OC Transport - Chapter 4

The 1999-2000 CenterLine EIR

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In 1999 OCTA published the first CenterLine Light Rail EIR [Ref 1]. By this time the basic technology and three alternative alignments had been selected:

- Alt1 Fullerton to Irvine via Santa Ana Main and/or Bristol Streets, largely elevated.
- Alt 2. (SLA1) Fullerton to Irvine via Main / Bristol Street, All at grade, (at street level).
- Alt 3 (SLA2) Fullerton to Irvine via Bristol Street. All at grade.

In all 3 cases, the system was to operate in an exclusive guideway, taking its right-of-way mostly from existing major arterial streets, Anaheim, Katella, Bristol, and Main streets. Train operational details and ridership had been estimated. It was recognized that mitigation for this street-taking would be required but the details had not yet been totally specified.

A traffic analysis micro-model was used to analyze the impact on link and intersection volume/capacity ratios at about 100 corridor links and intersections, taking into account both the beneficial impacts of reduction in street traffic volume due to rail ridership, and the loss of street capacity due to street lane taking blockading of unsignalized crossings, and green-light preemption at signalized crossings. The

> "*Compared to the No Build Alternative, all three build alternatives would have <u>more adverse impacts</u> on the environment (without mitigation) for traffic circulation, displacements, public services, visual quality, cultural resources, noise/vibration, hazardous materials, water resources, natural resources, parks/trails, and environmental justice. Mitigation measures are proposed to reduce these impacts*." (Emphasis added)

Read carefully, the statement says that

> *the light rail itself, (without mitigation, that is, without building more compensating road capacity somewhere else) actually made every measure of transportation and environment <u>worse</u> than doing nothing.*

How can this be? How can a transportation *improvement* make traffic worse. The only possible explanation is that the adverse impacts of

- street lane taking
- blockading of unsignalized crossings, and,
- partial preemption of green light at signalized crossings

results in a loss of more capacity than that afforded by the fail ridership.

The conclusion of the above quotation states:

> *"mitigation measures are proposed to reduce these impacts"*.

In other words,

> '*we can build enough road capacity somewhere else to make up for the overall system loss*'

Well, of course. But no amount of compensatory road building can alter the finding that the light rail system *per se, including* its inseparable guideway impacts, is a net loser of capacity and mobility.

The transportation concept of "independent utility" helps to sort out our thinking on this. Independent utility is the property of a system of subsystem having a utility or value that is essentially independent of other systems or subsystems. For example, mitigation, the road building to compensate for the loss of capacity due to the light rail guideway, has essentially the same value, independent of whether or not the light rail is built, so it is a project of "independent utility" with respect to the light rail system and may not be considered a part of the value of the light rail system. By contrast, the value of the guideway is of no value without the transit system it supports, it is not independent of, but properly considered a part of the light rail system *per se*.

The next, year 2000, CenterLine EIR [2] included minor changes in alignment, but essentially the same traffic analysis with the same result, that :

> *irrespective of its billion dollar cost, the light rail system per se, would make traffic congestion worse.*

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References

1. "The Orange County CenterLine Project, Draft Environmental Impact Statement / Environmental Impact Report" OCTA, September 1999.

2. The Orange County CenterLine Project, Supplemental Draft Environmental Impact Statement / Revised Draft Environmental Impact Report" OCTA, December 2000.