Agenda

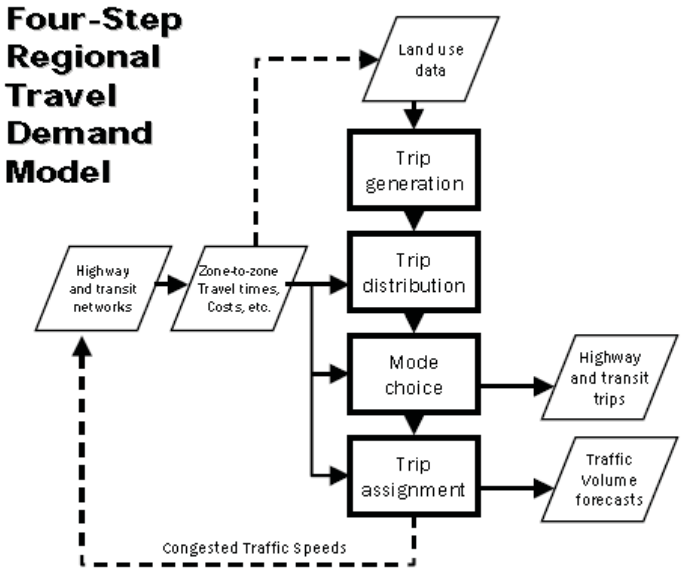
1. Land Use report
2. Station area planning – update
3. Model preview
4. Operating Plans
5. Public meeting planning
6. Work plan and schedule

Why Develop a Travel Demand Model for the project?

- FTA requires an estimate of user benefits
- User benefits are derived from a logit mode choice model
- No existing travel demand model can address project needs

What is the Travel Demand Model?

- Analytic Tool used to forecast travel patterns
- Based on:
  - Survey data of people's reported travel patterns
  - Geographic information about the current and future locations of population and employment
  - Detailed roadway and transit networks



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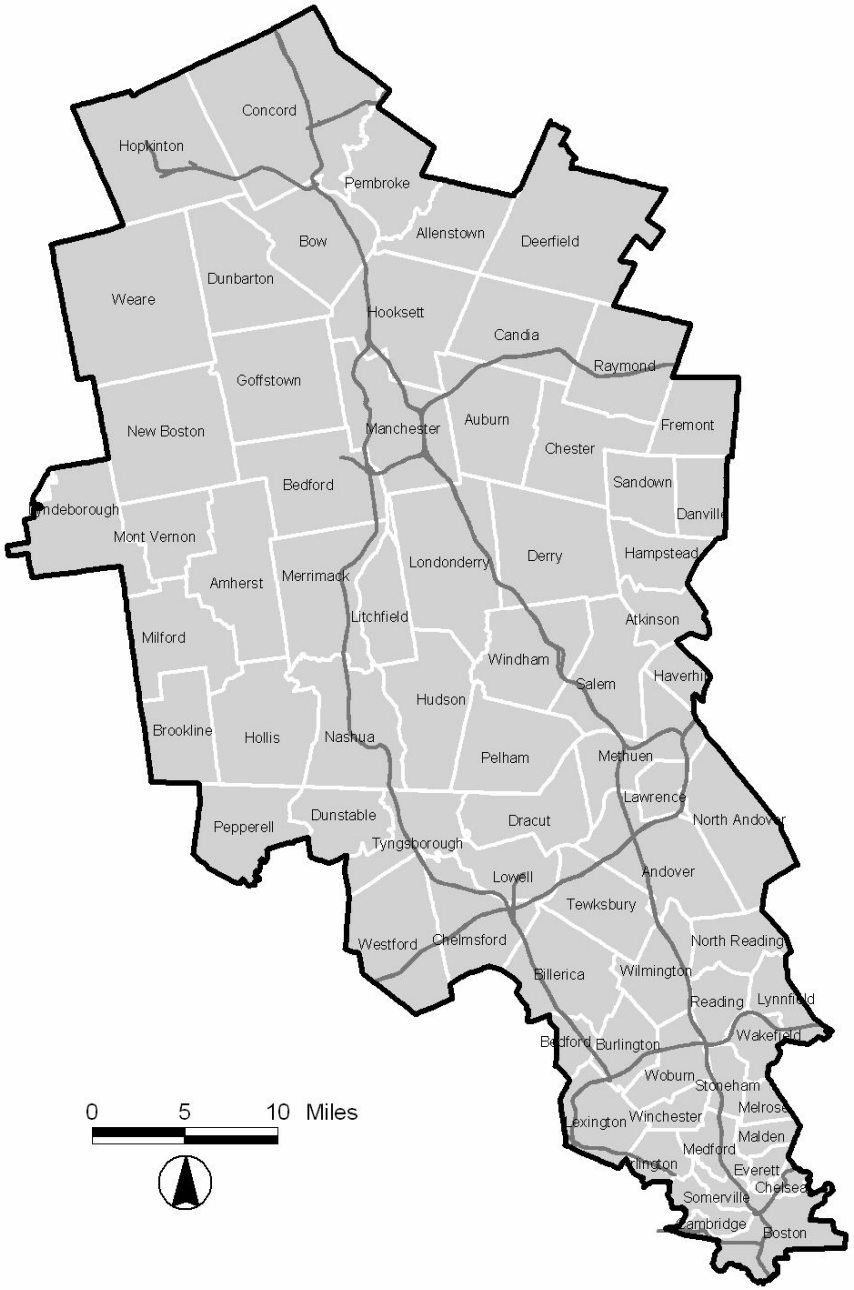
Model Extent



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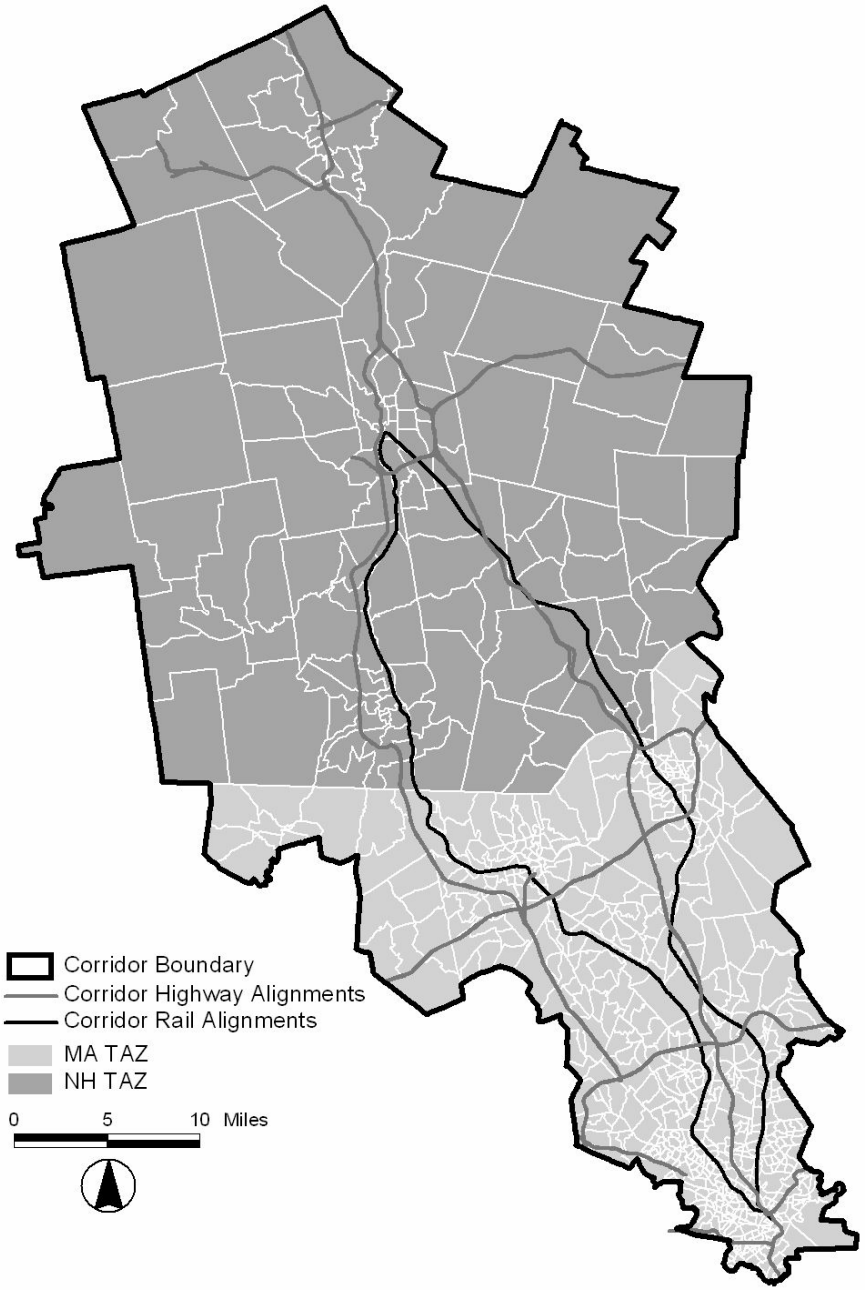
Model Traffic Analysis Zones



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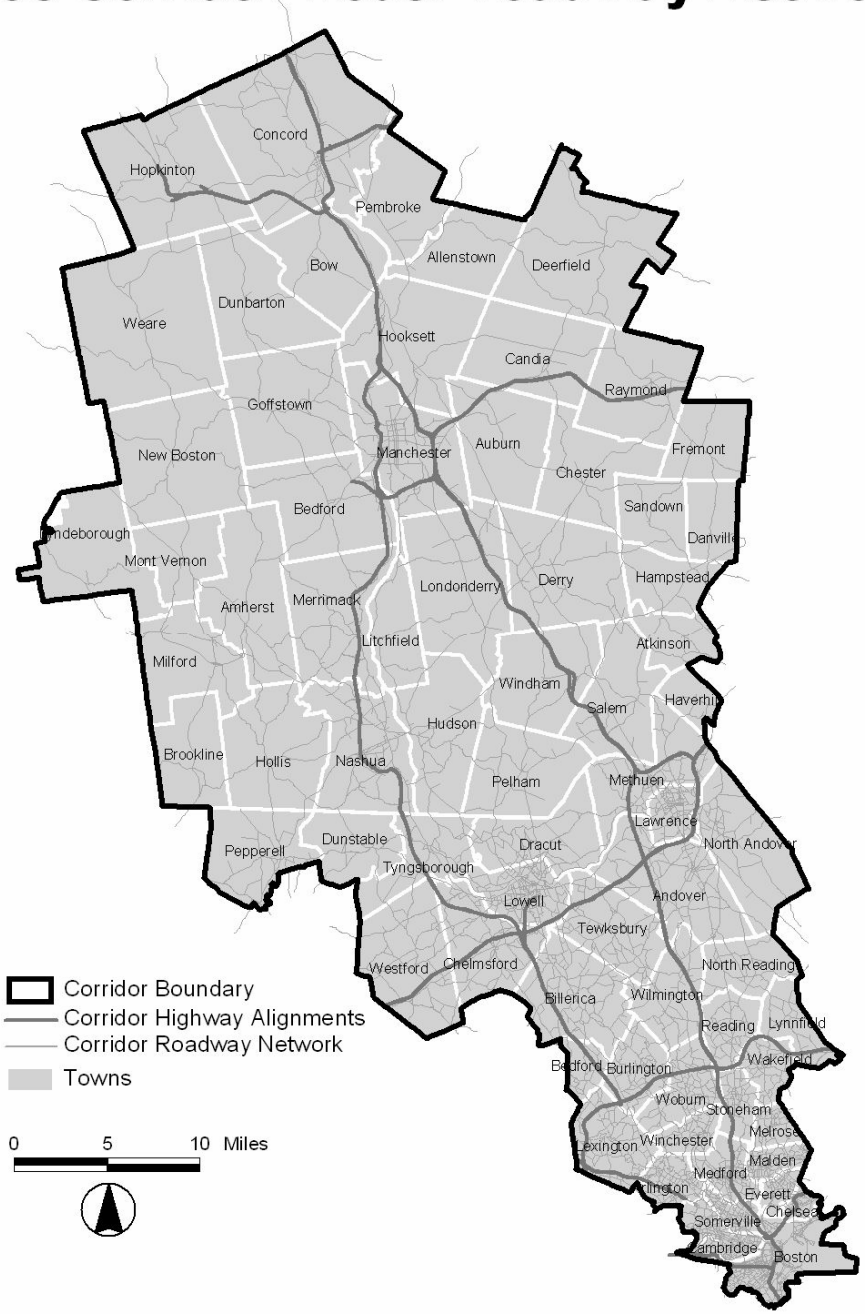
Model Network



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What Can the Model Do?

- Predict changes in travel based on:
  - Changes to the transportation system
    - Capacity and speeds (highway and transit)
    - Transit attributes (frequencies, stop locations)
  - Changes to prices
    - Fuel costs
    - Parking costs
  - Changes in future population and employment assumptions
    - Locations
    - Socioeconomic attributes

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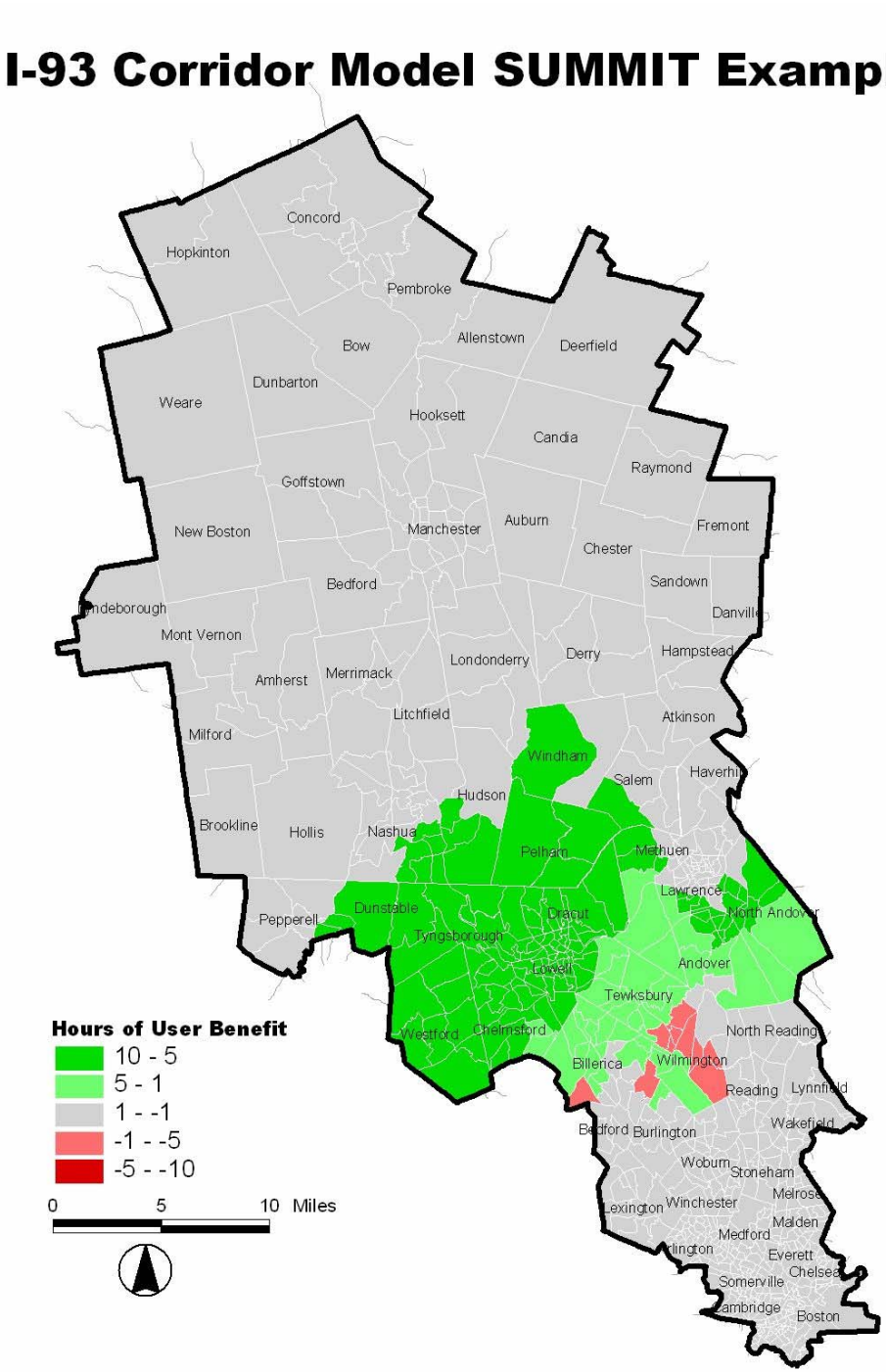
What Do We Expect to Get Out of It?

- For each alternative tested, the model will produce:
  - Ridership forecasts
  - FTA user benefit measures
- Compare modeled alternatives to a modeled “base case” to assess project effectiveness

Example of SUMMIT Output Map



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Model Development Process

- Build base year (2000)
  - Establish modeling area
  - Establish networks and zones
  - Implement and calibrate MA Statewide Model generation and distribution
  - Adapt and calibrate CTPS Model mode choice and assignment
- Calibrate / validate base year model
  - Compare to “observed” data, such as
    - Surveyed tripmaking
    - Census “Journey-toWork”
    - Transit and traffic counts
- Build future year model (2030)
- Test alternatives using future year model

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