
A Proposal for Improving Our Secondary Roads

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www.washingtonroads.org

Overview

- Ongoing Planning Efforts
 - Where Have We Been?
 - Where Are We Now?
 - The Plan for Improvement
 - Plan Maps
 - Cost Estimates
 - Next Steps
-

Local Roads Matter...

- ...to our economy
 - ...to our schools
 - ...to agriculture economy
 - ...to businesses
 - ...to emergency response
 - ...to our cities
 - ...to our citizens
-

Winter Gravel Roads



Spring Gravel Roads



Summer Gravel Roads



Mounting Problem

1. Increased usage on gravel roads
2. Cost increases
3. Funding not increasing
4. Disasters

** Reaching an Infrastructure Crisis Point*

Disasters

2007

- 5 major ice events
- 15 snow storms with 61” of snowfall
- Precipitation 53 of 112 days
- **1 Federal Disaster Declarations (winter storms)**

2008

- Additional ice storms
 - Widespread flooding
 - Rain and more rain
 - **2 Federal Disaster Declaration (ice, flood)**
-

Disasters

2009

- Hard winter
- More flooding

2010

- Long winter
- Very wet spring / widespread frost boils
- Near continuous rainfall (May – July)
- **1 State Disaster Declaration (flood)**

**4 Disasters
Declarations
in 3 Years!**

Ice...



Snow...



Snow...



Spring Thaw...



Spring Thaw...



Flooding...



Flooding...



Flooding...



Flood Damages...



What is Left?



What is Left?

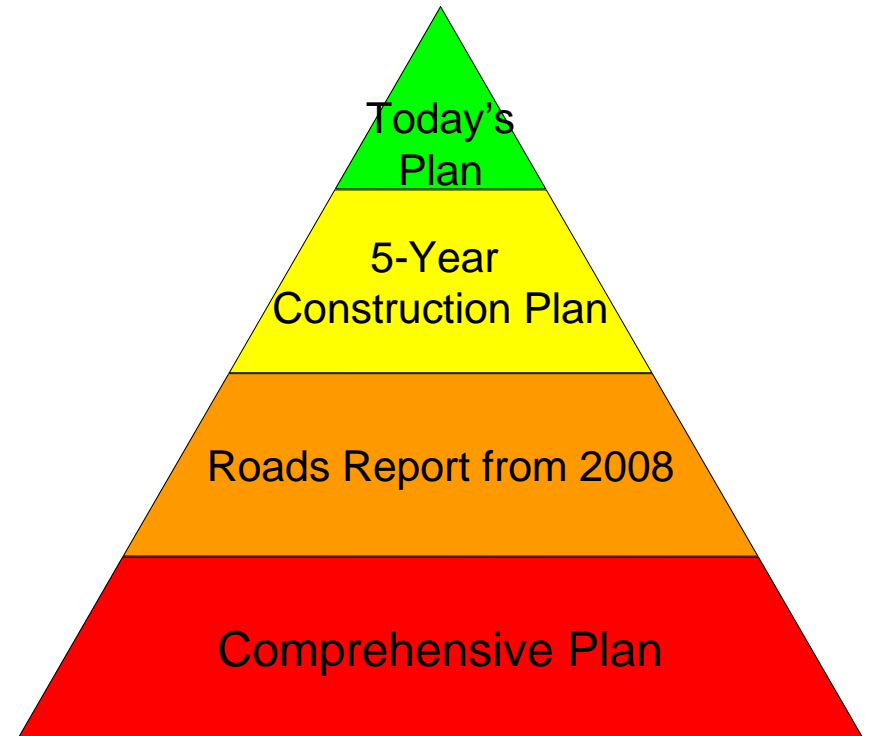


What is Left?

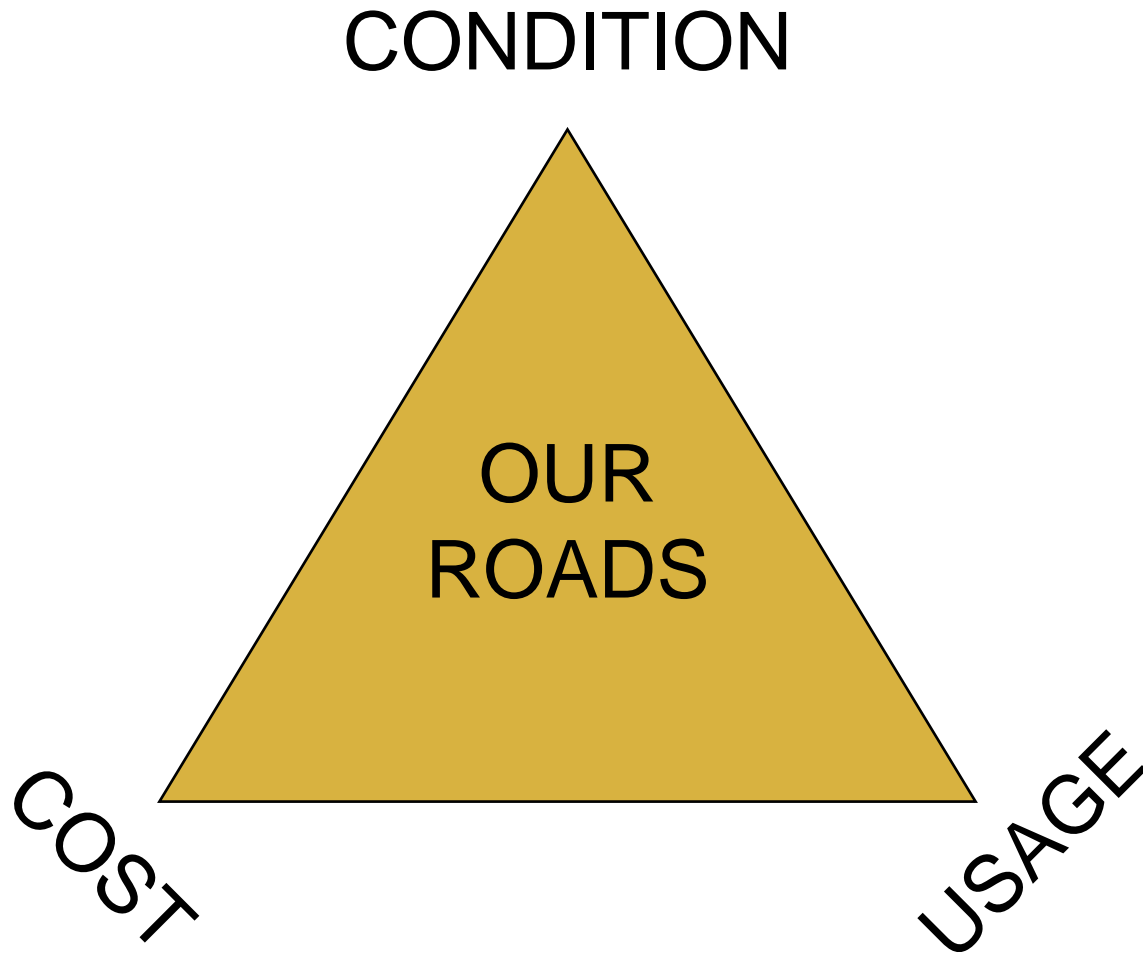


Continuous Planning Efforts

- Consistent Planning
- Looking to the Future
- Keep our Roadway System Sustainable



How to Improve Gravel Road Conditions



What's the Question?

Question

- What can we do to make our roads better?

Answer

- Pay more
 - Use less
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The Plan for Improvements

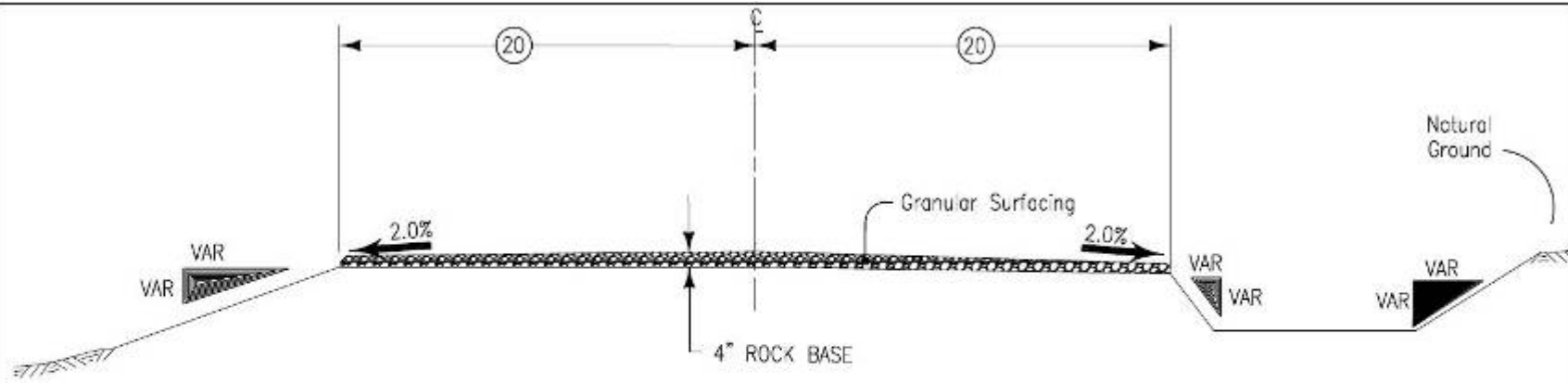
1. Fix the “hot spots”
 2. Make system-wide improvements to gravel
 3. Reduce our long-term maintenance cost
 4. Rebuild/Recover from disasters
-

1. Fix the “Hot Spots”

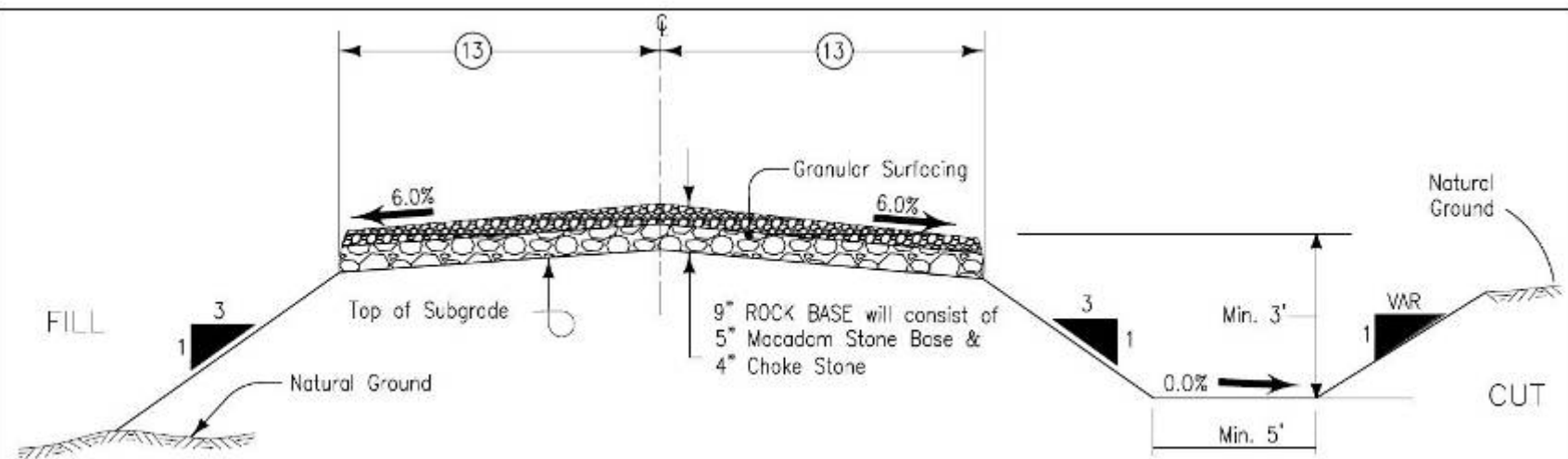
- Hot Spots are locations where we spend 3-4 times our normal maintenance dollars
 - \$2,500 per mile is typical
 - \$7,500 - \$10,000 per mile in these locations
 - Adversely affect all gravel roads
 - A Permanent Fix...
 - Improves condition for all users
 - Reduces maintenance for the future
 - 6-8 locations across the county
-

2. Make system-wide improvements

- The heaviest travelled roads
 - Traffic Volume
 - Traffic Type
 - Roads that have poor geometry
 - Roads affect surrounding roads
 - Grade the road back into shape
 - Build with an updated surfacing
-



EXISTING ROAD CROSS SECTION



PROPOSED CROSS SECTION

A Typical Gravel Road in the Fall...



Becomes this in the spring...



Does this under heavy loads...



Becomes this...



And contributes to frost boils...



And will do this...



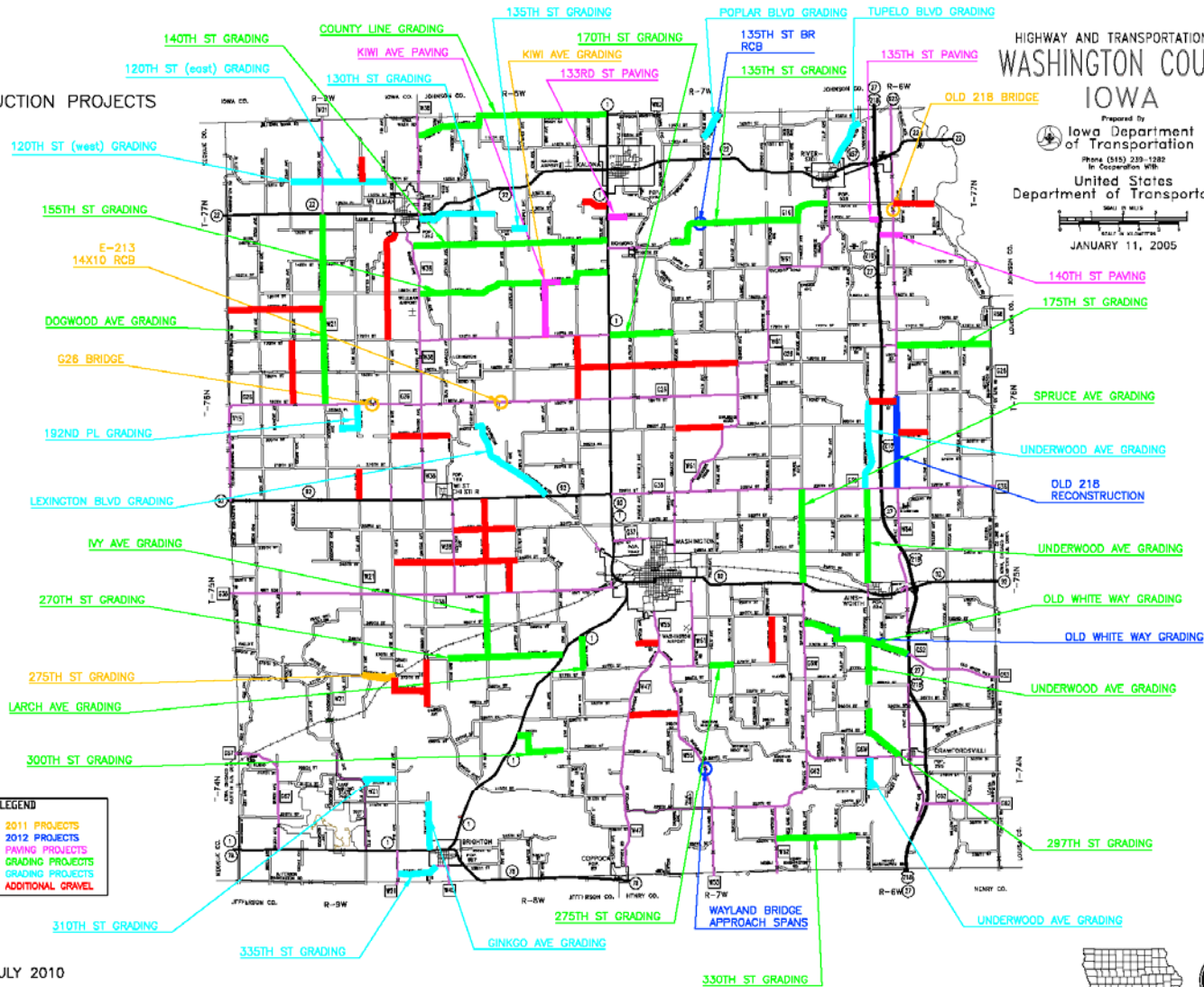
3. Reduce our long-term maintenance cost

- Reducing the ongoing maintenance cost for some roads helps all roads in the system
 - Avoid solutions that we cannot afford
 - The worse the condition, the more we spend to maintain
-

4. Rebuild/Recover from disasters

- Estimated \$9.8 million in damages in 2008
 - Damage done primarily to the gravel roads
 - Ice / soft roadways
 - Did not adversely affect paved roads or bridges
 - Because repairs have not been made, we are loosing the effectiveness of our maintenance
-

CONSTRUCTION PROJECTS



LEGEND

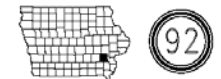
- 2011 PROJECTS
- 2012 PROJECTS
- PAVING PROJECTS
- GRADING PROJECTS
- GRADING PROJECTS
- ADDITIONAL GRAVEL

HIGHWAY AND TRANSPORTATION MAP
WASHINGTON COUNTY
IOWA

Prepared by
 Iowa Department of Transportation
 Phone (515) 281-1282
 In Cooperation with
 United States Department of Transportation
 JANUARY 11, 2005



UPDATED JULY 2010



Summary of Proposed Improvements

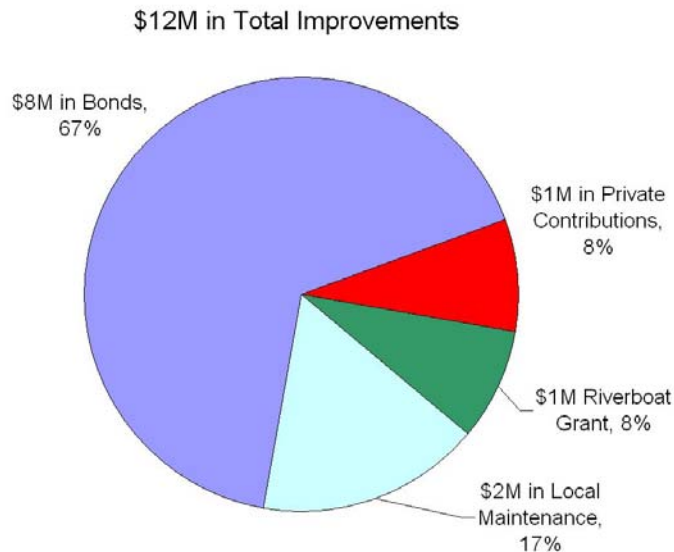
Improvement	Miles	Cost
Hot Spot Paving	5	\$2,000,000
Grading/Updating Roads	60	\$8,000,000
Minor Grading	20	\$2,000,000
Rock Improvements	40	\$250,000
Total	125*	\$12,250,000

**There are 662 miles of gravel roads in Washington County.*

Construction Timeframe

- 2010
 - Survey and Design
 - 2011
 - \$4 Million in Construction
 - 30 miles grading
 - 5 miles paving
 - 20 miles additional rock
 - 2012
 - \$4 Million in Construction
 - 50 miles grading
 - 20 miles additional rock
-

\$12M Total in Roadway Improvements



- \$8M - 10 year GO Bonds
- \$1M - Riverboat Grant
- \$1M - Private Contributions
- \$2M - Local Maintenance

Private Funding – Example

Subdivision, 40 lots ½ mile from a paved road

- Estimated Project Cost: \$300,000
 - Home Owners Association - \$100,000
 - County Contribution - \$100,000
 - Riverboat Grant - \$100,000
 - A permanent solution at 1/3 of the cost
-

Bonding

General Obligation (GO) Bonds

- Full faith and backing of the County
 - Disaster Recovery from 2007-2010
 - Historic low interest rates
 - Currently at 3%
 - Capitalizes on good construction prices
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