

STUDY SESSION AGENDA TUESDAY May 8, 2018

ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE

10:30 A.M.	ATTENDEE(S): ITEM:	Adam Burg Legislative Update
11:15 A.M.	ATTENDEE(S): ITEM:	Jeffery Maxwell / Jeremy Reichert / David Tuttle Gravel Roads Program Update
11:45 A.M.	ATTENDEE(S): ITEM:	Dave Ruppel 2017 Front Range Airport Highlights / Spaceport Update
12:15 P.M.	ATTENDEE(S): ITEM:	Raymond Gonzales Administrative Item Review / Commissioners Communications



STUDY SESSION AGENDA ITEM

DATE: May 8, 2018

SUBJECT: Gravel Roads Program Update

FROM: Jeffery Maxwell, PE, PTOE, Director of Public Works

AGENCY/DEPARTMENT: Public Works

ATTENDEES: Jeffery Maxwell, Director of Public Works Jeremy Reichert, Operations Manager David Tuttle, Foreman

PURPOSE OF ITEM: Provide an update on the 2018 Public Works Gravel Roads Program

STAFF RECOMMENDATION: That the BOCC provide feedback regarding the program

BACKGROUND:

The 2018 Gravel Roads Program calls for resurfacing of over 140 miles of roads in eastern Adams County. The Public Works Department will provide an update on the current status of the program as well as the scheduled work plan for 2018 and 2019.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

ATTACHED DOCUMENTS:

PowerPoint Presentation

FISCAL IMPACT:

Please check if there is no fiscal impact \boxtimes . If there is fiscal impact, please fully complete the section below.

Fund:

Cost Center:

	Object Account	Subledger	Amount
Current Budgeted Revenue:			
Additional Revenue not included in Current Budget:		·	
Total Revenues:			

	Object Account	Subledger	Amount
Current Budgeted Operating Expenditure:			
Add'I Operating Expenditure not included in Current Budget:			
Current Budgeted Capital Expenditure:			
Add'l Capital Expenditure not included in Current Budget:	<u> </u>		
Total Expenditures:			

New FTEs requested:	YES	🗌 NO
Future Amendment Needed:	YES	

Additional Note:

APPROVAL SIGNATURES:

Raymond H. Gonzales, County Manager

Bryan Oxtler, Deputy County Manager

APPROVAL OF FISCAL IMPACT: NW nlan Budget

Alisha Reis, Deputy County Manager

Patti Duncan, Deputy County Manager



Study Session – May 8, 2018

PUBLIC WORKS - OPERATIONS DIVISION

Gravel Road Rehabilitation Update

- Progress overview
- Results of improvement
- Cost overview
- Future projections
- Moving forward
- Questions



Program and progress overview: (review map exhibit)

- 2014 Evaluated existing processes and problems, developed maintenance and rehabilitation strategies 2.4 LM Completed identified gravel material needs
- <u>2015</u> Small scale pilot testing, implementation of grading routes, training for staff, established priority methodologies – 24 LM Completed – identified truck hauling service needs
- <u>2016</u> Medium scale pilot testing, developed tracking processes and systems, presented strategies to BoCC, staff development through pilot testing - 58 LM Completed – identified stabilization and equipment needs
- <u>2017</u> Large scale pilot testing, evaluated success/failures, better understanding of operational capacity, on-boarded new equipment, implementation of BoCC approved rehabilitation programs - 108 LM Completed – identified culvert needs
- <u>2018</u> Brief BoCC on success and failures and next steps, develop mid and long range plans, standardize processes, evaluate operational efficiencies and make adjustments as needed

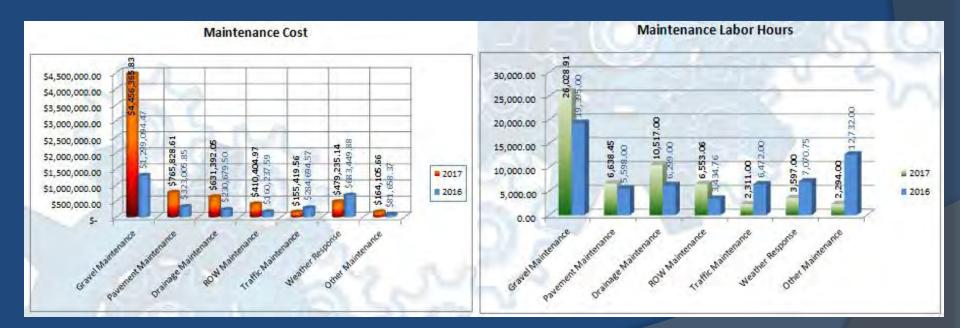
Public Works is making progress towards improving the gravel road network. Many of these improvements are highlighted below:

- 2017 complaints and service request's reduced by 18+% more citizen satisfaction and engagement
- Reduced need for grading frequency allowing other critical work priorities to be completed
- Improved drainage functionality eliminating long standing issues that often required temporary road closures for extended periods
- Reduced impacts from weather improved snow and ice control specifically on gravel roads – eliminating urgent grading after rain events (little to no impact)
- Employee satisfaction and engagement pride in the work they do and the outcomes they produce – advancing employee capability, new technology and industry knowledge
- Adams County has gained local and national notoriety, setting new standards for gravel road management industries. Our demonstrated results are peaking the interests of academic institutions and neighboring agencies

Overview of cost

In 2017 gravel road management consumed roughly 61% of the operations resource in terms of reported labor effort.

This level of effort will go down over time as the rehabilitation program progresses and improvements are made.



Overview of cost continued

The evaluation of cost for implementing gravel road rehabilitation is based on hard and soft costs. Each roadway has its own unique challenges and costs vary from road to road. Rehabilitation efforts consist of the following:

- Reconstruct (Road Profile)
- Gravel Surfacing
- Drainage Improvement (Culverts)



2017 Gravel Rehabilitation (reconstruct & resurfacing)

Soft Cost (Labor & Equipment)	Hard Cost (Materials & Services)	Total Cost
\$920,473.00	\$2,313,340.00	\$3,233,813

2017 Culvert Replacement

Soft Cost (Labor & Equipment)	Hard Cost (Materials & Services)	Total Cost
\$524,180.00	\$56,638.00	\$580,818.00

Total Cost \$3,814,631.00

Overview of cost continued

As rehabilitation progresses, the focus on maintenance grows proportionately, keeping good roads good as the priority.

In addition to rehabilitation cost, ongoing maintenance cost must be anticipated. This cost and effort is in perpetuity, in order to sustain the desired quality/condition of the gravel road network. Ongoing maintenance consists of the following:

- Routine service grading
- Fugitive dust control
- Gravel reclamation

These functions will grow each year whereas grading will reduce overtime

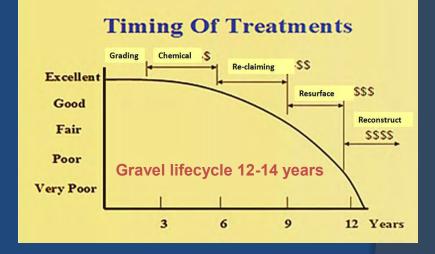


2017 Routine Grading				
Soft Cost (Labor & Equipment)	Hard Cost (Materials & Services)	Total Cost		
\$548,355.00	\$43,204.00	\$591,559.00		
2017 Dust Control				
Soft Cost (Labor & Equipment)	Hard Cost (Materials & Services)	Total Cost		
\$55,270.00	\$188,010.00	\$243,280.00		
2017 Gravel Reclamation				
Soft Cost (Labor & Equipment)	Hard Cost (Materials & Services)	Total Cost		
\$76,845.00	\$310,870.00	\$387,715.00		

Total Cost \$1,222,554.00

Future Projections – As the gravel road rehabilitation program progresses each year, weather and traffic impacts are reduced across the network, and our capacity to accelerate improvements increases.

- Improving 145 Lane Miles per year, the gravel road network will be rehabilitated in approximately 12 years
- Ongoing maintenance will reduce the level of effort for future rehabilitation, increasing productivity, keeping up with and/or eliminating disrepair



Bradbury Krebs Rd – E. 15th Ave to E. 112th



Before Improvement

After Improvement

Gravel roads will always be a priority for Public Works and a vital part of the overall transportation system. It is important to seek out new funding sources and standards that support efficient and sustainable maintenance. Below are recommended steps moving forward to achieve success in this regard.

- Continue evolving with technology and industry advancements
- Acquire more sustainable/reliable bulk water sources
- Continue evaluating and sourcing cost-effective materials and efficient and reliable equipment
- Ensure that employee development progresses with change in business practices

- Conservatively increase staffing levels proportionate to the area of responsibility, that is paced with current and projected community growth rates, ensuring the levels of service are acceptable
- Establish reasonable impact fees
- Enforce surface change (pave) requirements when development impacts create reasonable cause

Questions ?

E. 38th Ave – From Converse Rd to Penrith Rd Polymerized Stabilization

December 2017

April 2018

Rehabilitated in August of 2017 Maintenance free surface – 8 months and counting



STUDY SESSION AGENDA ITEM

DATE: May 8, 2018

SUBJECT: Air and Space Port Updates

FROM: Dave Ruppel

AGENCY/DEPARTMENT: Front Range Airport

ATTENDEES: Dave Ruppel

PURPOSE OF ITEM: Provide current Air and Space Port status and information.

STAFF RECOMMENDATION: Update

BACKGROUND:

This update will discuss 2017 projects, 2018 projects, new businesses at FTG, and the current status of the Spaceport licensing effort.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Front Range Airport

ATTACHED DOCUMENTS:

PowerPoint Update

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Total Expenditures:		***	

New FTEs requested:

YES

YES

Future Amendment Needed:

NO

Additional Note:

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Bryan Ostler, Deputy County Manager

APPROVAL OF FISCAL IMPACT: IIL Budget

Alisha Reis, Deputy County Manager

Patti Duncan, Deputy County Manager



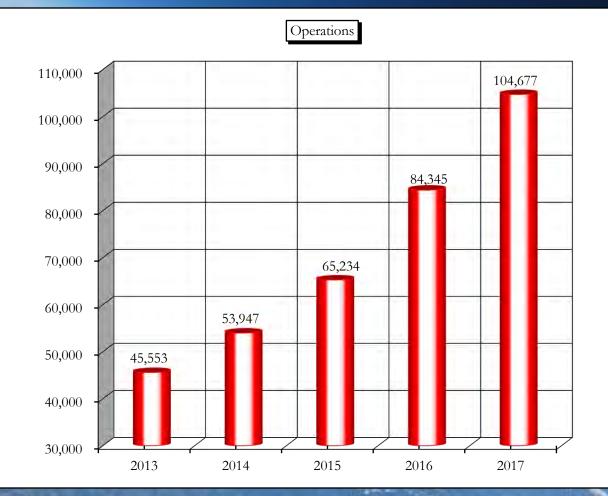
BoCC Update May 8, 2017



Dave Ruppel—Airport Director



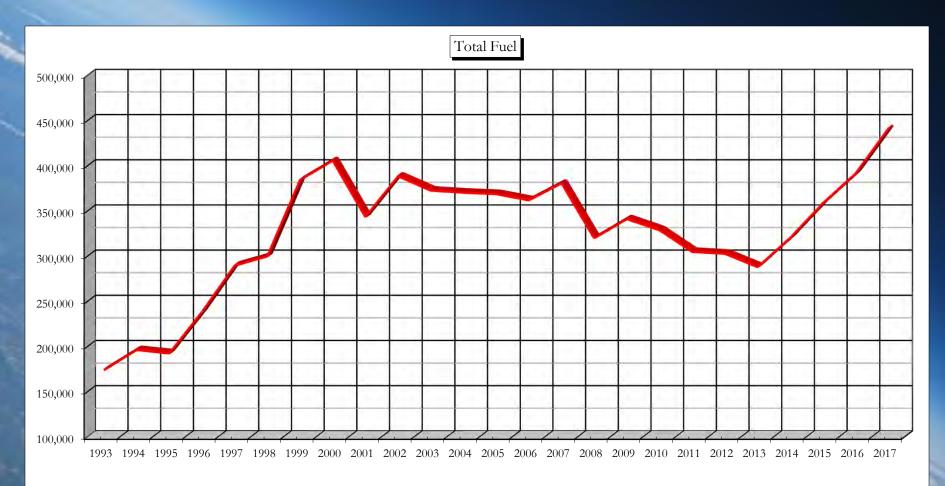
Aviation Operations







Fuel Sales

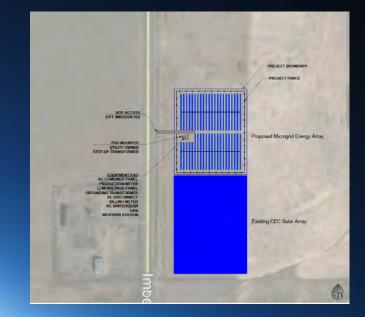






Businesses and Leases

- 4 new businesses
 - Reaction Engines, Engine Test Facility—Under construction, operational in June 2018
 - New aircraft design and manufacturing business.
 - Microgrid Energy(Solar Farm- in process-expect completion of 13 acre solar field by Fall 2018)
 - High end race track facility.
- Air Methods Training Facility reduced operation from 7 to 4 aircraft, moving more operations to the new simulator facility off of Tower Road.
- Pending Hangar Development
- Strong start to the year with several other businesses in various stages of negotiation.









Projects for 2017

- Completed pavement rehabilitation for Module 3 Taxilane.
- Repainted Runways and Taxiways
- Crack-sealed all airfield surfaces
- Major crack repair in CDOT Aeronautics parking lot
- Completed Airport and Control Tower digital mapping using Drone Platform—2nd Airport in USA to conduct full airport mapping with Drones. Events
- War Bird Auto Classic—Saturday, July 28, 2018
- Colorado Mile –Car Race- Labor Day Weekend
- Numerous smaller events and Pancake Breakfasts

Projects for 2018

- Taxiway A7 repair-AIP project
- Taxiway A8- Development-Internal Project
- Cargo Road Chipseal







Spaceport License

FAA designated a special use airspace for our use in mid-September 2017.

Engineering team completed new noise, sonic boom, and hazard evaluations.

>Application update completed and application submitted, December 2017.

➢Application began formal 180 Day review on February 20, 2018.

EA was released on April 17th for its 30 day Public review. Public meeting on May 17th.

➢ Final determination not later than August 19, 2018.



Growth in U.S. Spaceports: A 2017 Snapshot





Areas of Growth

Rocket Engine testing continues to draw interest both from manufacturers and research institutions.

- ➢Flight Training
- ➤Transient Corporate Traffic
- ➢Community Solar
- National Guard Activity
- Off Airport Business Parks

Eastern Business Activity and Interest





Questions?







