</i>	34%		34%	32%			32%	29%								
<b>4. Resurface Community-Use Roads</b>																
<i>\$955 K per year on CU Roads (\$,000)</i>	\$ 980		\$ 1,160	\$ 425			\$ 200	\$ 925								
<i>Running Average (\$,000 per yr)</i>	\$ 845		\$ 950	\$ 820			\$ 695	\$ 735								
<i>Pavement Condition – CU Roads</i>	6.4		6.0	5.5			5.4	--								
<b>5. Replace Capital Equipment</b>																
<i>\$2.2 M per year on replacement (\$,000)</i>	\$ 1,596		\$ 956	\$ 1,607			\$ 2,800	\$ 1,610								
<i>5-Year Running Average (\$M per yr)</i>	\$ 1.1		\$ 1.1	\$ 1.2			\$ 1.5	\$ 1.7								
<b>6. Minor Structure Replacement</b>																
<i>Replace 3 “Critical” Struct per year**</i>	--		--	2			2	3								
<i>Average per year (since 2017).</i>							2.0	2.5								

\*\* replaced as part of “structures” program from 2017 list. Does not include flood recovery or sales tax projects.  
\* includes two new flood projects from HUD funding

3. **Road Striping.** Striping is a critical safety measure for road operations and maintenance, particularly due to the aging population of drivers. While we are currently on-track with our goal to re-stripe one-third of the previously striped roads each year, it is likely that the amount of striping may be reduced over the coming years in favor of other critical projects.
4. **Subdivision Paving.** Starting in 2014, the Board of Commissioners allocated \$955,000 per year to address the need to resurface paved community use roads within the county subdivisions. The cost of the program fluctuates year-to-year depending on the length and condition of roads within a particular subdivision. Expenditures through 2017 have averaged \$820,000 per year. No resurfacing is scheduled for 2018, however scheduled chip seal treatments for Camp Eden and Copperdale subdivisions is anticipated to greatly extend the life of those pavements. Resurfacing of subdivisions will increase in 2019 with resurfacing of Deer Trail Drive in Boulder Heights.
5. **Capital Equipment Replacement.** Boulder County owns 264 pieces of equipment used to operate and maintain the county roads and bridges, everything from a set of four flatbed trailers worth \$6,400 each to a \$240,000 sewer jet truck used to clean culverts, storm drains and bridge abutments. The county owns and operates a fleet of 86 snow plows, eighteen of which are all-wheel-drive (AWD) to enable access to county roads and residents in the high mountain areas of the county.

The County's *Fleet Replacement Plan for Road Maintenance (2016)* recommends replacing an average of 18 pieces of road maintenance equipment each year over a ten-year period at an average annual cost of \$2.2 million. The 2016 plan estimates that annual needs could be lower by up to one million dollars once the replacement cycle has "caught up" and equipment is replaced on a more cost-effective schedule. At current funding levels, however, the catch-up period is likely to extend to fifteen years (2016-2031).

6. **Minor Structure Replacement.** Boulder County maintains over 370 *Minor Structures* throughout the county. Minor structures are defined as a culvert or box culvert that is greater than 48 inches in diameter but having less than a 20-foot span. A county inventory in 2012 identified twenty of these structures having reached the end of their useful life and needing replacement. By the end of 2018, thirteen of the original twenty will have been replaced. However, a new inventory of structures completed in 2017 has identified an additional ten structures in need of replacement. This new total indicates a need to replace at least three structures per year in order to get all sixteen replaced by 2022.

### **Long Term Road and Bridge Capital Needs**

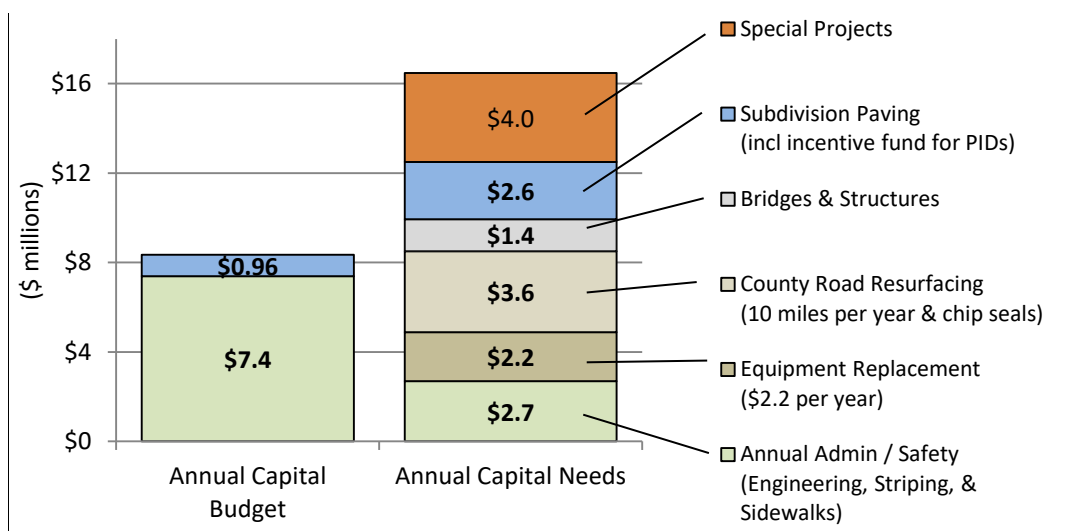
The Road and Bridge fund is currently meeting the majority of its performance measures as described above. However this success is largely due to the contributions of the Countywide Transportation Sales Tax program and the \$100 million in federal, state and local flood funds utilized over the past three years.

All cost and revenue assumptions listed are in 2018 dollars. Because construction costs continue to increase faster than revenues, the shortfalls identified in this section are likely to be greater than indicated.

The current annual appropriation for non-sales tax, non-flood, road and bridge capital programs is inadequate to fund the on-going transportation capital needs of the county. **Figure 1** (next page) shows the \$8.3 million in estimated new revenues appropriated in 2018 and compares that to the \$16.5 in annual needs as identified in county transportation plans and programs.

Each year, approximately \$2.7 million is needed for Road and Bridge fund program administration and funding for several engineering staff, sidewalk repair, railroad crossing improvements, road striping, signal repairs and other safety related activities. The Capital Equipment Replacement Plan identifies \$2.2 million needed each year to replace aging road maintenance equipment and catch up the replacement cycle to a sustainable \$1.2 million per year need. The county’s five-year Resurfacing Plan recommends repaving ten miles and chip sealing 25 miles of primary roads each year at an average cost of \$360,000 per mile. Repairing and replacing our bridges and structures will cost \$1,400,000 per year based on over five years to replace the sixteen structures currently on the County’s “critical replacement” list.

**Figure 1:  
Road and Bridge Fund  
Annual Capital Budget versus Annual Need**



This total annual need of over \$16.5 million per year also includes the need to catch up on resurfacing the 27 miles of Community Use roads and 120 miles of paved local non-community use roads with county subdivisions. Current estimates place those needs at \$1.5 million per year to repave the remaining 14 miles of Community Use roads and \$1.0 million per year for an incentive fund to assist neighborhoods in forming Improvement Districts that would fund all of the resurfacing needs for non-community roads after five years.

In addition to the safety improvements, road overlays, bridge repairs and subdivision paving needs, the county has \$20 million in special projects, \$16 million of which remain unfunded.

Even without the additional special projects and any attempt to address the subdivision paving needs, the total annual needs of the road and bridge capital fund exceeds the amount available. With the subdivision paving and special projects, the total need of \$16.5 million in annual needs exceeds the current 2018 capital budget of \$8.3 million by \$6.2 million each year.

**Table 5** (next page) shows the estimated \$83 million in non-sales tax, non-grant funded transportation capital program needs over a five-year period (2018-2022), and compares those needs to our current planned expenditures if the current capital budget is maintained. Overall the program shows a \$37 million shortfall over five years, representing the work that we are not doing to maintain our current system.

**Table 5**  
**Five Year (2018-2022)**  
**Capital Needs versus Funds Available**

<b>Project</b>	<b>Capital Needs (2018-2022)</b>	<b>Planned Expenditures* (2018-2022)</b>	<b>Net Shortfall (2018-2022)</b>
<b>Project Administration</b> (staffing, project supplies, contingency)	\$ 6,100,000	\$ 5,000,000	\$ - 1,100,000
<b>Safety Program</b> (road striping, guardrail, RR Xings and signal repair)	\$ 3,600,000	\$ 2,800,000	\$ - 800,000
<b>Sidewalk Repairs / Alt Modes Maintenance</b> (Repair sidewalks, transit stop and pathways Maint.)	\$ 3,800,000	\$ 2,000,000	\$ - 1,800,000
<b>Capital Equipment</b> (snow plows and other equipment for Road Maint.)	\$ 11,600,000	\$ 9,400,000	\$ - 2,200,000
<b>Road Resurfacing</b> (Asphalt overlays and chip seal of primary network.)	\$ 18,100,000	\$ 15,700,000	\$ - 2,400,000
<b>Bridge and Structure Repair</b> (Bridge repair and replacement of Minor Structures.)	\$ 7,100,000	\$ 4,200,000	\$ - 2,900,000
<b>Subdivision Paving</b> (Paving of Community Use Roads in subdivisions)	\$ 12,800,000	\$ 2,700,000	\$ - 10,100,000
<b>Special Projects</b> (Large capital projects incl. Boulder Canyon Trail, 95th over Boulder Creek, Eldora Ski Road, South Boulder Road replacement and intersection improvements)	\$ 19,900,000	\$ 3,800,000	\$ - 16,100,000
<b>FIVE YEAR TOTAL</b>	<b>\$ 83,000,000</b>	<b>\$ 45,600,000 (55%)</b>	<b>\$ - 37,400,000</b>

\* Planned expenditures are based on long-term capital plans and do not represent a commitment by the County.

### **Staff Recommendation**

The Transportation Department recommends approving the 2018 Capital Improvement Program as listed in Table 6, including initiating the contracting required in 2018 that may be necessary to complete 2019 projects in a timely and cost effective manner (contingent on approval of the 2019 budget).

We recommend continuing to prioritize programs by focusing on the following:

- (1) maintenance, operations and safety of the existing multimodal county transportation system;
- (2) replacement of the maintenance fleet in a timely and cost-effective basis;
- (3) cost-effective resurfacing of our primary network;
- (4) replacement of unsafe structures and bridges;

**Table 6  
Boulder County Transportation Department  
2018/2019 Capital Improvement Program**

<b>Road and Bridge – Long Term Rehabilitation</b>		
<b><u>Facility Maintenance / Equipment Replacement</u></b>	<b>2018</b>	<b>2019*</b>
Road Maintenance Equipment Replacement	\$ 2,800,000	\$ 1,600,000
Epoxy Striping Program (annual)	\$ 440,000	\$ 260,000
Olde Stage Road Retaining Walls	\$ 395,000	\$ --
Subdivision Sidewalk Repairs	\$ 320,000	\$ 705,000
Jay Road Pedestrian Crossings	\$ 280,000	\$ --
Boulder County Quiet Zone Design (incl. fed funds)	\$ 250,000	\$ 1,510,000
South Boulder Road Concrete Repairs (design)	\$ 250,000	\$ --
9th Avenue Railroad Crossing (w. City of Longmont)	\$ 145,000	\$ --
Alt Modes Facilities Maintenance (annual)	\$ 65,000	\$ 65,000
South Heatherwood Pedestrian Safety (incl. fed funds)	\$ 60,000	\$ 450,000
Jay Road Striping Bike/Ped Safety	\$ 50,000	\$ --
Guardrail Repair and Replacements (annual)	\$ 40,000	\$ 40,000
Neighborhood Quick Response (annual)	\$ 40,000	\$ 40,000
Traffic Signal Repairs (annual)	\$ 40,000	\$ 30,000
Vermillion Road Railroad Crossing Replacement	\$ 25,000	\$ --
North 63rd Street Pathway Repair	\$ --	\$ 100,000
<b>Subtotal – Capital Maintenance</b>	<b>\$ 5,200,000</b>	<b>\$ 4,700,000</b>
<b><u>Minor Structures / Bridge Rehabilitation</u></b>		
Lee Hill Culvert at Six Mile Crk	\$ 370,000	\$ --
Magnolia Drive Bridge Repairs	\$ 285,000	\$ --
Marysville Bridge Repairs	\$ 50,000	\$ --
55th Street Culvert at Boulder / White Rock Ditch	\$ 50,000	\$ 215,000
61st Street Culvert at Four Mile Canyon Crk.	\$ 50,000	\$ 330,000
Copperdale Culvert Replacement	\$ 30,000	\$ --
Pinebrook Loop Culvert Replacement	\$ 20,000	\$ --
Fairview over Marshalldale	\$ --	\$ 190,000
2020 Minor Structures Design (x3)	\$ --	\$ 355,000
<b>Subtotal – Structure Repairs</b>	<b>\$ 855,000</b>	<b>\$ 1,090,000</b>
<b><u>County Road Overlays / Resurfacing</u></b>		
Lee Hill Drive Reconstruction	\$ 790,000	\$ 2,850,000
Brainard Road Reconstruction (local match)	\$ 660,000	\$ --
Annual Chip Seals (materials only)	\$ 500,000	\$ 310,000
Upper Four Mile Paving (incl. homeowner funds)	\$ 200,000	\$ --
Pipe replacements, tree removals, & pavement design	\$ 70,000	\$ 60,000
Neva Road Overlay - Franklin to 83rd	\$ 20,000	\$ 450,000
Niwot Road Overlay -Hwy 119 to High School	\$ --	\$ 420,000
<b>Subtotal – Road Resurfacing</b>	<b>\$ 2,240,000</b>	<b>\$ 4,090,000</b>

<b>Long Term Rehabilitation (cont.)</b>		
<b><u>Community Use Road Resurfacing</u></b>	<b>2018</b>	<b>2019*</b>
ADA Sidewalk Compliance for subdivision resurfacing	\$ 240,000	\$ 120,000
Chip Seal of subdivision roads	\$ 60,000	\$ 135,000
Boulder Heights Paving - Deer Trail Drive	\$ --	\$ 790,000
<b>Subtotal – Subdivision Paving</b>	<b>\$ 300,000</b>	<b>\$ 1,045,000</b>
<b><u>Subdivision Incentive Fund Resurfacing</u></b>		
Burgundy Park PID (formed 2017)	\$ --	\$ 580,000
Knollwood Metro District Resurfacing	\$ --	\$ 360,000
<b>Subtotal – Incentive Fund Resurfacing</b>	<b>\$ --</b>	<b>\$ 940,000</b>
<b><u>Road and Bridge Contingencies / Reserves</u></b>		
Project Contingencies	\$ 405,000	\$ 510,000
Pavement Inventory System Update	\$ 110,000	\$ 5,000
<b>Subtotal – Contingency / Reserves</b>	<b>\$ 515,000</b>	<b>\$ 515,000</b>
<b>TOTAL LONG TERM FACILITIES REHABILITATION</b>	<b>\$ 9,110,000</b>	<b>\$ 12,380,000</b>
<i>Pre-Order of 2019 Snow Plows encumbered in 2018</i>	<i>\$ 1,400,000</i>	<i>\$ - 1,400,000</i>
<b>Total Requested for Contracting and Construction</b>	<b>\$ 10,510,000</b>	<b>\$ 10,980,000</b>

<b>Roadway Safety and Transit Access</b>		
<b><u>TDM / Transit Component *</u></b>	<b>2018</b>	<b>2019*</b>
Real Time Transit Marketing (incl. fed funds)	\$ 350,000	\$ --
Larimer County Stop Improvements (all federal)	\$ 285,000	\$ --
Highway 7 Bus Rapid Transit Facility Design (all federal)	\$ 240,000	\$ --
CTEPS / TDM (Transit Education and Pass Support)	\$ 210,000	\$ 210,000
Final Mile Stop Improvements (incl. fed funds)	\$ 200,000	\$ --
Countywide Stop Improvements (incl. fed funds)	\$ 125,000	\$ --
Lafayette Transit Support (local match)	\$ 105,000	\$ 140,000
"L" Route Service Buy Up (local match)	\$ 70,000	\$ 80,000
"Y" Route Buy Up	\$ 70,000	\$ 70,000
FLEX to Larimer County (local match)	\$ 45,000	\$ 200,000
Gold Hill CLIMB	\$ 30,000	\$ 30,000
Louisville Stop Improvements	\$ 25,000	\$ --
Lyons Eco Pass Support	\$ 20,000	\$ 20,000
<b>Subtotal – Transit / TDM</b>	<b>\$ 1,775,000</b>	<b>\$ 750,000</b>

\* TDM projects funded from the General Fund are not included in CIP table funding totals



<b>Roadway Safety and Transit Access (cont.)</b>		
<b><u>Road / Bikeway Safety Component</u></b>	<b>2018</b>	<b>2019*</b>
Highway 42 / South Street Intersection (county share)	\$ 1,000,000	\$ --
US287 / Isabelle Intersection (incl. fed funds)	\$ 590,000	\$ 4,020,000
95 <sup>th</sup> Street Intersection Construction (remaining)	\$ 560,000	\$ --
71st Street Shoulders (incl. federal & city funds)	\$ 390,000	\$ 2,750,000
Hwy 170 Shoulders (culvert replacement)	\$ 375,000	\$ --
South Boulder Road Widening – Lafayette (county share)	\$ 300,000	\$ 3,700,000
111th Street Widening – Lafayette (county share)	\$ 250,000	\$ --
Boulder Canyon Bike Trail – CDOT (county share)	\$ 150,000	\$ 500,000
Hwy 42 Ped. Underpass – Louisville (county share)	\$ 80,000	\$ 1,000,000
<b>Subtotal – Road / Bikeway Safety</b>	<b>\$ 3,695,000</b>	<b>\$ 11,970,000</b>
<b><u>Planning and Preliminary Engineering</u></b>		
East County Line Road Master Plan – Longmont to Erie	\$ 250,000	\$ --
SH170 Shoulders – Hwy 93 to Eldorado Springs	\$ 240,000	\$ --
Hygiene Road Master Plan – US36 to 75th Street	\$ 220,000	\$ --
95th Street Reconstruction – Lookout to Longmont	\$ 180,000	\$ 3,900,000
120th Street Master Plan	\$ 140,000	\$ --
Transportation Master Plan Update	\$ 50,000	\$ 50,000
Road & Bridge fund staffing and administration	\$ 640,000	\$ 435,000
Road Sales Tax staffing and administration	\$ 330,000	\$ 340,000
<b>Subtotal – Planning / Prelim Engineering</b>	<b>\$ 2,050,000</b>	<b>\$ 4,725,000</b>
<b>TOTAL BIKEWAY SAFETY AND TRANSIT ACCESS</b>	<b>\$ 7,520,000</b>	<b>\$ 17,445,000</b>

<b>Regional Trails Projects</b>		
	<b>2018</b>	<b>2019*</b>
LOBO - Williams Fork Trail Multi-use Path (incl. fed funds)	\$ 1,670,000	\$ --
RTD Rail Trail Master Plan (Erie to Boulder)	\$ 380,000	\$ --
St Vrain Greenway Planning / Design (match for fed funds)	\$ 180,000	\$ 560,000
LOBO Trail - Jay Road Connection	\$ 100,000	\$ 700,000
Regional Trails Bathrooms at Lefthand Grange Park	\$ 60,000	\$ --
US36 Bikeway Maintenance	\$ 20,000	\$ 20,000
LOBO Trail – Four Mile BNSF underpass	\$ --	\$ 780,000
CR 130 Trail	\$ --	\$ 450,000
Trails Planning / General Repairs	\$ 110,000	\$ 110,000
<b>TOTAL REGIONAL TRAILS</b>	<b>\$ 2,620,000</b>	<b>\$ 2,620,000</b>

*NOTE: Totals for Trails projects includes expenditures from within the County Grants Fund*

<b>Road and Bridge Flood Recovery Projects</b>		
<b><u>Complete Construction of Contracted Projects</u></b>	<b>2018</b>	<b>2019</b>
Four Mile Canyon – Wall Street	\$ 6,860,000	\$ --
Gold Run Road through Salina	\$ 5,860,000	\$ --
Wagonwheel Gap / Pinto Drive	\$ 5,490,000	\$ --
James Canyon Flood Repairs	\$ 5,250,000	\$ --
James Canyon Drive in Jamestown	\$ 2,010,000	\$ --
Old South St Vrain Bridge	\$ 730,000	\$ --
East County Line Road over Boulder Creek	\$ 350,000	\$ --
<b>Subtotal – Under Construction</b>	<b>\$ 26,550,000</b>	<b>\$ --</b>
<b><u>Start Construction of 2018 Projects</u></b>		
Four Mile Canyon Drive	\$ 3,950,000	\$ 7,000,000
Logan Mill Bridge	\$ 2,700,000	\$ --
Ward Paving (HUD funded)	\$ 1,460,000	\$ 900,000
Glendale Gulch Flood Repairs (HUD funded)	\$ 740,000	\$ 100,000
Airport Road over Lefthand Creek	\$ 50,000	\$ --
63rd Street over Lefthand Creek (2015 Flood)	\$ 40,000	\$ --
<b>Subtotal – 2018 Projects</b>	<b>\$ 8,940,000</b>	<b>\$ 8,000,000</b>
<b><u>Complete Remaining Projects</u></b>		
Sugarloaf Road Repairs	\$ 110,000	\$ 3,180,000
North County Line Road (2015 Flood)	\$ --	\$ 385,000
<b>Subtotal – Remaining Projects</b>	<b>\$ 110,000</b>	<b>\$ 3,565,000</b>
<b>TOTAL FLOOD RECOVERY EXPENDITURES</b>	<b>\$ 35,600,000</b>	<b>\$ 11,565,000</b>

**APPENDIX "C"**  
**BOULDER COUNTY CIP - 2007 Sales Tax**  
**CURRENT PHASING PLAN**

**DRAFT**

		ESTIMATED TIMELINE					CURRENT STATUS
		Pre-2018	2018	2019	2020-2022	2022 - 2025	
<b>CURRENT ROAD/SHOULDER SAFETY PROJECTS</b>							
1	SH 7 / E. County Line Road Intx. *	*****					Completed
2	McCaslin / Coalton Intersection *	*****					Completed
3	SH 119 / N. 63rd St. Intersection Construction *	*****					Completed
4	East County Line Shoulders - Austin to SH 7	*****					Completed
5	Lee Hill Drive - 4th Street to Olde Stage Road	*****					Completed
6	Cherryvale Road Shoulders - Baseline to Arapahoe	*****					Completed
7	Ped Connection to City of Boulder Euclid Station *	*****					Completed
8	N. 63rd Bridge over Lefthand Creek *	*****					Completed
9	Valmont Reconstruction - 75th to 95th	*****					Completed
10	Neva/Niwot Shoulders - Foothills Highway to N. 63rd	*****					Completed
11	SH 66 / East County Line Road Intersection *	*****					Completed
12	SH 93 Shoulders - SH 170 to SH 128 *	*****					Completed
13	SH119 Pedestrian Underpass -Airport Road *	*****					Completed
14	US 36 Bikeway *	*****					Completed
15	Stone Canyon / US 36 Intersection Improvements	*****					Completed
16	SH119 Pedestrian Underpass - Hover Road *	*****					Completed
17	95th Street Reconstruction - Lafayette to Boulder Creek	*****					Completed
18	Arapahoe Rd. - N. 119th St. to E. County Line Rd	*****					Completed
19	Isabelle / Valmont Reconstruction - 95th St. Intx.	*****	***				Completed
20	SH 42 Improvements - Short Street Intersection *		*****				In Design
21	111th Street Widening *		*****				In Design
22	71st Street - SH 52 to Lookout Road			*****			In Design
23	South Boulder Road Widening - Mallory Drive to 120th *			*****	*****		In Design
24	95th Street Reconstruction - Blder Crk to Longmont			*****	*****		In Design
25	US 287 / Isabelle Road Intersection				*****		In Design
26	East County Line Road Shoulders - Longmont to Hwy52				*****		Concept Only
27	SH 7 / N. 119th St. Intx. *					*****	In Design
28	Niwot Road - 95th to US287					*****	In Design
<b>PROJECTS REQUIRING PLANNING / PRE-ENGINEERING</b>							
29	Isabelle Road Reconstruction - 95th to 109th					*****	Concept Only
30	ECL Road Shoulders - SH52 to Jasper Rd. (no OL)					*****	Concept Only
31	SH170 Shoulders - (Eldorado Springs Drive) *					*****	Concept Only
32	S. 120th Street - Lafayette to Dillon Rd.					*****	On-Hold
33	79th Street - SH 52 to Lookout Road					*****	On-Hold
34	Hygiene Road Shoulders - 75th to US36					*****	On-Hold
<b>PROJECTS REQUIRING ACTION BY PROJECT PARTNER</b>							
35	SH42 Pedestrian Underpass - S. of Paschal *			*****			In Design
36	SH 42 Improvements - Short to Pine Street *				*****		Concept Only
37	120th Street Bridge over Coal Creek *					*****	On-Hold
38	SH66 Improvements - Main to Hover *					*****	Concept Only
39	Ped Connection to Gunbarrel Station - Spine Trail *					*****	On-Hold
40	SH42 Improvements - Pine to Lock Street & intx. *					*****	On-Hold
41	SH42 Improvements - Hecla Drive Intersection *					*****	On-Hold
42	75th Street - Plateau Road Intersection.					*****	On-Hold
43	SH7 Bike Lanes - 5th Avenue to Broadway (Lyons)					*****	On-Hold

\* Project relies on matching funds from local agency / state or federal. Could be accelerated if funding available.

**APPENDIX "C"**  
**BOULDER COUNTY CIP - 2007 Sales Tax**  
**CURRENT PHASING PLAN**

**DRAFT**

		ESTIMATED TIMELINE					CURRENT STATUS
		Pre-2018	2018	2019	2020-2022	2022 - 2025	
<b>TRANSIT PROJECTS</b>							
1	Special Transit Bus Barn *	*****					Completed
2	Transit ITS *	*****					Completed
3	JUMP to Erie / LYNX Service *	*****					Completed
4	BOLT / J Buy-Up *	*****					Completed
5	Longmont Free-Ride Program *	*****					Completed
6	Countywide Bus Stop Improvements	*****					Completed
7	Bus-then-Bike Shelter Construction *	*****	*****				Ongoing
8	Real-Time Bus Stop Displays		*****				In Construction
9	Countwide Pass Support Program	*****	*****	*****	*****	*****	In Operation
10	CLIMB Route *	*****	*****	*****	*****	*****	In Operation
11	"Y" Route	*****	*****	*****	*****	*****	In Operation
12	"FLEX" Fort Collins-to-Boulder *	*****	*****	*****	*****	*****	In Operation
13	"L" Route *	*****	*****	*****	*****	*****	In Operation
<b>TRAIL PROJECTS</b>							
1	St Vrain Greenway - ECL Underpass *	*****					Completed
2	Coal Creek Trail - Mayhoffer to Marshall Mesa *	*****					Completed
3	Rock Creek Trail - Mayhoffer to Coalton *	*****					Completed
4	LOBO Trail - Four Mile SH119 Connection *	*****					Completed
5	LOBO Trail - 95th Street Bridge Construction *	*****					Completed
6	LOBO Trail - 83rd to 95th *	*****					Completed
7	Coal Creek / Rock Creek Trail - 120th to Flagg Park	*****					Completed
8	Coal Creek Trail - Flagg Park to Erie	*****					Completed
9	LOBO Trail - IBM Connector *	*****					Completed
10	LOBO Trail - William's Fork Connector		*****				In Design
11	RTD Rail Trail (formerly UP)- Master Plan		*****	***			In Design
12	LOBO Trail - Jay Road Connection			*****			In Design
13	St. Vrain Greenway - Phase I: Golden Ponds to Pella *			*****			In Design
14	LOBO Trail - Four Mile RR Underpass			*****			In Design
15	Nederland Trails (County Road 130) *				*****		In Design
16	RTD Rail Trail - Erie-to-Boulder				*****	*****	Concept Only
17	St. Vrain Greenway - Phase II: 61st to US36 *					*****	Concept Only
18	Coal Creek Trail - McCaslin Link *					*****	Concept Only
19	St. Vrain Greenway - Phase III: Pella to 61st					*****	On-Hold
20	Feeder Canal Trail - Design and Construction					*****	On-Hold

\* Project relies on matching funds from local agency / state or federal.

NOTE: Numbers reflect implementation chronology and DO NOT reflect project priority.

# 2018 / 2019 CAPITAL EQUIPMENT REPLACEMENT PLAN

DEPT. PRIORITY NUMBER	UNIT NUMBER	YEAR	MAKE	CURRENT MODEL	ESTIMATED REPLACEMENT 2018 COST	ACCUMULATING GROSS-COST	MAINTENANCE COST	LTD MILES/HR.
<b>2018 TRANSPORTATION FLEET REPLACEMENT REQUESTS</b>								
----- FUNDED -----								
1	1186	2003	FORD	FORD F550, REGULAR CAB, DUMP, PLOW, SANDER, DIESEL	\$ 59,462	\$ 59,462	\$ 80,873	119,764
1	1300	2007	WESTERN STAR	TANDEM AXLE DUMP TRUCK	\$ 220,000	\$ 279,462	\$ 199,166	229,900
1	1328	2000	STERLING	WATER TANDEM AXLE TRUCK	\$ 170,000	\$ 449,462	\$ 138,889	103,755
1	1530	2005	CATERPILLAR	AWD MOTOR GRADER	\$ 287,815	\$ 737,277	\$ 211,709	10,410
1	1721	1986	HOMEMADE	TRAILER FLAT BED < 9,999 GVM	\$ 6,400	\$ 743,677	\$ 5,319	-
1	5586	2006	MONROE	SNOW PLOW HEAVY DUTY	\$ 13,704	\$ 757,381	\$ 2,527	-
1	5677	2006	MONROE	V-BOX SANDER CONVEYOR HD	\$ 35,317	\$ 792,698	\$ 11,385	-
1	1305	2005	WESTERN STAR	SEMI TRACTOR TANDEM AXLE TRUCK	\$ 132,200	\$ 924,898	\$ 219,921	226,734
1	1585	2006	GMC	ELGIN T7500 STREET SWEEPER	\$ 296,000	\$ 1,220,898	\$ 240,658	121,228
1	1121	2008	CHEVROLET	SILVERADO 1500 EXT. CAB, BED COVER, 4X4 GAS	\$ 37,166	\$ 1,258,064	\$ 35,370	150,897
1	1320	2007	STERLING	TANDEM AXLE DUMP TRUCK-NO SNOW EQUIP	\$ 236,759	\$ 1,494,823	\$ 166,781	155,382
2	1122	2008	GMC	SIERA 1500 EXT. 4X4	\$ 36,080	\$ 1,530,903	\$ 15,435	68,420
2	1173	2000	FORD	F350, REGULAR CAB, UTILITY BOX 4X4 GAS	\$ 42,000	\$ 1,572,903	\$ 57,171	239,038
2	1178	1999	FORD	F550 SD, DUMP, 4X4 DIESEL	\$ 72,473	\$ 1,645,376	\$ 46,180	65,536
----- UNFUNDED -----								
2	1185	2003	FORD	F550 CREW CAB FLAT BED, GOOSENECK, DIESEL	\$ 57,489	\$ 1,702,865	\$ 44,020	77,409
3	1174	1999	FORD	F550 SD 4X4 DIESEL	\$ 75,294	\$ 1,778,159	\$ 89,722	87,241
4	1137	2005	CHEVROLET	SILVERADO 1500 EXT. CAB 4X4 GAS	\$ 36,080	\$ 1,814,239	\$ 29,995	170,356
4	1120	2000	FORD	F150 CREW CAB 4X4 GAS	\$ 36,080	\$ 1,850,319	\$ 50,618	182,637
4	1101	2000	FORD	EXPLORER 4X4 GAS SUV	\$ 28,123	\$ 1,878,442	\$ 23,883	156,040
4	1182	2003	FORD	F350 REGULAR CAB, 4X4, UTILITY BED, GAS	\$ 42,000	\$ 1,920,442	\$ 86,250	201,674
4	1120	2008	GMC	SIERRA 1500 EXT. 4X4	\$ 37,166	\$ 1,957,608	\$ 50,618	171,789
4	1123	2008	GMC	SIERRA 1500 EXT. 4X4	\$ 37,166	\$ 1,994,774	\$ 18,610	75,484
<b>ROAD &amp; BRIDGE FUND REPLACEMENT TOTALS</b>					\$ 1,994,774	\$ 1,825,098	\$ 2,613,694	
<b>2019 TRANSPORTATION FLEET REPLACEMENT REQUESTS</b>								
----- HIGH PRIORITY TO ORDER IN 2018 FOR 2019 DELIVERY -----								
1410	1998		VOLVO	AWD SNOW PLOW TRUCK	\$ 257,908	\$ 257,908	\$ 244,564	77,256
1411	1998		VOLVO	AWD SNOW PLOW TRUCK	\$ 257,908	\$ 515,815	\$ 279,261	69,529
1501	2006		CATERPILLAR	AWD MOTOR GRADER	\$ 311,301	\$ 827,116	\$ 237,510	8,581
1531	2005		CATERPILLAR	AWD MOTOR GRADER	\$ 311,301	\$ 1,138,416	\$ 181,267	8,848
1588	2014		ISUZU	NPR SWEEPER	\$ 313,664	\$ 1,452,080	\$ 85,036	32,160
----- UNFUNDED -----								
1596	1994		MIDLAND RD WIDE	WA ROAD WIDENER	\$ 73,549	\$ 1,525,629	\$ 68,257	1,105
1599	2013		KASI	IR-480 INFRARED PAVEMENT MAINTENANCE	\$ 39,857	\$ 1,565,486	\$ 7,298	-
1631	2002		JOHN DEERE	310SG RUBBER TIRE BACKHOE LOADER	\$ 121,139	\$ 1,686,625	\$ 89,358	5,312
1632	2001		JOHN DEERE	310SE BACKHOE/LOADER	\$ 121,139	\$ 1,807,765	\$ 89,378	5,300
1725	1998		INTERNATIONAL	UTILITY TRAILER FLAT BED < 9,999 GVM	\$ 10,000	\$ 1,817,765	\$ 7,243	-
1849	2009		ACE ROTO-MOLD	MAG TANK 900 GL WATER TANK/SYS. DUST CONT.	\$ 31,560	\$ 1,849,325	\$ 11,164	-
1588	2014		ISUZU	NPR SWEEPER	\$ 313,664	\$ 2,162,989	\$ 85,035	33,050
5530	2004		CATERPILLAR	GRADER SNOW PLOW HEAVY DUTY	\$ 19,469	\$ 2,182,457	\$ 3,326	-
5537	2000		MONROE	SNOW PLOW HEAVY DUTY	\$ 14,822	\$ 2,197,280	\$ 12,610	-
5564	2013		MONROE	SNOW PLOW HEAVY DUTY	\$ 14,822	\$ 2,212,102	\$ 672	-
					\$ 2,212,102	\$ 4,206,876	\$ 3,227,076	241,141
					\$ 4,206,876	\$ 4,206,876	\$ 2,854,835	

**RESOLUTION 2018 - 85**  
**APPROVAL OF THE 2018 CAPITAL IMPROVEMENT PROGRAM**  
**FOR TRANSPORTATION**

RECITALS

- A. Boulder County has identified transportation projects and programs for Road and Bridge funding, Road Sales Tax funding, and Trails Sales Tax funding over a two year timeframe
- B. Boulder County has the responsibility for on-going improvements to their transportation facilities and programs.
- C. The September 2013 Flood caused approximately \$110 million worth of damage to Boulder County's transportation system which once repaired is eligible for reimbursement by the Federal agencies.
- D. Total funding for capital improvements in the amount of \$61.3 million is anticipated to be available in 2018, of which up to \$35.6 million is specifically dedicated to flood repair projects.
- E. An overview of the Transportation Sales Tax portion of the CIP was presented to the Consortium of Cities Board for comment on August 1, 2018

NOW, THEREFORE, BE IT HEREBY RESOLVED that the 2018 Capital Improvement Plan for Transportation is adopted herein,.

ADOPTED this 2<sup>nd</sup> day of Aug, 2018.

BOARD OF COUNTY COMMISSIONERS:



Cindy Domenico  
Cindy Domenico, Chair

Elise Jones  
Elise Jones, Vice Chair

Deb Gardner  
Deb Gardner, Commissioner

ATTEST:

Wita Ryder  
Clerk to the Board