

SACOG Scenarios and Proposed Targets for the Regional Targets Advisory Committee

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Draft Proposed Targets

- By 2020, 5% to 6% reduction from 2005
- By 2035, 14% to 15% reduction from 2005
- These draft targets are in a comment period, will be acted on by the SACOG Board of Directors in June

2005 Base Year



Land Use Characteristics	Transportation Characteristics
Dwelling Units 67% Large Lot Single Family 3% Small Lot Single Family 30% Attached Multi-Family Residential Density is 5.7% per Acre 47% of all dwelling units in Transit Priority Areas	4% of freeways are HOV lanes 19% of transit service is high frequency TSM/TDM deployment is moderate No car sharing or pricing programs

Scenario Development



- Current MTP and 6 variations
- New, lower regional growth projections
 - 2020
 - Dwelling units - 21,000 (-2%)
 - Population -109,000 (-4%)
 - Jobs -110,000 (-9%)
 - 2035
 - Dwelling units -155,000 (-12%)
 - Population -194,000 (-6%)
 - Jobs -165,000 (-11%)
- New, statewide fuel price projections

Additional Scenarios



- Between June and September, one more scenario will be developed with more aggressive land use
- Transportation funding will be tested with higher and lower funding levels

Scenario 1 Current Metropolitan Transportation Plan (MTP)



- An achievable scenario
 - 2020 - 4.0% in GHG per capita
 - 2035 -12.6% in GHG per capita

Current MTP Characteristics



Year	Land Use	Transportation
2020	Dwelling Unit Growth 46% Large Lot Single Family 25% Small Lot Single Family 29% Attached Multi-Family Residential Growth Density is 8.5/Acre 34% of dwelling unit growth in Transit Priority Areas	The HOV lane-miles per capita more than doubles Transit service per capita +22% Frequent transit service per capita +84% TSM/TDM increases with population growth No car sharing or pricing
2035	Dwelling Unit Growth 41% Large Lot Single Family 26% Small Lot Single Family 34% Attached Multi-Family Residential Growth Density is 8.8/Acre 36% of dwelling unit growth in Transit Priority Areas	The HOV lane-miles per capita nearly doubles Transit service per capita +79% Frequent transit service per capita +256% TSM/TDM increases with population growth No car sharing or pricing

How to set the bar for “Ambitious”?



- 6 more scenarios were developed to test a range of additional improvements beyond the MTP
 - The scenarios were not designed with the goal of ‘ambitious’ but with the goal of establishing an outer limit that could then be evaluated to define ‘ambitious’
 - Each scenario reports additional reduction beyond the Scenario 1 results

Scenario 2 – Land Use



- Additional GHG reduction beyond the current MTP
 - For 2020, -1.9%
 - For 2035, -1.2%

Year	Land Use	Transportation
2020	Dwelling Unit Growth 39% Large Lot Single Family 30% Small Lot Single Family 32% Attached Multi-Family Residential Growth Density is 9.9 /Acre 44% of dwelling unit growth in Transit Priority Areas	No change from 2008 MTP
2035	Dwelling Unit Growth 33% Large Lot Single Family 29% Small Lot Single Family 38% Attached Multi-Family Residential Growth Density is 10.5 /Acre 46% of dwelling unit growth in Transit Priority Areas	No change from 2008 MTP

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Scenario 3 – Transit



- Additional GHG reduction beyond the current MTP
 - For 2020, -0.07%
 - For 2035, -0.11%

Year	Land Use	Transportation
2020	No change from MTP	Total transit service is 15% more than MTP
2035	No change from MTP	Total transit service is 15% more than MTP

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Scenario 4 – TSM/TDM



- Additional GHG reduction beyond the current MTP
 - For 2020, -0.6%
 - For 2035, -0.5%

Year	Land Use	Transportation
2020	No change from MTP	TSM/TDM grows faster than population growth Car sharing in 2 communities
2035	No change from MTP	TSM/TDM grows faster than population growth Car sharing in 4 communities

Scenario 5 – Trans. Pricing



- Additional GHG reduction beyond the current MTP
 - For 2020, -0.7%
 - For 2035, -2.6%

Year	Land Use	Transportation
2020	No change from MTP	\$0.01 / VMT \$0.10 / congested VMT +25% in employment center parking cost 10% transit fare reduction
2035	No change from MTP	\$0.03 / VMT \$0.25 / congested VMT +50% in employment center parking cost 25% transit fare reduction

Scenario 6 – Land Use, Transit, TSM/TDM



- Additional GHG reduction beyond the current MTP
 - For 2020, -2.5%
 - For 2035, -1.8%

Year	Land Use	Transportation
2020	Dwelling Unit Growth 39% Large Lot Single Family 30% Small Lot Single Family 32% Attached Multi-Family Residential Growth Density is 9.9 /Acre 44% of dwelling unit growth in Transit Priority Areas	Total transit service is 15% more than MTP TSM/TDM grows faster than population growth Car sharing in 2 communities
2035	Dwelling Unit Growth 33% Large Lot Single Family 29% Small Lot Single Family 38% Attached Multi-Family Residential Growth Density is 10.5 /Acre 46% of dwelling unit growth in Transit Priority Areas	Total transit service is 15% more than MTP TSM/TDM grows faster than population growth Car sharing in 4 communities

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Scenario 7 – Land Use, Transit, TSM/TDM, Trans. Pricing



- Additional GHG reduction beyond the current MTP
 - For 2020, -3.9%
 - For 2035, -4.8%

Year	Land Use	Transportation
2020	Dwelling Unit Growth 39% Large Lot Single Family 30% Small Lot Single Family 32% Attached Multi-Family Residential Growth Density is 9.9 /Acre 44% of dwelling unit growth in Transit Priority Areas	Total transit service is 15% more than MTP. TSM/TDM grows faster than population growth. Car sharing in 2 communities. \$0.01 / VMT, \$0.10 / congested VMT +25% in employment center parking cost 10% transit fare reduction
2035	Dwelling Unit Growth 33% Large Lot Single Family 29% Small Lot Single Family 38% Attached Multi-Family Residential Growth Density is 10.5 /Acre 46% of dwelling unit growth in Transit Priority Areas	Total transit service is 15% more than MTP. TSM/TDM grows faster than population growth. Car sharing in 4 communities \$0.03 / VMT, \$0.25 / congested VMT +50% in employment center parking cost 25% transit fare reduction

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Summary of GHG reductions



% Reduction	2020	2035
Current MTP	-4.0%	-12.6%
Land Use	-5.9%	-13.8%
Transit	-4.1%	-12.7%
TSM/TDM	-4.5%	-13.1%
Pricing	-4.7%	-15.1%
Land Use, Transit, TSM/TDM	-6.5%	-14.4%
Land Use, Transit, TSM/TDM, Pricing	-7.9%	-17.4%

Conclusions/Learnings (part 1)



- Performance of the current MTP is strong
- Multiple ways to generate savings, but land use the biggest
- Low levels of existing transit make it especially critical to get more funding

Conclusions/Learnings (part 2)



- Low density in the base year + high growth helps create high benefits
 - The MTP has 50% growth that is more than 50% denser
 - The Land Use alt. has that 50% growth more than 84% denser
- Land use pattern in the current MTP may be conservative
 - Recent residential growth is already at Blueprint vision goal

Conclusions/Learnings (part 3)



- Many pricing options unlikely to achieve political support, at least this MTP cycle
- “Most ambitious achievable” is higher than the current MTP but lower than most ambitious alternative
- Draft recommendation
 - By 2020, 5% to 6% reduction from 2005
 - By 2035, 14% to 15% reduction from 2005