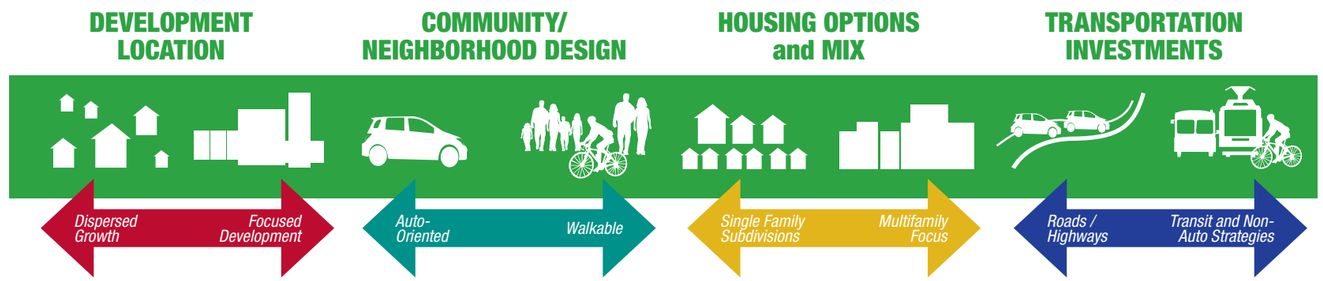
2012 RTP/SCS PUBLIC OUTREACH WORKSHOPS

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

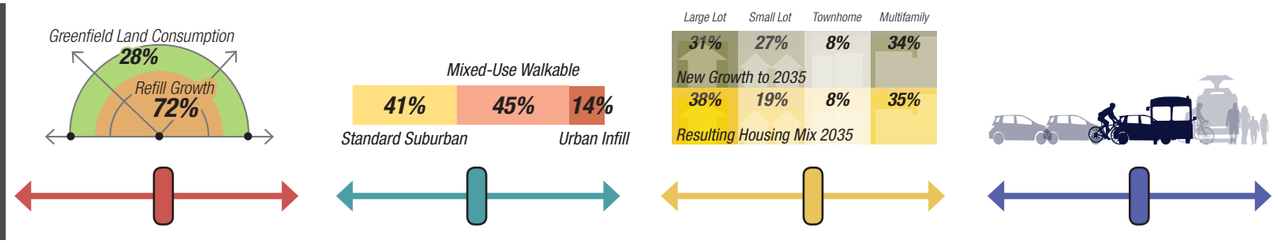
Rev. 25 July 2011

2035 SCENARIO DESCRIPTIONS



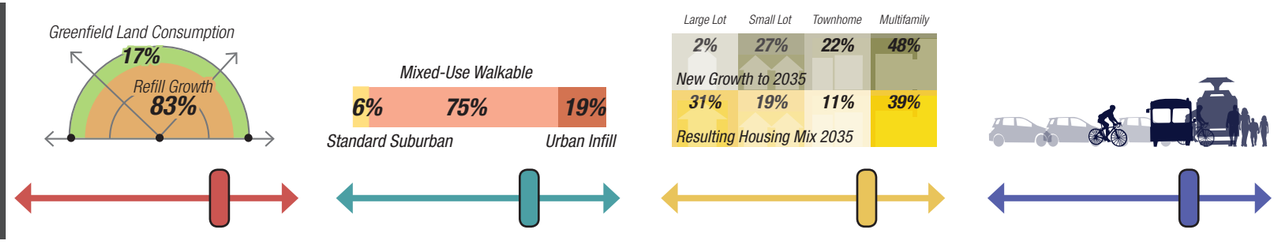
1

This scenario is based on the general plans prepared by cities. It includes a significant proportion of suburban, auto-oriented development, but also recognizes the recent trend of increased growth in existing urban areas and around transit. New housing is mostly single-family, with an increase in smaller-lot, townhome, and multifamily homes; housing mix still falls short of demand for these types, though. Transportation investments may favor automobile infrastructure slightly, but also support new transit lines and other non-auto strategies and improvements.



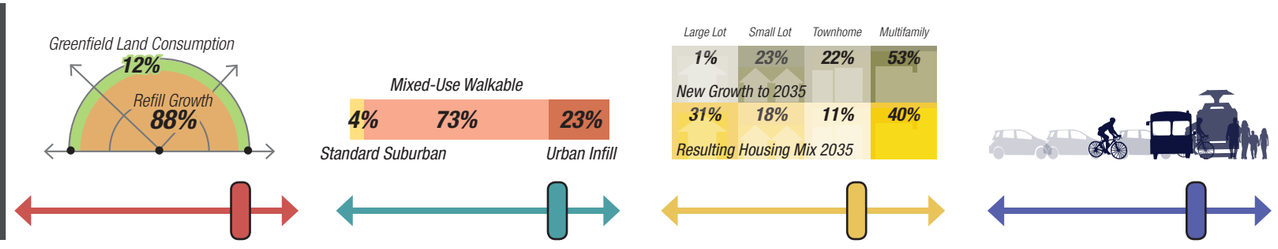
2

This scenario focuses more growth in walkable, mixed-use communities and in existing and planned high-quality transit areas. It would see increased investments in transit and non-auto modes, with strategies to support growth patterns that are less auto-dependent. Employment growth is focused in urban centers around transit. This scenario strives to meet demand for a broader range of housing types, and new housing is weighted towards smaller-lot single family homes, townhomes, and multifamily condos and apartments.



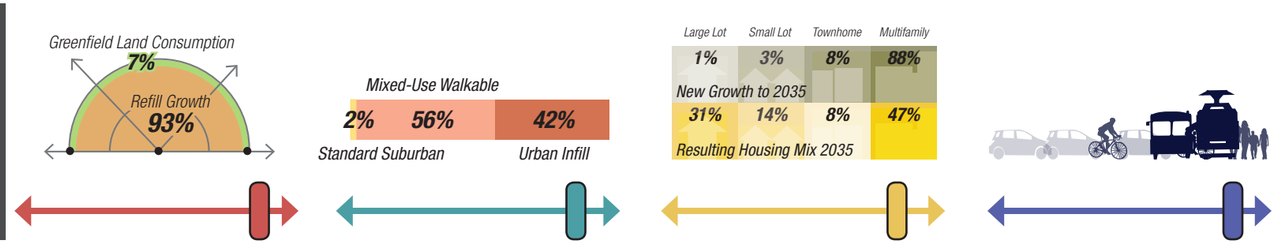
3

This scenario builds on the walkable, mixed-use focus of the growth in Scenario 2, and also aims to improve fiscal and environmental performance by shifting a portion of the region's growth into areas that are closer to transit, less auto-centric, and less intensive for building energy and water needs. Like Scenario 2, this scenario aims to meet demand for a broader range of housing types, with new housing weighted towards smaller-lot single family homes, townhomes, and multifamily condos and apartments.



4

This scenario maximizes growth in urban and mixed-use configurations in already developed areas, and around existing and planned transit investments. To support this shift, transportation system investments are heavily weighted towards transit infrastructure and operational improvements, as well as improvements to bicycle and pedestrian infrastructure. Like Scenario 3, this scenario aims to improve environmental performance by shifting a portion of the region's growth into areas that are closer to transit, and have lower demands on building energy and water use.

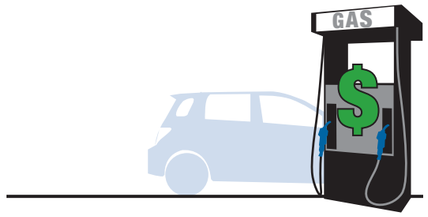


SCENARIO CONSIDERATIONS

The scenarios described here vary in their land use programs and patterns, and in the package of transportation investments that support the quality and location of growth in the scenarios. Ultimately, the RTP and SCS will also consider various transportation strategies and policies aimed at improving mobility while reducing vehicle miles traveled (VMT) and transportation emissions.

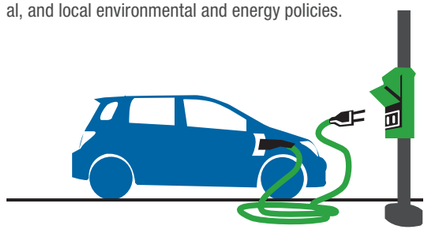
PRICING EFFECTS

Fuel price, along with other driving costs, have both short and long-term effects on driving decisions. SCAG is working with our partners to explore how pricing could simultaneously impact driving decisions, reduce roadway congestion, support more efficient growth patterns, and raise revenue to support critical transportation system improvements – including those aimed at improving non-auto travel options such as transit, walking, and biking. Each of the scenarios described here assumes a hypothetical 2 cent per mile VMT charge, which on average, would result in a 2% reduction in total VMT.



VEHICLE and FUEL POLICY

Meeting our greenhouse gas (GHG), pollutant emissions, and energy goals will include a suite of strategies and policies. In addition to the land use and transportation strategies explored in these first RTP/SCS scenarios, the efficiency of our cars and the fuels we use to power them will also play a role, as will the energy and water conservation measures for our homes and businesses. While these first scenarios focus on the impact of land use and transportation investments and strategies in meeting VMT, GHG, pollution, and energy challenges, subsequent analysis will explore the impacts of emerging vehicle technologies, renewable power generation, building measures, and a host of state, regional, and local environmental and energy policies.



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2035 SCENARIO OUTCOMES*

* Scenario outputs are meant for comparative purposes only. Model outputs at this stage in the RTP/SCS process are preliminary and subject to refinement as the scenario development and modeling process progresses.

	LAND CONSUMPTION	LOCAL INFRASTRUCTURE COSTS	VEHICLES MILES TRAVELED (VMT)	FUEL CONSUMPTION	HOUSEHOLD COSTS	GREENHOUSE GAS (GHG) EMISSIONS	BUILDING ENERGY USE	WATER CONSUMPTION	PUBLIC HEALTH
	Greenfield (Open Space) Land Consumption	*Cumulative Capital Costs and General Fund Operations and Maintenance Expenditures* — *Includes local roads, waste water and sanitary sewer, water supply, and parks and recreation*	*VMT (Auto Passenger Vehicle Travel)*	*Automobile Fuel Use*	*Annual Fuel, Auto Operating, Energy, and Water Costs per Household (HH)*	*GHG Emissions from Auto Passenger Transportation and Building Energy Use*	*Annual Commercial and Residential Energy Use*	*Annual Water Use, Total and per Household (HH)*	*Annual Savings in Health Costs due to Reductions in Transportation-Related Pollutant Emissions*
	[square miles]	***[2009 dollars]***	***[miles]***	***[gallons]***	***[2009 dollars]***	***[Million Metric Tons CO_2e]***	***[Btu]***	***[acre feet and gallons]***	***[2009 dollars]***
1	251 sq mi	Capital / Operations/ Maintenance: $35 bil	20,920 mi per HH	5.5 bil gal	Fuel/ Automobile / Energy/ Water: $15,100 per HH	Transportation / Building: 96 MMT	Commercial / Residential: 835 tril Btu	3.0 mil ac ft	$635 mil — Savings from status quo
2	127 sq mi	$31 bil	18,630 mi per HH	4.9 bil gal	$13,600 per HH	88 MMT	775 tril Btu	2.9 mil ac ft	$915 mil — Savings from status quo
3	84 sq mi	$29 bil	18,250 mi per HH	4.8 bil gal	$13,350 per HH	86 MMT	760 tril Btu	2.9 mil ac ft	$960 mil — Savings from status quo
4	46 sq mi	$25 bil	17,990 mi per HH	4.7 bil gal	$13,150 per HH	85 MMT	745 tril Btu	2.8 mil ac ft	$990 mil — Savings from status quo

1

Mixed-Use Walkable: 41% Standard Suburban, 45%, 14% Urban Infill

	Large Lot	Small Lot	Townhome	Multifamily
New Growth to 2035	31%	27%	8%	34%
Resulting Housing Mix 2035	38%	19%	8%	35%

2

Mixed-Use Walkable: 6% Standard Suburban, 75%, 19% Urban Infill

	Large Lot	Small Lot	Townhome	Multifamily
New Growth to 2035	2%	27%	22%	48%
Resulting Housing Mix 2035	31%	19%	11%	39%

3

Mixed-Use Walkable: 4% Standard Suburban, 73%, 23% Urban Infill

	Large Lot	Small Lot	Townhome	Multifamily
New Growth to 2035	1%	23%	22%	53%
Resulting Housing Mix 2035	31%	18%	11%	40%

4

Mixed-Use Walkable: 2% Standard Suburban, 56%, 42% Urban Infill

	Large Lot	Small Lot	Townhome	Multifamily
New Growth to 2035	1%	3%	8%	88%
Resulting Housing Mix 2035	31%	14%	8%	47%