



Presentation Overview

- Introduction to MPMS IQ
- Key Functions of MPMS IQ
- Google functions
- Future Enhancements
- Links

Introduction to MPMS IQ

What is it?

- A web-based GIS mapping application

➤ What does it do?

- Allows users to search for and view Highway and Bridge data in a geographic environment
- Maps current, past and draft Transportation Improvement Plan (TIP) projects by Project ID

➤ Who can access this tool?

- PennDOT employees via the Intranet
- The general public via the Internet

Background

- The existing MPMS Maps application was enhanced to further strengthen the tie between Planning and Programming and GIS
- MPMS IQ was created through the cooperative efforts of the Bureau of Planning and Research and the Program Center



Introduction to MPMS IQ

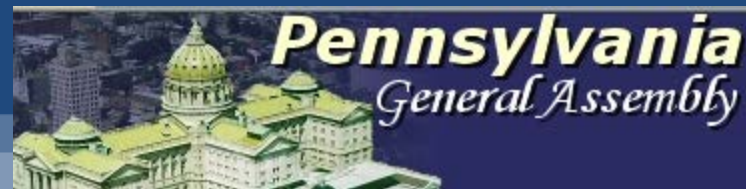
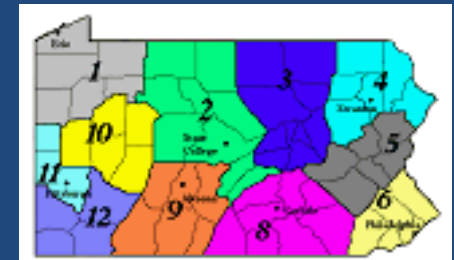
Development Background

- The Application was developed in GeoMedia WebMap 6.0 and ASP .net
- The data is stored in Oracle 10g
- 6 to 8 month in development
- Approximately \$250,000 at cost
- Original data stored in DB2 database

Introduction to MPMS IQ

Users

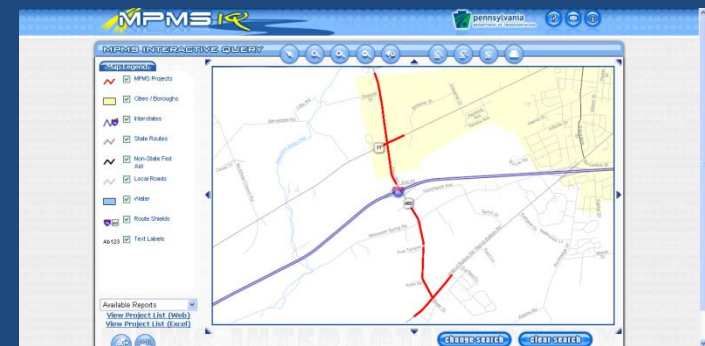
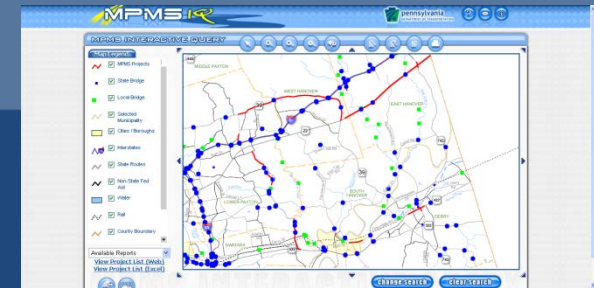
- PennDOT Central Office Employees
- Districts
- Planning Partners
- Other Federal and State Agencies
- The General Public
- Legislators



MPMS IQ Key Functions Overview



1. Single/Multiple project and bridge mapping
2. Geographical query based reports (County, Municipality, State Route, Street name)
3. Google and KML exports
4. Reports for planning and project status:



Project Status Report

Basic Information		Project:	Exit 44 Improvements	Date of Report:	3/5/2011 <th>MPMS #:</th> <td>10550</td>	MPMS #:	10550								
Description/Location		State Information	State Route: PA465	County: Cumberland	Planning Partner: Harrisburg	Improvement Type: Interchange Improvement	Length: 2.75	ADI: 16701	Truck Percentage: 7						
Project Map		Project Class: Highway Reconstruction	Let Date: 02/20/2009	Actual	Physical Work Complete: 12/15/2010	Open to Traffic: 12/27/2011	Capital Budget Year: 2008								
Cost Data		Description/Location	Description: Exit 44 Improvements Location: I-82 Interchange with PA 465 in South Middleboro Township												
		Project Map													
Cost Data (\$1,000's)															
Phase	Status	Post	Fiscal Year: 2011			Fiscal Year: 2012			Fiscal Year: 2013			Fiscal Year: 2014			Estimate
PE	ACT	\$ 1,341	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,000	9/4/2003
RD	ACT	\$ 2,250	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,250	7/18/2007
UTL	ACT	\$ 1,311	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,000	7/18/2007
ROW	ACT	\$ 7,074	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 7,303	10/27/2008
CON	ACT	\$ 13,835	\$ 410	\$ 308	\$ 82	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,678	1/31/2011

MPMS IQ Key Functions

Single/Multiple project and bridge mapping

Map by Project ID and/or Bridge ID

- Provides information from 4 different databases
- Basic project/bridge information
- Road and bridge conditions
- Milestones and Project Costs



Project Status Report

Basic Information

Description/Location

Project Map

Cost Data

Project: Exit 44 Improvements **Date of Report:** 3/8/2011 **MPMS #:** 18550

Basic Information

State Route: 0465 **TR:** PA465 **County:** Cumberland **Planning Partner:** Harrisburg **Improvement Type:** Interchange Improvement **Length:** 2.75 **ADT:** 16781 **Truck Percentage:** 7

Project Class: Highway Reconstruction **Let Date:** 02/20/2009 Actual **Physical Work Complete:** 11/15/2010 **Open to Traffic:** 12/15/2011 **Capital Budget Year:** 2008

Description/Location

Description: Exit 44 Improvements

Location: I-81 interchange with PA 465 in South Middleton Township

Project Map

- MPMS Projects
- Cities / Boroughs
- Interstates
- State Routes
- Non-State Fed Aid
- Local Roads
- Water
- Route Shields
- Text Labels



Cost Data (\$1,000's)

Phase	Status	Past	TIP 2011				TIP 2012				TIP 2013				TIP 2014				Estimates		
			Total	Fed	State	Local	Total	Fed	State	Local	Total	Fed	State	Local	Total	Fed	State	Local	Cost	Date	
PE	ACT	\$ 1,341	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,000	9/4/2003
FD	ACT	\$ 2,258	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,250	7/18/2007
UTL	ACT	\$ 1,311	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 938	7/18/2007
ROW	ACT	\$ 7,074	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 7,303	10/27/2008
CON	ACT	\$ 13,835	\$ 410	\$ 328	\$ 82	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 15,678	1/31/2011

MPMS IQ Key Functions

Query by Geographical Areas

- Query projects by geographical areas:
 - 11 Engineering Districts
 - 67 Counties
 - 2546 Municipalities
 - 253 Legislative districts



Google Maps Export

- Export projects, bridges, road conditions and maintenance activities to Google maps and Google Earth
- Easy to use interface
- Cost effective development

Reports for planning and status

- The system provides reports such as:
 - Detailed project and bridge reports
 - Reports that use GIS overlays to evaluate conditions of the road and bridges
 - Planning Statistics report that breaks down number of bridges worked on and poor roadways addressed.

Other features

- Plot your own Map up to 17 X 22
- Report queries exported to excel
- Color code by Improvement Type query
- Output a standalone map to take anywhere

Future Enhancements

- Map by Fund Category
- Integrate project visualization for 3D rendering and before and after design concepts
- Enhance GIS overlays to help with environmental and linking planning and NEPA

Links

INTERNET

Available to the General Public

<https://www.dot7.state.pa.us/mpms%5Fiq/>

INTRANET

Available to PENNDOT Staff

http://164.156.155.62/mpms_iq/default.aspx

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