

Traffic Barricades

A Web-based
Digitizing Application

Project Participants

- Traffic Engineering - Data entry and analysis
- Development Services - Permits Plus design
- DOT Management Services - Web design

Resources

- Autodesk MapGuide
- Permits Plus
- HTML, ColdFusion, JavaScript
- Access

Common Questions

- How is the digitized data stored?
- Can I use the data with my software?
- What are the advantages, if any?
- How does it all work?

Storing Map Objects

- Points - In a table as Lat & Lon
- Lines - In SDF (Spatial Data File)*
- Polygons - In SDF (Spatial Data File)*

* Associated data stored in secondary table.

Compatibility Issues

SDF's can be imported into AutoCAD Map then:

- Saved as a drawing
- Exported as a shape file
- Exported into Oracle Spatial

OR

Points, Lines, and Polygons can be digitized directly into Oracle Spatial

Give and Take

- Save on the cost of software and training
- Loss of some spatial accuracy
- Limited editing capability
- Compromise by adding data through the web to existing accurate layers

Getting the Point

Capturing the X & Y with ColdFusion

```
<!-- insert data into points table -->
<cfquery name="write" datasource="Traff_Barricades">
    INSERT INTO Points
        (LatY,
         LonX,
         PermitNum)

    VALUES
        (#form.Lat#,
         #form.Lon#,
         '#Cookie.PermitID#')
</cfquery>
```

Seeing It Your Way

Building client side spatial queries with JavaScript

```
var multiPermitSQL = mapLayerSetup.setSpatialQuery  
("SELECT KeyID, Lat, Lon, MapTip,URL, Width, Height, Angle  
FROM DisplayPoints_qry2  
WHERE PermitNum = '"+permitID+"'");
```

Allows the user to define how the layer is displayed.

Web-based Layers

- Bike Paths
- Capital Improvement Projects
- Contract Medians
- Emergency Streets
- Environmental Barriers
- HPMS
- Irrigation Controllers
- Landscape Plans
- Meters
- NAVD88
- Operation Freeze
- Operation Splash
- Non-residential Parking
- PIA Contracts
- Research Notes
- Service Requests
- Speed Humps

More Layers

- Alleys*
- Asphalt*
- Dirt Streets*
- Drainage*
- Shoulders*
- Sweep Dump Sites*
- Weeds*
- Storm Water Permits
- Sweeping Contracts
- Traffic Circles
- Traffic Barricades
- Traffic Signals
- Wash Signs
- Weed Control Contracts

*Street maintenance scheduling data

Layers Under Design

- LED's
- Power Drops
- Street Lights
- Traffic Signals - Redesign

Request Backlog

- Neighborhood Parking
- Utility Permits
- Excavation Permits

A Possibility

That we can build a web-based application that allows real time editing of a geodatabase providing updated data to layers on both MapGuide and ArcIMS sites at the same time.

Give It a Try

A scheduling application anyone can use

<http://tdotmaps.transview.org/digiapps/TrainingDigi/mgframes.cfm>

UserID: Type in anything

Password: map

Add, move, or delete a point. Edit scheduling data or run a report.

Requires Internet Explorer and the plugin for MapGuide 6.5

Inside the Database ...