



# Draft Scenarios Assumptions

August 27, 2008 (Revised)

States and regions across the United States, and around the world, are realizing that in order to achieve sustainable urban development patterns, reduce greenhouse gas (GHG) production thus lessening climate change and maintain quality of life, it is important to address community mobility, land use and the environment in a coordinated fashion. The following alternative mobility scenarios to be considered in the Regional Framework Studies (RFS) are designed to test various mixes of transportation strategies against a comprehensive Evaluation Framework that includes criteria in the areas of mobility and access, transportation/land use integration, environment and conservation, economic benefit and safety. The various scenarios described below were also formulated to consider meeting our State's long-range (2050) mobility needs in a safe and efficient manner, while also addressing the Governor's Smart Growth Initiative and significantly contributing to the fulfillment of the Arizona Climate Change Action Plan 2006 (CCAP).

## Baseline Condition

Includes existing transportation network plus committed projects included in the ADOT 5-year program, plus maintenance, to be utilized for comparison purposes against each of the following scenarios.

Scenario Description	Key Assumptions
<p>A. Enhanced Technology Mobility Emphasis</p>	<p>Existing transportation network plus committed projects included in the ADOT 5-year program, plus maintenance;</p> <p>Plus the Statewide Transportation Investment Strategy's 30-year multimodal program (STIS);</p> <p>Assumes that alternative vehicular technologies powered by relatively clean and affordable fuels will be further developed, will become pervasive in the fleet and the public will generally continue current travel behavior, relying heavily on individual vehicles for many trip types. Transit investments and resultant mode shift in trips are also significantly increased over current conditions through the incorporation of the STIS; and</p>



Scenario Description	Key Assumptions
	<p>Land use and urban development patterns are assumed consistent with adopted community plans, and vehicle miles traveled (VMT) is not anticipated to decrease in this scenario, other than in response to market and environmental awareness conditions.</p> <p>This scenario strongly supports the CCAP and embodies a number of its policy recommendations, including:            TLU-1: State Clean Car Program (forecast to potentially provide the highest level of GHG reductions),            TLU-7: Hybrid Promotions and Incentives,            TLU-11: Accelerated Replacement/Retirement of High Emitting Diesel Fleet,            TLU-12: Biodiesel Implementation, and            TLU-13: State Lead by Example Vehicle Procurement and SmartWay.</p>
<p><b>B. Enhanced Technology Mobility Emphasis</b></p>	<p>Existing transportation network plus committed projects included in the ADOT 5-year program, plus maintenance;             Plus the STIS's 30-year multimodal program;</p> <p>Assumes that the cost of fuel will continue to increase, that the prevalent technology for private vehicles will improve somewhat but not dramatically, and that emissions and GHGs will also continue to rise and remain a major concern to governmental policy makers and the general public. As a result of these increasing economic costs and environmental concerns, a major shift will occur in the public's transportation decision-making, moving to an emphasis on the use of public transit for many trip types within the local and regional mobility spectrum, with an overall resultant reduction in VMT;            and</p> <p>Land use and urban development patterns are assumed consistent with adopted community plans.</p> <p>This scenario strongly supports the CCAP, particularly its policy recommendation TLU-3: Promoting Multimodal Transit, and secondarily thru those policy recommendations identified in Scenario A above.</p>



Scenario Description	Key Assumptions
<p>C. Multimodal Mobility Emphasis</p>	<p>Existing transportation network plus committed projects included in the ADOT 5-year program, plus maintenance;</p> <p>Plus the STIS's 30-year multimodal program;</p> <p>This alternative combines a number of elements of those described above, including continuous technological advancement in vehicles and affordable clean fuels, and growing public use of transit for many local and regional trips; and</p> <p>Under this scenario, it is assumed that cities, towns and counties will eventually embrace Smart Growth principles in their general and comprehensive plans (e.g. compact master planned communities with significant employment components, more mixed use development, transit-oriented development stimulated near transit and rail access points, emphasis on infill and redevelopment of Greenfield and brownfield sites, respectively) with strong support and encouragement from the State of Arizona. It is also assumed that eventual changes in the marketplace could result in more compact development patterns, resulting in reduced VMT, (potential target of 10%), shorter trips, more multi-purpose trips and more trips achieved through alternative modes.</p> <p>This scenario strongly supports the CCAP through all the policy recommendations cited above within Scenarios A and B, as well as addresses TLU-2: Smart Growth Bundle of Options (forecast to potentially provide the second highest level of GHG reduction).</p>