





The Role of GIS in Virginia DOT's Performance Dashboard

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Dashboard

*A New Era in Openness for
Virginia Department of Transportation*

- Public Perception of Agency
 - Before and after Dashboard
- Performance Results
- Success Factors
- Accountability
- Dashboard Application
 - Demonstration



Public Perception

PUBLIC PERCEPTION OF VDOT 2002

- Confused lines of responsibility and accountability
- Needed “a room full of people” to assess project status
- Prevailing refrains:
 - *“It costs what it costs”*
 - *“It’ll be done when it’s done”*
- Public perception was of poor management and promises not kept

“VDOT is in shambles with little credibility left either inside or outside the agency.”

(Washington Post; April 10, 2002)

PUBLIC PERCEPTION OF VDOT 2005

“With a smaller but abler workforce and with solid managers, the agency that used to promise projects it could not afford has improved its score ... VDOT is up to the job.”

(Washington Post; June 5, 2005)

“... continues to improve the performance of an agency that long has resisted attempts at reform...”

(Richmond Times Dispatch; July 18, 2004)

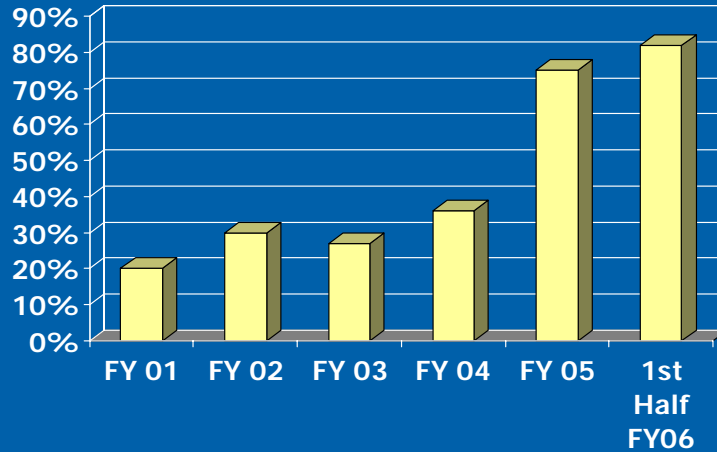
“Many drivers, frustrated by mounting traffic and construction delays ... never got the message that VDOT has become a more trustworthy organization. But it has.”

(Virginian Pilot; June 3, 2005)

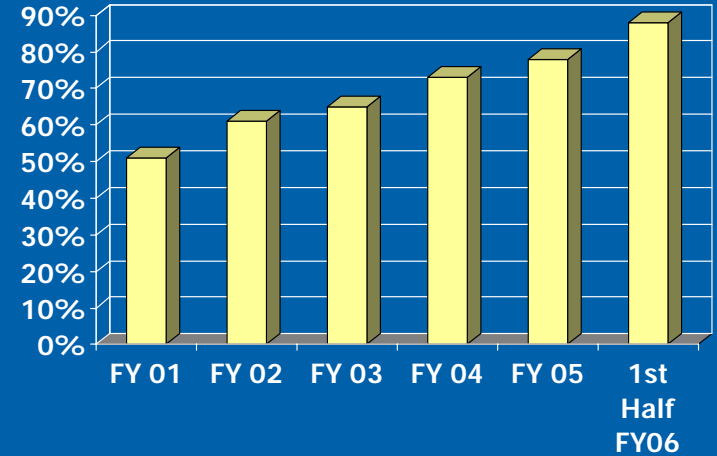


PERFORMANCE RESULTS

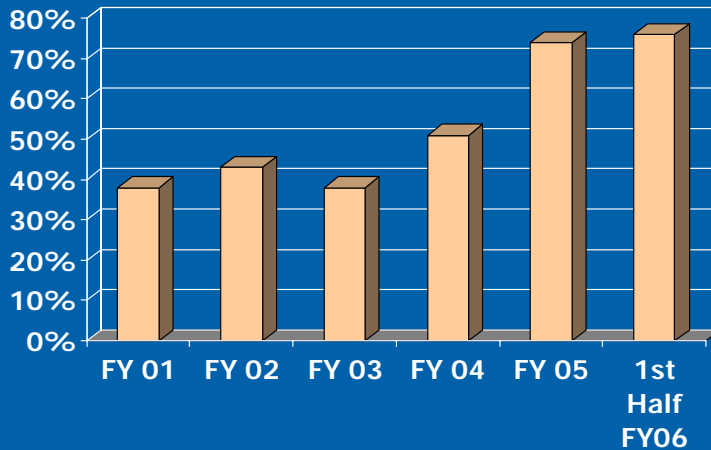
Construction On-Time



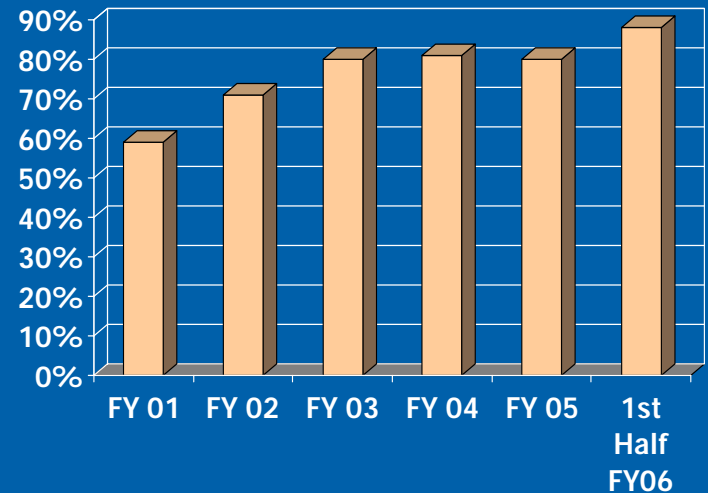
Construction On-Budget



Maintenance On-Time



Maintenance On-Budget





Success Factors

SUCCESS FACTORS

- Accountability at all levels
- Clear lines of responsibility
- Open, direct communications
- Performance management tools & practices



Accountability

ACCOUNTABILITY

- Organizational changes were implemented to increase VDOT effectiveness through increased responsibility, decision-making authority, and accountability

“Rarely were people the problem ... Difficulties stemmed from the dysfunctional management system they worked under.”

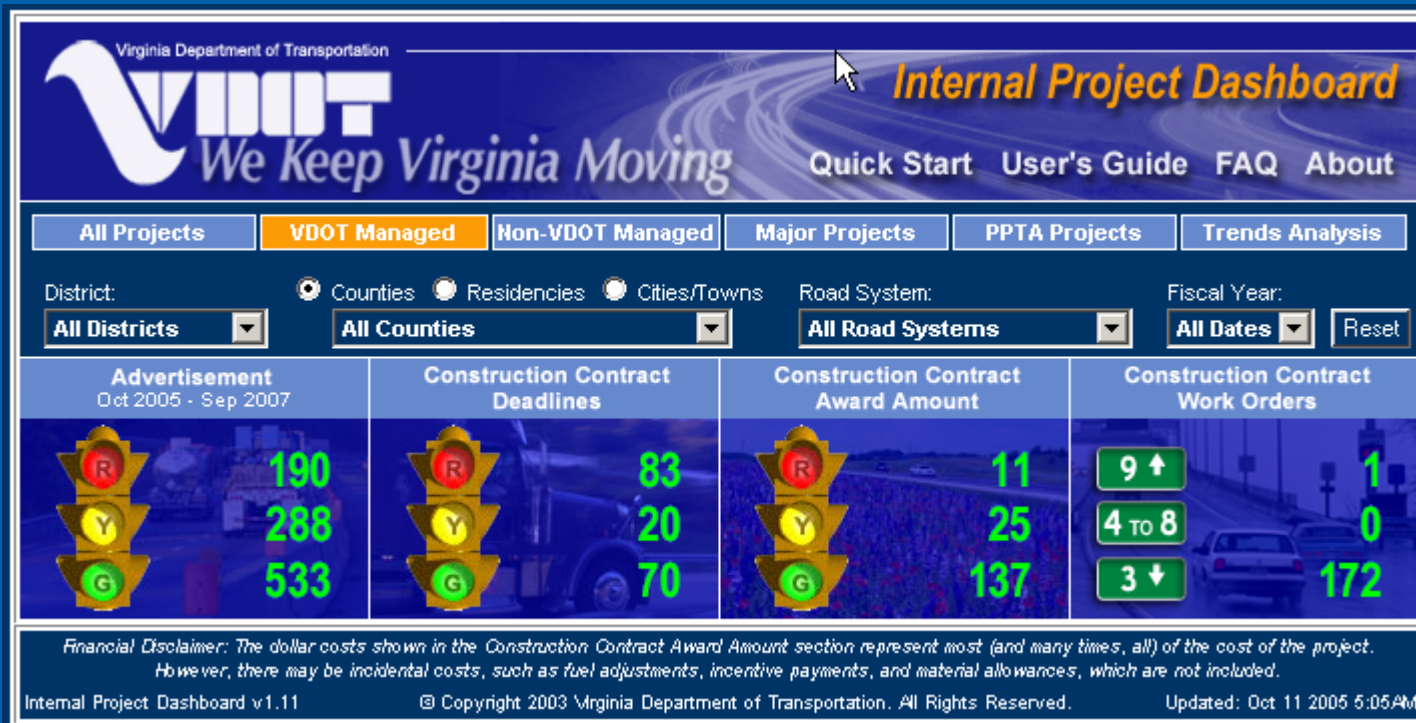
Shucet, September 2004

- *Going forward...direction from Commissioner Whirley...*
 - Hold VDOT employees accountable
 - Hold other transportation service providers accountable
 - “Regardless of who does it, VDOT is accountable”*
 - Continue transparency by being open and honest
Open with public, accountable to public

Dashboard History

- 2003 Dashboard 1 released
 - Construction Project Details Only
- Dashboard 1.0 forced improved business rules and accountability in Construction Management

Construction Dashboard (1.0)



Dashboard 2 – Expansion of Business Accountability

- Engineering
- Maintenance
- Operations
- Safety
- Finance
- Environmental Compliance

Dashboard 2.0

- Designed to accommodate greater role for GIS
 - Integrated Systems
 - Common Technology
 - Spatially Enabled Business Processes

Dashboard 2

FEEDBACK

ENGINEERING
CONSTRUCTION
MAINTENANCE
ENVIRONMENT
FINANCE
SAFETY
OPERATIONS

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All Projects
VDOT Managed
Non-VDOT Managed
PPTA Projects

Construction

Malcolm T. Kerley, P.E.
 Chief Engineer

District: <input type="text" value="All Districts"/>	<input checked="" type="radio"/> Counties <input type="radio"/> Residencies <input type="radio"/> Cities	Road System: <input type="text" value="All Road Systems"/>	Funding: <input type="text" value="Construction"/>	Date Range: <input type="text" value="Current FY"/>
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Active Projects (FY2006)		Completed Projects (FY2006)	
52% On Schedule	77% On Budget	97% On Time	85% On Budget
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: red; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">R</div> <div style="background-color: yellow; color: black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">Y</div> <div style="background-color: green; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">G</div> </div> <div style="margin-top: 10px;"> 30 6 39 </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: red; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">R</div> <div style="background-color: yellow; color: black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">Y</div> <div style="background-color: green; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">G</div> </div> <div style="margin-top: 10px;"> 5 12 58 </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: red; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">R</div> <div style="background-color: yellow; color: black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">Y</div> <div style="background-color: green; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">G</div> </div> <div style="margin-top: 10px;"> 2 60 </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: red; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">R</div> <div style="background-color: yellow; color: black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">Y</div> <div style="background-color: green; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">G</div> </div> <div style="margin-top: 10px;"> 9 53 </div>

Updated Daily

Financial Disclaimer: The dollar costs shown in the Construction On-Budget section represent most of the cost of the project. However, the final payment to a contractor may not be known at this time, and there may be incidental costs, such as fuel adjustments, incentive payments, and material allowances, which are not included.

VDOT Dashboard - Construction v2.0
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Operations Dashboard

