

DRAFT

Subtopic G12: Energy

Three public and agency comments were submitted on the subtopic of G12: Energy. From those three comments, five common concern statements were generated. Themes include:

- The Draft PEIS did not address the additional energy requirements of alternatives and how they are tied to additional air emissions, incremental global climate change, and national energy security issues.
- There are concerns about the energy consumption for transit construction and how mitigation and overhead costs would skew the estimated energy usage upward.
- There are discrepancies in the PEIS regarding the Bus in Guideway alternatives.
- Twenty-two mpg for vehicles is optimistic and requires an explanation with data to support the assumption.
- There are questions about the total daily energy consumption for the Six-Lane Highway 55 mph and the Six-Lane Highway 65 mph as being the same.

CCS No.	Community Values Common Concern Statements (CCSs)
Subtopic G12: Energy	
G 12-a	<p>Additional Energy Requirements</p> <p>All of the alternatives, with the exception of some aspects of the Minimal Action alternative, require a substantial amount of energy for construction and “allow” more vehicle miles of travel (VMT), thereby increasing the energy requirements for operation. It should be noted that this bigger issue of additional energy requirements is not addressed in the Draft PEIS. Additional energy may be tied to additional air emissions, incremental global climate change, and national energy security issues. These broader energy issues should be addressed.</p>
G 12-b	<p>Construction Costs</p> <p>The document states that the energy consumption for construction of transit was based on 10 terajoules (TJ) per million dollars in construction costs, and there is some discussion of what is included in “construction costs.” Mitigation and overhead costs would tend to skew the estimated energy usage upward.</p>
G 12-c	<p>Energy Use by Bus in Guideway Alternatives</p> <p>It is not clear why the Dual-Mode and Diesel Bus in Guideway alternatives would have operational energy use close to, if not exceeding, the operational energy use for a six-lane highway. Buses would be expected to be more energy efficient on a per person basis than automobiles. In addition, the total daily gas consumption numbers for the Dual-Mode and Diesel Bus in Guideway alternatives in Table 3.18-2 are almost the same, but the total daily energy operations costs are quite different for the two modes. These apparent discrepancies should be explained.</p>
G 12-d	<p>Miles per Gallon Assumption</p> <p>Twenty-two miles per gallon (mpg) for vehicles using I-70 is optimistic. A better explanation, with data sources, is needed to support this assumption.</p>
G 12-e	<p>Highway Energy Consumption Assumptions</p> <p>The total daily energy consumption for the Six-lane Highway 55 mph and 65 mph alternatives is the same. This seems questionable as intuitively, cars going 55 mph are more efficient than at 65 mph.</p>