East-West Gateway Council of Governments

Applying TEAM in Regional Sketch Planning

Presentation Layout

- Introduction
- Analysis Tools
- Methodology
- Travel Efficiency Strategies
- Case Study Results and Conclusions
- Conclusion

Introduction

- Participants
  - EPA – Environmental Protection Agency
  - EWGCOG – East-West Gateway Council of Governments
- TEAM
  - **T**ravel
  - **E**fficiency
  - **A**ssessment
  - **M**ethod
- Why TEAM?

Analysis Tools

- MOVES2014
- TRIMMS
- Landuse Analysis
- CitiLabs CUBE

Methodology

Case Study Selection

Area	Strategies	Geographic Area Covered	Applied to
EWG (St. Louis)	TOD near existing light rail stations	3 county core area	1.6 million+ people
	Increase residential density and mixed development	Entire 5 county area	2.3 million+ people
	Complete bicycle and pedestrian network	Entire 5 county area	150% increase in bike lane miles (1,951 miles) Increase sidewalk coverage to 71% of local and arterial roads (10,579 sidewalk miles)
	Complete light rail system	Entire 5 county area	761,887 additional people

Case Study Results and Conclusions

Percent Regional Emissions Changes for Future Year Business as Usual Compared to Future Year Scenario					
Scenario	Light-Duty VMT	GHGs (CO_2 equivalent)	$PM_{2.5}$	NOx	VOC
Scenario 1: Regional TOD (Neighborhood)	−0.16%	−0.16%	−0.16%	−0.16%	−0.16%
Scenario 1: Regional TOD (Multivariate)	−0.54%	−0.54%	−0.54%	−0.54%	−0.54%
Scenario 2: Scenario 1 + Workforce Housing Balance (Neighborhood)	−2.13%	−2.13%	−2.13%	−2.13%	−2.13%
Scenario 2: Scenario 1 + Workforce Housing Balance (Multivariate)	−1.66%	−1.66%	−1.66%	−1.66%	−1.66%
Scenario 3: Scenario 2 + Bike / Ped Network (Neighborhood)	−2.21%	−2.22%	−2.24%	−2.37%	−2.56%
Scenario 3: Scenario 2 + Bike / Ped Network (Multivariate)	−1.73%	−1.75%	−1.76%	−1.89%	−2.08%
Scenario 4: Scenario 3 + Transit Expansion (Neighborhood)	−2.54%	−2.56%	−2.57%	−2.70%	−2.90%
Scenario 4: Scenario 3 + Transit Expansion (Multivariate)	−2.07%	−2.11%	−2.13%	−2.39%	−2.79%

Conclusion

- TEAM
  - Advantages
  - Disadvantages

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