



On-Course

Traffic Forecasts
for Your Community

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Traffic Forecasting for Your Community

■ Forecasting Elements

- Transportation Analysis Zone (TAZ)
Allocations
- Map of Principal and “A” Minor Arterials
 - Existing and Proposed Number of Lanes
 - Current Daily Traffic Counts
 - 2030 Forecast Traffic Volumes
 - May also consider intermediate years

Traffic Forecasting for Your Community

■ TAZ Allocations

- Use Council transportation analysis zones (TAZs)
- May Develop Community Specific TAZs
 - Scaled to Address Local Concerns
 - Related to Planned Land Uses
 - Must be Able to Aggregate to Council TAZs

Traffic Forecasting for Your Community

■ Reasons for TAZ Allocations

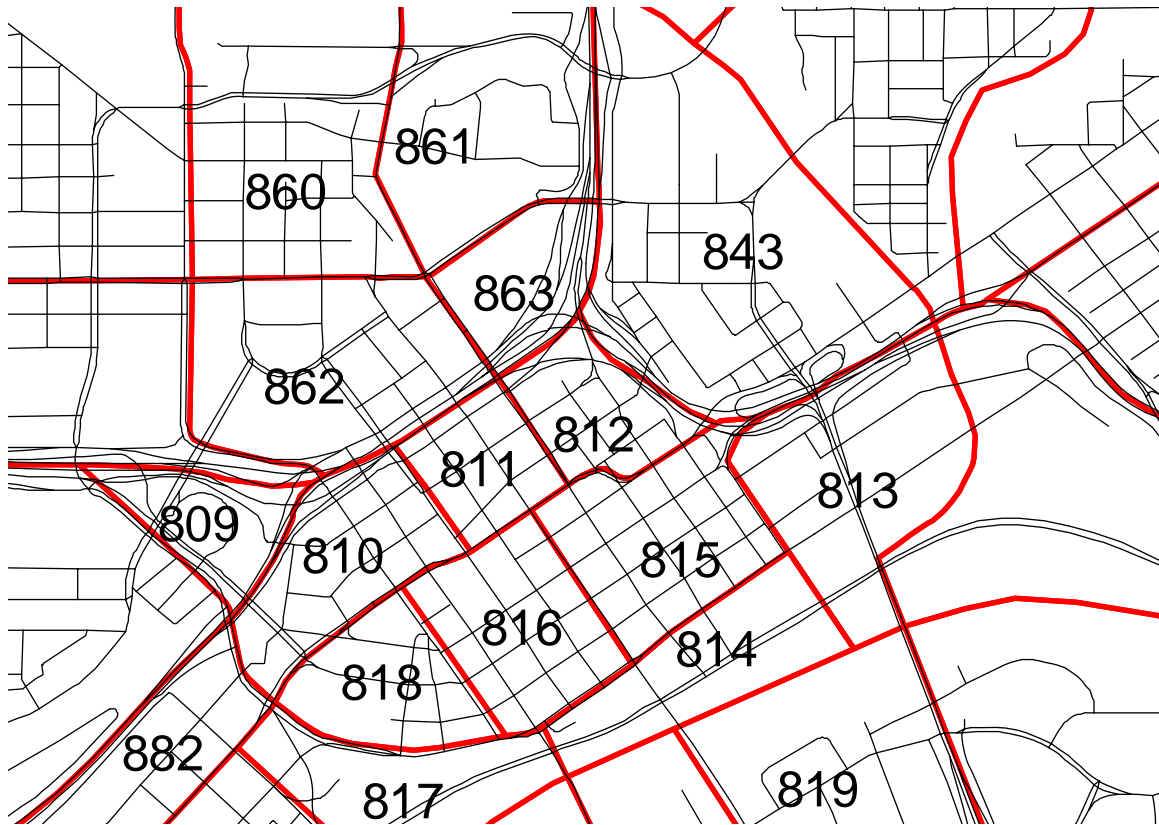
- Basis for Regional and Local Travel Forecasts (Highway and Transit)
- Major Source of Data for Transit New Starts Submittals

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■ Methods for TAZ Allocations

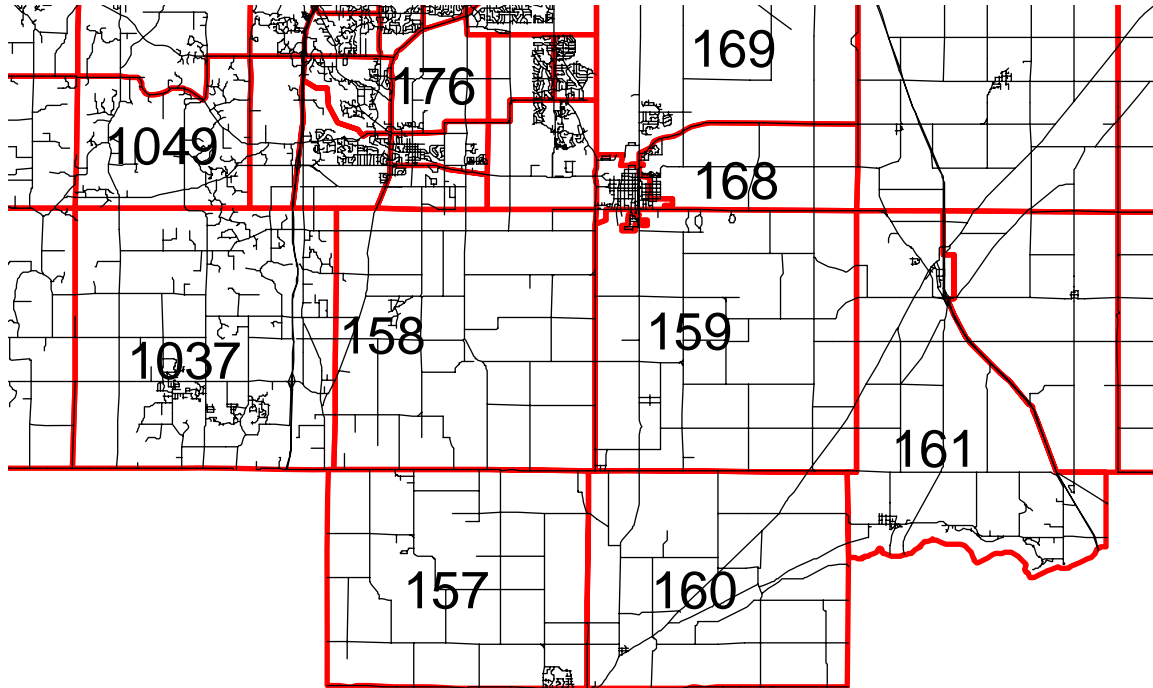
- Start with 2000 Census
- Add Building Permit Data and Calculate Population from Housing Units
- Allocate Employment by Land Use Plans
- Use Future Year Land Use Plans to Locate Future Housing

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Example of TAZs in Downtown St. Paul

Traffic Forecasting for Your Community



Example of TAZs in Southern Dakota County

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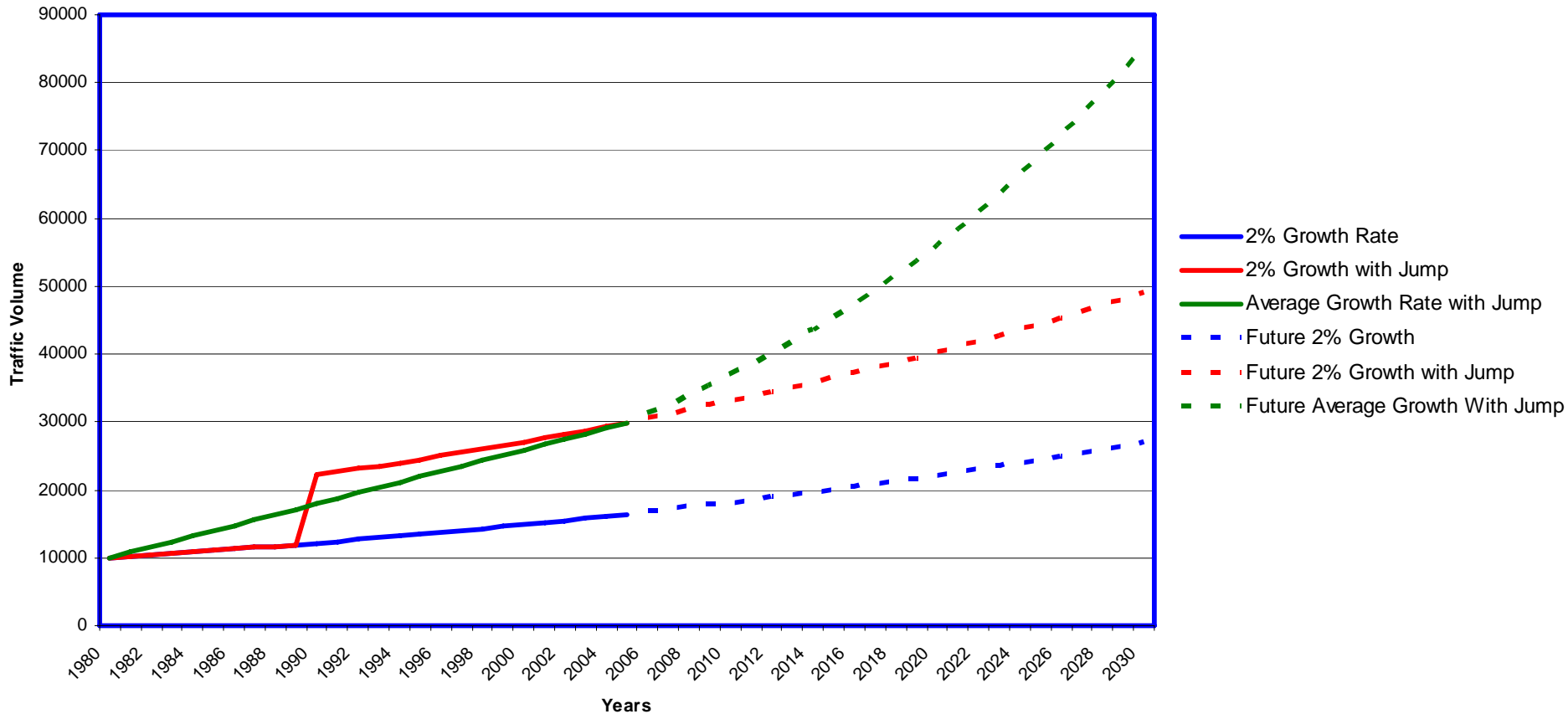
- Traffic Forecasting Options
 - Developed and Rural Communities
 - Developing Communities

Traffic Forecasting for Your Community

- Developed and rural communities
 - “Developed and rural communities where traffic growth is limited may need only a trend analysis to forecast traffic.”
 - Beware “jumps” in long-term trends
 - Need to consider growth in communities that provide pass-through traffic.
 - Major changes in land use prohibit use of this technique.
 - Supplement with local knowledge

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Illustration of Trendline "Jump" Issue



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- “Developing communities may use the Metropolitan Council’s regional traffic forecasts as long as they reflect the municipality’s expected growth.”
- May also develop own forecast using consistent 4-step travel demand model.
(Coordinate with Council forecasting staff)

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- 4-Step Travel Demand Model
 - Trip Generation
 - Trip Distribution
 - Mode Choice
 - Trip Assignment (Capacity Restrained)

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- Model Highway Network Assumptions
 - Consistent with Council's Transportation Policy Plan
 - Consistent with Mn/DOT's Traffic System Plan
 - Inconsistent projects may be tested as alternatives, but baseline must be consistent.

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- Other Options for Developed or Rural Communities:
 - Check for Forecasts Done in your Area by Mn/DOT, County or Council (Environmental Impact Studies, Corridor Studies, etc.)
 - Add traffic for land uses not consistent with council transportation analysis zone (taz) data or the data used by the agency preparing the forecast.

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■ Needs Assessment

- Use Lane-Capacity Assumptions in Appendix A of the Transportation Policy Plan for Initial Needs Assessment
- Make Changes to Model Network
- Rerun Four-Step Model
- Review Needs Assessment to Confirm Improvements Address Impacts
- Iterate as Needed