

Person Trip Analysis

December 14, 2016

WE KEEP PORTLAND MOVING.



PBOT
PORTLAND BUREAU OF TRANSPORTATION

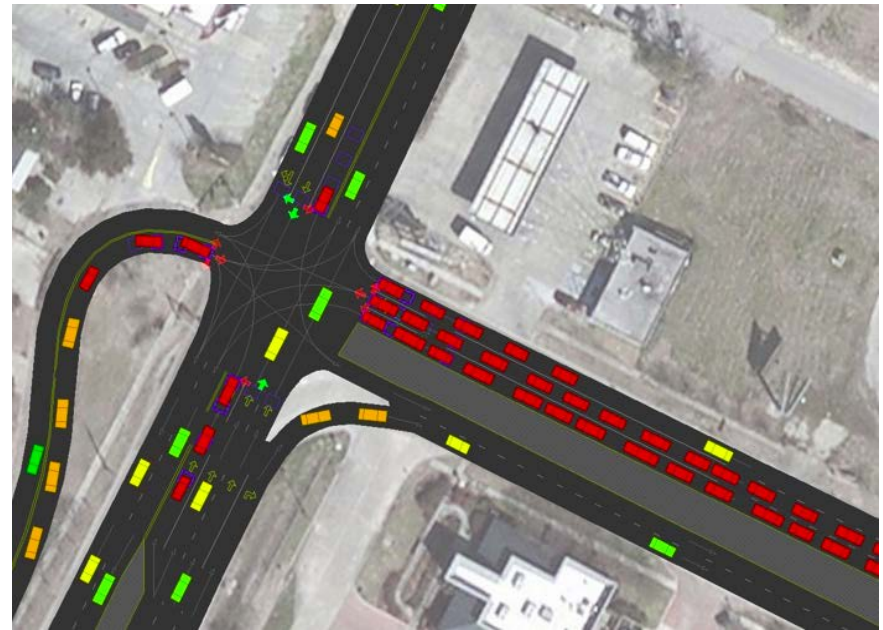
Agenda

- **Why Person Trips?**
- **Changing the Practice**
- **Our Approach**
- **Next Steps**



Assessing Transportation Impacts

- Historically, interested in traffic impacts on adjacent facilities
- Only consider vehicle trips
- Performance measures are level of service (volume to capacity measure, delay) for facility or intersection
- Focus on peak hour



Caliper Corporation: accessed September 2016
<http://www.caliper.com/transmodeler/transmodeler-se-analysis-software.htm>

Things are changing



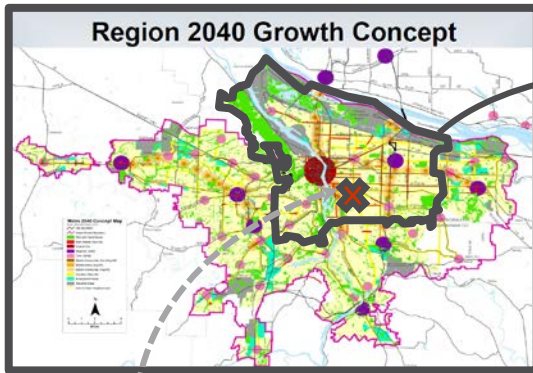
Sam Beebe / Flickr: <https://www.flickr.com/photos/sbeebe/5817452248/>

Your old road is rapidly aging.
Please get out of the new one
If you can't lend your hand,
For the times they are a-changin'.

Bob Dylan

- Communities want more out of their transportation system
- Want to plan for all modes
- Developing new performance measures
- Collecting new data
- Realizing some of the limitations of historic practice
- New research

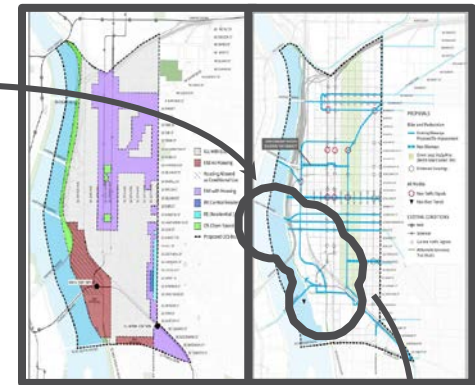
Consistency Across Scales



Regional Plans



Comprehensive Plans



Neighborhood Plans



Site Plans



Station / Corridor Plans

Putting People First



C. Bucheli: <https://www.flickr.com/photos/elaxolotl/867767071>

- People generate trips (not land uses)
- People make trips (not cars)
- 30 years + of research on the built environment & travel outcomes
- None of this is considered in current methodologies

Consider All Modes

Current methods were developed around the automobile...

...contributing to the marginalization of other modes.

Methods & data need to consider all modes:

- Multimodal planning
- Evaluation of performance goals
- Financing infrastructure
- Future innovations



How to Change Practice?



Shift from “vehicle trips” to “person trips”

- A better starting point for establishing multimodal demand
- Collect new data or adjust existing data
- Distribute person trips across modes based upon current & planned conditions
- Develop new planning tools
- Link to plans and methods at other scales

Current Efforts

Many cities/states/universities advancing state of the practice

- San Francisco; NYC; DC
- Caltrans Smart Growth Infill I & II; Affordable Housing Study (PSU)
- NITC funded research (PSU, Utah)

ITE's new recommendation in 3rd edition of the *Trip Generation Handbook*



Opportunities for Portland

- Transform the ways impacts of new development are assessed
- Better consideration of differential impacts of various modes
- Link site development to plans/tools at other scales
- Plan for what we want; not reproduce past trends

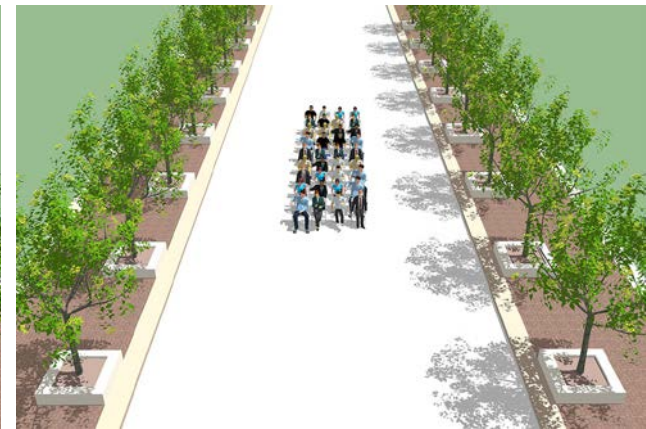


Rolling Best Practices into TSDCs

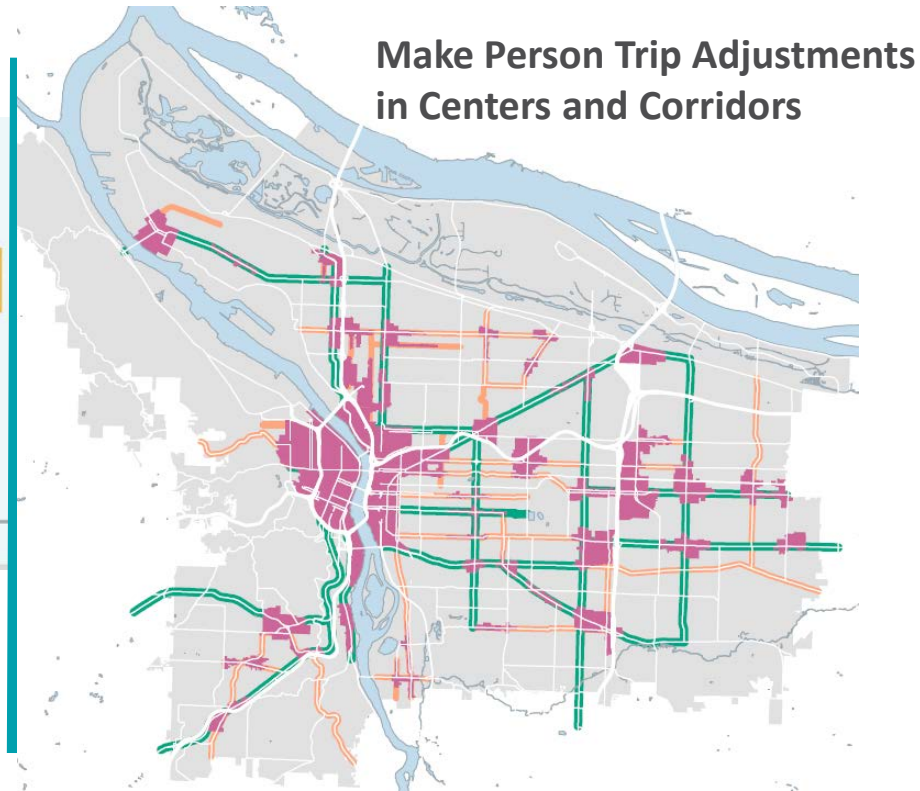
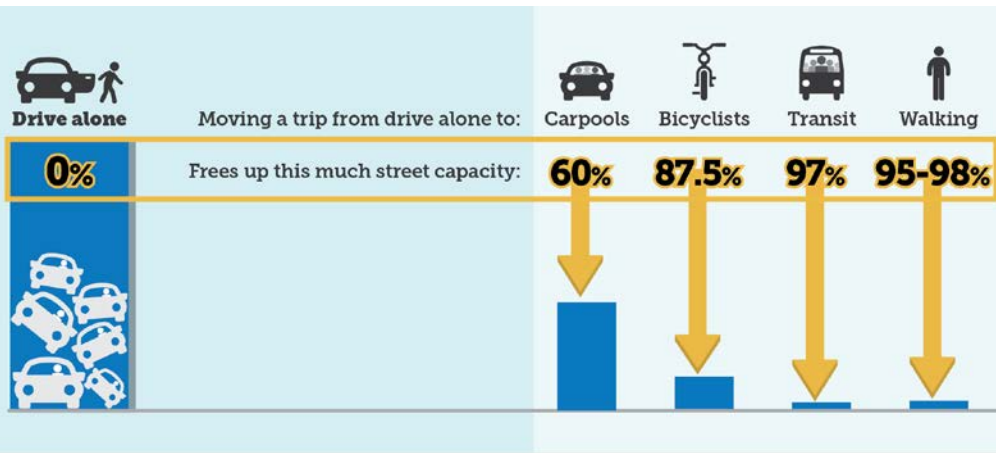
- ✓ **Include new person trip survey data where available**
- ✓ **Adjust existing vehicle trip data for land uses with no person trip data**
- ✓ **Develop person trip data collection program for Portland**
- ✓ **Update the trip rates as new data become available**



Not all Person Trips Have the Same Impact



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Next Steps for TSDC Update

- **Conducting Outreach (eg, Online Open House)**
- **Prepare new TSDC eligible project list**
- **Implement new Person Trip Data**
- **Calculate new TSDC rates for various land uses**
- **Adopt TSDC update in mid-2017**



Person Trip Analysis

QUESTIONS?
