T. R. I. P.
Trail and Recreation Information Portal
Blue Cross Blue Shield of Minnesota
  – Active Community Planning Contract Grant

• Active Living Initiatives – Carver County Public Health

• 2030 Comprehensive Plan
  – County-wide GIS Trail Collection
    • Data Gathering - Cities, County, Regional, State
    • Designed GIS Data Model – Standardized Fields
    • Merged Data Together

• Website
  – GoCarverGo – [www.gocarvergo.org](http://www.gocarvergo.org)
  – Trail and Recreation Information Portal (TRIP)
    • Contracted: Houston Engineering & GeoDecisions
Architecture and Design

• Initial Considerations and Planning
  – Audience
  – Data Sources
  – Application Functionality
  – Hardware
  – Server Architecture
  – Client Requirements: Windows OS and .NET

• Development Options: WebADF versus JavaScript API versus Custom .NET Code
Desktop GIS

is designed for . . .
Citizen users are...
Don’t Give this

To them

To them
What do you mean PAN tool?
Public Users don’t understand GIS tools

- Pan
- Identify
- Zoom In
- Zoom to rectangle
- Zoom Out
- Query
- Buffer
Public users want to...

...pan without selecting a tool

...zoom without selecting a tool

...search with guidance

...use task based interfaces

...see meaningful results
Simple Familiar Navigation

Zoom/Pan with Slider and Nav Arrows

Always active click and drag to pan

Mouse Scroll Zoom In/Out
What is a task based interface?
Task Based interface
(Zoom to a Lake)

NOT Task Based interface
(Query Builder)
ESRI to the rescue

Javascript API
REST API and Services

- Application access Service through REST API
- Used ArcCatalog and ArcMap to Create Services
  - 5 MapServices (3 are MapCache)
  - 1 Geometry Service
  - 1 Geocoder Service
- Source of data is ArcSDE
  - Also tested with Shapefiles
REST API and Services

- REST Services can be made browsable
  - [http://carvergisweb1.co.carver.mn.us/ARCGIS/rest/services](http://carvergisweb1.co.carver.mn.us/ARCGIS/rest/services)
- ArcCatalog and ArcMap to Create Services
REST API and Services
JavaScript API Pros/Cons

• Pros
  – Background layers are fast
  – Code is easy to update and maintain
• Cons
  – Map Caches take a long time to build
  – Need to Update Cache anytime data changes
• Challenges
  – ESRI Bugs in new version
  – Network Configuration
  – Map Tips/Pop-ups
  – Security of Services
  – Short timeline
TRIP Demonstration