"HOW MODEL OUTPUT VISUALIZATION SAVED ME FROM DATA"

presented by Rhett Fussell

NC Model Users Group
November 2009
Excel sheets
Maps Galore!!
60 GIGs of Output Data
Hours Spent on Looking at Data
Creation of “Presenting Info to Stakeholders”
<table>
<thead>
<tr>
<th>zone</th>
<th>Total col</th>
<th>sumsum</th>
<th>bummer</th>
<th>bummerint</th>
<th>sumsum2</th>
<th>Total col</th>
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<th>3260</th>
<th>TOTAL ROW</th>
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</tbody>
</table>

**Journey At Work**

**From Zones**

- User Benefits:
  - >5000 to >250
  - >250 to 20
  - >20 to >5
  - >5 to 20
  - 20 to 250
  - 250 to 500
  - 500 to 1000
  - M08 L Alignment
  - Stations

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**Table Legend:**

- **Total col**:
  - Sum of the total column.
- **sumsum**:
  - Sum of the sum column.
- **bummer**:
  - Bummer column.
- **bummerint**:
  - Bummerint column.
- **sumsum2**:
  - Sumsum2 column.

**Row Values:**

- **18334**: Total number of rows.
- **3260**: Total number of columns.
- **TOTAL ROW**: Total of all rows.
- **TOTAL**: Total of all columns.

**Columns:**

- **Zone**: Zone identifier.
- **Total col**: Total column.
- **sumsum**: Sum column.
- **bummer**: Bummer column.
- **bummerint**: Bummerint column.
- **sumsum2**: Sumsum2 column.
Why Do You Need a Tool!!!

- User Benefit Maps CHANGE A LOT!!!
- Takes Hours to Re-create
- Are the bins & colors right/consistent?
- Will you remember how you created them?
- You need to troubleshoot your user benefits
  - You gotta “Take the Red Out”
Put next to each other
Do the flip method to display?
R SCRIPTING FOR
FTA VISINE MAPS

- Generic Script
  ANYONE can use
- Uses shapefiles of your area
- Standard FTA Outputs
- Flexible
Use of Color Important

http://colorbrewer2.org/
Swim2 Visualization

- Oregon Statewide Model (SWIM)
- Landuse/Transport
- Wanted Consistent and Central Output
- Different Models and format
- Visualization of the Data
- R used to compile the database
- Implemented in SQLITE
  - Open source
  - Fast, R and Adobe have interface
SWIM2 VISUALIZATION
USES ADOBE FLEX
**Dynamic Interactive Visualization**

- People can See the Data “realtime”
- Perform their own queries
- Plot maps/figures
- Not have to worry about what fields are in the data for each year
- Troubleshooting
DYNAMIC INTERACTIVE VISUALIZATION

- Faster & More efficient

- Use for LRTP’s / CTP’s
  - Imagine 25 alternatives to test
  - Public meetings
  - Checking data inputs
  - Desire Lines (can use TCAD)