



Cost Management Strategies

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Results of Down Economy

- Defaults / Bonding Company Take Overs?
- Increase in prompt pay complaints?
- More claims?



More Claims?

- 2008 – 218 Final Estimates, 13 Claims
 - 6%
- 2009 – 201 Final Estimates, 19 Claims
 - 9%
- 2010 – 326 Final Estimates, 27 Claims
 - 8%



NCDOT Challenges

- Inspection Positions in 2009 /2010 reduced by 15%
- Average size of RE office – 14 technicians
- Increased expectations
- More focus areas



More with Less

- Automate documentation
- Track materials using bar code / scanners
- AMG – Reduce staking
- Increased use of contract surveying
- Additional QC/QA programs?
- Reduced Inspection / Increased use of warranties?



2007 Cost Savings Suggestions

List of Items to Implement:

- 2007 Workshop Breakouts
- AGC / DOT Special Committees
- Meetings with Executive Staff

Implemented Items

External Constructability Reviews

- 2005-2006 – 2 reviews
- 2007-2010 – 17 reviews
- Ocracoke Island bridges and I-40 widening in Wake Co included in the list of 17





Implemented Items

Increase Advertisement Period for Complex Projects

- 2005-2006 – 1 project – 8 week adv.
- 2007-2010 – 13 projects – 8 week adv.

Implemented Items

More Pre-Bid Meetings for Complex Projects

- 2005-2006 – 4 pre-bid meetings
- 2007-2010 – 34 pre-bid meetings





Implemented Items

More Decision Authority Given to REs

- This was completed in 2007.
- Active Claims and SAs increased to \$50K and 30 days for Res.
- Unlimited Active Claim and SA amount for Divisions

Implemented Items

Standard Bridge Elements & Reduced Roadway Improvements for Secondary Road Bridges

- 2009 – Implemented reduced roadway for low impact bridges
- 2010 – Implemented standard bridge designs for cored slab bridges – includes superstructure and substructure design elements



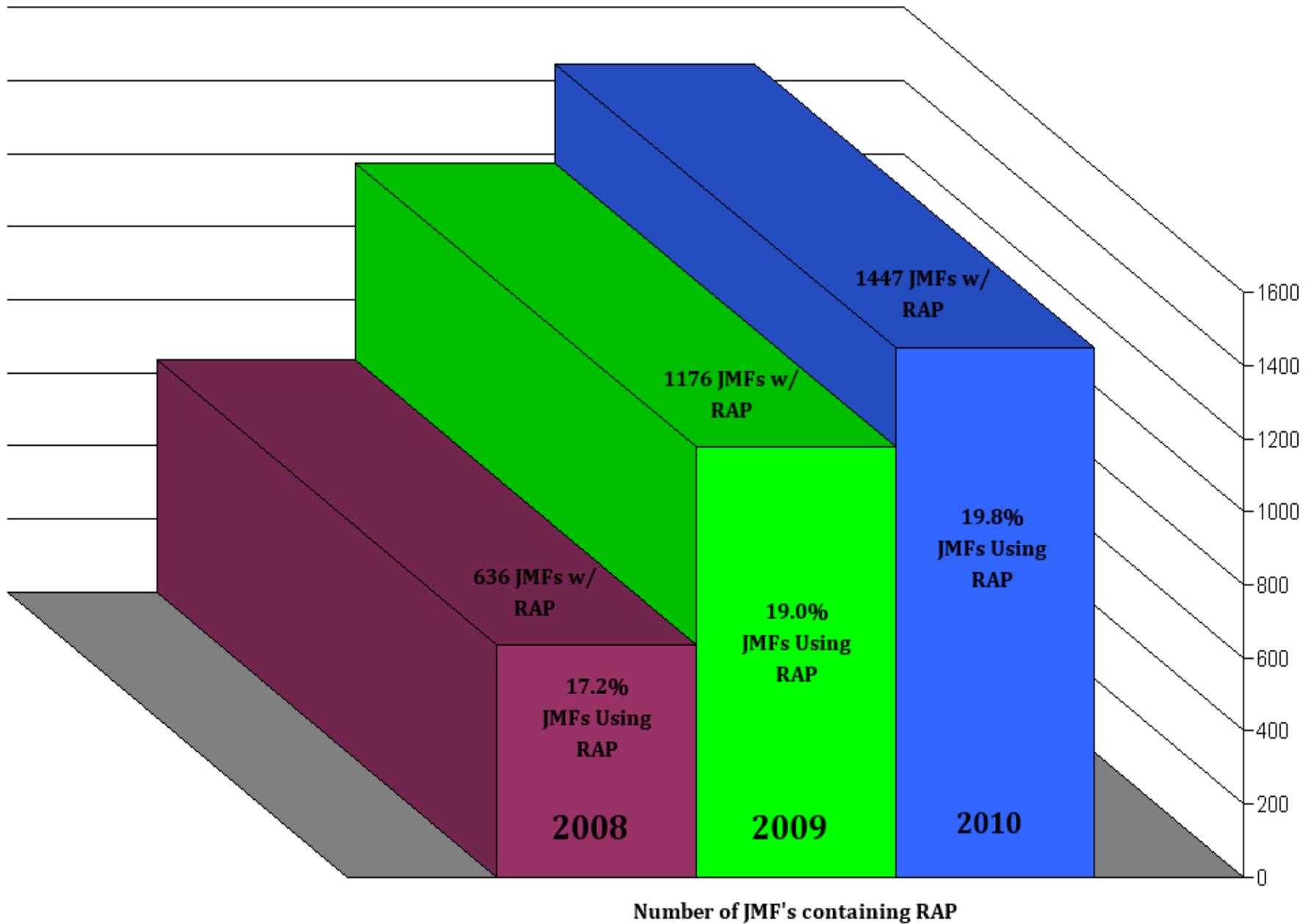


Implemented Items

Increase the Use of Recycled Asphalt

- 2008 – Revised Spec to allow more RAP in A level mixes
- 2009 – Established 3 categories of RAP, 20-30% RAP allowed with bump down to PG 64-22
- 2009 – Spec revised to allow WMA

Amount of JMF's 2008 - 2010





Partially Implemented Items

Geotechnical Options to Deep Undercut and Chemical Stabilization

- Increased use of fabric / geogrid and shallow undercut
- Need better decision tools to make cost effective decisions
- Chemical stabilization cost effective – currently reviewing spec to base restrictions on temperatures not entire winter



Partially Implemented Items

Improve Response Time for Value Engineering Proposal Reviews

- Process improved to require internal meeting to discuss & establish review times with all review parties
- Overall \$ value of VEPs has not increased since 2007



Partially Implemented Items

Increase the Use of Alternate Bid Items

- 2009 – Expanded the use of alternate items related to drainage pipe
- Currently working on a policy related to pavement alternates
- More review needed for bridge related items

Partially Implemented Items

Encourage Automated Machine Guidance (AMG) – Reduce Staking

- 2009 – Spec for design-build projects to reduce staking
- 2010 – Expanded use of Spec to design-bid-build for large grading projects
- 2011 – Revise project stake out manual to address reduced staking for AMG projects
- 2011 – Implement use of “Corridor Modeling” on new design projects and share files as part of project advertisement





Partially Implemented Items

Electronic Plans and Addendums

Improvement ideas currently under discussion

- Eliminate hard copy mailed advertisement
- Electronic plan rooms – to establish “plan holders” list
- Email or other means of addendum notifications



Items Not Implemented

Reduce On-Site Detours on Bridge Replacement Projects

<u>Year</u>	<u># of Projects with Detour Structures</u>
2005 –	4
2006 –	5
2007 –	8
2008 –	15
2009 –	11
2010 –	8

Items Not Implemented

Balance Earthwork – Designate On-Site Waste / Borrow Areas

- Off-site waste & borrow sites becoming difficult to find and more costly.
- This should be reviewed closely at all field plan reviews.
- Most common area of innovation / cost measure used for design build projects.



