

Long Range Transportation Plan Task Force
January 31, 2011 Meeting Recap

Welcome & Introductions

- PC - Richard Martin, Bill Williams
- TAC - Lew May, Jane Fleig, Justin Wykoff
- CAC - Ted Miller, Jack Baker, Sarah Ryterband
- Staff - Josh Desmond, Scott Robinson, Raymond Hess

Peer Community Research

Scott Robinson presented his research on the North Front Range MPO (NFRMPO) out of Fort Collins, CO. He interviewed Suzette Mallette, Regional Transportation Planning Director.

Travel Demand Model

- 4 step (Trip generation, distribution, assignment, and mode split model)
 - Called a “mode choice model” (p. 153), Transit is modeled separately on its own network and then the model is calibrated to transit surveys. Bike/ped is done through Census/HH survey and (% mode split) taken off top of TAZ demand (std method).
 - Plan can answer policy questions (transit)– good tool. Currently the model is in its third iteration. Each time it is getting more sophisticated. 2035 Model has good transit capabilities. The 2040 Model is looking to get transit to consider beyond boundary – external trips w/ DRCOG (Denver)– and do a better job on distance based with bike/ped.
 - DRCOG is doing a tour based model - very expensive, but can augment their 2040 plan.
 - See scenario testing – eleven total including land uses/densities/consumption for transit and base assumptions (p. 132 to 142). Base improvements, TOD and other alternatives were run.
- How does your model account for...
 - Pedestrian trips?
 - Policy: State Regional Trails plan as priorities (no resolution on local priorities but highway capacity projects include ped components).
 - Data from HH survey and then used for mode split into TAZ (similar to our model), Mention to model bike ped network need to build a bike ped network into model – not just a road network.
 - Use ACS as a good check to data, because ACS is conservative.
 - Bicycle trips?
 - See pedestrian
 - Transit trips?
 - Policy: Standard industry performance measures (farebox, cost/passenger trip, etc), downtown/campus focused, VanGO share/ride services with performance measures, private providers, para-transit services, and used Coordinated Public Transit and Human Services Transportation Plan.

- Data: Model uses a nested loci method for Transit, Bus, Vehicle, and Train (don't have). Can be used for mode choice model scenarios.
 - Mentions the use of TODs to model transit to show land consumption and density against the base and TOD scenario as well as local, regional, and premium transit services
 - Freight?
 - Truck – Policy based: used Global Insight Tansearch Database (2004) for regional activity and then highlighted truck routes and accidents.
 - Data used from regular vehicle counts and filtered with axel classifications (validated by class). Model used attractions and destinations for freight.
 - Rail – Policy based: local information from three RR companies and highlighted RR crossing accidents
 - Intermodal (airports, rail)?
 - Rail – see above
 - Airports - Policy based: local information from two airports, but no specific priorities identified. Plan does have recommendations for the airports.
 - Regulated by the state
- How is land use factored into the model?
 - Used Community Viz software to allocate employment/housing totals over time to TAZ/parcel/subarea (HH density using faytor (sic) process). Based information from 20 communities on Land Use. Had to fit all different classifications into several general classifications.
 - Land Use allocation was achieved through a parcel based gravity model to project employment and household numbers into four large sub-regions of the NFRMPO area (see map p. 109). Parcels were first determined if developable before allocations could be projected. “Attractiveness” of developable parcels (gravity) was determined by proximity to arterials, employment centers, and corporate boundaries.
 - Household size and income data was used in density assignments (std practice).
 - How many land use categories did you use for your model - TAZ?
 - Five (residential, retail, service, production, campus)
 - Socioeconomic based: Three economic and household for standard socioeconomic TAZ analysis.
 - Three commercial allowed for better traffic assignment
 - Special Campus was used because of unique trip generator aspects
- Please list the sources of data used in the creation of your model?
 - NHTS, Census, ACS, other (please list)
 - 2001 Local Household Travel Survey (1350 respondents) 2005 follow-up (350 requests and 14 responses)
 - Center for Business Economic Facts
 - State Demographer
 - Mobile 6.2 (air quality to estimate vehicle emissions only)

- Assessors data (2005) used to determine what parcels are “developable” for employment/housing and to exclude others (parks, floodplain, open space, cemetery).
 - Quarterly Census of Employment and Wages (QCEW Employment – Bureau of Labor Statistics)
 - 2000 Census (TAZ, Employment, and Household) - Census Blocks household size and Census Block Groups household income
 - Environmental, EJ, Historic, and Agricultural assets clearly listed
 - Did you conduct supplemental surveys (add-ons)?
 - Yes, Both 2001 survey by ETC Institute of Olathe KS and staff in 2005 follow-up on-line
 - May we have access to the questions of your survey?
 - Can provide and will follow-up if necessary.
- When was your model developed (date)?
 - 2005 (base year)
- How much did it cost to develop your model?
 - \$90K but not exact
- What consultant did you use?
 - Used an RFP, and selected, LSA on 1 year contract with 4 additional extensions – made it flexible.
 - Consultants did survey, socioeconomic data analysis, model building (data, network, assignments, validation, etc.), and document production (not writing – in house ~80%).
 - The RFP is available on request.
- Model uses TransCAD and EPA’s Mobile 6 (Air Quality)
- Longevity of model – used only for RTP updates with exception of Mobil 6 (air quality). NFRMPO used to have a full time modeler on staff, but did not work out as envisioned (development vs. applications). Now can use to test some policies (applications) and required air quality, but no need for model development.
 - Model/staff can/did run scenarios (TOD, Land use). Do give the model to fifteen members (twenty within planning area) agencies as a tool to use for planning purposes, but cannot change how it works.

Plan Development

- How is land use addressed in your Plan (e.g. is there a linkage to transportation projects and density or land use types)?
 - Regionally Significant Corridors Plan
 - See notes on model – e.g. community vis
 - The Corridor and Tiered approach to transportation planning seems to address future growth expectations, but it does not prescribe any particular project (exception of highway expansion).
 - Local Agencies provided land use on areas not developable (parks, cemeteries, environmentally sensitive) vs. growth areas for HH data assignments. Good environmental and EJ section.

- 15 member agencies, 20 within planning area, none pay fees, but still have the “how to get our piece of the pie” mentality. Held regular and thorough coordination meetings.
- Transit is contentious based on vastly different community preferences (Greely vs. Fort Collins)
- What role did the old plan or other plans (comp plans, transit plans, corridor plans) play in the development of your new plan?
 - Model was based on previous models, but upgraded. The Regionally Significant Corridors provided the main policy direction for the plan. There was also an economic/housing study mentioned.
 - Good job of building and tying past efforts into the RTP
- Project Selection
 - How did you deal with project identification and selection:
 - The Regionally Significant Corridor Study established the top priorities for corridors and grouped them into three tiers using safety, congestion, accessibility, freight, and public opinion as tiering measures. Then the top tiered corridors went through additional public involvement process for detailed visions (these visions establish performance measures for Tier I Corridors – generally follow the base measures established with the NFR Congestion Management Process). All corridors have defined goals and visions through this study. The significant corridors were then defined as Highway Capacity projects and included in the resource allocation matrix of the plan. This matrix set 75% of funding aside for the significant corridors (70% to Tier 1, 15% to Tier 2, and 15% to Tier 3) and 25% of funding for other projects (70% to Tier 1, 15% to Tier 2, and 15% to Tier 3). The other projects vie for funding during the TIP process (updated every four years for a six year TIP) based.
 - Projects are submitted by the agency responsible for the project and go through Project Prioritization (p. 233 – 236 or NFR CMP). For Highway Capacity projects they have been identified as top priorities and conform to air quality (Figure ES-5) and fiscal constraints – thus identified and timed with the TIP development (table ES 4 clearly details priorities and weighted scores). These are then eligible to be considered during the TIP development. The other projects are prioritized by project category (transit, rail, bike/ped, TDM, TSM, other) and vie for funding during TIP development (not clear on prioritization methods).
 - Who proposed projects for consideration in the plan (MPO staff, Committees, LPAs, citizens)?
 - Area public agencies – many projects are based on related plans public involvement efforts
 - Regionally Significant Corridors – went through visioning and public process
 - Tiered approach and allocation of funding.
 - What approach(es) were used to analyze projects?

