City of Pocatello
Pavement Management

OVERVIEW

- History
- Strategy
- Treatments
- Coordinated Efforts
- Outcomes
CITY OF POCATELLO
DEMOGRAPHICS

- Population = 57,000
- Terrain – Hills and Valleys
- Hot Summers/Harsh Winters
- Maintain approximately 268 Centerline Miles

HISTORY OF PAVEMENT MANAGEMENT

- 2005 – 2013
  - Annual Budget Allocation = $1,000,000
  - Limited Asset Management Plan
  - Subjective Analysis
  - Averaged 24 Miles Treated Per Year
    - Road treated every 11 years
  - Added 5 PCI points in 8 years
    - Averaged 0.63 PCI points per year
STRATEGY

- **Collect Objective Data**
  - Modern Technology
    - Takes human factors out of the equation
  - Windshield Survey Factors
    - Fatigue
    - Subjectivity

- **Develop a Plan**
  - Study Data
    - Current methodology was unreliable
    - Budget remained flat - from 2005-2022
      - $1,000,000 per year
    - Determined we need to increase our road miles treated
      - Target was to treat 35-40 miles per year
        » Road need treated every 7 years

- **Implement a Plan**
  - How To Treat 10-15 More Miles Per Year With The Same Money
    - How Do We Do That?
      - Realized conventional thinking wasn’t going to solve our problem
      - Determined we would have to get creative in our tactics and treatments

COLLECT OBJECTIVE DATA

- **Asset Management Program**
  - Pavement Management Analysis
    - Performed by Third-party
      - Modern technology
      - PCI ratings
    - Perform Annual Modeling – EAM/Lucity
      - Strategic Parameters Set
        - Types of treatments
        - Budget allocations
          » % based
          » $$ based
DEVELOP A PLAN

• Deterioration Graph
  – Sometimes Its Difficult To Adhere To
    • Political influence
    • Complaints
• Preventative Maintenance Is Key
  – Keep Good Roads Good!
• Kicking The Can Has Benefits
  – Deplete every bit of life

IMPLEMENTING THE PLAN

• Invested In Manpower And Equipment
  – Manpower
    • Hire qualified employees
    • Extensive operator training
  – Equipment
    • Asphalt Paver
    • Asphalt Cold Planer
    • Asphalt Distributor Truck
    • Oil Tanker

Old Ways

New Ways
PAVEMENT TREATMENTS
Preventative

- Crack Seal
  - Underutilized Treatment
  - When Utilized, Over-applied
  - Proper Techniques
    - Clean cracks
    - Proper temperature
      - Material
      - Ambient
  - Needs To Be Done Every Year

- FOG SEAL
  - Minimum Of 10% Of Budget Allocation
  - Most Under-rated Treatment
  - Research Good Products & Suppliers
    - Rejuvenators
    - Rejuvenators with latex
    - Seal-coats
  - Determine What Works Best In Your Area
  - 4 Years Of Life Extension
  - PCI Of 77 And Above

*Deplete Every Ounce Of Life Out Of Every Road
*Kicking The Can
*Forget About This Road For 4 Years And Move On To Others
PAVEMENT TREATMENTS
Restorative

• Chip Seal
  • Excellent treatment, cost prohibitive in urban environment
    ▪ Sweeping
    ▪ Flushing
    ▪ Multiple closures
    ▪ Moving vehicles
• Micro Seal
  • Game Changer
  • One-time closure
  • Added Fiber
• Cape Seal
  • Chip/Micro

• PREPPING
  • Scrub Patch
  • Improve IRI
  • Correct drainage
    ▪ Keep base dry
    ▪ Repair Base Failures
    ▪ Replace base and patch back
  • Profile Mill
    ▪ Grade averaging
  • ADA Ramps

*Deplete Every Ounce Of Life Out Of Every Road
*Kicking The Can
*Forget About This Road For 4-5 Years And Move On To Others

PAVEMENT TREATMENTS
Restorative

• Thin Overlay
  • Profile Mill 1/10th of Asphalt, Reapply 1/10th of Asphalt
  • ½” Aggregate Asphalt
  • Correct Data Imperative
  • Base Defects Are Usually Visual
    ▪ Proof roll with pneumatic
    ▪ Repair base failure
    ▪ Correct Drainage

• Thick Overlay
  • Profile Mill 2-3”
  • ½” To ¾” Aggregate, Depending On Traffic Volumes
  • Proof Roll With Pneumatic Roller
  • Repair Base Failures
  • Correct Drainage
  • Reapply 2-3”

*Have Depleted Every Ounce Of Life Out Of The Road
*We Are No Longer Kicking The Can
COORDINATED EFFORTS

- Coordinate Pavement Management Data With Local Utilities Data
  - Pavement Model Vs. Water Dept. Replacement Plan
    - Determine cost sharing between departments
  - Pavement Model vs. Other Utilities
    - Utility Coordination Committee
      - Meet monthly
      - Change plans as needed

*Street Department Gets A New Road
*Utility Department Gets A Budget-friendly Pave Job

OUTCOMES

- 2014 – 2019
  - Annual Budget Allocation = $1,000,000
  - Do more with less
  - Data Driven Strategies
    - Accurate data
    - Keep good roads good!
    - 7-Year Strategy – based on lane miles
  - Outcome
    - Road network condition 77.1
      - +10 PCI in 5 years
      - 2 PCI points per year
Questions?