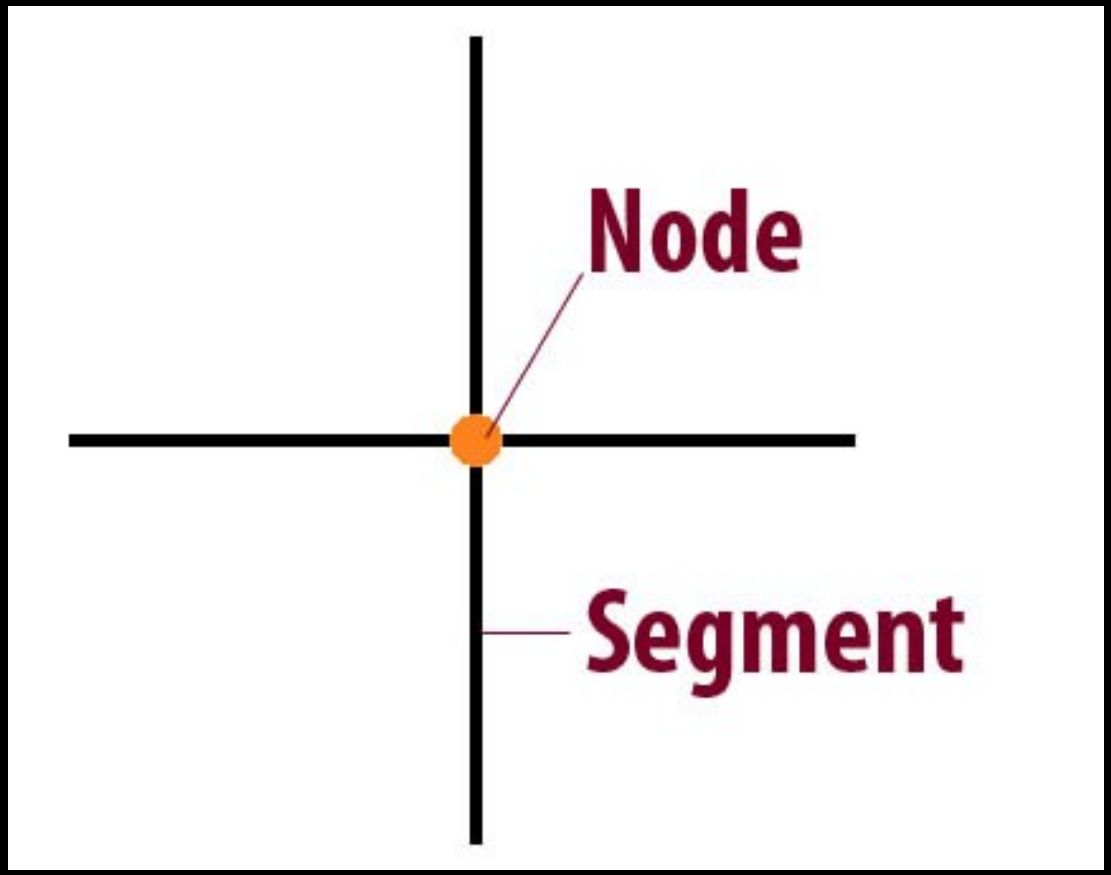
Introduction to the Walkway Network

GIS Jammers

27 March 2013

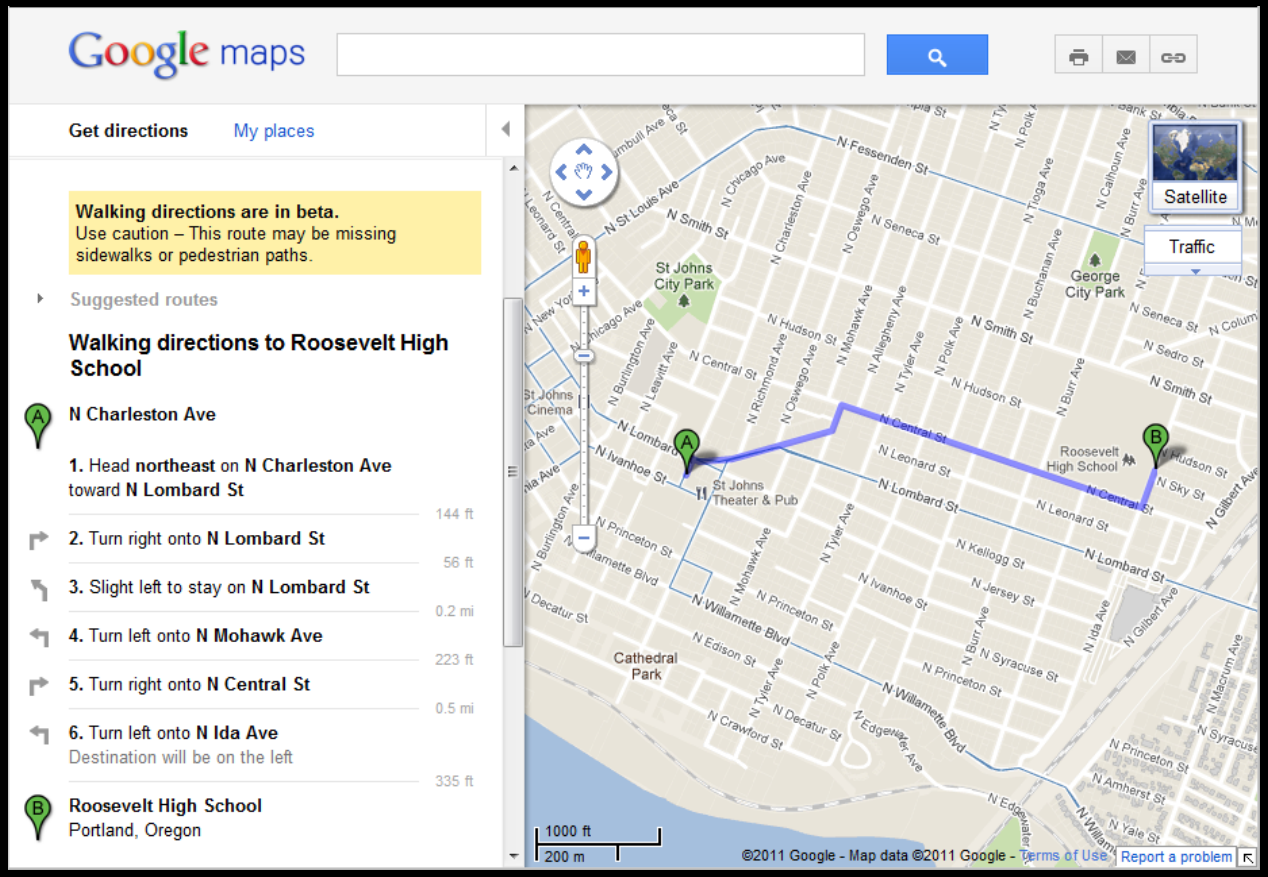
“Network 101”



What can you do with a network?

- Analyze network connectivity - can you get there from here?
- Combine with demographic data to analyze people's access to destinations and services
- Evaluate the contribution of proposed improvements
- Generate real-time services like best routing

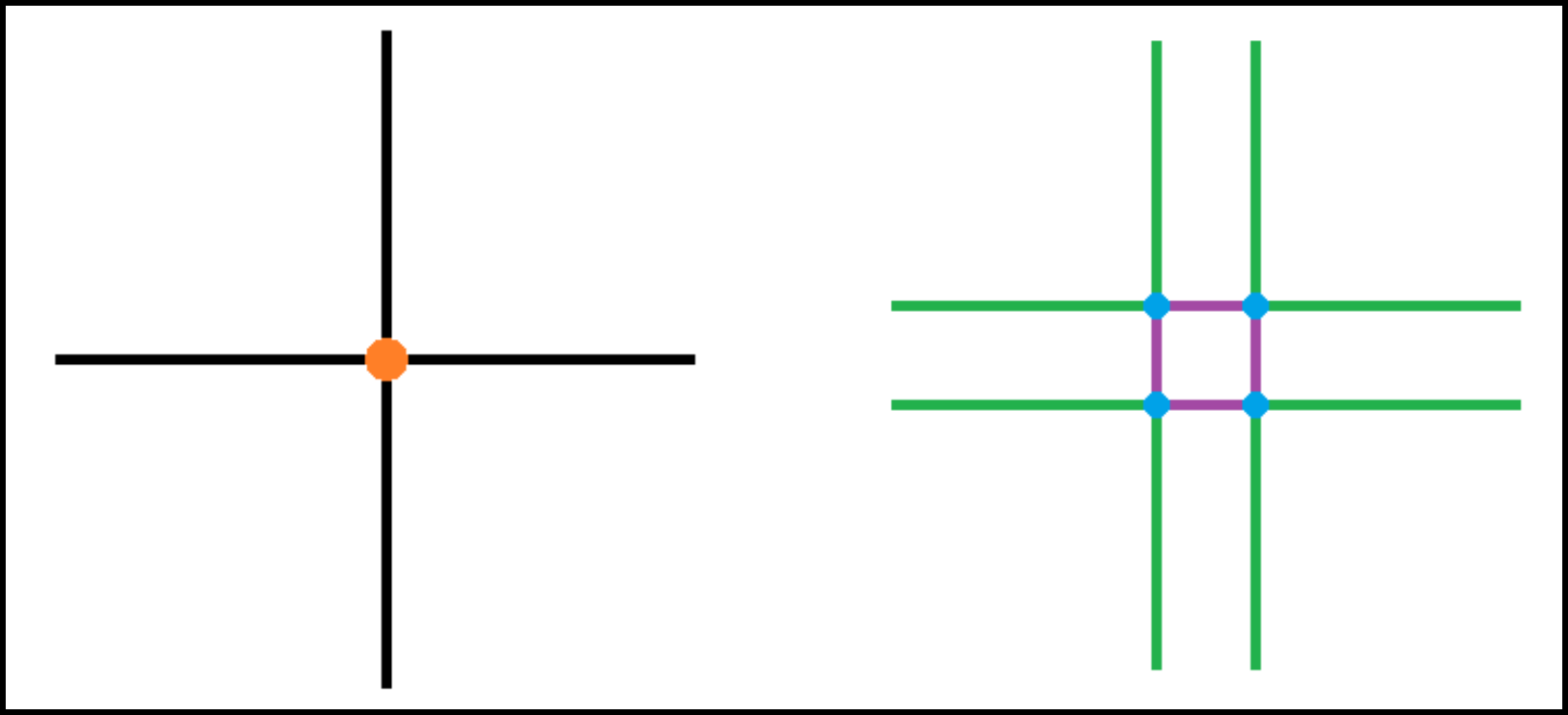
Dynamically-generated walking route on Google maps



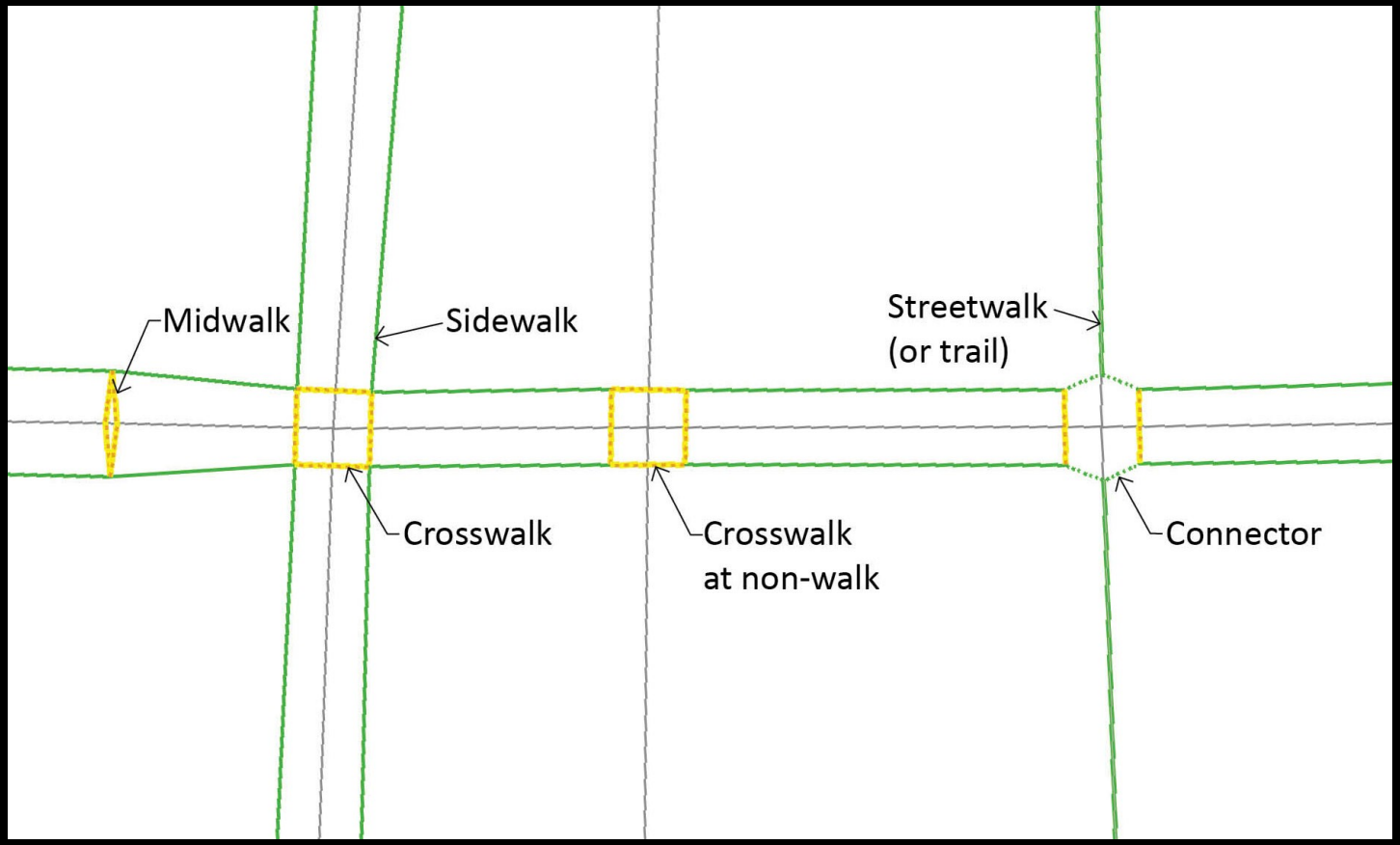
East Portland in Motion

Active transportation implementation strategy

Street centerline network vs. the Walkway Network



Elements of the Walkway Network



“Weighting” the network

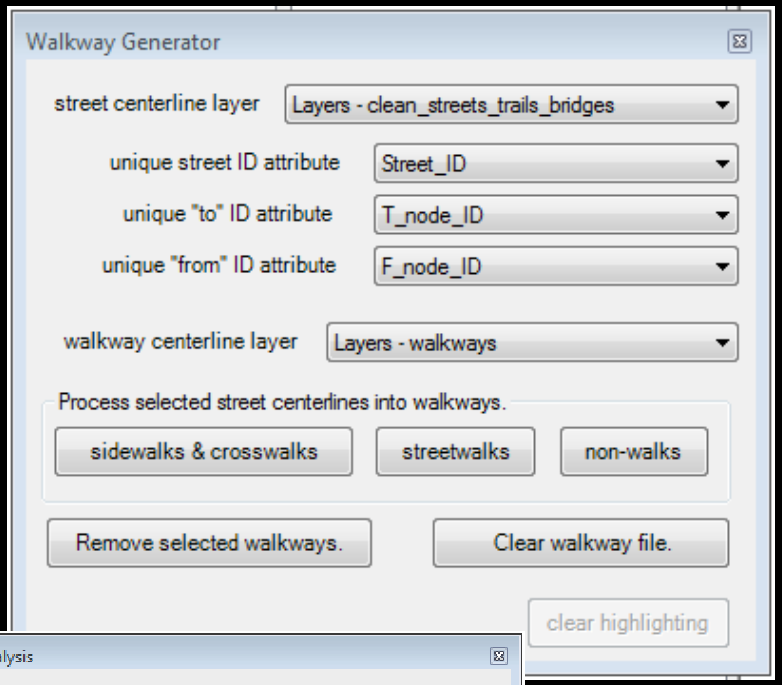
How far out of direction would you go to avoid walking on this segment?

GIS Jammers have created
multiple tools and apps.

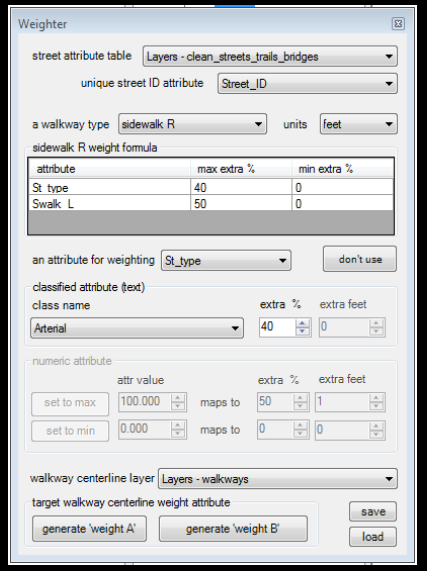
They have solved
many technical challenges.

Active users will help drive future
development of tools and apps.

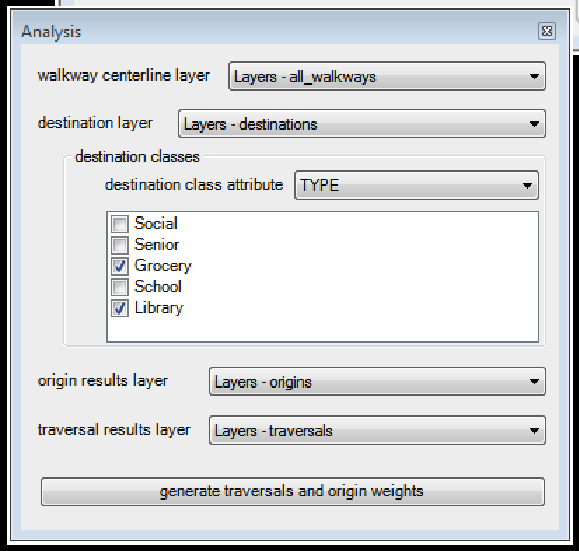
The Walkway Generator



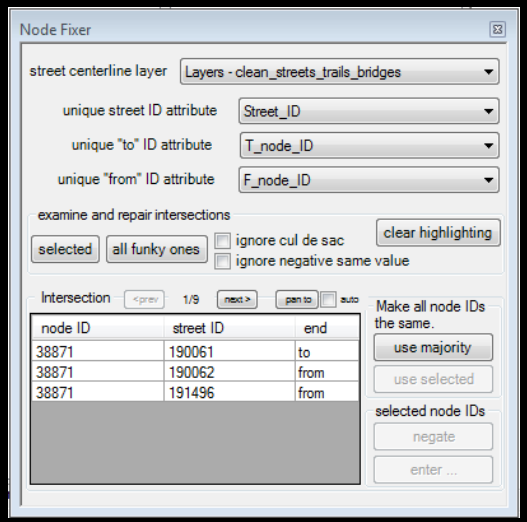
The Weighter



The Analysis Tool

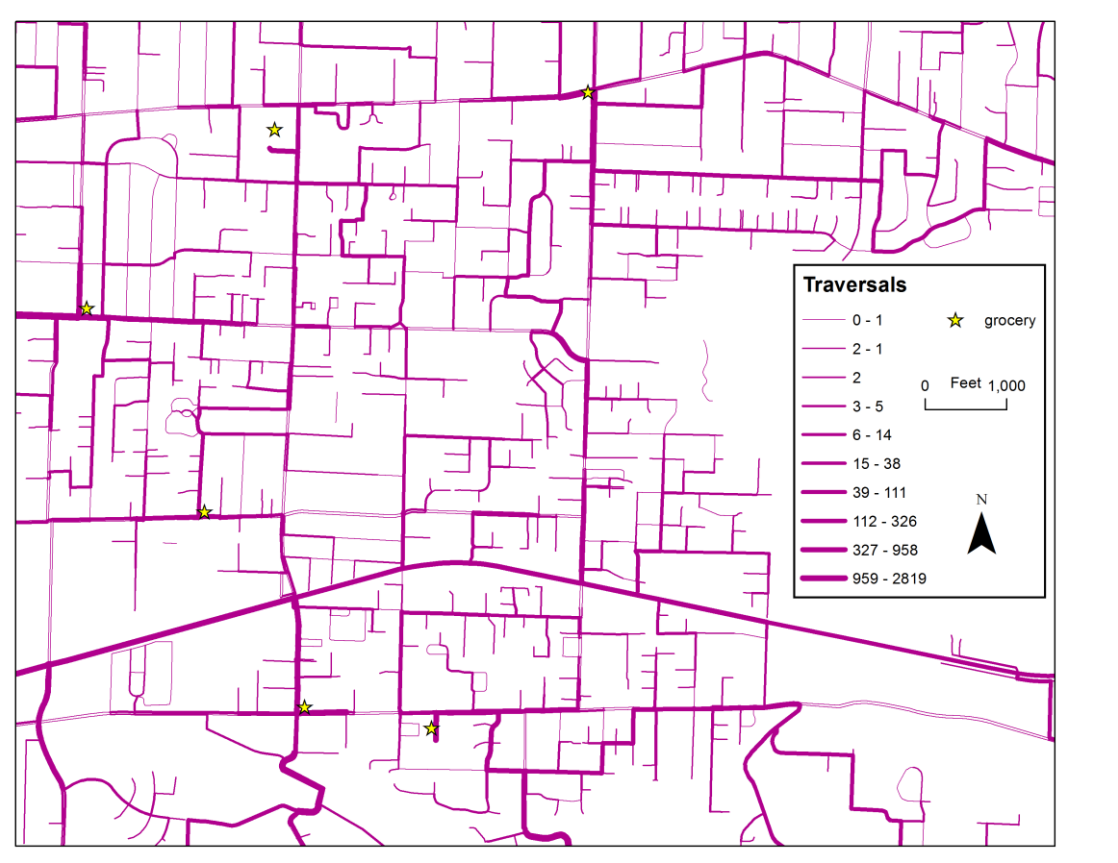


The Node Fixer

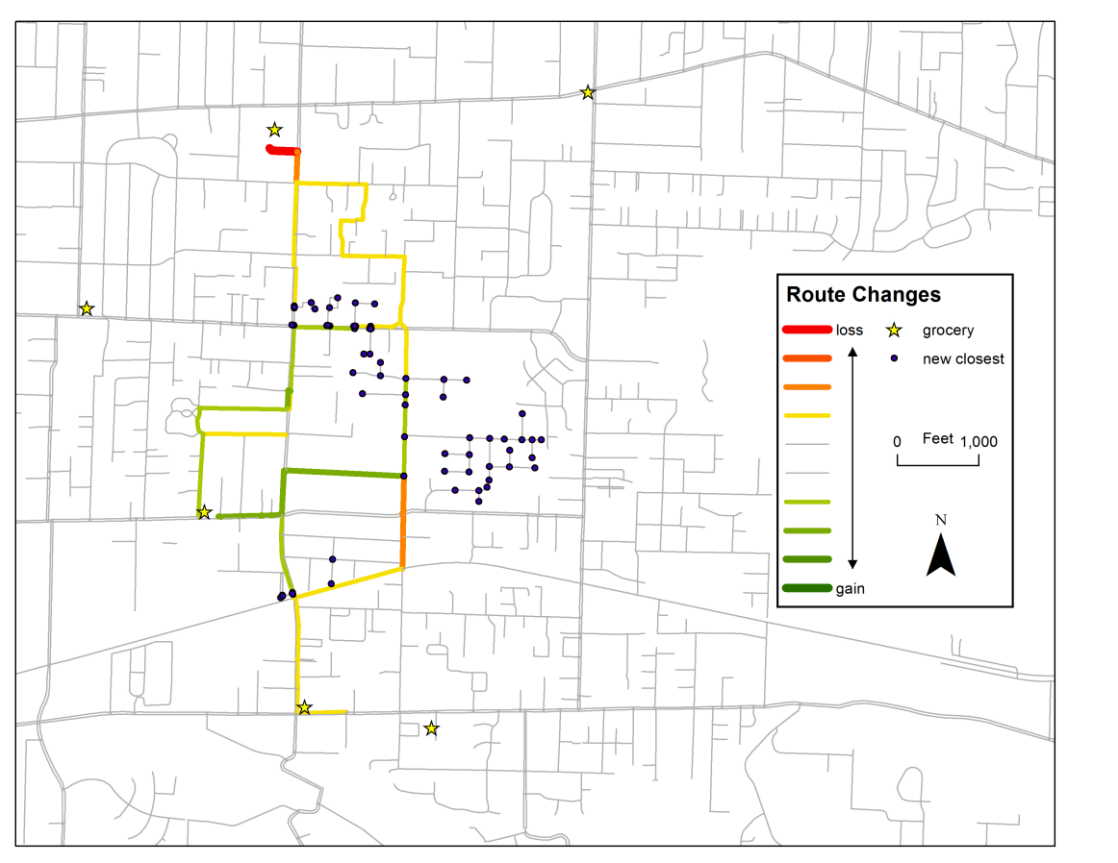


Results from Walkway Network analysis can be visualized to show the effects of changes to the network.

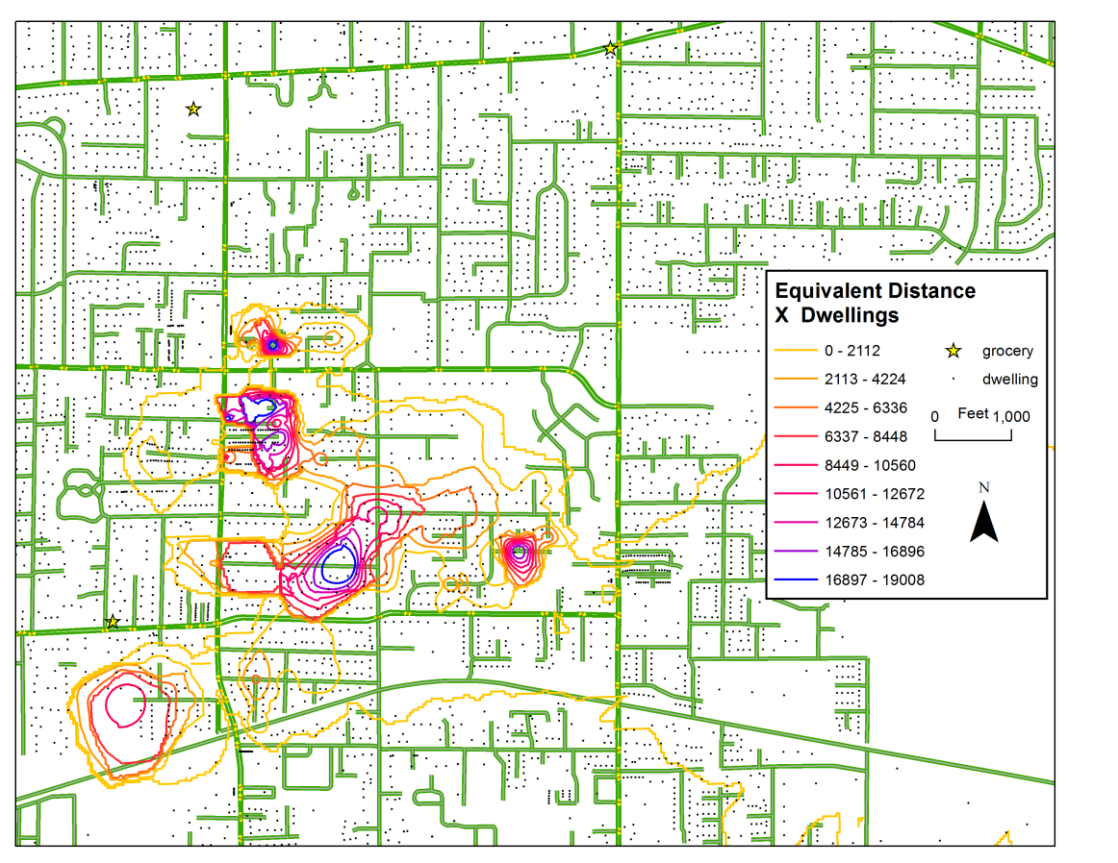
The tools can be used to quickly tally what routes every resident might use to walk to the nearest grocery store



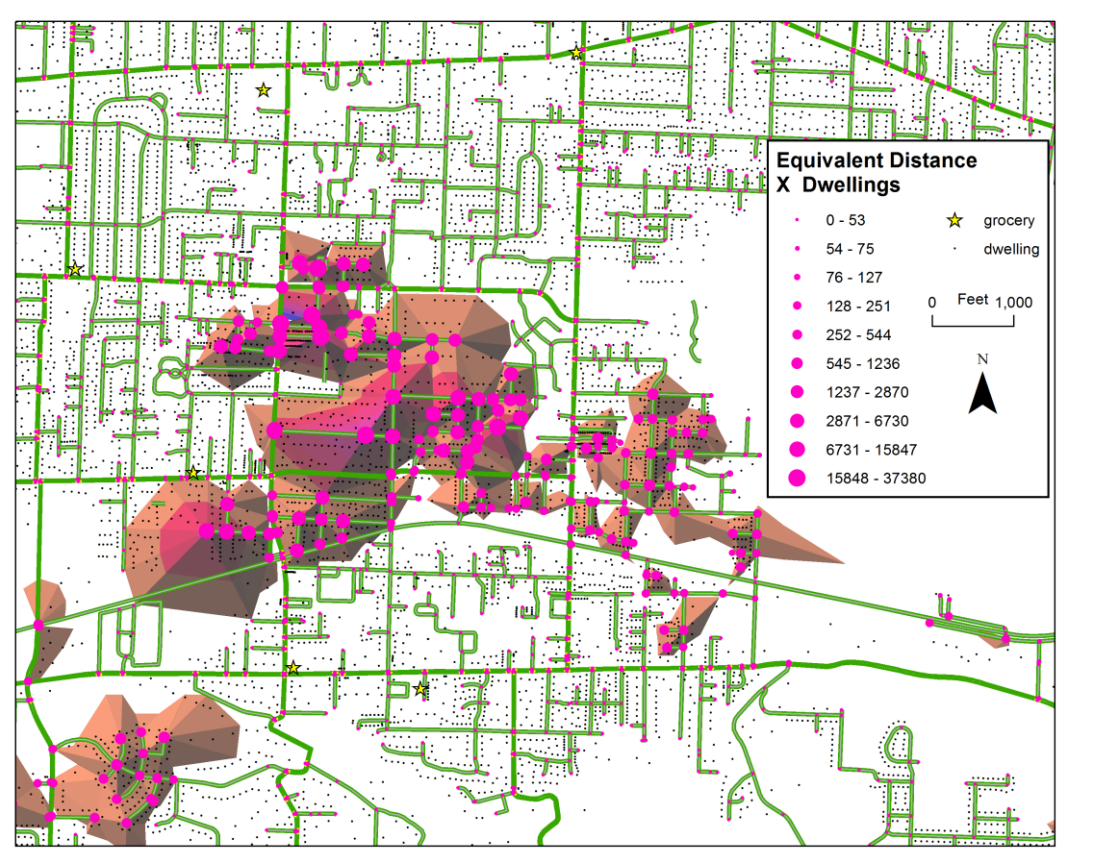
Improving one crosswalk can change people's "effective distance" to the nearest grocery store



The effect can be visualized as a “surface of difference”



The visualization shows the effect of improving one crosswalk can extend a long way



Active users will help drive future development of tools and apps.

Oregon Walks can use these tools and apps to engage their membership in creating an accurate walkway network.

An accurate network can be used to make the case for improvements and generate real-time services.