ActivitySim

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TAC Planning Committee 10/14/2021

metrocouncil.org



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Topics

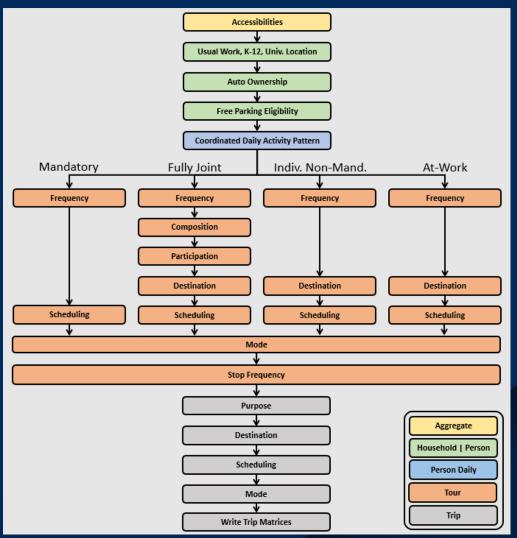
- What is ActivitySim?
- Collaboration with other regions
- Project scope and next steps
- Timeline



Activity Based Modeling

More detailed modeling of:

- Individual travel choices
- Daily time constraintsWide range of policies
- Demographics



Goals for Improving Model

- More frequent updates, improvements
- Greater flexibility
- Avoid "consultant lock"
- Incorporate best practices
- Faster run times



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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



activitysim.github.io



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

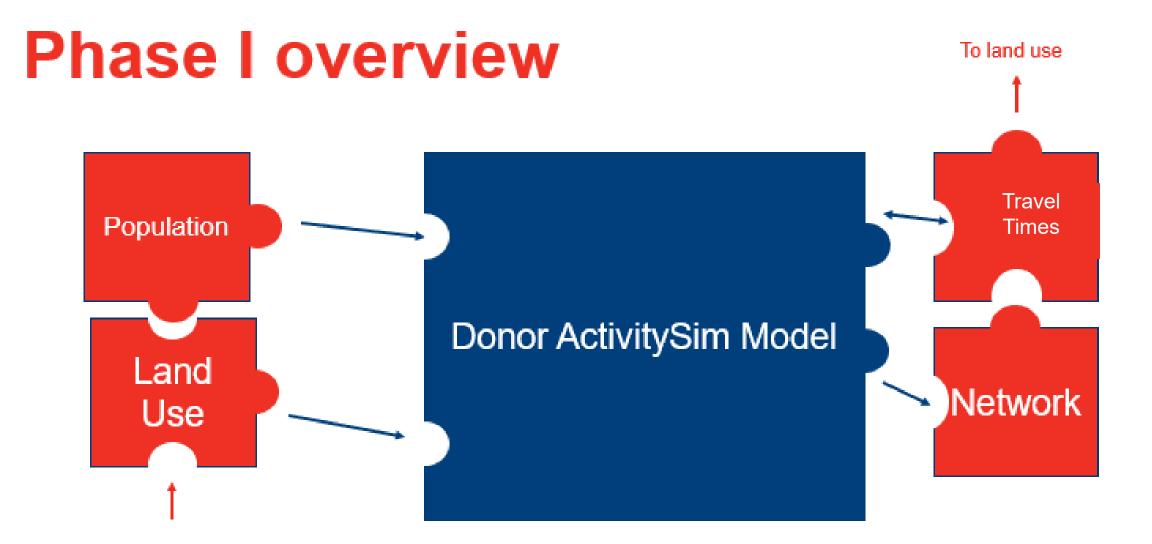


Project Plan – Phase I

- 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







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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