

A photograph showing a sunset over a field of crops, with the sun low on the horizon and silhouettes of plants in the foreground.

## **Department of Public Works**

Transportation – Challenges



# Public Works

- Board of County Commissioners:
  - John N. Marshall, District 1
  - Roger L. Hartwig, District 2
  - Jeffrey W. Stevens, District 3
  
- Public Works
  - Todd O'Brien, P.E. – Director
  - Scott Yaeger, P.E. – County Engineer



# Adams County – Statistics

- Population Served: 19,200
- Roads:
  - 1,732 C/L miles total
  - 650 Paved C/L miles
  - 1082 Unpaved C/L miles
- Bridges:
  - 114 > 20' (Federal Bridge)
  - 177 < 20' (Short Span Bridge)



# Public Works – Statistics

- Employees:
  - 63 Full time
- Areas of Responsibility
  - Maintenance, Preservation and Engineering
    - Roads and Bridges
  - Solid Waste
    - 2 Transfer Station Operations (including long haul)
  - Fleet –
    - 357 different pieces of equipment
    - ?? Pits and Quarries
  - Public Facilities
    - O & M of all County owned facilities (including Fairgrounds)



## Challenges

Simply put – Preserving what we have!



# History – Revenue

- Fuel Tax
  - Collection
    - 3.576 million in 2002
    - 4.049 million in 2014
  - This represents a **13.8%** increase
- Inflation
  - 2002 to 2014 = **31.4%**
- **This is a decrease in value of 17.6%**



# History – Costs

- Fuel
  - Annual average price County paid
    - Gasoline
      - **\$1.17** / gal – 2002 vs **\$2.78** / gal – 2014
      - **237%** increase
    - Diesel
      - **\$0.93** / gal – 2002 vs **\$3.09** / gal – 2014
      - **332%** increase
  - Sealcoat oil – Preservation
    - \$135 / ton – Late 1990's
    - \$562 / ton – 2014



# History - Operations

- Pavement Preservation
  - Mid to Late 1990's
    - Sealcoat 70 miles per year
    - 7-9 year cycle
      - Crackseal
      - Pre-level
      - Sealcoat
    - Gravel road conversions
      - ACRAB - created
      - Development and freight main reasons



# History - Reality

- Early 2000's
  - Help ourselves vs ask for more money
  - What can we do to preserve what we have?
    - Management approach
      - Review operations
        - » Preservation
        - » Maintenance
      - Funnel local dollars to preservation



# History – Reality

- Early 2000's
  - Gravel conversions hit system adding mileage
  - Price of oil jumped to \$190 / ton
- Solutions
  - Preservation
    - Sealcoat mileage slipped to 60 / year
    - Crackseal and Prelevel one year - Sealcoat next
      - » 8 to 11 year cycle
    - Higher ADT roads & Freight Roads
      - » STP dollars used for overlays



# History - Changes

- 2006 to 2007
  - Price of oil jumped to \$320 / ton
- Solutions
  - Preservation
    - Sealcoat mileage slipped to 45 / year
    - New methods
      - » Crackseal only
      - » Fog seal rural roads for 3-5 year life
      - » Spot patching with Sealcoat
    - Overall - 8 to 16 year cycle



# History - Changes

- 2008
  - Price of oil jumped to \$490 / ton
- Solutions
  - Administration
    - Reduced FTE's = 10% maintenance - 15% overall
    - Eliminated levy shift - BOCC
    - Returned Traffic Enforcement diversion



# Big Changes

- 2008 - Continued
  - Preservation
    - Sealcoat mileage slipped to < 40 / year
    - Hauling sealcoat oil in-house
  - Maintenance
    - Vegetation Management Charter
      - » Reduced sterilant cost
      - » Hydro seeding program
    - Gravel roads
      - » Magnesium / Lignosulfonate program
      - » Grader packers



# Long range Planning

- 2009 - 2012
  - Revenue's remained similar
  - Price of oil jumped to \$560 / ton
- Administration
  - Long range forecast to try to fit revenue
    - Reviewed entire paved system
    - Created fictitious program that revolves around maximum lifecycles we have experienced
      - » 7-14 years sealcoat
      - » 10-15 years HMA



# Long Range Planning

- 2009 - 2012 - Continued
  - Administration
    - Life cycles developed – 57 miles/year needed
      - HMA 10 and 15 year cycle
      - Sealcoat 7, 10, 14, and 21 year cycle
      - When roads approached costs to maintain long term comparable with a gravel road they would be converted back to gravel. (82 miles identified)
    - Budget needed
      - \$700,000 dollar shortfall – 25% of overall
        - » Includes all resources (CAPP, STP & Local)



# What now?

- 2013 – 2016 and beyond
  - Managing the System
    - Some relief from oil costs
    - Charter gravel road maintenance
    - Continue with roads and life cycles developed
      - Pick up backlog
    - Constant review of technologies and BMP
      - Pavement preservation
      - Maintenance



# New stuff

- Things that could help!
  - Find reliable source of funding for General Fund
    - Diversions
  - Federal Fund Exchange program
    - Federal funds for State funds
  - Funding for short span bridges
  - Reduce regulation



# Adams County



- Thank you for time and consideration