ActivitySim

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Topics

• What is ActivitySim?
• Collaboration with other regions
• Project scope and next steps
• Timeline
Activity Based Modeling

More detailed modeling of:

- Individual travel choices
- Daily time constraints
- Wide range of policies
- Demographics
Goals for Improving Model

• More frequent updates, improvements
• Greater flexibility
• Avoid “consultant lock”
• Incorporate best practices
• Faster run times
Solution: ActivitySim

- Open Source
- Extensible, flexible
- Undergoing continuous improvement
- Supported by growing community
- More user-friendly
ActivitySim Consortium

A group of state/regional transportation planning agencies that pools resources to collaboratively build and maintain an open source traveling modeling software based on best practices.
E.g. Improvements

- Telecommute model
- Vehicle Type model
- Visualization tools
- Transit pass model
- Optimized model run times
Model Improvement Overview

• Continue participation in ActivitySim Consortium
• Phased regional implementation of ActivitySim in the Twin Cities Metro
Project Plan – Phase I

- Now – April 2022
- Select established ActivitySim model from other region
- Link this model with regional land use, network, and demographic data
- Test and evaluate
- Develop Phase II plan
Phase I overview

- Population
- Land Use
- Network
- Travel Times

Donor ActivitySim Model

Red = regional data

Phase I linkages
Project Plan – Future Phases

• April 2022 - TBD
• Customize ActivitySim model using regional survey data
• Calibrate the model to local data
• Other improvements identified in Phase I
Questions

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