## Virginia Department of Transportation (VDOT) Construction Dashboard

**What the Innovation is:**
The Dashboard is a web-based tool used by VDOT, contractors and the public to monitor the development and delivery of construction and maintenance projects. A series of screen views, it provides an overview of projects and their on-time, on-budget performance as they progress from development to delivery. All project related information is updated daily.

**Why it is innovative:**
Very few state transportation agencies have exhibited this amount of "transparency",  or have this much information about the status of its projects in development and under construction available to the public. VDOT spends roughly $14 million a day. Taxpayers have a right to know how their money is being spent. The Dashboard holds VDOT accountable for its work in a very public way. It serves as an early warning device and a one-stop information source for project managers. Combining data from various VDOT computer systems, the Dashboard is user-friendly and provides real-time status of VDOT projects.

**What it changed or replaced:**
Prior to 2002, VDOT had developed a poor record of delivering construction projects on-time and within budget. Public perception of the agency was that it was wasteful and mismanaged.  A new management tool was needed that could quickly and easily provide the status of individual projects, as well as the overall program. The Dashboard was originally designed to be an internal tool, but the VDOT Commissioner decided to make it public, in order to demonstrate good stewardship of taxpayer funds.  It also holds contractors and VDOT managers accountable by listing contractor and project manager names and project manager email addresses and phone numbers. A feedback system allows anyone to send an email directly to the appropriate person, be it a project manager, district administrator, or the Commissioner.

**Where and when it originated, has been used and is expected to be used in the future:**
The Dashboard was developed internally, by staff, using standard technology, using software tools already licensed by VDOT. It was made available to the public, via the Internet, on the VDOT external web site in March of 2003. It was upgraded in June 2005 to cover other areas of agency performance (maintenance, operations, finance, safety and environmental compliance). Another upgrade of the Dashboard will be released later this year.

**Identify innovations:**
The Dashboard makes VDOT operations "transparent" to all. Projects must be well coordinated, well designed and well executed in order to meet targets. This promotes individual accountability with estimators, plan reviewers, right of way practitioners etc. Projects are rated for *green, yellow*, or *red* status. A series of lights is displayed, showing the number of projects in each status every day. Projects can be searched for, sorted and listed by county, construction district, route number, and several other criteria. Increasing levels of complexity and detail are available with a few clicks of a mouse. Dashboard includes a link to the responsible engineer for each project and a built in method of sending comments, or asking for information.

**Why the innovation is a proven success:**
In FY 01, prior to Dashboard development, VDOT completed 20% of its construction projects on-time and 65% of its construction projects on-budget. Improvements have been significant; VDOT is currently on pace to finish approximately 90% of its construction projects on time and on budget this fiscal year.

**How it has a positive effect, improves quality or reduces cost:**
At a glance, Dashboard's red, yellow and green coding system shows which projects are past due, over budget, which projects are at risk, and which ones are okay. With such information at their fingertips, managers can take steps to get projects back on track as soon as possible. Additionally, the Construction Quality Improvement scores have not only been maintained during the push to meet deadlines and budgets, but have improved. VDOT has proven that it can deliver a quality construction program on-time and on-budget.

**How the innovation promotes good practices and is a significant advance, rather than a natural evolution of existing methods:**
Like a dashboard that can alert a driver to problems, the Construction Dashboard gives a quick indication of a project's status, and allows time for corrective action. It assists VDOT in accelerating delivery of the program at a minimum cost. With this reporting mechanism VDOT employees at every level of VDOT are able to better focus in on their responsibility for program delivery.  By making project information available to the public in a simple format, it increases accountability to the public by allowing the public direct access to project managers.
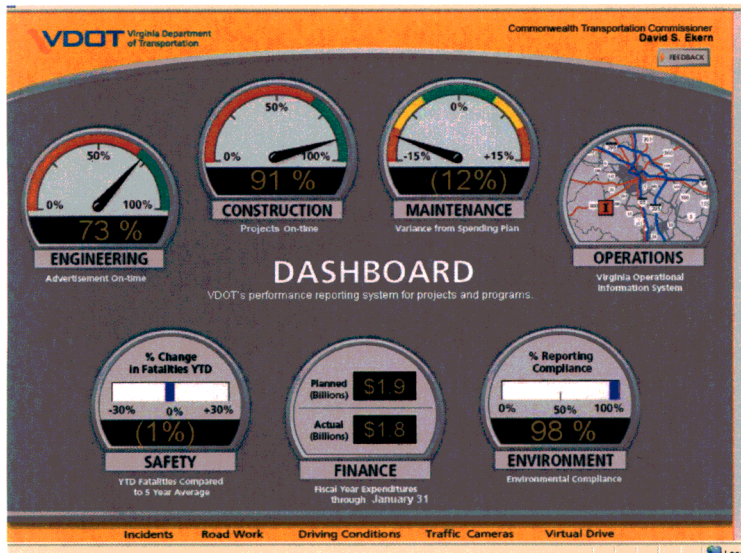
Opening page of the Dashboard at http://dashboard.virginiadot.org showing the Construction and other measures.
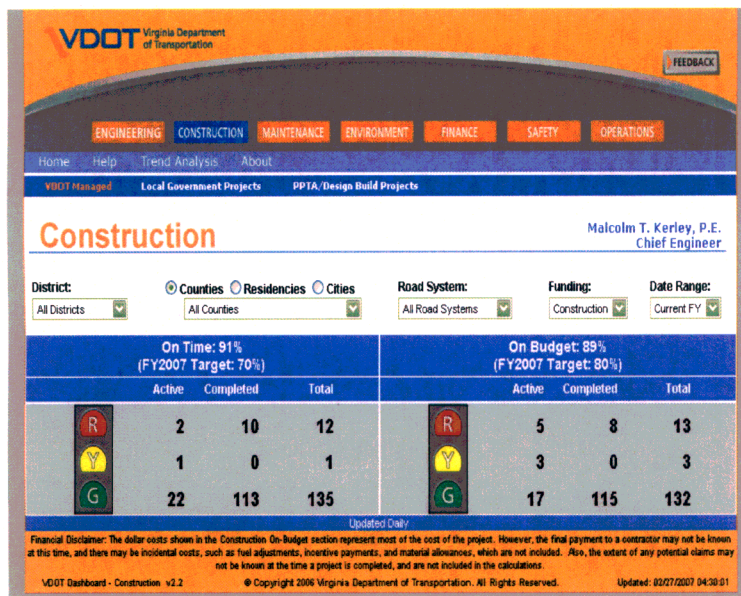


The main Construction page. The default view shows contracts due for completion in the current fiscal year. Other dates may be selected, and there are filters for several other categories.
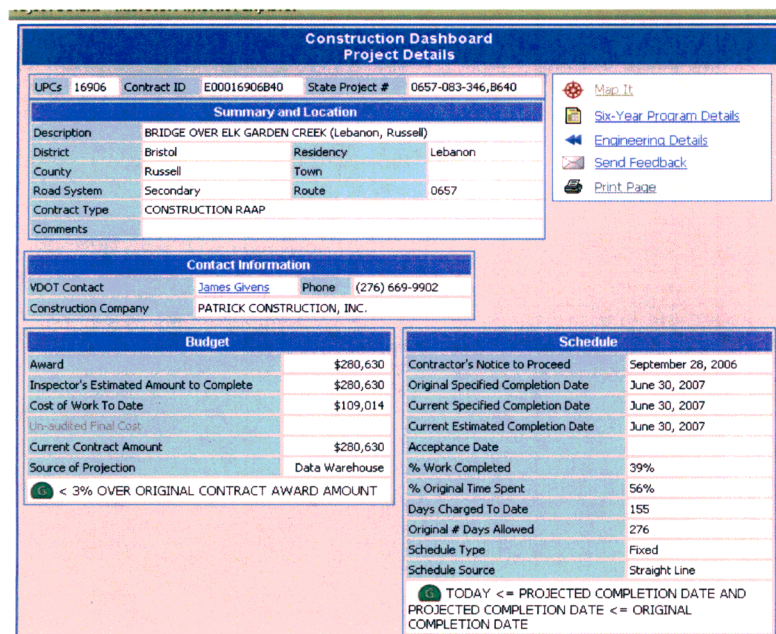


This is the details page which is available for each construction contract. Pertinent information about the contract is seen here, including the VDOT contact person and the Contractor, as well as links to the Six-Year Plan, Map-it features, etc.