

An Easy Way to Update Your Data



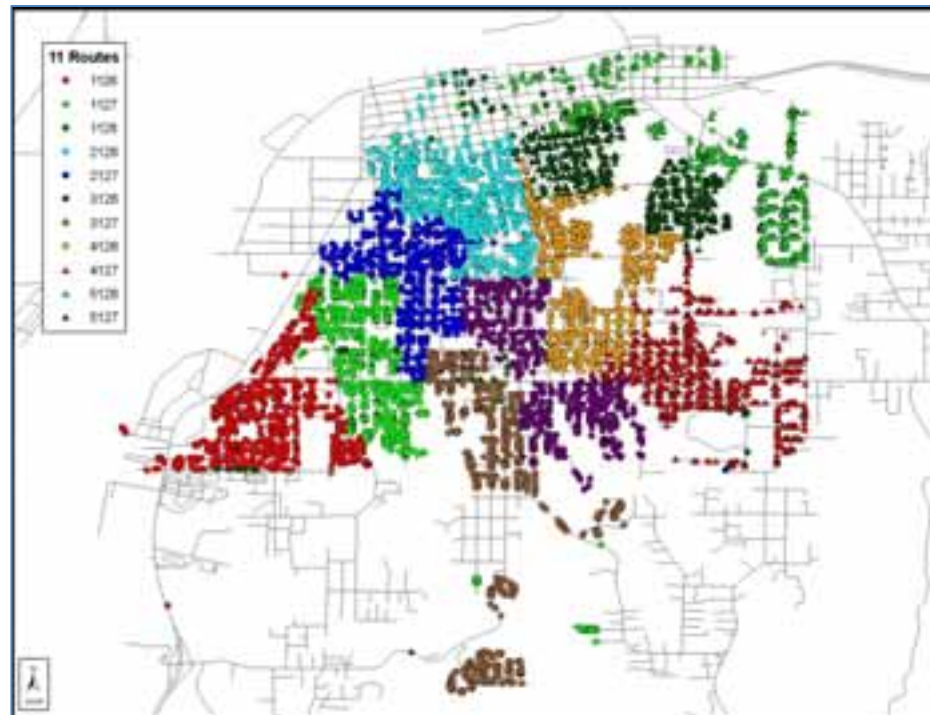
By Amy Ma, Recology and Stanley Dallal, ESEA

*ESRI International Users Conference:
July 12-16, 2010*

Recology provides Garbage & Recycling services to over 50 communities in Northern California and Oregon.



We use routing software to balance and sequence our garbage, recycling and organics routes.

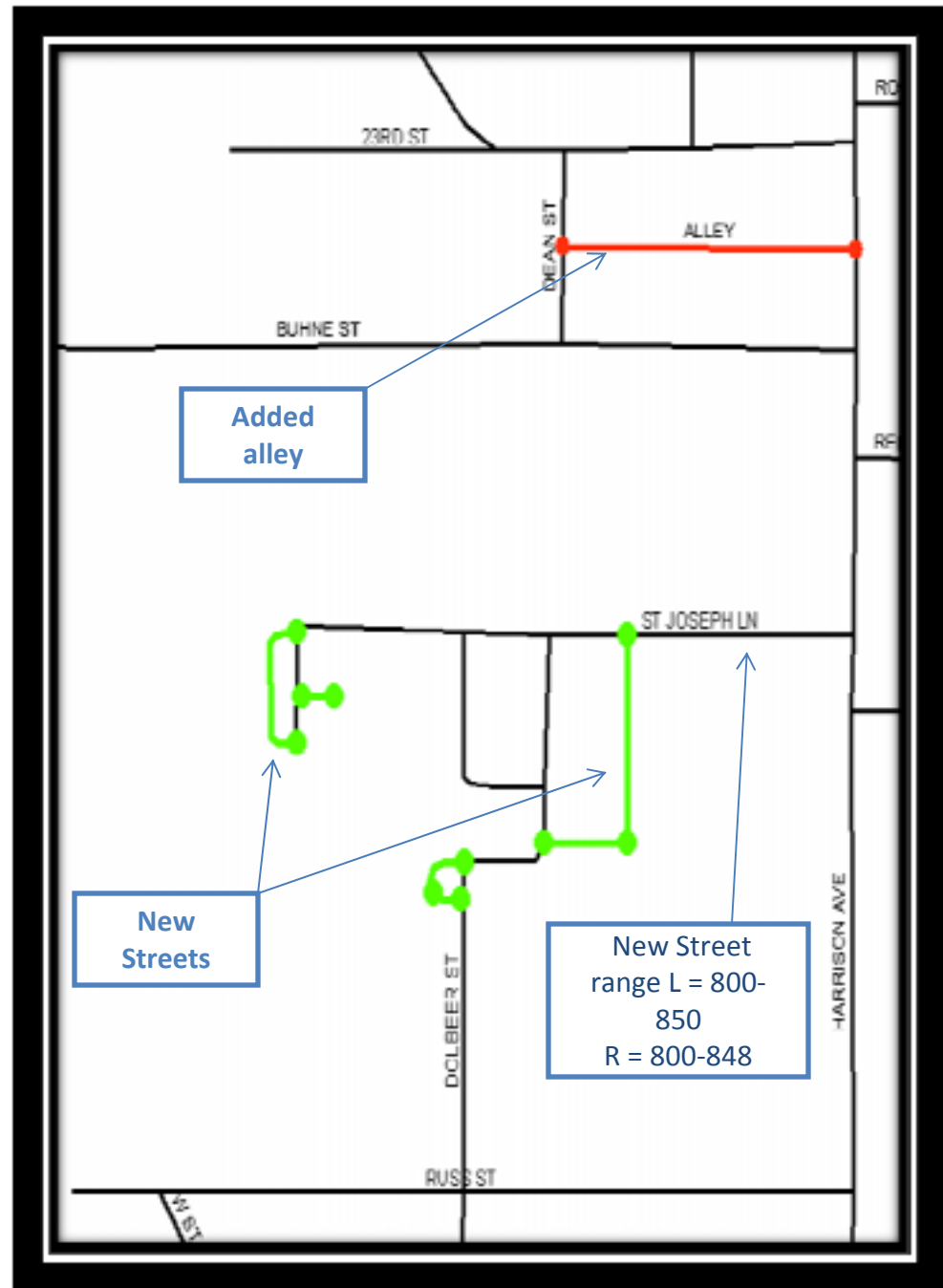


**CHANGES TO BASEMAP
OVER TIME:**

- * Add missing streets or alleyways
- * Modify street attributes

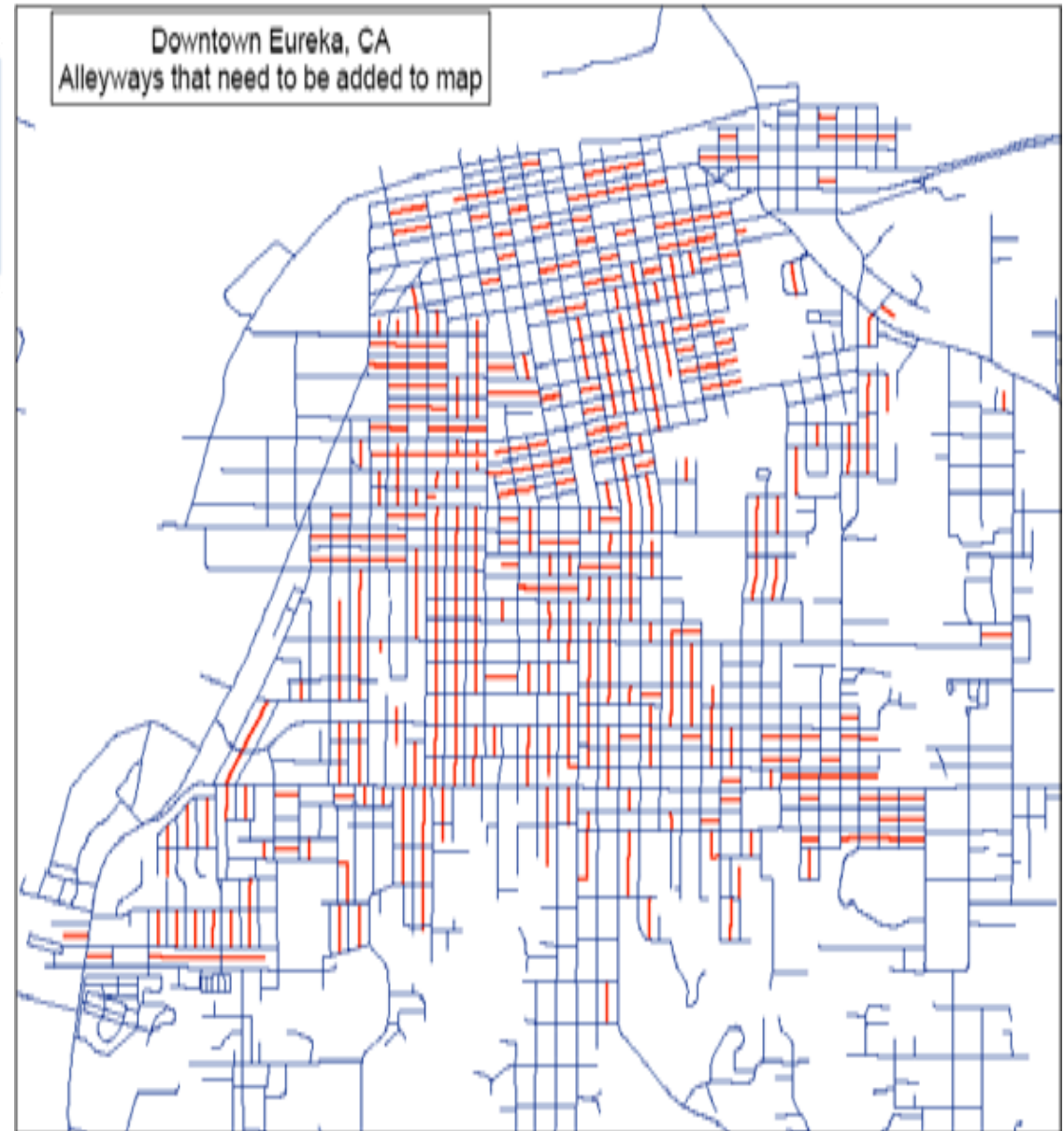
CHALLENGE:

How do you merge new NAVTEQ updates into basemap, while keeping edits that were made since the last update?



Recology used ESEA's MapMerger tool

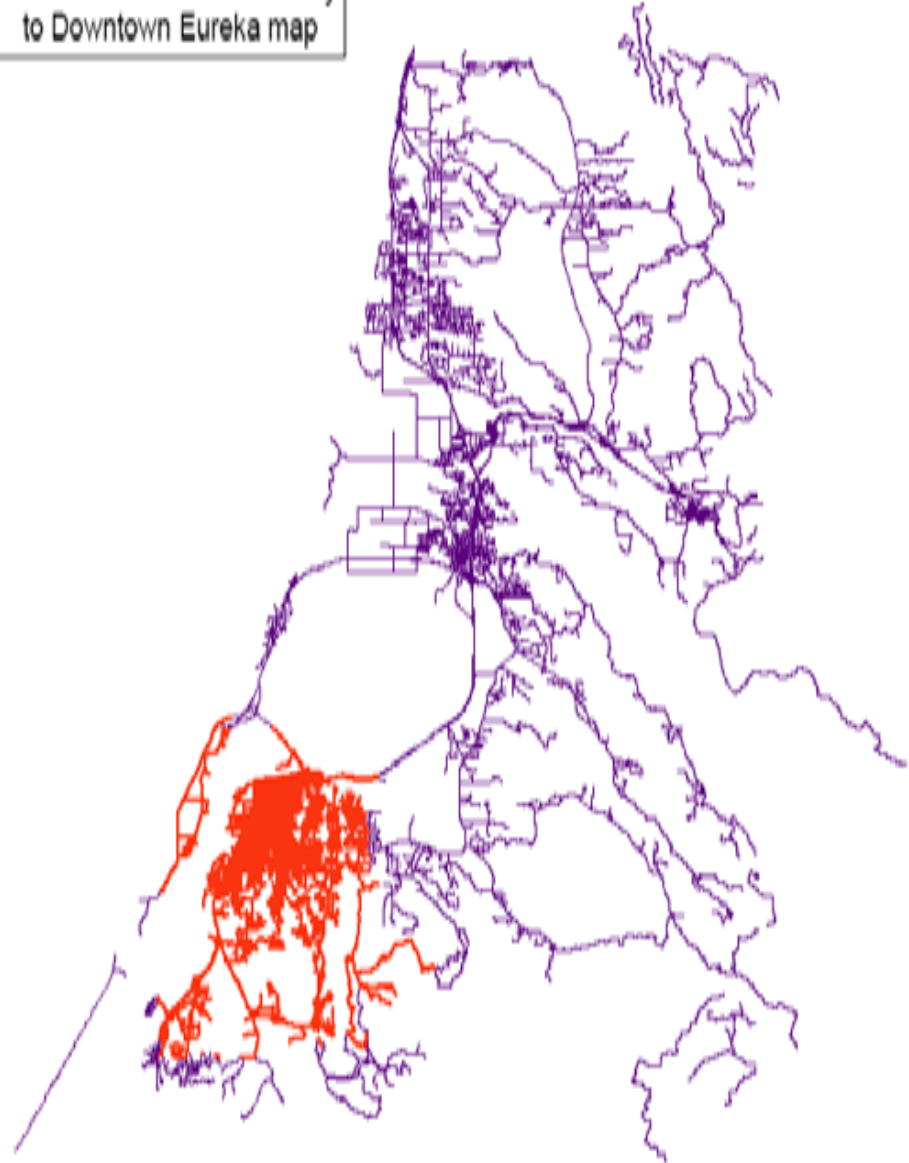
- **Red lines are new alleyways to be added- 470 segments. Created a shapefile of alleys and used MapMerger to merge the alleys into the basemap.**
- **MapMerger splits every segment where an alley intersects it, calculates new left and right street ranges and gives a new Link Id to one of the split segments.**
- **Changes must be carried forward into each NAVTEQ data release. MapMerger is used for the transfer.**
- **Using MapMerger saved about 40 hours of labor in this 1 month project.**



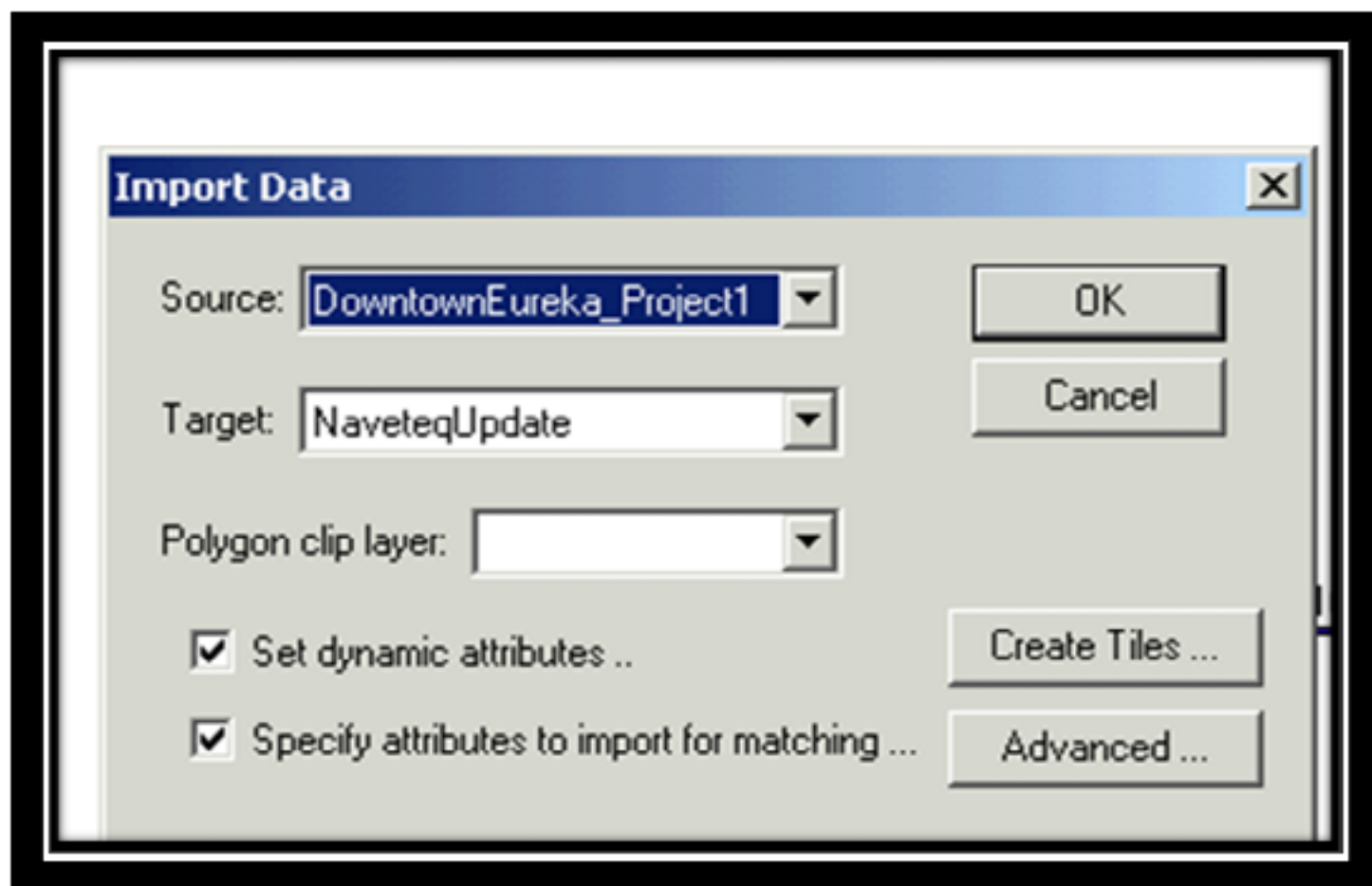
MapMerger Stitching

- **Needed to add the blue area to the red map.**
- **MapMerger can stitch these 2 maps together.**

Need to Add Humboldt County
to Downtown Eureka map

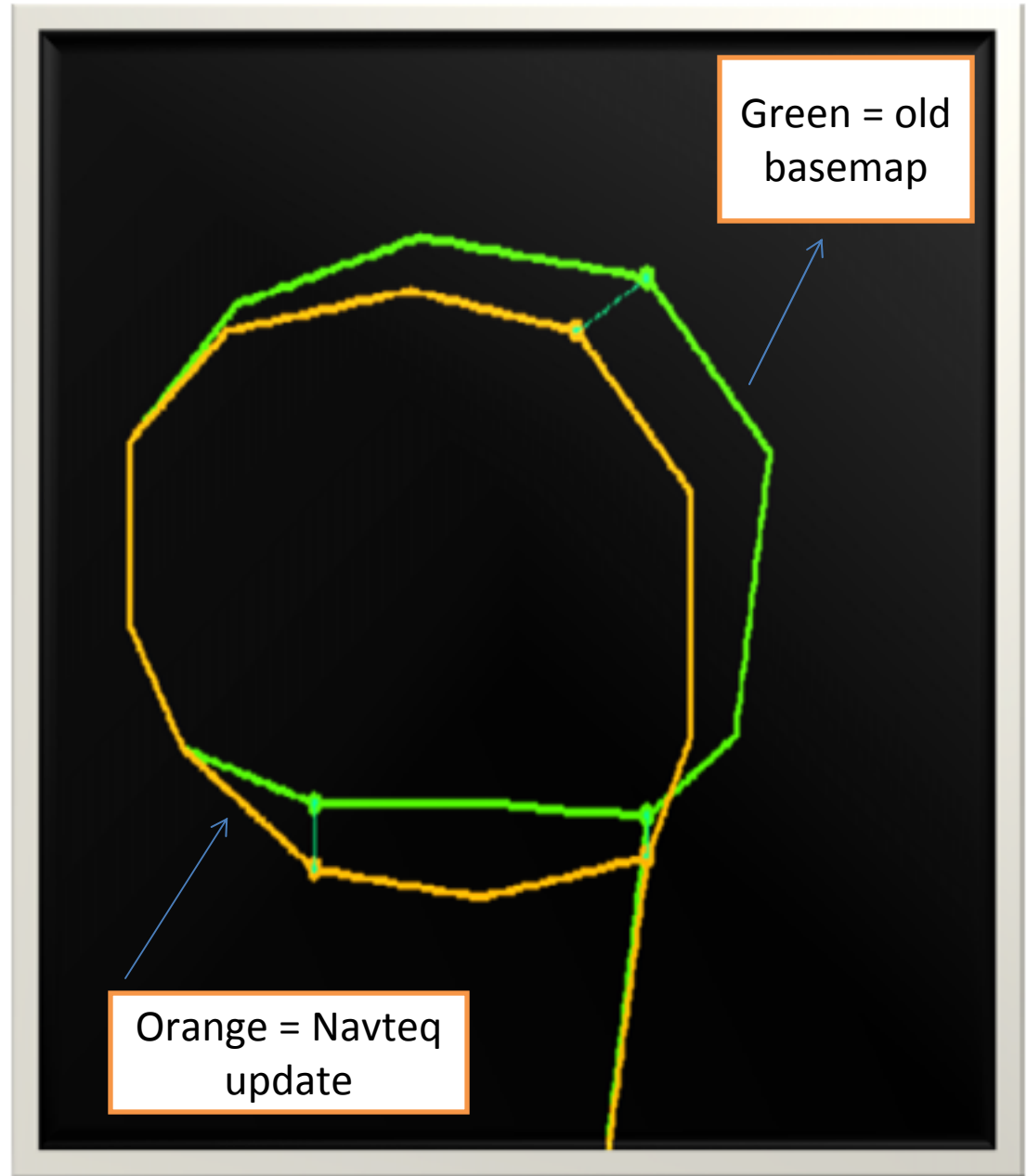


MapMerger Import screen



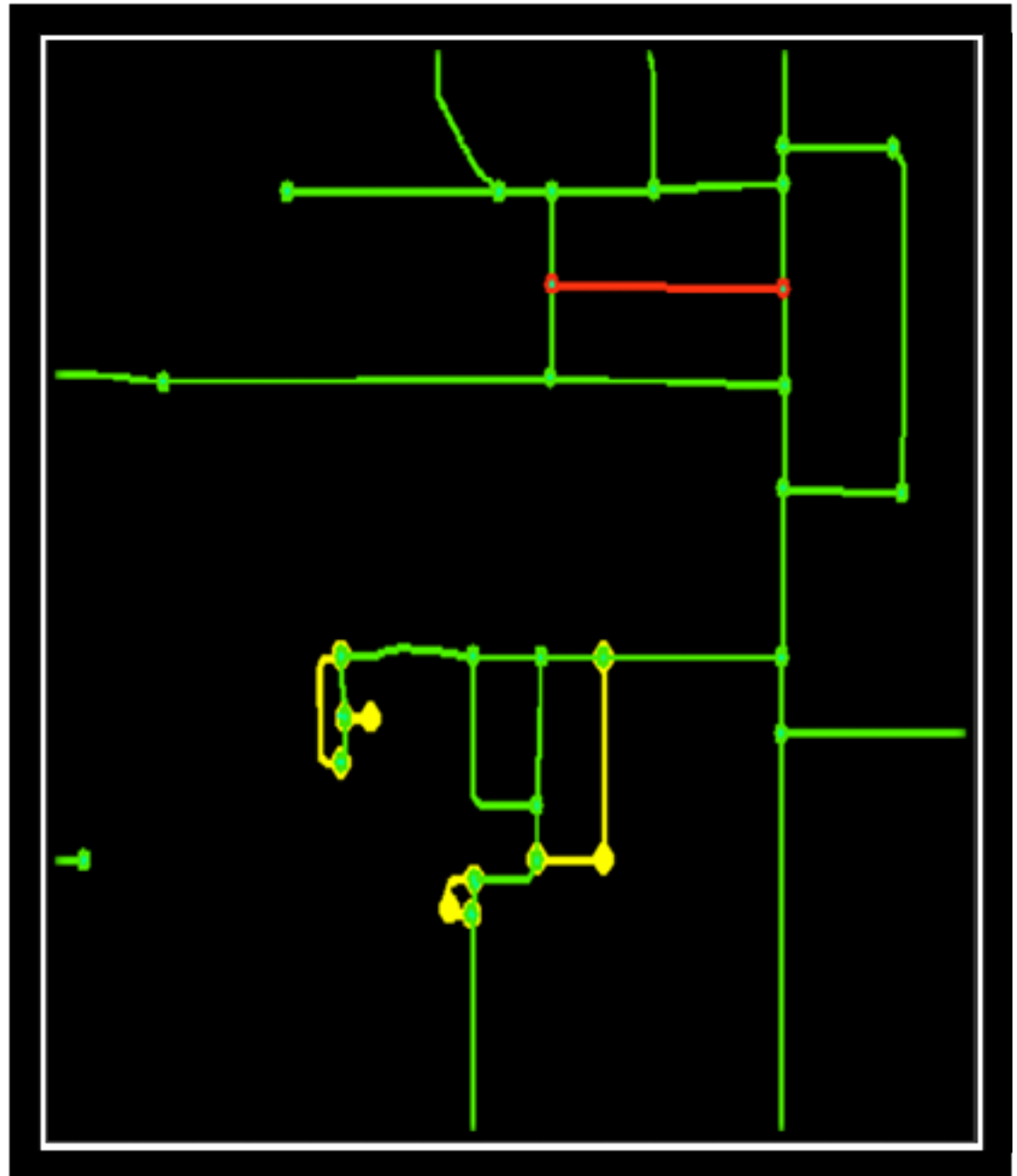
Matches in MapMerger

- Geometry is slightly different but is considered a match based on set tolerance.
- Thin green lines indicate matching nodes.



Unmatched Streets

- Yellow = Unmatched Streets from the Target
- Red = Unmatched streets from the Source
- Yellow and Red streets will be added to the map result.
- MapMerger has line matching tools to match segments that did not match automatically.



Conflict Resolution Table

Attribute and geometry transfer directives for each conflict

Attribute	Action	Date Modified	Geometry	Action	Date Modified
yes	source	-----	yes	target	-----
no	source	-----	yes	target	-----
no	source	-----	yes	target	-----
yes	source	-----	yes	target	-----
no	source	-----	yes	target	-----
no	source	-----	yes	target	-----
no	source	-----	yes	target	-----

Conflicting attribute values

Attribute	Source Value	Target Value
LINK_ID	20000909	91480790
L_NREFADDR	1920	1900
R_NREFADDR	1919	1901
COVERIND		0
MILES	0.0083946	0.0495001
MEANDER	N	
DRIVE_TIME	0.000494	0
BREADTH	0.0042	0
TRAVCONS	3	

Attribute Preference: Source, Target, Default, Src/Null, Tgt/Null

Geometry Preference: Source, Target, Default, Reviewed

Default Attribute Preference: Source, Source unless null or blank, Target, Target unless null or blank

Default Geometry Preference: Source, Target, Tolerance (display units)

Refresh Merge 1349 conflicts found Close

- SOURCE** • Transfer the Source attributes or geometry to the result
- TARGET** • Transfer the Target attribute or geometry to the result
- Set Defaults** • Always take the Source attributes to the result unless it's null or blank and vice versa.
- Analysis** • Highlighting the row will cause the display to pan and highlight each feature to allow for easier analysis.

RESULT

Alleyways are merged into Navteq map update.



Thank you

Questions/Comments Please Contact:

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