

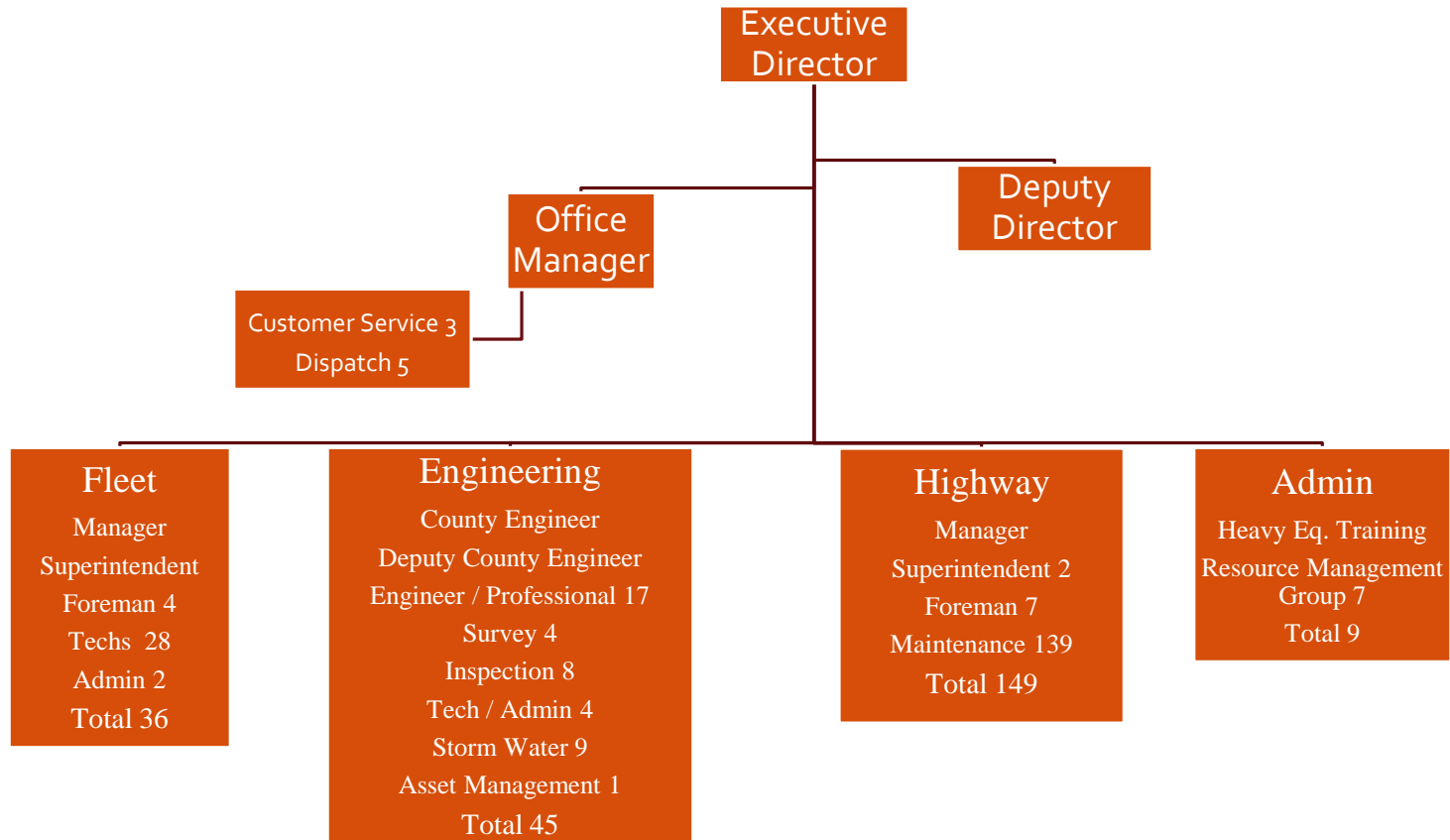


2021 Budget Presentation Department of Public Works

Scot Cuthbertson, Executive Director

October 22, 2020

Organizational Chart



Department of Public Works



Fleet Management

Fleet Management Division maintains County transportation resources to assure the safety and reliability of vehicles and equipment

- Manage and maintain \$45 million fleet
- 1,245 vehicles and equipment ranging from road graders and snow plows to lawn mowers and chain saws
- Essential to 20 County departments and elected offices



Fleet Management

Strategic Plan

- Identify and implement fleet technologies to enhance operational efficiencies (5 & 11)
 - Transition from Zonar to Verizon Connect vehicle telematics to improve operations and oversight of the County's fleet.
 - Improve situational awareness of countywide light fleet using Verizon Connect vehicle telematics that have been installed in all County vehicles.
 - Enhance the capability and efficiency of the County's fleet maintenance program by installing a dedicated fleet management information system software.
- Upgrade snow removal and ice control equipment (12)
 - Implement routing and mapping software that will improve our ability and oversight during snow removal operations.
 - Utilize vehicle telematics and routing software to allow County Citizens to view current status of snow removal operations.
 - Increase training on current snow removal technology in order to operate these systems to their full potential.



Fleet Management

Successes, Capital Projects

- Replaced 2 – 25-year-old vehicle lifts located at the Akers maintenance facility.
- 47 – medium/heavy equipment units replaced // on-order
 - Current average age of medium / heavy equipment is 9.2 years
- 60 of 235 light vehicles replaced // on-order for county departments
 - Current average age of light fleet vehicles is 7.6 years
- Installed vehicle telematics into the County's light fleet.



Fleet Management

Base Budget and Critical Needs

<u>Description</u>	<u>2019 Budget - OAB</u>	<u>2019 On going changes</u>	<u>2020 Budget - OAB</u>	<u>2020 On going changes</u>	<u>2021 Budget - Base Budget</u>
Fleet Services	6,847,632	540,016	7,387,648	(430,959)	6,956,689

- 2021 Capital replacement funds \$4,227,000 (includes \$600,000 light fleet)
- Critical needs include:
 - Fleet Management Information System: \$230,000 year one, \$30,000 ongoing
 - DEF / Fuel Island Upgrades: \$505,000
 - Light Fleet \$150,000
 - Hydraulic Lift \$400,000



Transportation-Engineering & Highway

Overview:

- Planning and Design for critical road and drainage infrastructure needs
- Inspection and Maintenance of infrastructure
- Operations
- Emergency infrastructure repairs to meet public safety requirements
- Project management
- Wildland Fire Support
- Snow removal
- MS4 permit



Transportation-Engineering & Highway

Transportation Numbers:

- 2,326 lane miles (1,137 centerline miles) of paved roads
- 2,083 lane miles (1,046 centerline miles) of gravel roads
- 270 bridges/55 steel deck structures
- 109,000 linear feet of drainage ditches
- 382,000 feet of drainage pipe
- 24 miles of guardrail
- 29,000 traffic signs
- 54 traffic signals
- 34 warning flashers
- 162 streetlight luminaires



Transportation-Engineering & Highway

Mandates/State Statutes Required

- Clean Water Act (1972)-El Paso County Municipal Separate Storm Sewer System (MS4) Permit
- Americans with Disabilities Act (ADA) and CFR35.105
- **Colorado 811, SB 18-167, Underground Utility Locates (New)**
- Applicable State Statutes included in
 - Title 22
 - Title 24
 - Title 29
 - Title 30
 - Title 32
 - Title 34
 - Title 35
 - Title 37
 - Title 38
 - Title 42
 - Title 43



Transportation-Engineering & Highway

Strategic Plan Goals

Goal 1: Maintain and promote a financially sustainable County government

- Strategy C: Define and allocate funding streams designated for capital investment and operational needs

Goal 3: Maintain and improve the County transportation system

- Strategy A: Provide a safe, sustainable, integrated and efficient multi-modal transportation system
 - 9: Planning and grant application leadership to solve I-25 Gap
 - 10: Support the expansion of public transportation opportunities
 - Enhance public understanding of the true costs of deferred capital projects and maintenance



Transportation-Engineering & Highway

Operating Indicators

Major Capital Projects in Process 2020

- US24 & Fountain Ave Intersection
- US24 & New Meridian / Falcon Park & Ride
- Struthers/Gleneagle Roundabout
- McLaughlin Roundabout
- Riverside Channel Stabilization
- Marksheffel & Meadowbrook Intersection
- West Side Avenue Action Plan (WAAP)

Maintenance YTD 2020

- 3,677 Customer Service Requests received, (down from 4,486 last year)
 - Asphalt 20%, gravel 17%, signage 13%, snow removal 8%, animal removal 6%, drainage 6%, dumping 6%, tree trimming / removal 5%, signals 3%
- 84 lane miles dust abatement treatment
- 6 lane miles gravelling
- 56 lane miles gravel road reclamation
- 75 lane miles chip seal
- 44 lane miles pavement overlay

Department of Public Works – Transportation (Engineering & Highway)



Transportation Capital Projects*

*Does not include PPRTA, Recovery, Parks, Municipal Coordination

Project Title	Status	ECD	Cost	EPC Committed	EPC Obligated	EPC Shortfall
I-25 GAP	Construction	2020	Tot: \$350M EPC: \$15M	\$6.0M TABOR \$1.5M Gen Fund	\$0	\$7.5M
Struthers / Northgate Drainage	Design	2020	Tot: \$2.2M EPC: \$1.2M	\$1.2M	\$0	\$200K
Charter Oak Ranch Road	Construction	2020	Tot: \$14.2M EPC:\$2.1M	\$2.1M	\$2.1M	\$0
Falcon Park and Ride/US24	Construction	2020	Tot: \$13.8M EPC:\$4.4M	\$4.4M	\$4.4M	\$0
Rex / Meridian	Design	2020	Tot: \$300K	\$300K	\$300K	\$0
Fountain Mesa, Caballero Dr, Fortman Ave	Final Design	2021	EPC: \$2.5M	\$2.5M	\$100K	\$0



Transportation Capital Projects*

*Does not include PPRTA, Recovery, Parks, Municipal Coordination

Project Title	Status	ECD	Cost	EPC Committed	EPC Obligated	EPC Shortfall
Meridian Road Corridor Signal Optimization	Planning	2021	\$200K	\$0	\$0	\$200K
Grinnell / Fontaine	Design / Build	2021	\$885K	\$885K	\$885K	\$0
Bradley Rd / Grinnel Blvd	Traffic Study	2021	Tot: \$460K EPC: \$60K	\$60K	\$60K	\$400K
Elbert Road Bridge	Construction	2021	Tot: \$900K EPC: \$700K	\$700K	\$100K	\$0
Arnold Ave Bridge	Design	2022	Tot: \$1.8M EPC: \$534K	\$250K	\$250K	\$800K
EPC - MTCP	Planning	2022	\$700K	\$0	\$0	\$700K
Haul Route Study	Planning	2022	\$400K	\$0	\$0	\$400K
Broadband Masterplan	Planning	2022	\$500K	\$0	\$0	\$500K



Transportation Capital Projects*

*Does not include PPRTA, Recovery, Parks, Municipal Coordination

Project Title	Status	ECD	Cost	EPC Committed	EPC Obligated	EPC Shortfall
EPC Wetlands Bank	Planning	2022	Tot: \$725K EPC: \$145K	\$0	\$0	\$0
Jimmy Camp Creek DBPS	Planning	2022	Tot: \$350K EPC: \$350K	\$350K	\$0	\$0
Calhan Road Bridge	Design	2023	Tot: \$3.0M EPC: \$600K	\$90K	\$90K	\$510K
US 24, Fountain Ave	Design	2025	Tot: \$7.5M	\$1.1M	\$0	\$6.4M
Baptist / Hodgen / Roller Coaster Intersection	Planning (Phase I TIS)	TBD	TIS: \$60K	\$60K	\$60K	\$0
Peyton Infrastructure Improvements	Concept Planning	TBD	\$150K	\$150K	\$0	\$0



Transportation-Engineering & Highway

Wins:

- Maintained operations through COVID 19 pandemic
- Stormwater Quality Management Engineering Review
- Asset Management Program Initiation
- Local Road Safety Program Contract Award
- ADA Infrastructure Location Inventory Collection
- Tabor retention projects in process
- Program of Projects Development
- Transparency on Road Quality
- Roadway Conveyance/Annexation
- 2020 American Public Works Association (APWA) Colorado Chapter Large Transportation Project of the Year Award - WAAP
- Engineering Criteria Manual updates for the American with Disabilities Act



Transportation-Engineering & Highway

Opportunities:

- Asset Management Program Initial Operating Capability
- American with Disabilities Act Compliance Assessment
- Infrastructure Attribute Collection
- PPRTA Capital Program Extension
- Major Transportation Corridors Plan Update
- 2021 Pavement Quality Index (PQI) Data Collection
- Engineering Criteria Manual and Drainage Criteria Manual Updates
- Programmatic Shortfall Report
- Outlying Yard Expansions
- DPW Facility Needs



Transportation-Engineering & Highway

Challenges:

- Providing infrastructure and services to accommodate increasing population and urbanization
- The increased traffic volume on some County gravel roads exceeds their designed traffic capacity and warrant converting them to a paved surface
- Providing infrastructure and services to isolated unincorporated enclaves
- Sustainable long-term funding strategies for major maintenance and capital improvement programs
- CO 811 mandated new utility locate requirements
- Paved Road Maintenance Backlog:
 - Of the total 2,326 lane-length miles EPC roads, 653 miles (28%) do not meet the minimum Pavement Quality Index requirement
 - At current funding rate (including PPRTA funds), by 2028, 1,101 lane miles will not meet the minimum desired PQI requirements
 - To maintain existing PQI, an additional \$10M/year above the current budgeted amount is required
 - EPC overlays an average of 2% of paved roads a year over the last ten years
 - Typical life expectancy of pavement in our climate demands 7-10%



Transportation-Engineering & Highway

Challenges:

- Long-term Capital Transportation Needs: Backlog Grows
 - 2016 Major Transportation Corridors Plan (MTCP) identifies \$846M needed road system improvements over the next 24 years
 - The Road Impact Fee Program projection \$137M (Developer funded improvements)
 - PPRTA capital improvements projected to fund \$68M
 - Unfunded requirements \$641M or \$24M/year



Transportation-Engineering & Highway

- Challenges:
 - Gravel Road Maintenance:
 - Historically a top customer service request
 - Currently 15-30 of the 2,083 lane miles of gravel roads are re-graveled annually
 - At 30 lane miles per year that is a 69 year cycle
 - Typical re-gravel cycle is 7-10 years
 - 2020 was first full year of gravel road reclamation program (56 lane miles); long term effectiveness being evaluated



Transportation-Engineering & Highway

- SB 18-167: Enforce 811 Underground Facility Locate Requirements
 - Elimination of tiered membership (EPC from Tier 2 to 1)
 - Implementation 2 November; soft start 1 October
 - Tier 1 Locate Requirements:
 - EPC facility locate requests within required timeframes (normal-2 business days; emergency-1 hour; after hours-2 hours; engineering-10 business days)
 - 75 Average Daily Ticket Request /37 Average Daily Field Locates (two weeks of data)
 - New locate ticket types: subsurface engineering & gravel roads
 - Underground facilities must be electronically locatable
 - New engineering design requirements for public facilities (ASCE 38 Standard)
 - Initial Estimate of Tier 1 Impacts for physical locating: 1 Existing FTE + 3 Proposed FTE
 - \$316k AFR Request for 3 FTE (\$176k ongoing FTE & \$142k one-time vehicles & equipment)
 - Need Legislative Fix: Working with CCI on locate exemption for County road maintenance (HB20-1173 Postponed Indefinitely, anticipated to be reintroduced in 2021)



Transportation-Engineering & Highway

<u>Description</u>	<u>2019 Budget - OAB</u>	<u>2019 On Going Changes</u>	<u>2020 Budget - OAB</u>	<u>2020 On going changes</u>	<u>2021 Budget - Base Budget</u>
Road & Bridge	26,327,003	(1,442,380)	24,884,623	(428,102)	24,456,521
Engineering		2,385,918	2,385,918		2,385,918

- Engineering salary expense moved from Fund 2 to Fund 1
- Critical Needs
 - Colorado 811 Compliance (3 FTEs): \$392,272 year one, \$252,272 ongoing (salary)
 - Highway Scheduler Logistics / Admin (1 FTE): \$93,805 ongoing (salary)
 - Pavement Maintenance Program (10 years): \$10,000,000
 - ADA - Snow Removal on Pedestrian Facilities within the public ROW \$250,000 on-going



Questions?

