General discussion:

Older Cities:
- Baltimore – redevelopment is happening away from the rail lines, especially along the harbor. Discussions are underway about extending the rail lines to serve this area.
- Philadelphia – a large, older rail system, with development happening at various station areas.

How much development can we expect in TODs (in total), and where will it “come from” (that is, what other areas will experience less development as development is drawn to TODs)?

How do we evaluate mode share?

Infill: many assume it will add traffic to the core area, but can we evaluate how much congestion-saving benefit will be seen in greenfield areas due to this infill?

Are models too conservative? Several rail projects have exceeded by significant margins the forecasts that were prepared for them in the planning stages. Are “politicians” pushing for this conservatism?

Are models too auto-based, too much detail in them and care taken on the auto side, and not enough on the transit side?

Calgary: re-development is going on in transit station areas, after initial lower-density development, as some of the lines opened at a time when the economy was poor, and the station areas had to take what they could get.

How we calculate trip generation rates in mixed-use infill areas?

Politicians don’t care about models. They just want answers. However, longer term changes can be very hard to predict, including “side changes” that have real effects on travel outcomes.

Risk analysis! Can we give ranges of numbers, with probabilities attached, instead of a single number? However, if we do, is there a concern that politicians will be more empowered to pick the answer in the range that suits their prejudices?
FTA: Congress is pushing for reliability analysis, “what if” scenarios that vary inputs that we can’t predict very well, to see what happens to the answers over a range of values for these variables.

We are (or may be about to be) seeing populations in TOD-type areas that we haven’t seen in such areas in a long time (wealthy people, elderly, etc.) Do our recent surveys have information on such people in such contexts, so our models properly depict their reactions? One answer: we do have data from transit-rich neighborhoods. Won’t sufficient samples come from them? Another answer: don’t our utility functions handle such issues, (if we get the necessary variables in them)?

Take care on pedestrian environment conditions. Just because one zone and another zone both have a lot of employment doesn’t mean that their land use is similar, and that people will behave similarly in them, or traveling to them.

Is the fact that DRCOG is using data from 1997 a problem? Chair answer: the question should be framed “will people today, or in forecast year, when presented with the same set of choices, make different decisions than they did in 1997?” If the answer to this question is “yes”, then we do have a problem.

Transit “captives” versus “choice-based riders”: how do we handle their different reactions? Should we segment models between these two types? And how do we define/identify them? Or is this dichotomy not really that useful, and other segmentation would be more important?

Is it the case that TOD residents are so self-selecting that they don’t react in the same way as the general population, and so models won’t get their reactions right? Might we be missing some “I just am committed to transit and ride it a lot” variable in such people?

What about cities without any significant transit at this point? How do they develop credible forecasts of the ridership they can expect if they do create such system?

Is it feasible, even desirable, simply to decide transportation (and land use) plans by policy, without so much reliance on modeling, etc? Tampa, FL is very interested in going this route. One answer, a cautionary tale: The Puget Sound region made a decision not to build more freeways in the central area, on just this basis (policy-first.) The result was a big backfire: congestion increased so much in the central area, that the result was an acceleration of suburban development.

A regional land use plan is key to supporting the transit system: Organize key destinations and link with transit.
Question: How large is the transit walk distance? One quarter mile has often been used in the past. Is this too short? DRCOG answer: yes, our maximum is 30 minutes (about 1.5 miles), with most people walking much shorter distances. Perhaps ½ mile is a better number than ¼ mile.

Pricing (road pricing, etc): how does it affect transit planning and demand analysis? We need better modeling of the effects of pricing. The SHARP-II project should help on this. What about other types of pricing, such as carbon dioxide pricing?

Aren’t there overall quality of life issues that also play a role in land use and transit planning (e.g., preservation/availability of open space, etc.)

Land use planning can help preserve the investment in transportation facilities, by reducing the propensity for them to become oversubscribed (by, for example, too much suburban development near new freeways.)

Question: Who uses models, and at what point in the planning process? Can they be made more accessible, and more useful for alternatives analysis DURING the planning process?

Auto ownership is a key variable. We need to do a better job of forecasting auto ownership, and of its effect on transit use. TOD breaks the tie between income and auto ownership: high-income people may choose to live in TOD areas and own fewer cars.

Are cities such as Denver just going through a “maturity curve”, with people simply becoming more accepting of transit, as people in older cities often already are?

Current models focus on the difference in travel time between one mode and another as a key variable in forecasting differences in ridership between them. Shouldn’t travel time reliability also be included?

We need not just static models, but dynamic models that integrate land use and travel!

Some research topics:

- Behavior of TOD choosers.
- Overall regional accessibility from TOD.
- Forecast new TOD ridership, with before/after studies.
- Study TOD corridors, not just nodes.
- Review mode-specific constants for various transit mode.
- Market segmentation.
- Bike/ped access to transit.
• What is the effect on ridership of user knowledge (or lack of it) of the transit system?
• How can we build land use as the transit system matures?
• How can modeling help plan in presently “no-transit” areas?
• How can we define “auto captives”, so we know what the transit market really is?