

Practical Operations

Achieving MoDOT's Five-Year Direction

Missouri Department
of Transportation

Tom Blair

MoDOT – St. Louis

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 **ONE TEAM**

Integrating Practical Solutions

Concentrate Resources On

- Honor commitments in the STIP
- Keep major roads in good condition
- Improve condition of minor roads
- Hold our own on bridges
- Maintain high customer satisfaction

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A white arch graphic is positioned to the right of the AASHTO logo and extends across the top of the blue footer bar.
The logo features a circular icon with four interlocking puzzle pieces in red, green, blue, and yellow, followed by the text "ONE TEAM" in a bold, black, sans-serif font.
Integrating Practical Solutions

Operations Focus Areas:

Top Five Areas *(avg. expenditures)*

- Winter = \$41M
 - Signing = \$29M
 - Striping = \$19M
 - Mowing = \$18M
 - Pavement = \$79M
-
- **Develop efficient, consistent practices**
 - **Redirect more resources to pavements**

Winter Operations



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Winter Operations

- **“Continuous Operations” definition revised**
- **Prioritize roads for regional significance**
- **Reduce truck fleet over three years**
- **Reduce the use of salt**
- **Suspend operations when doing more damage than good**

Continuous Operations Defined

- **Regionally Significant and/or > 2500 ADT**
 - Continuous operations until roads are mostly clear
 - Crews will return next working day and continue fight where progress can be made
 - Emergency crews ready to handle overnight refreeze/slick spots
- **Not regionally significant and < 2500 ADT**
 - Plowed open to two way traffic
 - Hills, curves and intersections treated as needed

Covered



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Partly Covered



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Mostly Clear



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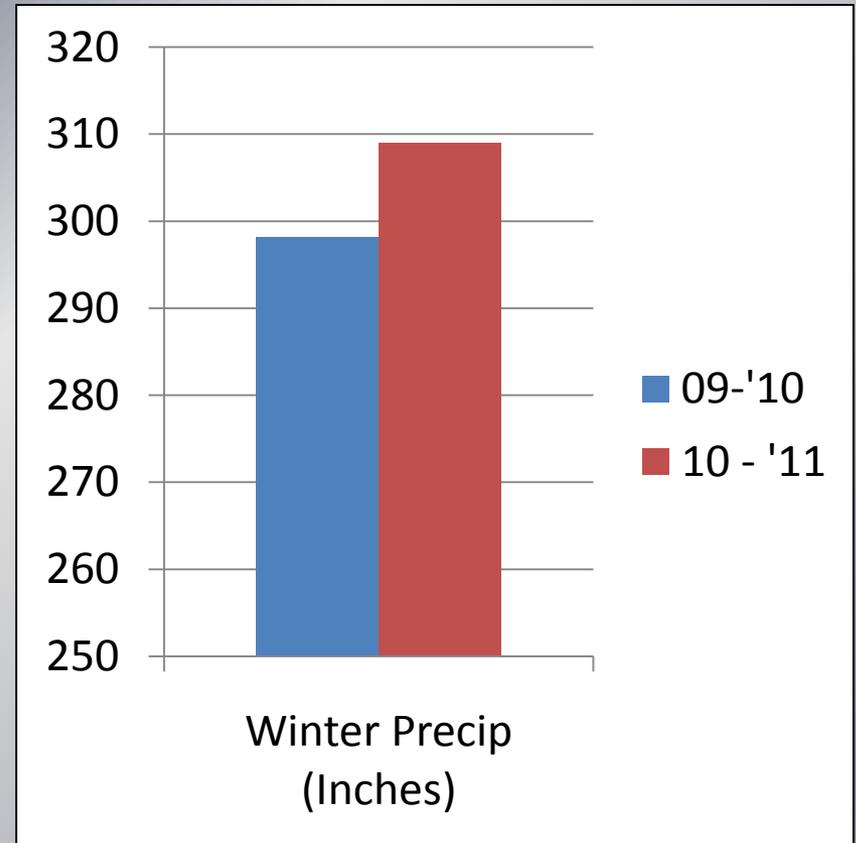
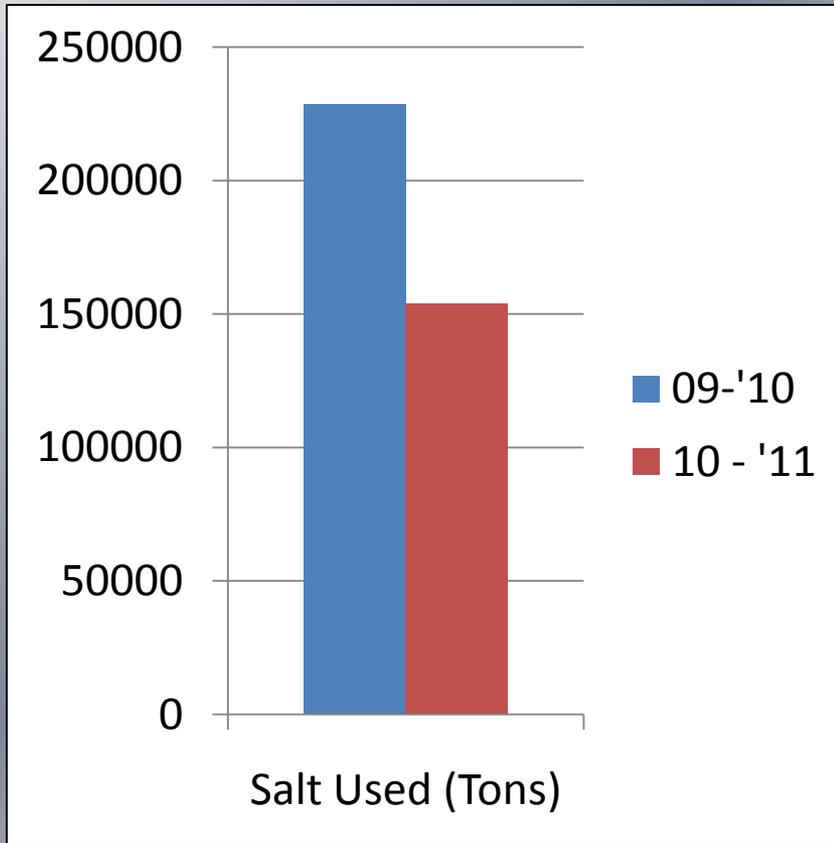
Safe/Passable Low Volume Road



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Winter Operations Results



Signing



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Signing Operations

- **Replace only “Bad” and “Needed” signs**
- **Conduct nighttime sign inspections annually**
- **Use wood posts on low volume roads**
- **Change the plumb criteria on minor road signs**
- **Use the minimum size sign post necessary to support the sign**
- **Reuse structural posts and bases when possible**

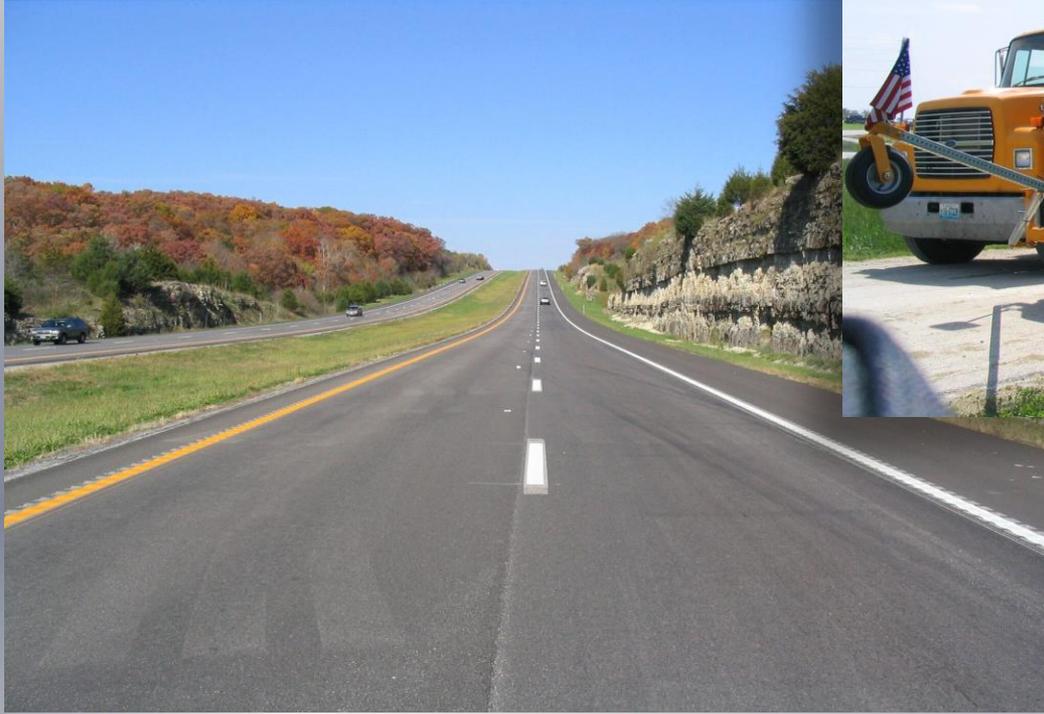
Signing Operations

- **Reduce sign and post inventories significantly**
- **Combine signing and striping crews in all districts**
- **Regionalize large equipment**
- **Use Sign Management System to streamline management and ordering process**

Signing Operations Results

- Total inventory value reduction in signs to date
\$453,528
- Total inventory value reduction in posts to date:
\$350,197

Pavement Marking



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Striping Operations

- Restripe every major road before Memorial Day
- Stripe regionally significant minors and ramps after Memorial Day
- Stripe 50% of remaining minors every year
- Use one paint and bead system on edge lines
- Low-volume minor road patching will not need to be restriped that season

Striping Operations

- Utilize two crews per striper
- Reduce striper fleet over three years
- Combine signing and striping crews in all districts
- Transitioning from reflective tape to epoxy, high-build paint installed in a groove



Mowing



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Mowing Operations

- **Keep sight distance clear with focus on first 15 feet**
- **Mow all major roads before 3 summer holidays**
- **Use plant growth regulators to reduce mowing on minor roads**
- **Mow minor roads according to manual max height**
- **Reduce tractor fleet and mower attachments over two years**
- **Be consistent among areas and districts**

Out of Policy Examples



Over mowing on minor road

Out of Policy Examples



Lack of mowing around guard cable

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Mowing by Policy



Mowing 30 feet wide on major road

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Mowing by Policy



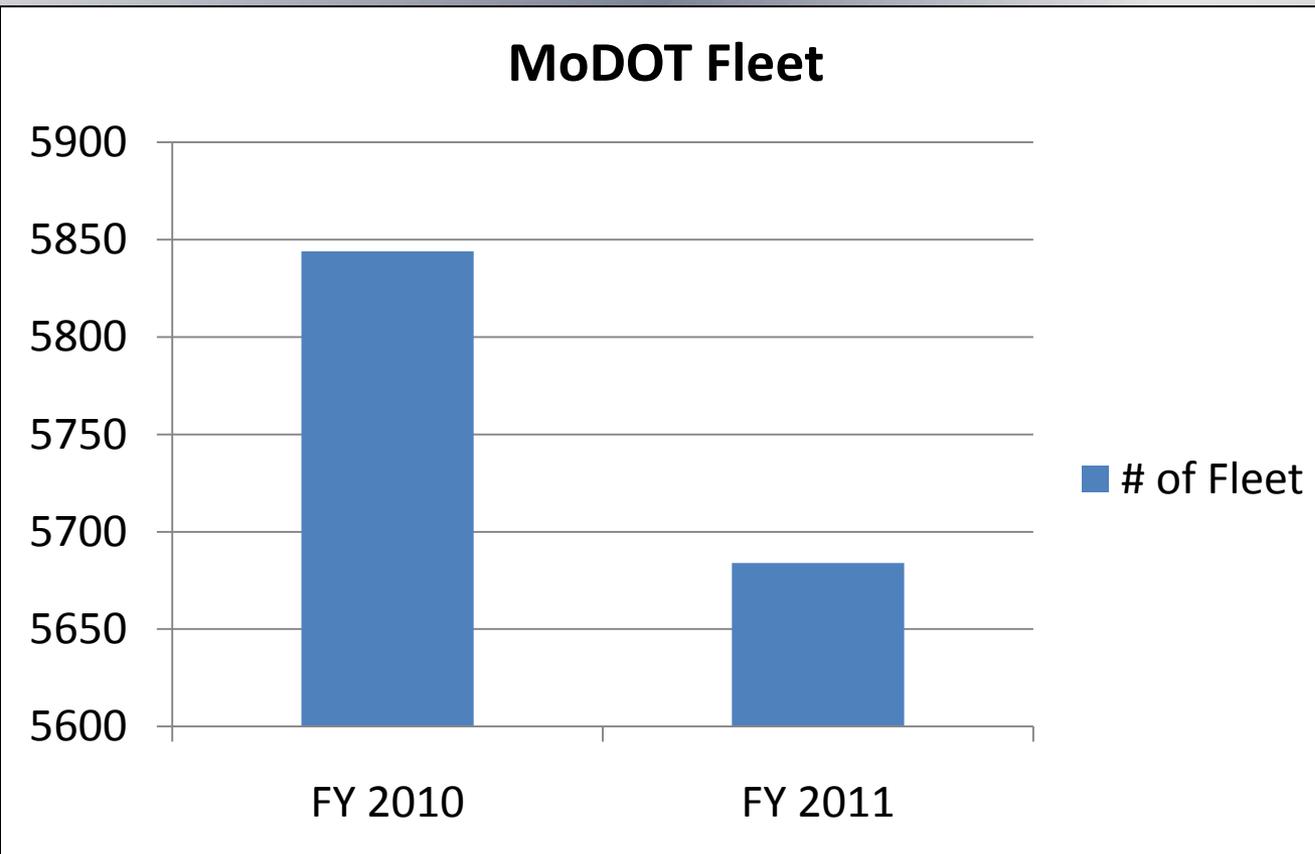
One pass mowing on minor road

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Equipment Reductions

- Reduction in equipment overall
 - Striping, mowing, trucks and plows



Pavement Maintenance



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Pavement Operations

- Pavement work first priority
- Use pavement planning tool for future work plans
- Pavement options chart to choose right treatment
- Modified pavement rating system for less than 400 ADT roads
- Fog seals/fly coat not required on minor roads less than 400 ADT
- Professional looking joint and crack sealing encouraged

Pavement Rating Scale



#3 rated pavement needs substantial treatment to improve to good condition

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Pavement Rating Scale



#6 rated pavement needs a preventative maintenance treatment to keep it in good condition

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Pavement Rating Scale



A perfect “10” on the Pavement Rating Scale

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Pavement Operations

Summary:

- Redirect more resources to our pavements;
 - \$200 million additional over next five years
- Focus resources on maintaining majors, improving minors and holding our own on bridges
- Perform quality work that looks good and rides good when completed
- Focus on preventative maintenance to keep good roads good

Pavement Operations

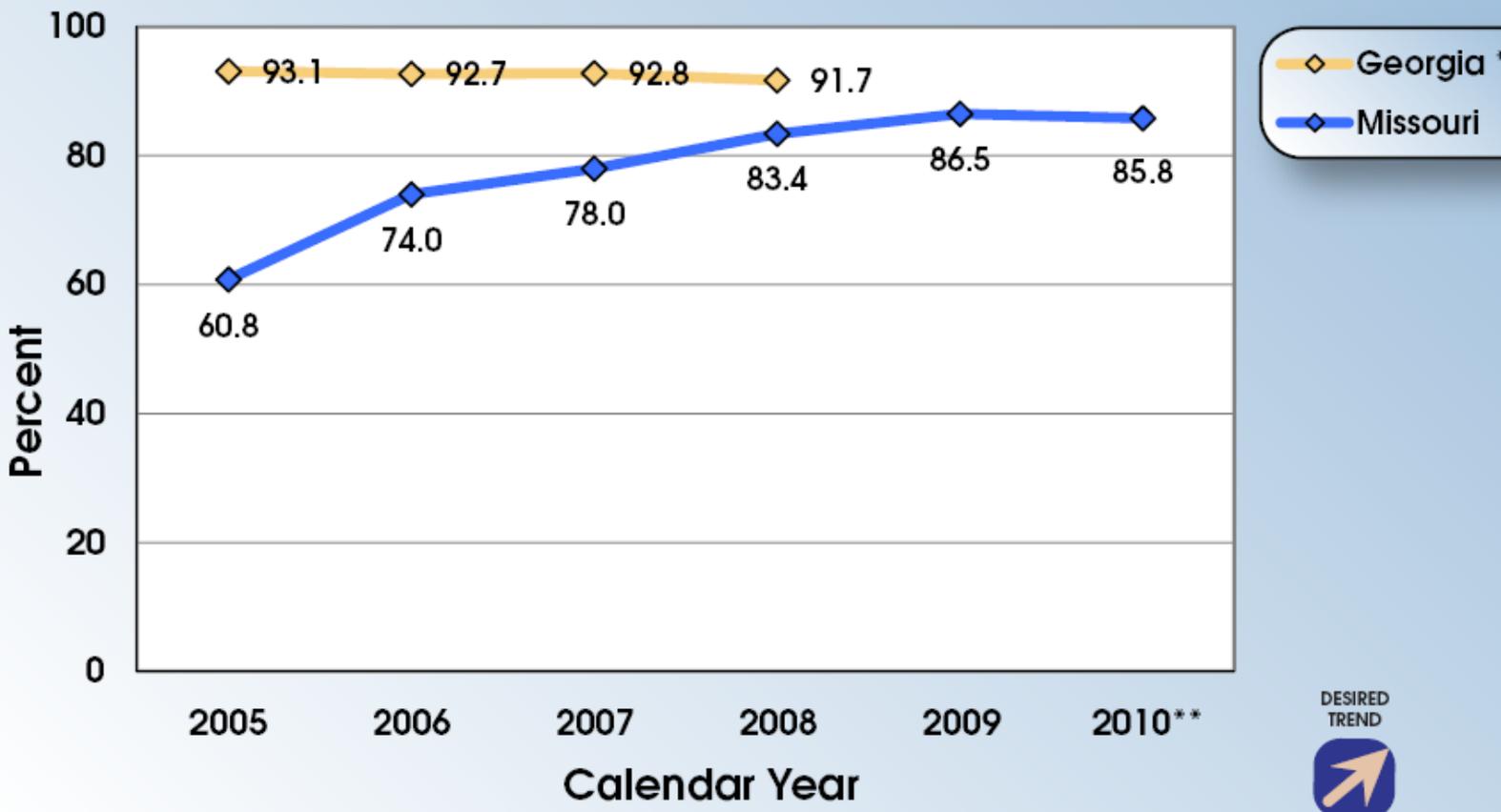
Summary:

- **Prioritize roads based on condition and volume**
- **Use options chart to choose the right treatment**
- **Track which treatments work best for future pavement planning tool**
- **Measure our performance**
 - **Percent of major and minor roadways in good condition**
 - **Dollars invested in pavement maintenance per lane mile**

Current Pavement Conditions

Major Roads:

Percent of Major Highways in Good Condition

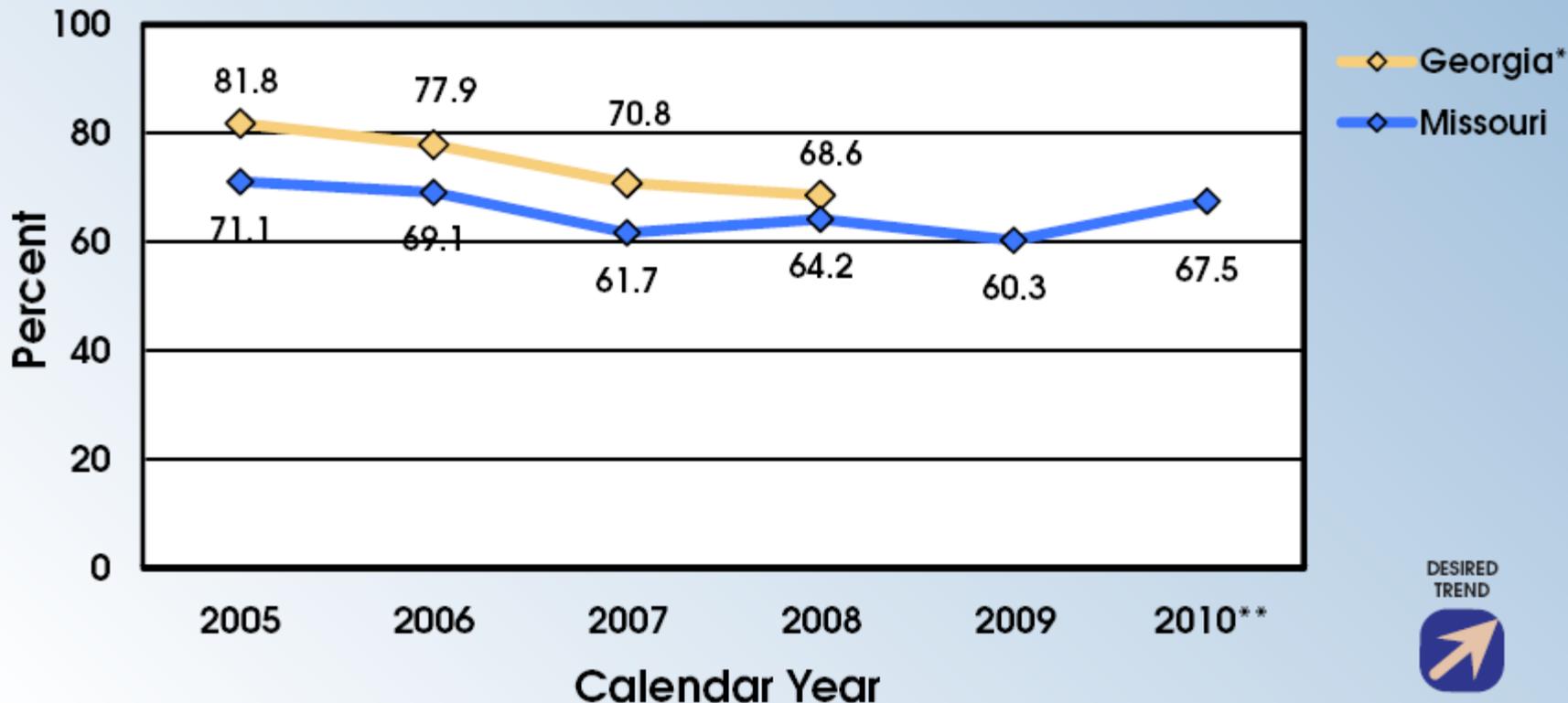


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Current Pavement Conditions

Minor Roads:

Percent of Minor Highways in Good Condition



Practical Operations

- One ton of salt costs about the same as one ton of asphalt
- Efficiencies in winter operations and mowing will be redirected to take care of our pavements
- Goal is to meet the Five-Year Plan
 - Honor our commitments
 - Keep good roads good
 - Improve minor roads
 - Hold our own on bridges
 - Maintain customer satisfaction

Welcome to Practical Operations!

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MoDOT – St. Louis

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