# DEVELOPING WEB BASED MOBILE MAPPING APPLICATIONS WITH JAVASCRIPT

Matt Lane – OIR GIS Services, State of TN

# USE HTML 5

- New semantic elements
- Geolocation
- Local storage
- File api

## REDUCE PAGE LOAD

- Less requests
  - Single js
  - Single css
  - Compact ESRI api
- Smaller requests
  - Minified files
  - Compression
  - Smaller images
  - JavaScript last when possible

# MAPPING IS (SLIGHTLY) DIFFERENT

- Page zoom matters
- Map height matters

## CHOOSE THE CORRECT APPROACH

- Mobile Enabled
- Mobile Targeted
- Mobile Native

### PROTOTYPE THE GUI

- Sketch out design
  - Small
  - Medium
  - Large
- Can show customer before code, head design problems off early
- Some tools can export page markup

## MOBILE 1<sup>ST</sup> APPROACH (RESPONSIVE)

- Design a site first for mobile
  - No js for structure, just markup and CSS
  - Small images
  - Small number of requests
- Alter structure and dimensions as it sizes up to desktop
- · Choose media query breakpoints based on content, not device dimensions
  - Changes are dependent on needs
  - Devices dimensions change

### TODAY'S EXAMPLES

- Mobile Enabled (responsive)
  - Traditional desktop oriented web layout
  - Grid system (bootstrap)
- Mobile Targeted
  - jQuery mobile
- Extras
  - Geolocation (follows your position)
  - Redirection of a desktop site to a mobile one

#### **WRAP UP**

- CONTACT
  - Matt Lane
  - matt.lane@tn.gov
  - 615-741-7724

- DOWNLOAD / FORK
  - https://github.com/mdlane/MTNGIC-2013-Workshop

