GIS Update

Partnering Conference
August 10, 2010
Challenges we face...

“Do more with less...”

“Work smarter....”

Furloughs...
A Littler Perspective...
We choose to be public servants...?

• “Be the change that you want to see in the world.”
  – Mohandas Gandhi

• “A small group of thoughtful people could change the world. Indeed, it's the only thing that ever has.”
  – Margaret Mead
Reflecting On “Where We Are…”

And Where we are headed with GIS.
KYTC Agencies We Support Today

State  Highway  Engineer’s  Office

Program Management
- Transportation Systems
- Data Management
- Modal Programs

Environmental Analysis
- Archaeology Section
- Ecology Section
- Cultural Historic Section
- Environmental Coordinators

Planning
- Tech Support Branch
- Estimating Branch
- Development Branch
- Drainage Section
- Location Section

Highway Design
- Bridge Design Branch
- Geotech Branch

Structural Design

Maintenance
- Roadside Environment Branch
- Bridge Preservation Branch
- Operations & Pavement Branch
- Permits Branch

Construction

Traffic

Aviation

Rural and Secondary Roads

Special Programs

Traffic Operations Center

Legal

Highway Safety

Districts 1 - 12
How we are contributing...

• New Foundation Technology
  – ArcGIS 10
  – SDE
  – ProjectWise/MicroStation
• Data Collection & Analysis
  – Environmental/Facilities
  – MRP
  – Asphalt Contract Analysis
• Viewing/Decision Making
  – Bridge View
  – Photo Log Viewer
• Future Directions...
ArcGIS 10 is coming...

- Improved display performance
- Improved workflow
- New analysis methods
  - Location-allocation
  - Time
  - 3D

- Later this fall...
SDE/SQL Server...

- Key Benefits
  - Easier sharing
  - More data will be available
  - Integrates Field GIS & Desktop
  - Multi-user editing
  - Better maintenance
SDE...

- Easier sharing between CADD & GIS
- More data will be available
- Multi-user editing
- Better maintenance & performance
- Integrates Field GIS & Desktop
ProjectWise/CADD & GIS Integration: ArcGIS Connector

- KYTC ArcSDE
- Oracle
- SQL Server
- ProjectWise
- PW Geospatial
- ArcGIS Connector
- 12 ProjectWise Gateway Servers

ArcGIS Connection

ArcView
ArcInfo

Microstation
Bentley Map
Reviewing Attributes in Bentley Map
Photo Log Can Be Embedded
You can also Extract Raster Data
Understanding Our “System”...
Data Collection & Analysis

- Environmental/Facilities
- MRP
- Asphalt Contract Analysis
Facilities Management and Environmental Compliance Inventory
Mobile Application: Maintenance Rating Program Pavement Inventory

View the Map

Identify Section
Mobile Application: Maintenance Rating Program Pavement Inventory

Inspecting and updating the Attribute information

Finalized Inspection
Mobile GIS: Maintenance Rating Program
Districts 6, 8 & 12 have mobile GIS units
Progress so far.

June 23rd

June 30th

July 7th
The Mobile Future

• Many more integrated applications.
  – Mobile elements post into larger systems (OMS, RCI, PERKS...)

• Yes... there is an (ESRI) I-Phone App for that.
Web Solutions

• **KY View** – KYTC Layout Sheet Map Generator

• **Photo Log Viewer**

• **Bridge Viewer**
Future Web Development

• Embed spatial elements into all IT applications (where appropriate).
  – Maps
  – Tabular “answers”
    • What is near?
    • Is it in?
    • What touches?
    • What is the route description (County Route Milepoint).
Training/Customer Support

• Video streaming of classes

• Remote live training & “application sharing”

• Continuing the KYTC Transportation GIS Conference.
Remember Why We Work to Build A Safe Transportation System
Thank You!

GIS Branch &
Our Customers