Distance matters: A community can reduce consumer costs and environmental impacts by using locally produced materials

The Benefits of Local Supplies

Aggregates are a vital natural resource. They are essential to our quality of life in California and needed to build and maintain all roads, bridges, ports, levees, homes, hospitals, schools and public and private construction. Historically, California communities have relied on local supplies of aggregates as the most efficient and effective way to supply materials.

Today, we mainly transport aggregates by truck but, because it is a high bulk, heavy weight commodity, it is very costly to transport long distances and distance adds to environmental impacts. By supporting and obtaining locally produced materials, a community can help reduce consumer costs (fuel and energy costs), and reduce environmental impacts (specifically air quality emissions and greenhouse gases).

The Trend has been Towards Longer Distances

Since the 1970’s, aggregate haul distances have been gradually increasing as local sources of aggregate diminish. These are a few examples:

- Downtown Los Angeles and Ventura County receive aggregate from the Palmdale area, a distance of over 60 miles in congested Southern California traffic.
- The City of Fresno receives material trucked 60-70 miles across county from Coalinga.
- Northern San Diego County receives aggregate from as far away as the San Gabriel Valley, a distance of 90 miles.

Shorter Distances are Better for the Environment

If truck trip length can be reduced by even 15 miles, then total transport distances could be reduced by 282 million miles per year. It would have these benefits:¹

- Reduce fuel consumption by 44 million gallons annually.
- Reduce tail pipe emissions by 835 tons a year.
- Remove over 400,000 metric tons of greenhouse gases.

Shorter Distances Reduce Congestion

- Local aggregates can reduce transport of materials through congested urban areas.

Shorter Distances Mean More Money to Build Roads

If transportation distances were reduced by an average of 15 miles, Caltrans estimates these benefits:

- 42% savings in material costs.
- Reduce road wear and tear costs by $12-18 million per year.
- Fewer delays in the supply of materials to road and other construction projects, saving about $9 million a year.

Local Materials Create Local Jobs

- Creating local jobs is a sustainable practice – especially when both jobs and the products produced will benefit the local community.
- Recent studies show that construction materials jobs are desirable, providing some the highest wages and compensation in California.²

¹ Aggregate Availability in California, California Geological Survey, 2007
² Construction Aggregate Supply Limitations; Estimates of Economic Impact, Caltrans, 2007