Fishbones for Fun and Profit

February 8, 2019

What?

- Analysis technique for validating address and road GIS data
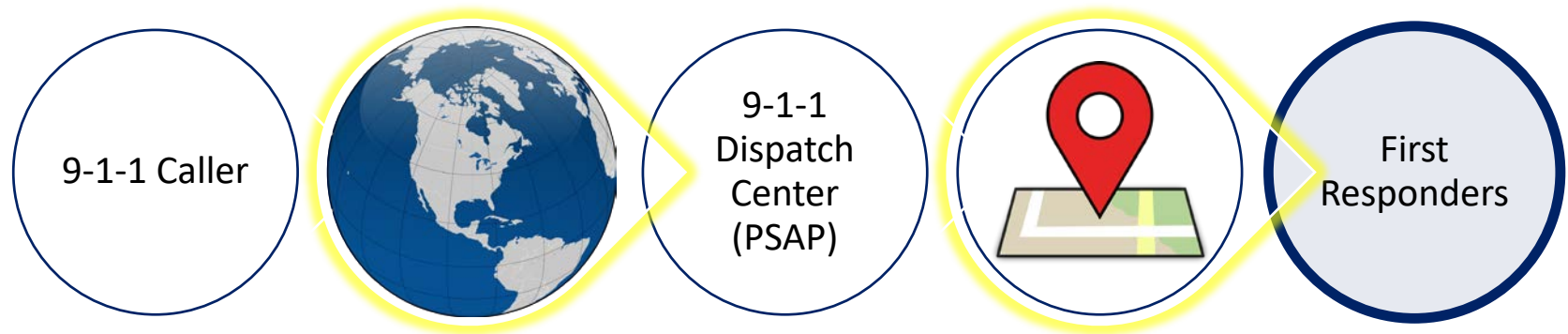
Why?

- Preparation for NG9-1-1 and other enterprise applications

How?

- Illustrate where address points *geocode* in comparison to where they are *located*

Public Safety GIS Highlights

9-1-1 Caller

9-1-1 Dispatch Center (PSAP)

First Responders

Addressing Authorities → **GIS Data Provider** → **Public Safety Stakeholders**

Inputs

1. Point layer of site address points
   - Address attributes
   - Unique ID
   - X,Y fields

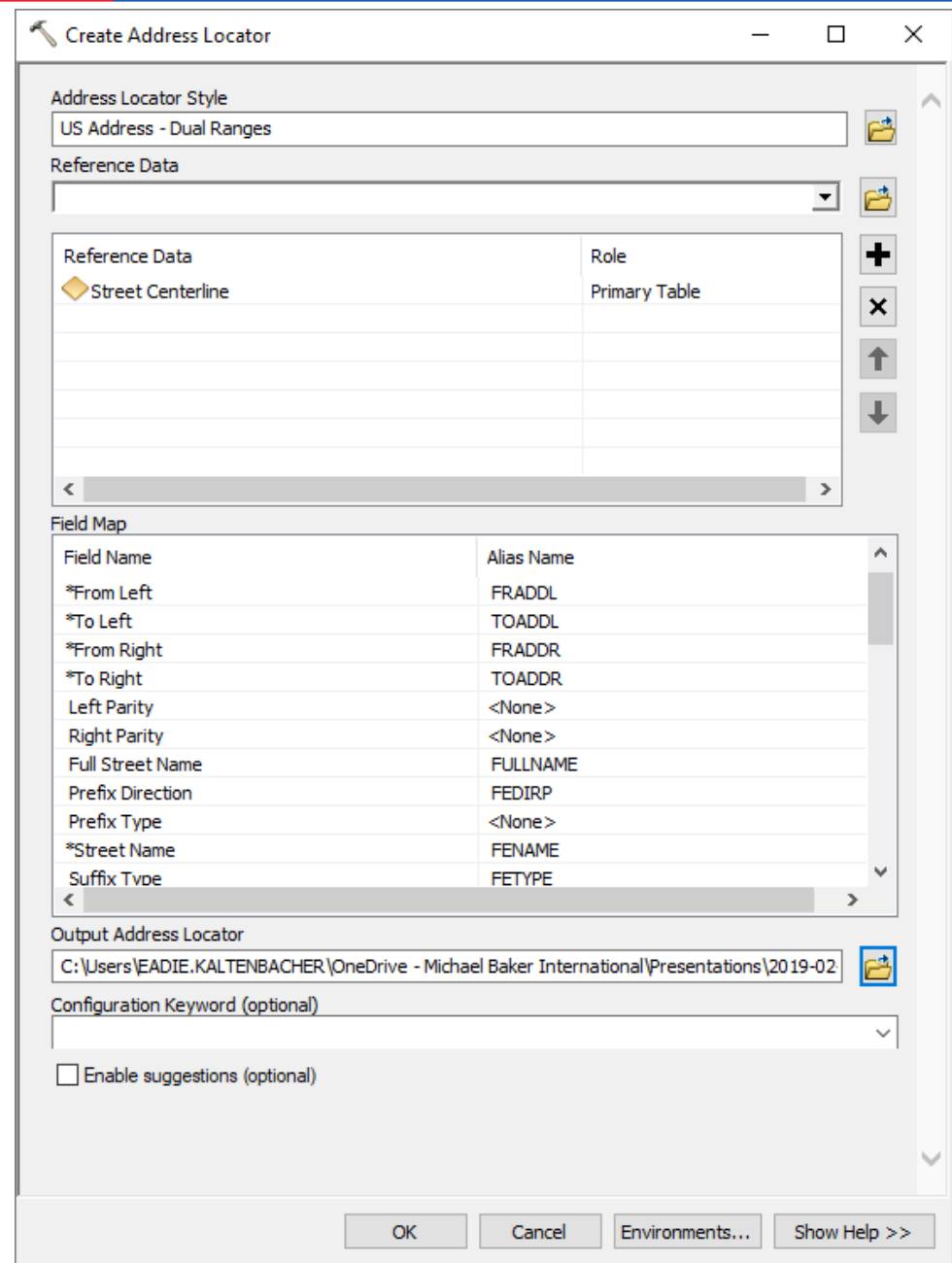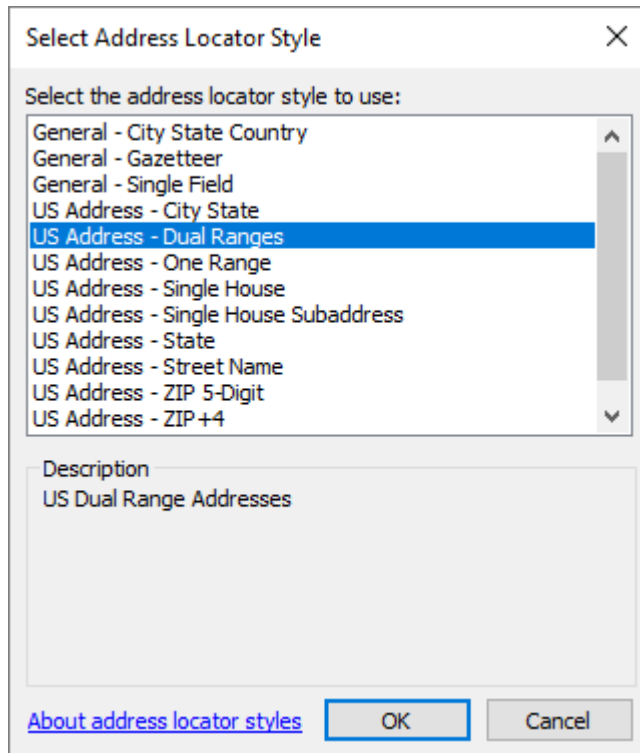| RECORD	STREET	ST_NSFX	ST_PFX	ST_NAME	ST_TYPE	ST_SFX	UNIT	UNITNUM	CITY	ZIP	UNIQ	UID	TAX_ID
0	512 COLLEGE ST			COLLEGE	ST			<Null>	PHILOMATH	97370	410035745010453	<Null>	0
0	4851 DUMBECK AVE NW		NW	DUMBECK	AVE			<Null>	ALBANY	97321	410030000010452	<Null>	0
<Null>	3095 EAGLE VIEW DR NW	<Null>	NW	EAGLE VIEW	DR	<Null>	<Null>	<Null>	ALBANY	97321	<Null>	<Null>	<Null>
0	7256 NW GRANDVIEW DR		NW	GRANDVIEW	DR			<Null>	CORVALLIS	97330	410030000003202	<Null>	0
0	4730 SW 53RD ST			53RD	ST			<Null>	CORVALLIS	97333	410030000007345	<Null>	0
<Null>	5950 SW PHILOMATH BLVD	<Null>	SW	PHILOMATH	BLVD	<Null>	<Null>	<Null>	CORVALLIS	97333	410030000010456	<Null>	<Null>
<Null>	24169 HENDERSON RD	<Null>	<Null>	HENDERSON	RD	<Null>	<Null>	<Null>	CORVALLIS	97333	<Null>	<Null>	<Null>
<Null>	384 N 8TH ST	<Null>	<Null>	8TH	ST	<Null>	<Null>	<Null>	MONROE	97456	410034960014377	<Null>	<Null>
<Null>	378 N 8TH ST	<Null>	<Null>	8TH	ST	<Null>	<Null>	<Null>	MONROE	97456	410034960014378	<Null>	<Null>
<Null>	366 N 8TH ST	<Null>	<Null>	8TH	ST	<Null>	<Null>	<Null>	MONROE	97456	410034960014379	<Null>	<Null>
<Null>	121 N 12TH STREET	<Null>	N	12TH	ST	<Null>	<Null>	<Null>	PHILOMATH	97370	410035745014381	<Null>	<Null>

2. Line layer of road centerlines
   - Road attributes

100   198

101   199

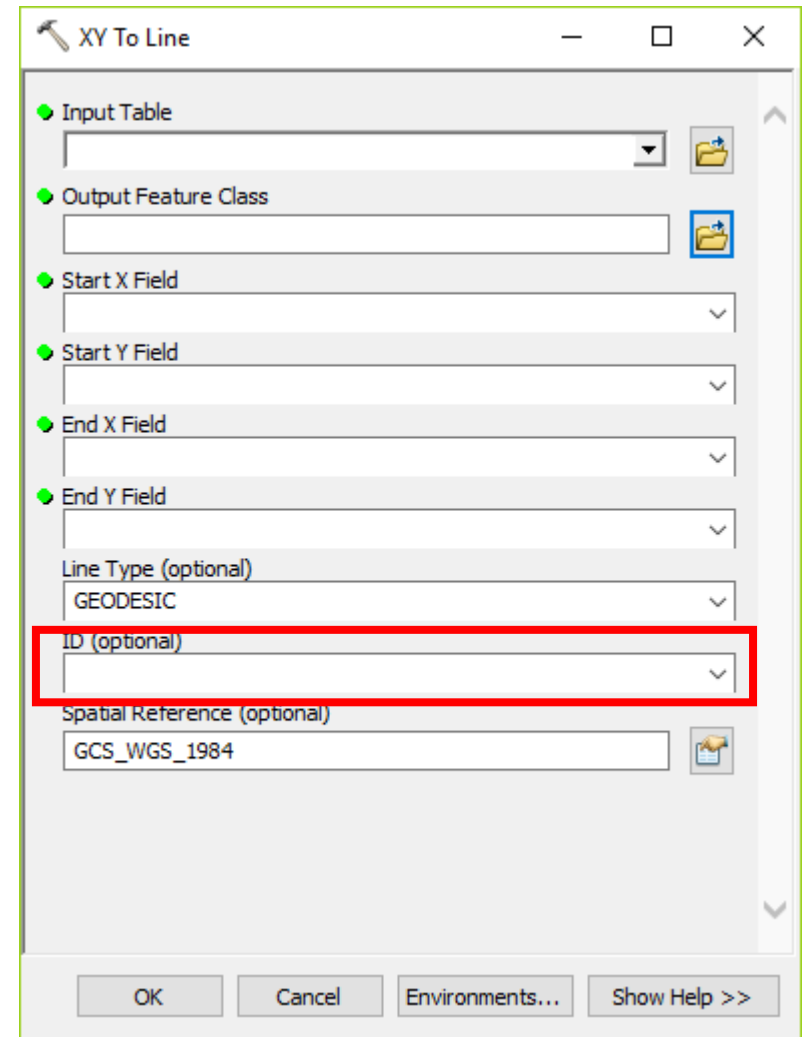| From-Address Left	100
From-Address Right	101
To-Address Left	198
To-Address Right	199

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Inputs (continued)

3. Address Locator

Process

1. Export site address layer to table

2. Geocode table using Locator created in previous step
   - Add X,Y fields

3. Join geocoded table to site address layer based on Unique ID
   - Export table

4. Run XY To Line tool on this table
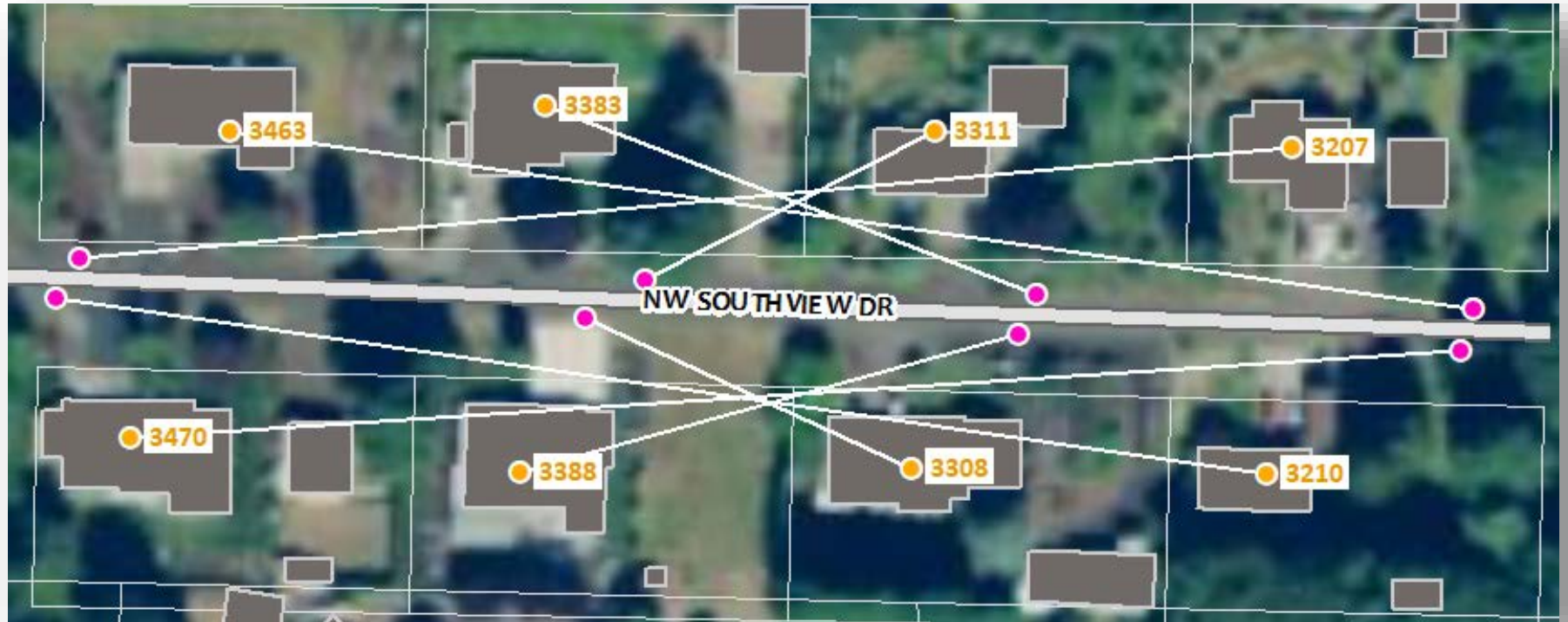   - Draw lines from site address points to geocoded address points based on 2 sets of X,Y fields

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Output: Fishbones

Reading the Bones: Odd/even issue between roads and addresses
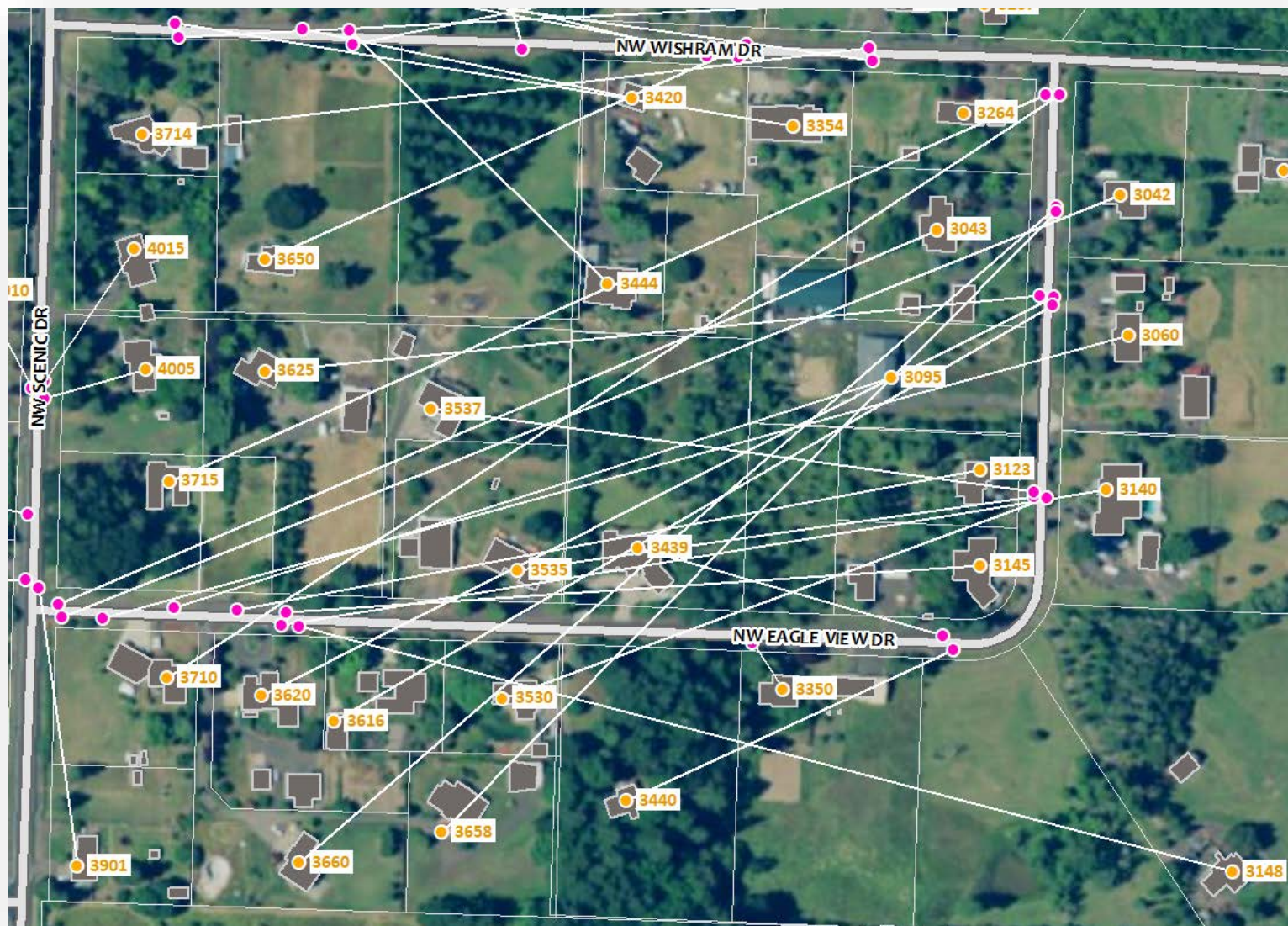
Reading the Bones: Road range is flipped

Reading the bones: Addresses don't geocode to the correct road segment

Reading the bones: ??

QUESTIONS?

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