ProTrack+ White Paper

How to Streamline DDOT's Project Management Process by Utilizing ProTrack+

Introduction

Traditionally, the District Department of Transportation's (DDOT) project management process has relied extensively on paper-driven documentation that is segmented, residing in various inboxes and file folders. Because of this segmentation, it is customary for project stakeholders to be unaware of each other's roles and responsibilities. In addition, where data is captured electronically, it usually requires project and program managers to enter the same information into multiple databases. This task is not only time consuming and inefficient, but introduces errors and inconsistency in the overall data collection.

DDOT's Office of Information Technology and Innovation's (OITI) new project management system, **ProTrack+**, addresses these issues by removing redundant data entry and increasing project-related transparency. **ProTrack+** will serve as a digital hub for all project and program documentation, approval workflow and configuration management. It will increase clarity and transparency among colleagues and external parties while drastically improving data integrity.

ProTrack+ helps manage DDOT projects through their entire life cycle, helping users track and manage projects through various phases including call for projects, funding obligation, contract and procurement, construction management, payment tracking and project closeout processes. This white paper explains the critical elements of **ProTrack+** and how the application will play a central role in reconstructing DDOT's project and program management process.

Background

ProTrack+ is a GIS-centric web application that centers DDOT's various construction projects on a District map. Users can access a construction project, and the project's financial and procurement information, using this map-based feature.

ProTrack+ will eliminate the current stove piping/silos that exist between project-related applications. **ProTrack+** will interact with—and consume data generated by—other project-related applications used by DDOT and store this information in one location via the Transportation Integrated Enterprise Solution (TIES), an Extract Transfer Load (ETL) web service process developed by DDOT's OITI.

TIES is a Service Oriented Architecture (SOA) framework that integrates disparate systems and DDOT's business applications with a common architecture to facilitate data sharing and features comprehensive management tools for better decision making. TIES' nightly feature extraction process enables project-related data from each related application to be shared and accessed enterprise-wide by various DDOT stakeholders. Comprehensive reports and statistics can be generated against various business databases using TIES as well.

ProTrack+ will also use TIES' data services to aggregate project information and identify where projects have geographic conflicts with other ongoing DDOT-related work (for example, public space permits and 311-related work orders). This

will allow project and program managers to receive alerts and view information on dashboards so that they can coordinate and reduce potential conflicts, such as multiple construction projects at the same location and erroneous street cuts on newly paved roads.

ProTrack+ serves as a central repository for all project-related information. It will establish a parent-level record for all projects to allow for a one-to-many relationship with other activities that normally occur in a project's life cycle. It will standardize unique IDs for all project records and provide users with the ability to view the status of pending contracts, task orders and track the entire project from inception to close out (including Transportation Planning Board, Federal Highway, and DC Council approvals). This incorporated data will enhance DDOT's ability to make better decisions regarding project prioritization, funding projections, expiring contracts, financial status and procurement issues.

The primary audience for **ProTrack+** is various DDOT administrations, divisions, employees, project and program managers, resource management officials and contract and procurement staff. Other District Government agencies that play an integral role in DDOT projects—such as the Office of the Chief Financial Officer, and the Office of the Chief Procurement Officer—will use the application as well.

Solution

ProTrack+ will be employed in a two-layer method:

1) Divisions will work with OITI to build various modules ensuring they reflect their improved portion of the overall project process. The group should identify their current process while noting any related problems and issues that affect their effectiveness. OITI will help identify data redundancy and unknown bottlenecks in existing business workflow and/or systems and apply solutions within ProTrack+ to streamline the overall project management process and increase agency productivity.

2) OITI will continue to develop, improve, and implement an enterprise solution that includes automated workflows, content management, version control, metadata, and electronic signature approval to decrease processing time, increase visibility and improve interagency customer service.

Looking forward, OITI proposes developing a future iteration of **ProTrack+** that is more compatible with mobile platforms (for example, smart phones and tablets) to further improve the reach and usability of this application, which will increase the efficiency of the agency's project and program management processes. OITI will also develop a new District Transportation Access Portal (DTAP), a public facing website that provides constituents, residents, private developers, utility companies and contractors access to ongoing project information, open solicitations and bid documents. DTAP will include several modules to capture and facilitate proposed utility work, ongoing construction management and Small Business Enterprise (SBE) certification.

Conclusion

ProTrack+ will allow for DDOT's project stakeholders to work in a more collaborative manner and leverage an ever-increasing trove of project-related data to improve agency-wide decision making. **ProTrack+** will increase the efficiency, productivity, transparency and accessibility of DDOT projects and programs and decrease valuable time lost to communication gaps and unreliable data.