

SETTING UP YOUR OWN SIGN INVENTORY

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Why do an Inventory?

- ▣ What and where are my current signs?
- ▣ What signs do we need to add?
- ▣ Are our signs up to code?
- ▣ What do our signs look like at night?
- ▣ What's the condition of the post & sign(s)?
- ▣ How much money should we budget for signs?

Tools you will need

Tablet (GPS)



ArcOnline



ArcGIS Online

Retro Reader

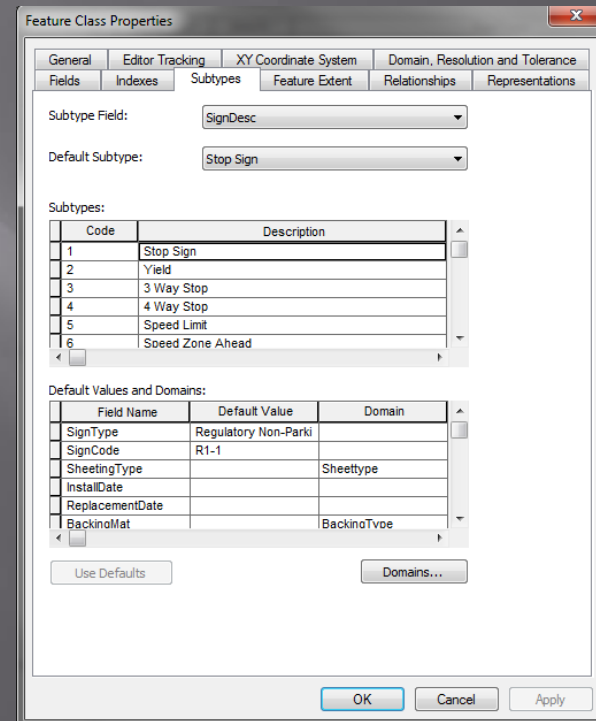
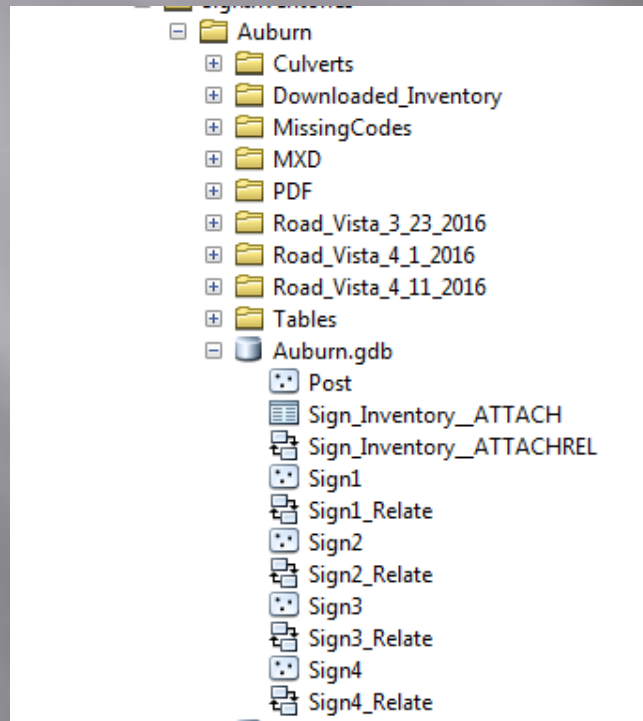


Notebook



Setting up your Project

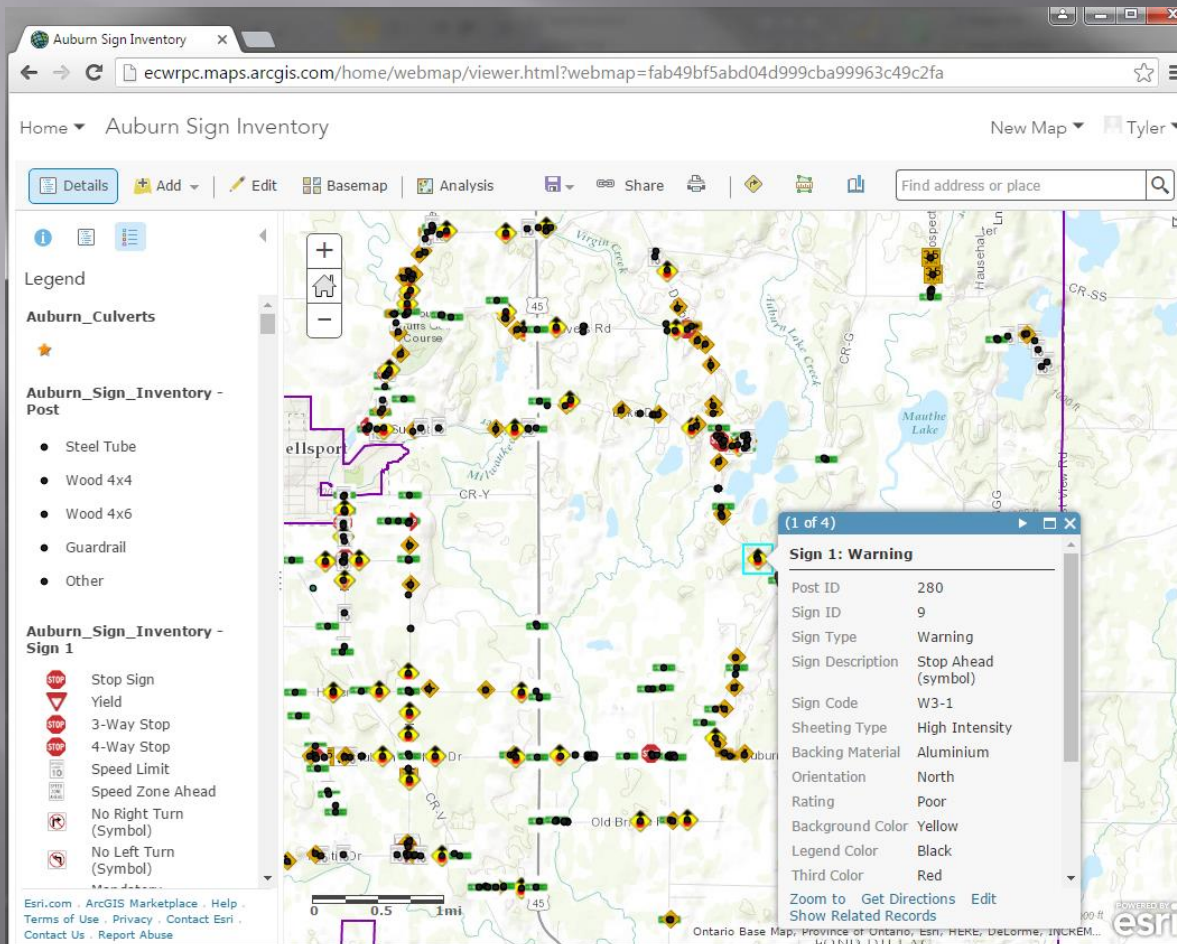
- 1. Set up your project folder & relate features:



Relate features to features (signs to post by ObjectID). Set up your descriptions and domains

Setting up your Project

2. Set up ArcGIS Online



Upload as a feature service with editing. Set up symbology & test to make sure it is working properly

Post and sign must be related by OBJECTID to edit

Setting up your Project

- ▣ 3. Make sure your retroreflectometer gun is set!



Retrore WHAT???

- ▣ Tests reflectivity of sign in dark environments when car lights hit it.
- ▣ Part of code requirements to hit certain number

Traffic Sign Retroreflectivity

New MUTCD Table 2A.3
Minimum Maintained Retroreflectivity Levels

Sign Color	Sheeting Type (ASTM D4956-04) ①				Additional Criteria
	Beaded Sheeting			Prismatic Sheeting	
	I	II	III	III, IV, VI, VII, VIII, IX, X	
White on Green	W* G ≥ 7	W* G ≥ 15	W* G ≥ 25	W ≥ 250; G ≥ 25	Overhead
	W* G ≥ 7	W ≥ 120; G ≥ 15			Ground-mounted
Black on Yellow or Black on Orange	Y*; O*	Y ≥ 50; O ≥ 50			②
	Y*; O*	Y ≥ 75; O ≥ 75			③
White on Red	W ≥ 35; R ≥ 7				④
Black on White	W ≥ 50				—

① The minimum maintained retroreflectivity levels shown in this table are in units of cd/lx/m² measured at an observation angle of 0.2° and an entrance angle of -4.0°.

② For text and fine symbol signs measuring at least 1200 mm (48 in) and for all sizes of bold symbol signs

③ For text and fine symbol signs measuring less than 1200 mm (48 in)

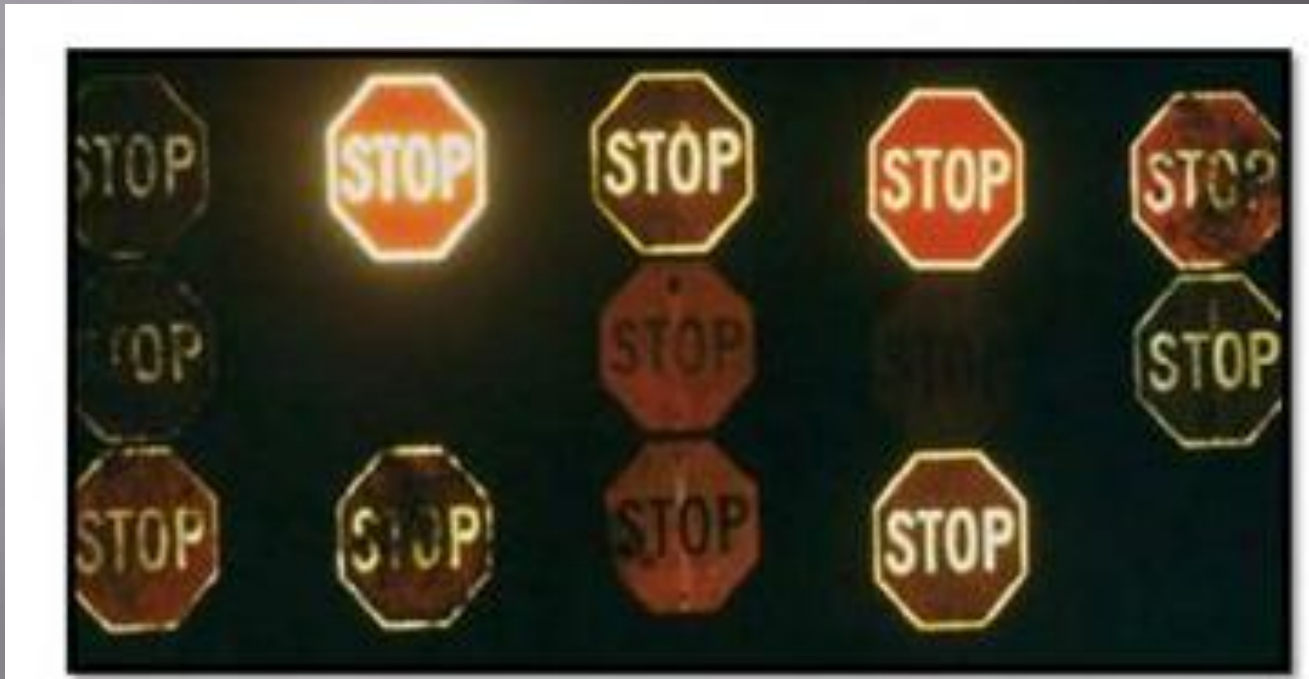
④ Minimum Sign Contrast Ratio ≥ 3:1 (white retroreflectivity ÷ red retroreflectivity)

* This sheeting type should not be used for this color for this application.



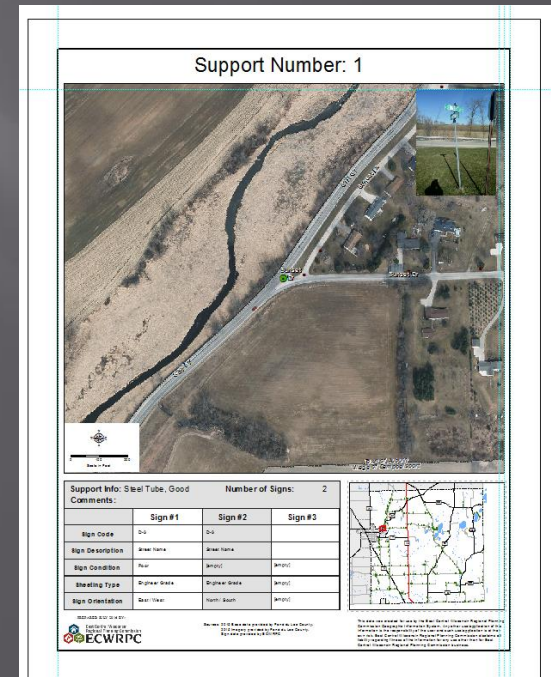
Why can't I just eye ball it??

- ▣ Reflectometer costs roughly \$10,000



Post Processing

- 1. Offload data from ArcGIS Online
- 2. Join data from Retroreflectometer to points
- 3. Set up your map book (data driven pages)
- 4. Mark poor signs, create cost estimate



Thanks for listening

GIS Department



East Central Wisconsin
Regional Planning Commission
ECWRPC