

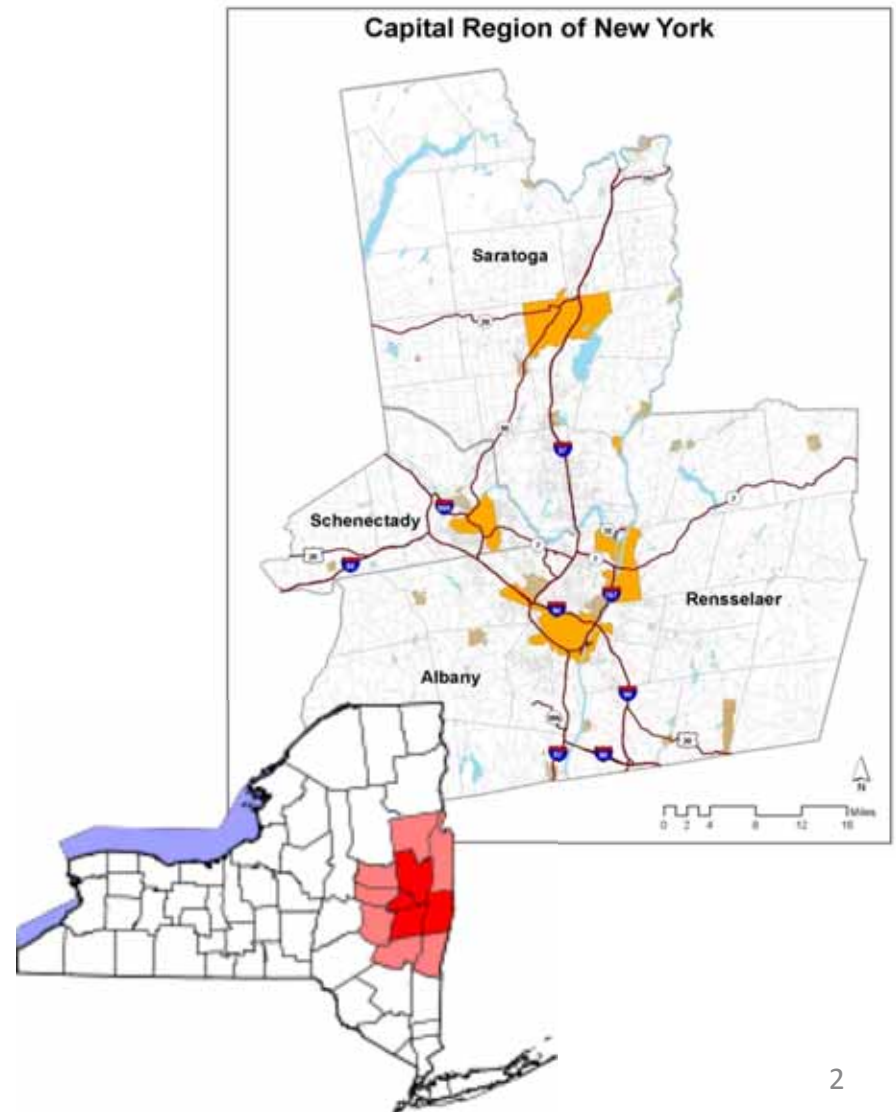
SmartGAP Application in the Capital Region of New York

Sree Nampoothiri
Transportation Planner
Capital District Transportation Committee

New Partners for Smart Growth Conference
Kansas City, MO, February 7, 2013

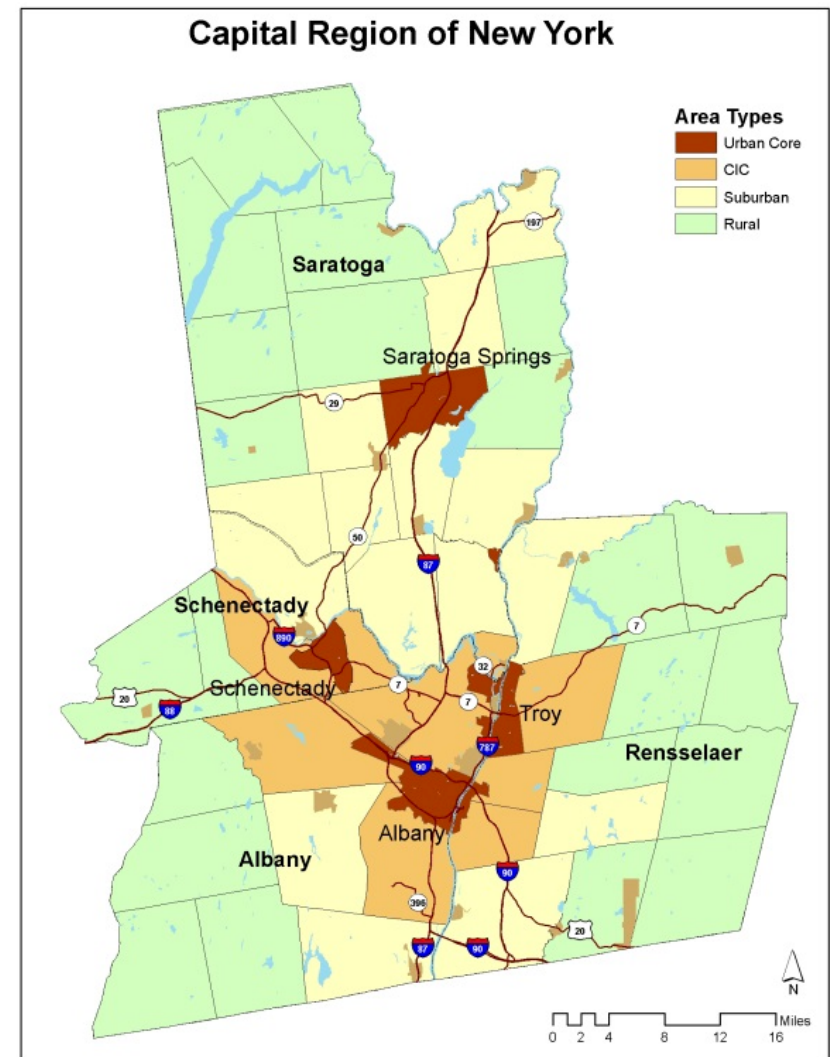
Capital Region & CDTC

- 860,000 population
- Four counties
- Eight cities
- CDTA, Port, Airport
- NYSDOT, NYSTA
- CDRPC
- Largest town + rotating membership of two towns at a time



SmartGAP Application

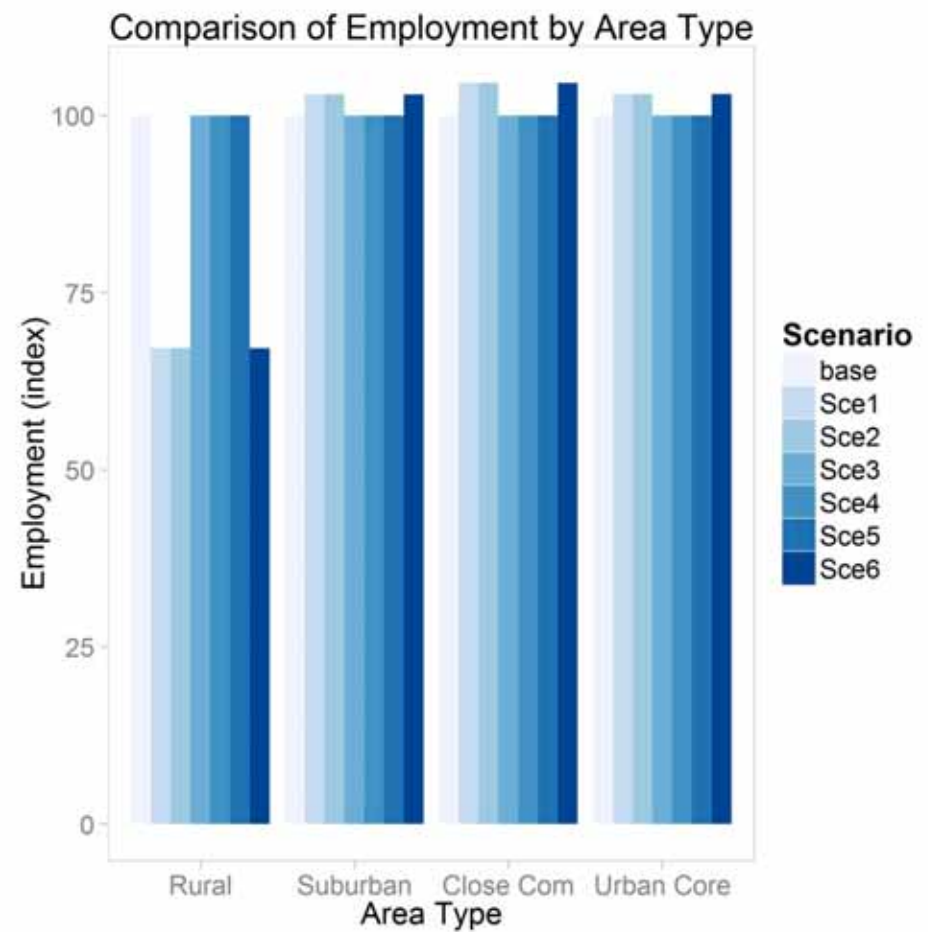
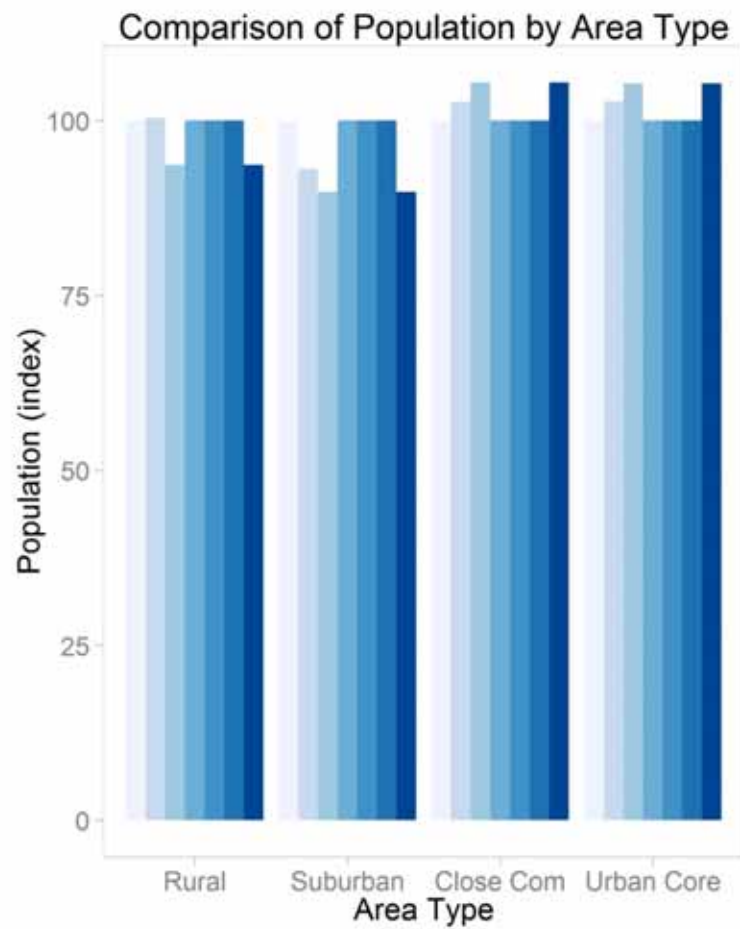
- Area types @ municipal level
- Place types @ TAZ level
- Base Scenario
- Six “what if” scenarios



Scenarios

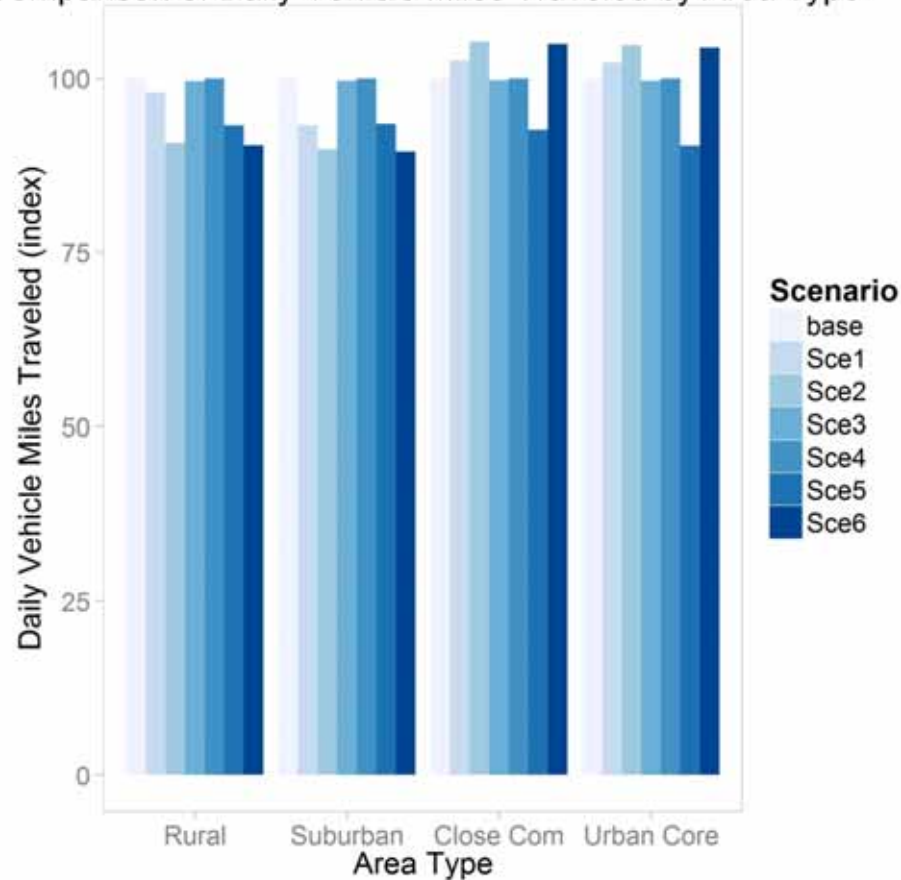
Scenario	Description	Land use	Transportation	Policy
0	Base	base	base	base
1	Shift 20% to UC/CIC	Shift 10% pop/emp to CU; 10% to CIC from suburb	base	base
2	Shift 30% to UC/CIC	Shift 15% pop/10%emp to CU and 15%/10% to CIC from suburb	base	base
		Shift 5% pop to CU and 5% to CIC from rural		
3	Transit supply	base	+20% in transit	base
4	Add ITS	base	base	+20% ITS lane miles
5	Transit + VMT	base	+20% in transit	10c/mile charge
6	Shift 30% to UC/CIC	Shift 15% pop/emp to CU and 15% to CIC from suburb and rural	+20% in transit	+20% ITS lane miles

Results

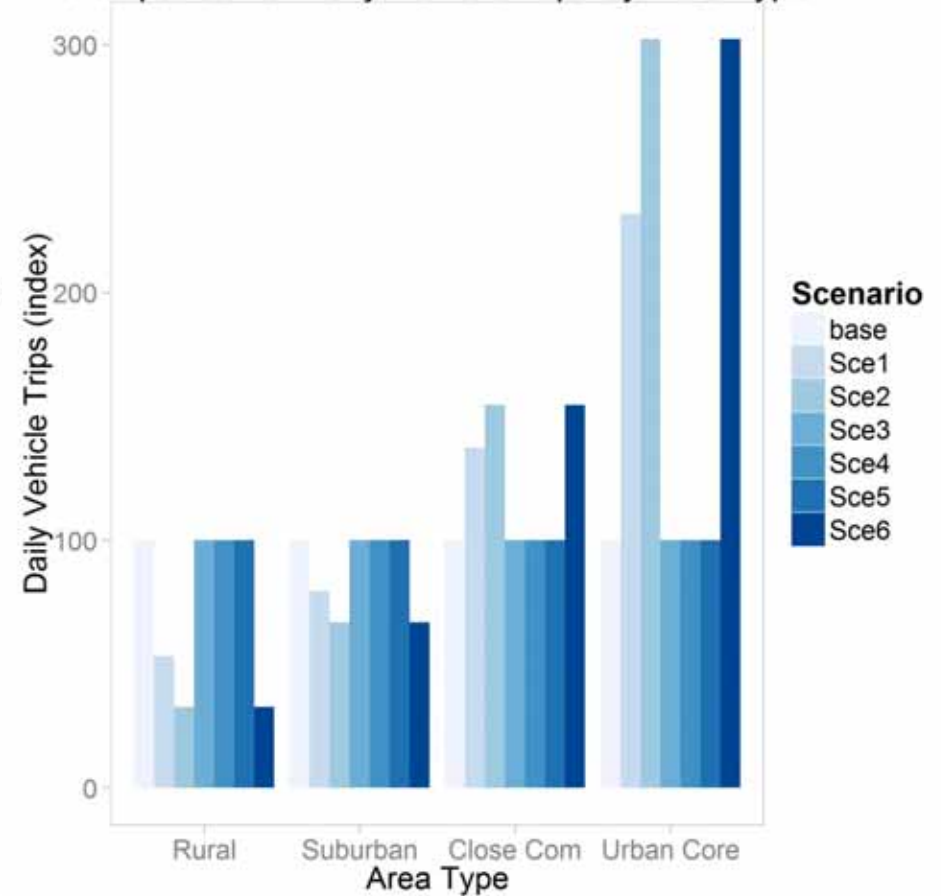


Results

Comparison of Daily Vehicle Miles Traveled by Area Type



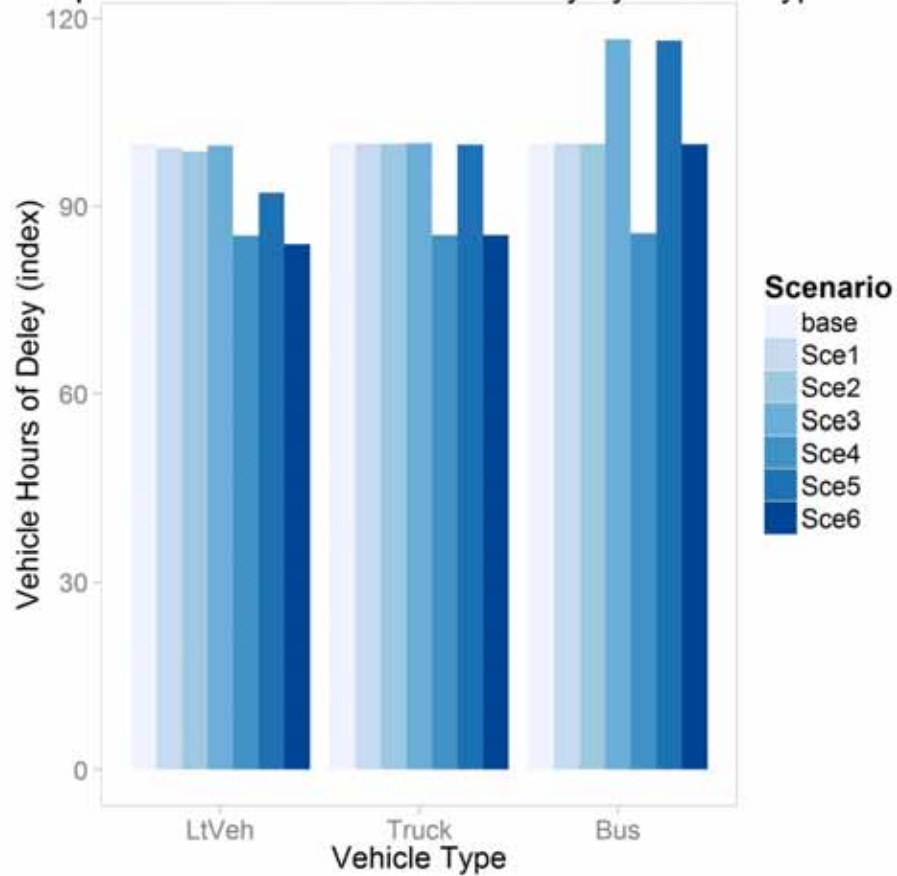
Comparison of Daily Vehicle Trips by Area Type



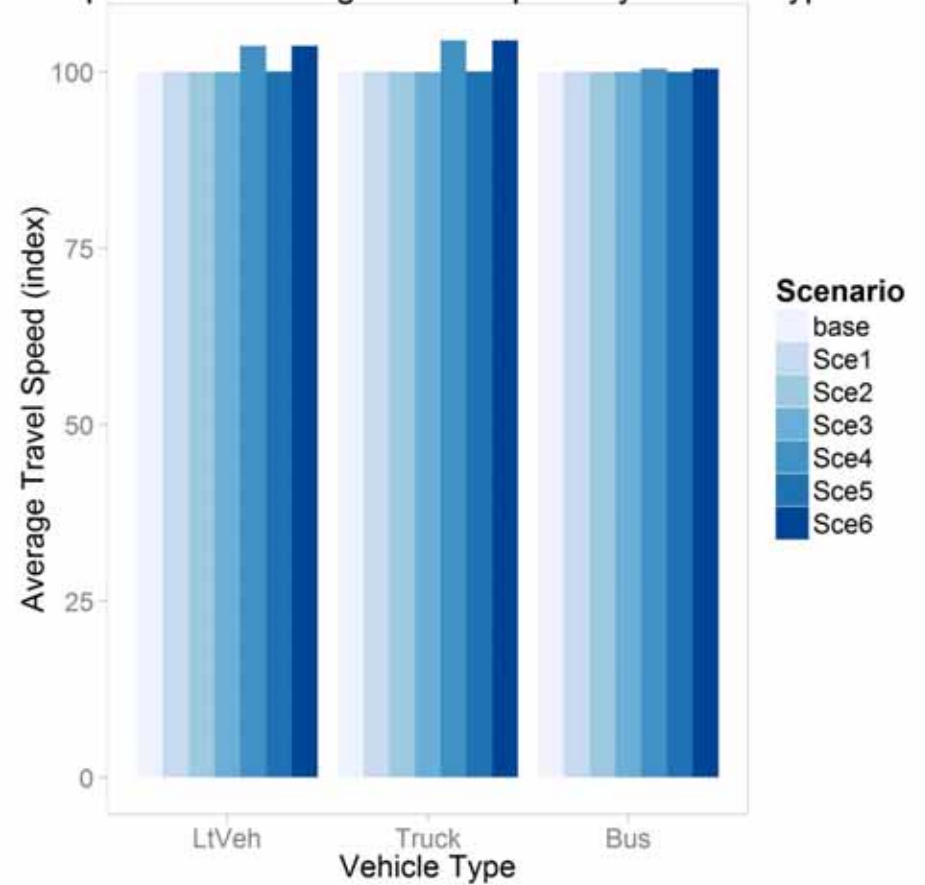
Smart Growth reduces VMT.....may be not

Results

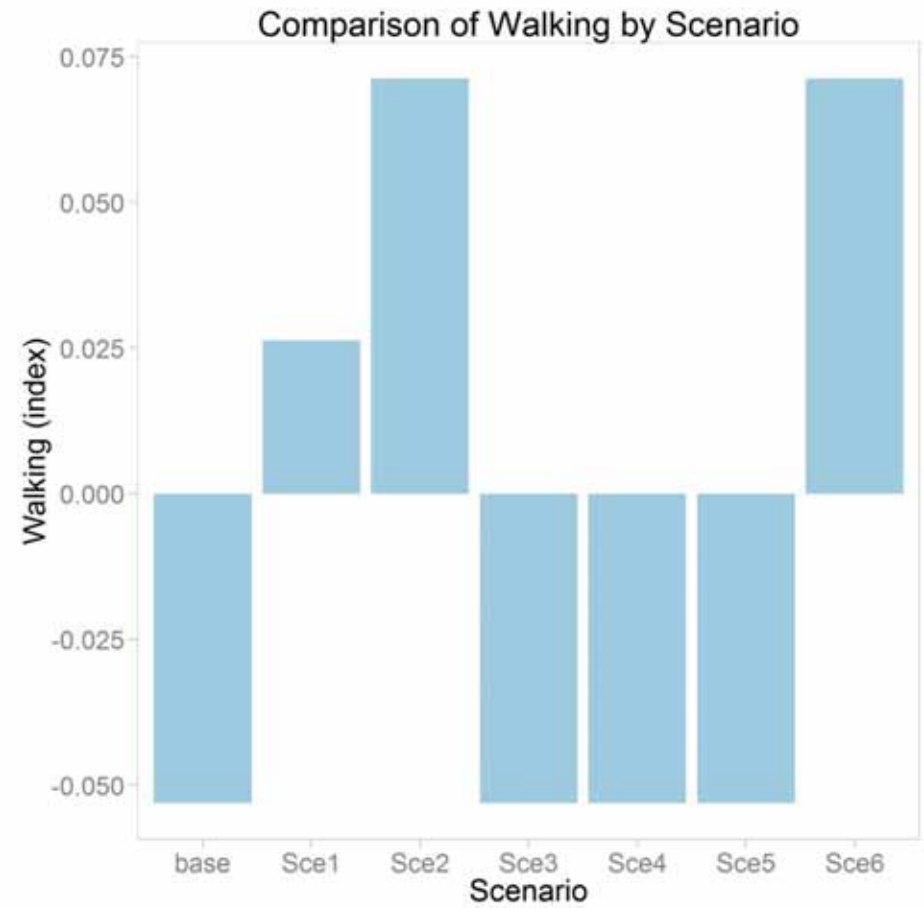
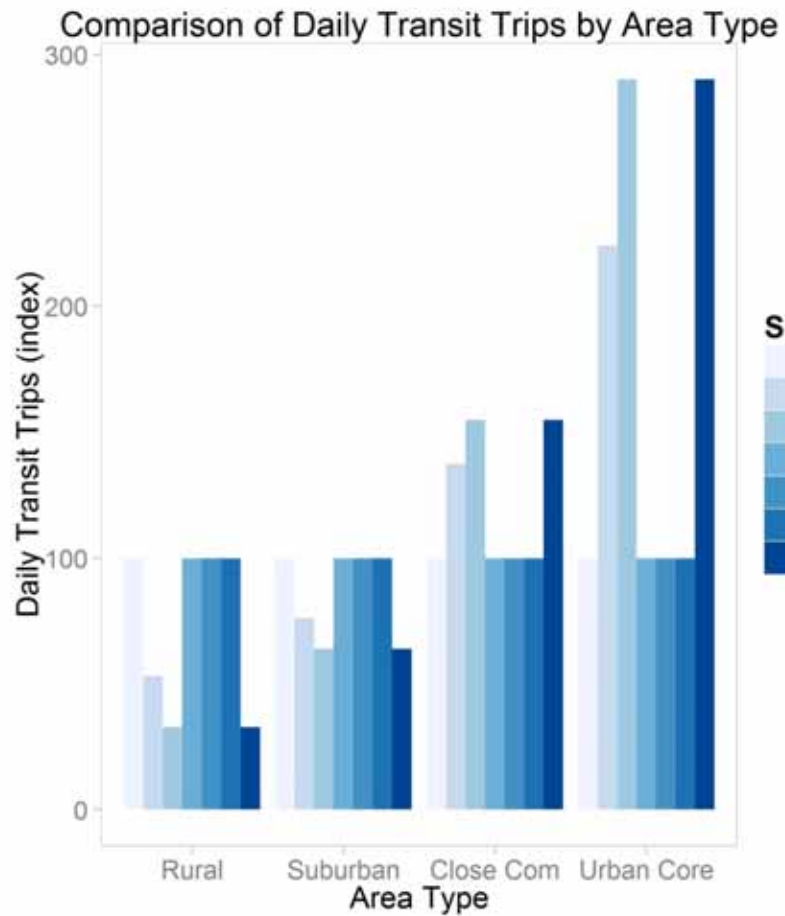
Comparison of Vehicle Hours of Delay by Vehicle Type



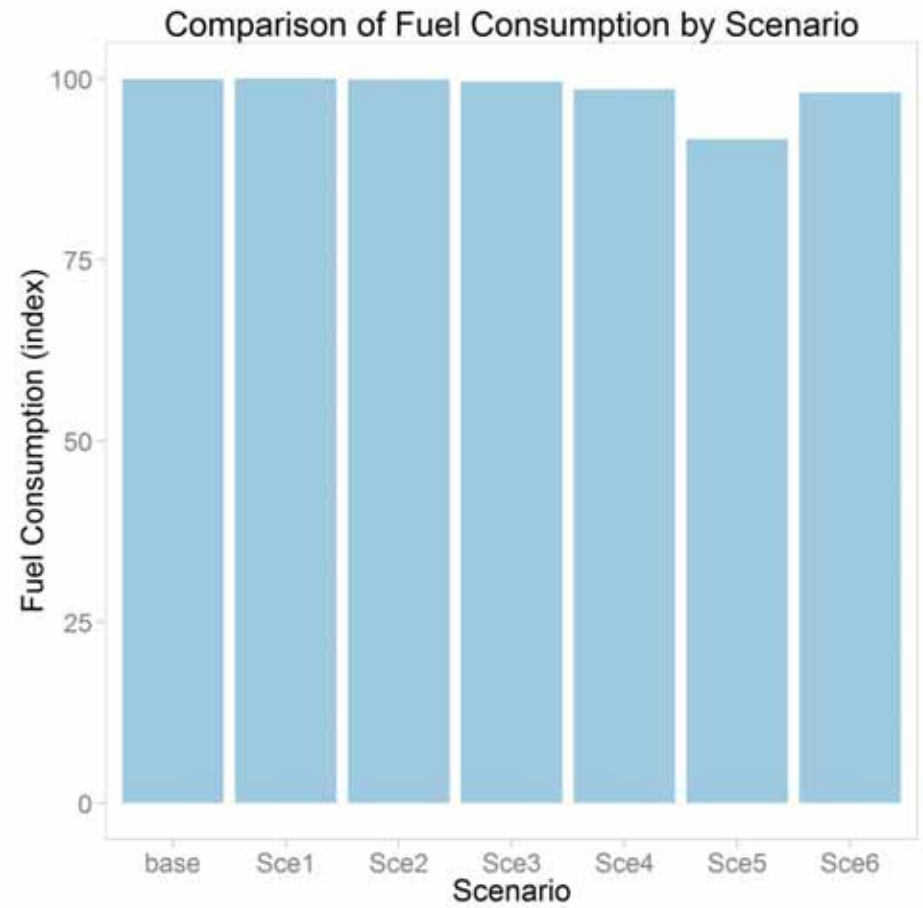
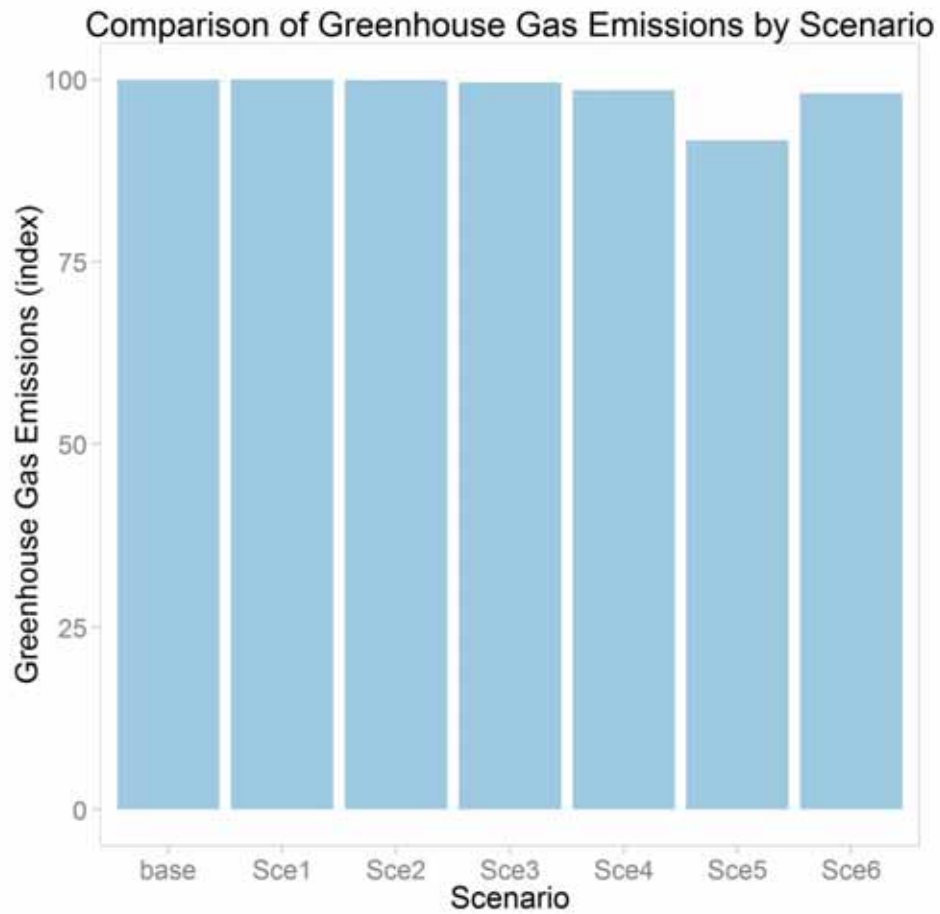
Comparison of Average Travel Speed by Vehicle Type



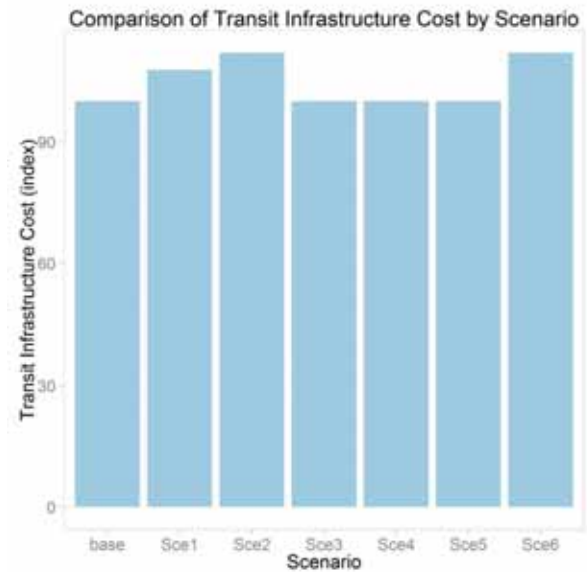
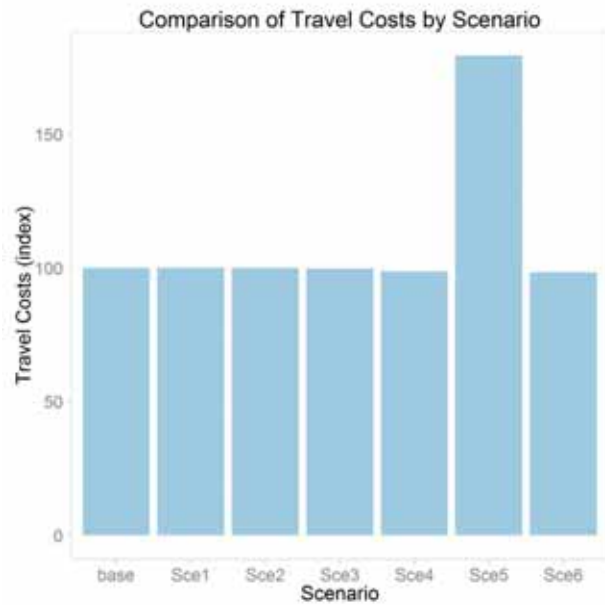
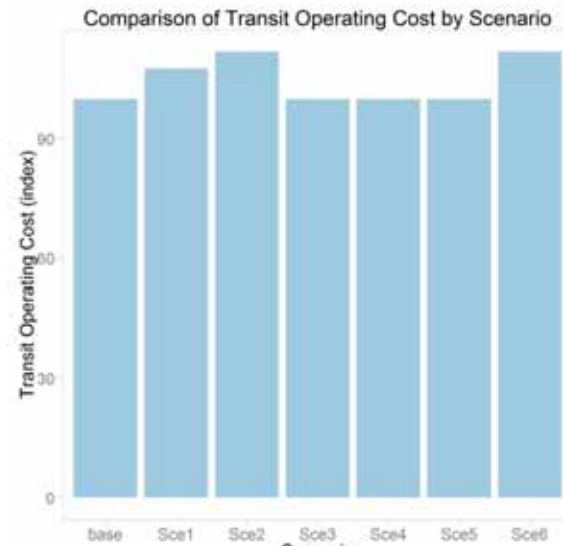
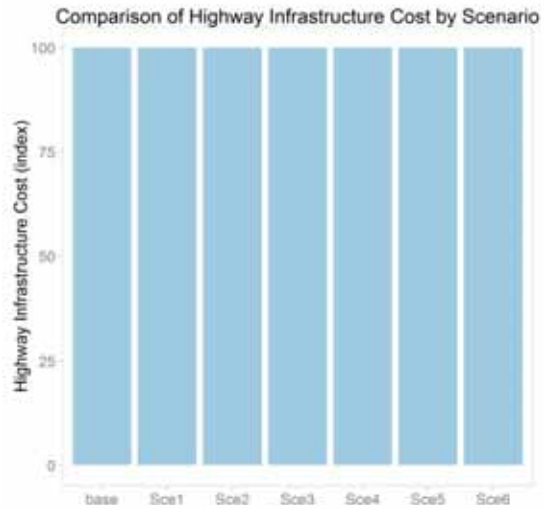
Results



Results



Results



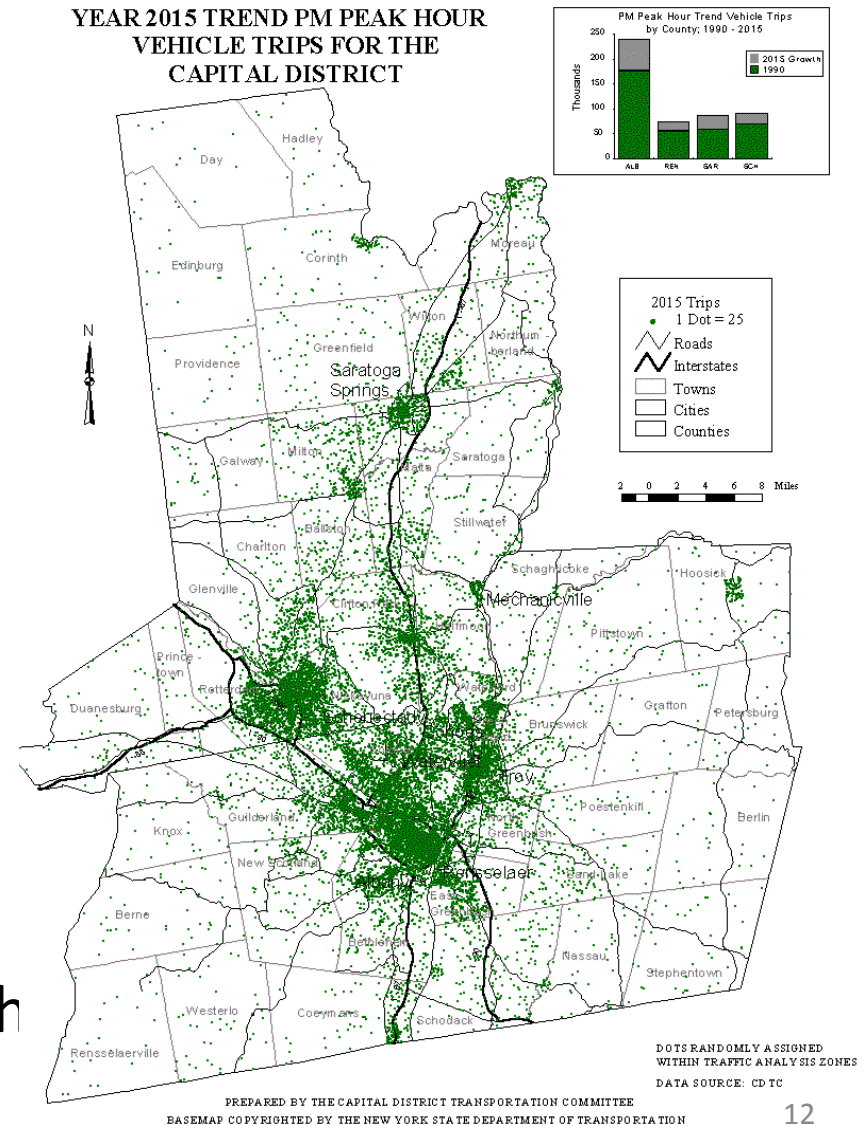
SmartGAP

- Easy to develop inputs
- Easy interface
- Quick process
- Travel impacts at place type level
- Good visualization for decision makers and general public

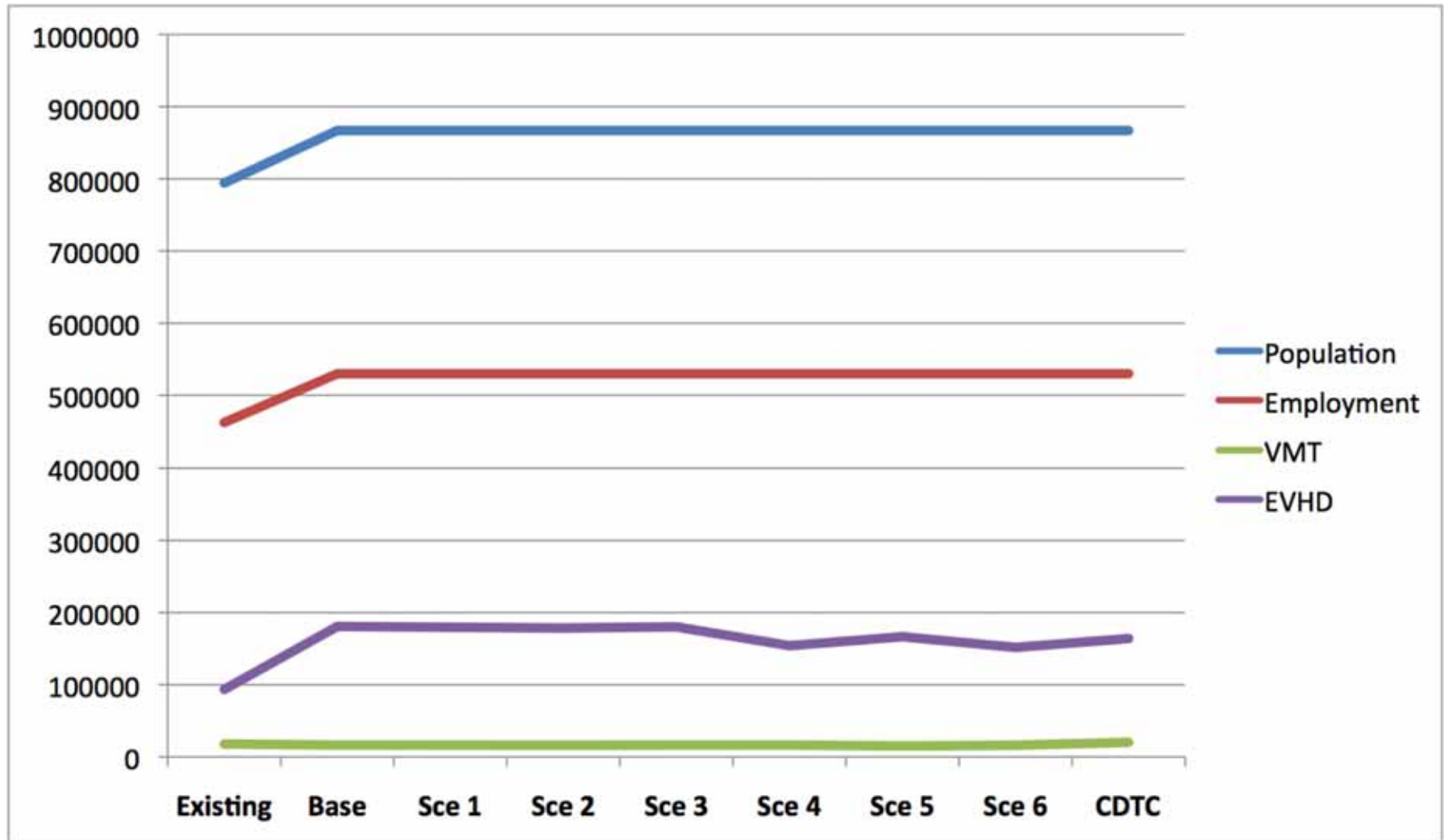
- Issues with installing and running the tool
 - Permissions; Accessing R through firewall; GUI
- Minor improvements on the chart titles

New Visions 2030

- Working groups
- Regional traffic demand model
- GIS
- Four scenarios
 - Status quo Trend
 - Concentrated growth
 - Trend High growth
 - Concentrated High growth



New Visions 2030



SmartGAP vs. CDTC Scenario Planning

- Similar area types
- Can do similar population and land use analyses
- Transportation & policy scenarios
- Good for screening “what ifs” to shortlist 2-3 scenarios for detailed analyses
- National averages; need to modify some parameters to local levels?