February 6, 2009

Part VI — "Strategic misrepresentation" in the Draft EIS

The University of Aalborg, Denmark, conducted the most extensive international study ever of actual versus estimated costs in transportation infrastructure development.[1] A summary of the study was published in the American Planning Association Journal. The study concluded:

> *"Based on a sample of 258 transportation infrastructure projects worth US$90 billion and representing different project types, geographical regions, and historical periods, it is found with overwhelming statistical significance that the cost estimates used to decide whether such projects should be built are highly and systematically misleading. Underestimation cannot be explained by error and is best explained by strategic misrepresentation, that is, lying. The policy implications are clear: legislators, administrators, investors, media representatives, and members of the public who value honest numbers should not trust cost estimates and cost-benefit analyses produced by project promoters and their analysts."*

Other distinguished and authoritative transportation experts have warned about cost misrepresentations in rail projects. Dr. John Kain, Chair Emeritus of Harvard's Economics Department, wrote *Deception in Dallas*, Dr. Don Pickrell, Chief Economist of the U.S Department of Transportation's Volpe Center, wrote what is known as the *Pickrell Report*, Dr. Martin Wachs, Head of Rand Corporation's Transportation practice and Chair Emeritus, Department of Urban Planning, UC-Berkeley, wrote *When planners lie with numbers,*" and there have been many, many others.

The Draft EIS needs to make clear the amount of scholarly literature produced by academic transportation experts[2] detailing the misrepresentations by promoters of rail transit and the virtual

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1 Flyvbjerg et al. *"Underestimating Costs in Public Works Projects: Error or Lie?"* American Planning Association Journal. Summer 2002.

2 Hall, P. (1980). Great planning disasters. Harmondsworth, UK: Penguin Books. Penguin Books.
Hall, P. (n.d). Great planning disasters revisited. Unpublished manuscript, Bartlett School, University College, London. UK: Cambridge University Press.
Holm, M. K. S. (1999). Inaccuracy of traffic forecasts and cost estimates in Swedish road and rail projects. Unpublished manuscript, Aalborg University, Department of Development and Planning.
Hufschmidt, M. M., & Gerin, J. (1970). Systematic errors in cost estimates for public investment projects. In J. Margolis (Ed.), The analysis of public output (pp. 267–315). New York: Columbia University Press.
Kain, J. F. (1990). Deception in Dallas: Strategic misrepresentation in rail transit promotion and evaluation. Journal of the American Planning Association, 56(2), 184–196.
Leavitt, D., Ennis, S., & McGovern, P. (1993). The cost escalation of rail projects: Using previous experience to re-evaluate the calspeed estimates (Working Paper No. 567). Berkeley: Institute of Urban and Regional Development, University of California.
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Merewitz, L. (1973a). How do urban rapid transit projects compare in cost estimate experience? (Reprint No. 104). Berkeley: Institute of Urban and Regional Development, University of California.
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Nijkamp, P., & Ubbels, B. (1999). How reliable are estimates of infrastructure costs? A comparative analysis. International Journal of Transport Economics, 26(1), 23–53.
Pickrell, D. H. (1990). Urban rail transit projects: Forecast versus actual ridership and cost. Washington, DC: U.S. Department of Transportation.
Pickrell, D. H. (1992). A desire named streetcar: Fantasy and fact in rail transit planning. Journal of the American Planning Association, 58(2), 158–176.
Simon, J. (1991). Let's make forecast and actual comparisons fair. TR News, 156, 6–9.
Skamris, M. K., & Flyvbjerg, B. (1997). Inaccuracy of traffic forecasts and cost estimates on large transport projects. Transport Policy, 4(3), 141–146.
Szyliowicz, J. S., & Goetz, A. R. (1995). Getting realistic about megaproject planning: The case of the new Denver International Airport. Policy Sciences, 28(4), 347–367.
Wachs, M. (1986). Technique vs. advocacy in forecasting: A study of rail rapid transit. Urban Resources, 4(1), 23–30.
Wachs, M. (1989). When planners lie with numbers. Journal of the American Planning Association, 55(4), 476–479.

complete lack of such literature defending them. The public needs to be so sufficiently informed about it that no one will be able to complain in the future that they were not warned.

> *NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.*[3]

There are many misleading elements of the Draft EIS. There are both errors of commission and omission and are dealt with below under the following headings:

1. Omissions of relevant material.
    a) OMPO surveys
    b) Future traffic conditions vs. today omitted.
    c) The Draft EIS omits relevant information about highways.
    d) Change of observed volumes without discussion
    e) Does not discuss the differences between Draft EIS and Alternatives Analysis
2. Misleading purpose and need statement.
3. Renderings that do not match reality

1. Omissions of relevant material

a) OMPO surveys:

In its entirety, this is how the Draft EIS describes the 2004 Oahu MPO Survey[4]:

> *As part of its work to update the Regional Transportation Plan, the O'ahu Metropolitan Planning Organization (O'ahuMPO) surveyed O'ahu residents about transportation issues in 2004. The survey results identified traffic congestion during the commute period in the study corridor extending from 'Ewa and Central O'ahu to Downtown Honolulu as the biggest concern. Nearly twice as many residents responded that improving transit was more important than building more roadways. Seventy percent of the respondents believed that rail rapid transit should be constructed as a long-term transportation solution, and 55 percent supported raising taxes to provide local funding for the system. (Draft EIS p. 1-3).*

From this one would not gather that the same Oahu MPO Survey Summary said in its entirety:

> *"Based on the survey, most residents appear to accept the necessity of tax increases to fund specific capital projects, such as new road-building, road widening and extensions. Between a Rapid Rail system and the BRT, residents do not indicate a strong preference for one over the other. There is broad support for either system, generally, with strongest support for the Rapid Rail system coming from the Ewa/Kapolei and Leeward areas of Oahu."*

Or that in a later page it would summarize question responses as follows:

- *60% would reportedly support a tax hike for road widening or extensions.*
- *59% would support a tax hike for new road-building.*
- *57% would back a tax hike for a rail rapid transit system.*

Wachs, M. (1990). Ethics and advocacy in forecasting for public policy. Business and Professional Ethics Journal, 9(1–2), 141–157.
Walmsley, D. A., & Pickett, M. W. (1992). The cost and patronage of rapid transit systems compared with forecasts (Research Report 352). Crowthorne, UK: Transport Research Laboratory.

2 Edwards, Chris. Government Just Can't Contain Itself. Cato Institute. September 23, 2003

3 http://edocket.access.gpo.gov/cfr2002/julqtr/40cfr1500.1.htm

4 www.honolulutraffic.com\issuessurvey.pdf

- *54% would back tax increases to improve the bus system.*

Adding to these errors of omission is that the City avoided altogether discussing a subsequent 2006 OMPO Survey[5]. Here is one excerpt from this Survey's Summary:

> *Oahu traffic and, in particular, congestion in Ewa/Kapolei, remains a key concern of residents. The key priorities are: (1) road-widening of the H-1 in the Honolulu corridor; and (2) widening Farrington Highway in Kapolei and Waianae.*
>
> *Relative to Rail Rapid Transit, over one-third of Oahu residents indicated that they would use the system on a regular basis.*
>
> *There is also majority support for the concepts of HOT lanes from Ewa to downtown and for a Pearl Harbor bridge or tunnel, but not for funding construction via higher taxes.*

b) Future traffic conditions versus today's traffic omitted

From the beginning the City and Parsons Brinckerhoff have misled the public into believing that rail transit will relieve congestion.

Far from *"supporting proactive public involvement"*[6] our elected officials and their appointees and consultants have continually alluded to the idea that rail transit will result in traffic congestion relief even though the Alternatives Analysis and the Draft EIS both show that traffic congestion will get significantly worse with the rail transit alternative than it is today.

A significant omission in the Draft EIS is that nowhere does it discuss future highway conditions with rail. In fact, it deliberately goes out of its way to avoid doing so. For example, the discussion of traffic conditions in section 3 assesses future traffic conditions for No-Build but not with the Build alternative. Nor does the Summary of Findings on page 3-53, which is shown below.

> *Existing Conditions: Increasing traffic congestion and constrained transit operating conditions have reduced system reliability and mobility for all travelers.*
>
> *Effects of the No Build Alternative: Traffic congestion would worsen, even with $3 billion in other planned roadway improvements, affecting mobility and reliability for all travelers.*
>
> *Effects of the Build Alternatives: [No mention of traffic congestion].*

The omission of future traffic congestion with the Build Alternative compared to the congestion that exists today in both the body and the summary shows that it was deliberate.

In addition, the Draft EIS has avoided any discussion of the new 2006 *National Strategy to Reduce Congestion on America's Transportation Network*[7]. Its preamble reads,

> *Congestion is one of the single largest threats to our economic prosperity and way of life. Whether it takes the form of trucks stalled in traffic, cargo stuck at overwhelmed seaports, or airplanes circling over crowded airports, congestion is costing America an estimated $200 billion a year.*
>
> *Each year, Americans lose 3.7 billion hours and 2.3 billion gallons of fuel sitting in traffic jams and waste $9.4 billion as a result of airline delays. Worse, congestion is affecting the quality of Americans lives by robbing them of time that could be spent with families and friends.*

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5 http://www.honolulutraffic.com/Trans_Proj_Surv_Results_2006.pdf

6 It is the policy of the … Federal Transit Administration (FTA) to aggressively support proactive public involvement at all stages of planning and project development. *http://www.fhwa.dot.gov/environment/pi_pol.htm*

7 http://isddc.dot.gov/OLPFiles/OST/012988.pdf

> *Congestion is not a fact of life. It is not a scientific mystery, nor is it an uncontrollable force. Congestion results from poor policy choices and a failure to separate solutions that are effective from those that are not.*

Given the current traffic conditions in Honolulu, and also the following NEPA requirement, one would think the new policy worthy of mention, if not analysis:

> *An agency shall identify and discuss all such factors including any essential considerations of national policy which were balanced by the agency in making its decision and state how those considerations entered into its decision. 40CFR1505.2(b)*

c) Highway capacity data omitted

In the Alternatives Analysis, Table 3-12, highway capacity data was given for each of the corridor's highway components. This has been omitted and makes it difficult to understand what caused the dramatic reductions in the Draft EIS from the Alternatives Analysis in forecast traffic volumes at the various screenlines.

For example, the Kalauao screenline in the Alternatives Analysis shows that the observed traffic volume for 2003 during the peak hour slightly in excess of the highway capacity shown, which motorists in the corridor would find accords with experience. However, the Draft EIS observed volume for 2005 shows an eight percent reduction in traffic from 18,870 to 17,300, and less than the highway capacity shown in the Alternatives Analysis, which certainly does not accord with experience.

Kalauao Screenline AM Peak Head bound volumes AA= Alternatives Analysis			Koko
AA Highway Capacity	AA 2003 Actual	AA 2030 No-Build	AA 2030 Build
18,450	18,870	28,023	26,101
Draft EIS Highway Capacity	Draft EIS 2005 Actual	Draft EIS 2030 No-Build	Draft EIS 2030 Build
N/A	17,300	20,800	18,910

Source: Alternatives Analysis, Table 3-12, Draft EIS, Tables 3-12 & 3-20

Further, there is a 28 percent reduction in projected traffic volume for the Draft EIS 2030 Build Alternative compared with that of the Alternatives Analysis from 26,101 down to 18,910. No explanation is given for this.

We know that with no planned widening of H-1 the freeway cannot accommodate either the 18,910 given in the Draft EIS, let alone the 26,101 vehicles per hour projected by the Alternatives Analysis. Are we to assume that the City and Parsons Brinckerhoff recognize that the highways will be excessively congested and that the excess traffic will be accommodated in extended shoulder periods?

In other words, those who currently leave home at 5:00 AM to miss the worst of the traffic will, in the future, with rail have to leave home at 4:00 AM — or earlier?

If this is the case, why does the City not say so? Or is it once again to avoid any discussion of traffic congestion relative to today's unbearable levels?

2. Misleading purpose and need statement:

> *Congestion is not a scientific mystery, nor is it an uncontrollable force. Congestion results from poor policy choices and a failure to separate solutions that are effective from those that are not.*[8]

[8] http://isddc.dot.gov/OLPFiles/OST/012988.pdf

The relevant federal requirements regarding the "purpose and need statement" are as follows:

> *... the lead agency shall provide an opportunity for involvement by ... the public in defining the purpose and need for a project ... The statement of purpose and need shall include a clear statement of the objectives that the proposed action is intended to achieve ... (SAFETEA-LU Sec. 6002).*
>
> *"FHWA and FTA review would include making sure that objectives or choices derived from the transportation plan were: based on transportation planning factors established by Federal law; reflect a credible and articulated planning rationale; founded on reliable data; and developed through transportation planning processes meeting FHWA and FTA statutory and regulatory requirements. In addition, the basis for the goals and choices must be documented and included in the NEPA document."*[9] (emphasis added)
>
> *Consistent with NEPA, the purpose and need statement should be a statement of a transportation problem, not a specific solution ... A purpose and need statement that yields only one alternative may indicate a purpose and need that is too narrowly defined.*[10]

The NEPA regulations require that,

> *Environmental impact statements "shall be written in plain language ... so that ... the public can understand them."*[11]

The purpose statement in the Draft EIS is presented here in its entirety while the need statement that follows is truncated in the interests of space:

> *1.7 Purpose of the Project*
>
> *The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide high-capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and UH Manoa, as specified in the O'ahu Regional Transportation Plan 2030 (ORTP) (O'ahu MPO 2007). The project is intended to provide faster, more reliable public transportation service in the study corridor than can be achieved with buses operating in congested mixed-flow traffic, to provide reliable mobility in areas of the study corridor where people of limited income and an aging population live and to serve rapidly developing areas of the study corridor. The project also would provide additional transit capacity, an alternative to private automobile travel, and improve transit links within the study corridor.*
>
> *Implementation of the project, in conjunction with other improvements included in the ORTP, would moderate anticipated traffic congestion in the study corridor. (Draft EIS p. 1-19.)*

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9 http://www.fhwa.dot.gov/hep/plannepa050222.pdf

10 http://edocket.access.gpo.gov/2007/pdf/07-493.pdf Federal Register / Vol. 72, No. 30 / p. 7282.

11 40 C.F.R. § 1502.8

> *1.8 Need for Transit Improvements*
>
> *There are several needs for transit improvements in the study corridor. These needs are the basis for the following goals:*
>
> *Improve corridor mobility*
>
> *Improve corridor travel reliability*
>
> *Improve access to planned development to support City policy to develop a second urban center*
>
> *Improve transportation equity (Draft EIS, p. 1-20/21)*

The main misrepresentation in this purpose and needs statement is that it is in total conflict with what the public understands. The Draft EIS says that the "purpose and need" is a need for "transit improvements" and the purpose is to build "rapid transit."

Aside from the misrepresentation the statement is at variance with FTA/FHWA guidance,

> *Consistent with NEPA, the purpose and need statement should be a statement of a transportation problem, not a specific solution.*[12]

The public believes that the purpose of the project is to reduce traffic congestion. This is reinforced in the Draft EIS by the following:

> *Total congestion would be reduced by 21 to 23 percent with the Build Alternatives."S-5*
>
> *"Implementation of the project, in conjunction with other improvements included in the ORTP, would moderate anticipated traffic congestion in the study corridor." (p.1-19)*

The general understanding of the public is that the purpose of the Project is to reduce traffic congestion in the Corridor so it less than today's unbearable levels and also, *incidentally*, provide improved public transportation.

> *"The statement of purpose and need shall include a clear statement of the objectives that the proposed action is intended to achieve ... " SAFETEA-LU Sec. 6002.*

When does one hear the ordinary citizen use phrases like "Improve corridor mobility," "Improve corridor travel reliability," and "moderate anticipated traffic congestion"?

This is jargon for those working in the transportation industry; it is not understood by the average resident unless they habitually parse sentences in City documents. To the average citizen, to moderate or reduce traffic congestion means relative to what they experience today — and not some projected condition in the future unless explicitly told so.

A "clear statement" would say instead that, "It is not the Purpose of the Project to reduce traffic congestion below today's levels, it is to provide an alternative to automobile travel." That the language is not *a clear statement* understandable to ordinary citizens proves that the process lacks *public involvement.* To *involve* is totally different than to *inform*.

The intent of the statute is for the public to be *involved* and to this end it is essential that the language be clear. Instead, this jargon lulls the average citizen into believing that the primary purpose of the Honolulu High-Capacity Transit Corridor Project is to reduce traffic congestion from current levels.

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[12] http://www.environment.fhwa.dot.gov/strmlng/linkingtrans.asp

Lacking an FTA definition of *involvement* we have to fall back on the dictionary definition, which tells us that to *involve* is,

> "To engage as a participant; embroil: *involved the bystanders in his dispute with the police.*
> "To connect closely and often incriminatingly; implicate: *evidence that involved the governor in the scandal.*
> "To influence or affect: *The matter is serious because it involves your reputation.*
> "To occupy or engage the interest of: *a story that completely involved me for the rest of the evening.*"[13]

To make clear the distinction: If you are *involved* in a murder, you may be hanged. If you are only *informed* of a murder you will not be.

It is derelict to omit any discussion of traffic relief relative to today's congestion in the Draft EIS especially since there has been a constant refrain from City officials implying that the purpose and need is for traffic relief.

To be a "clear statement," the purpose and need statement requires it to say that, "It is not the Purpose of the Project to reduce traffic congestion below today's levels; it is to provide an alternative to automobile travel" and, "After the rail transit line opens, traffic congestion will be worse than it is today, though somewhat less than what it might be otherwise."

The NEPA regulations require that, "*Environmental impact statements shall be concise, clear, and to the point …*"[14] and the purpose and need statement is the complete antithesis of this.

3. Renderings misrepresent reality

See this issue covered under Part II, Insufficient consideration of elevated rail impacts. Pages 2:7

[13] Excerpted from the American Heritage® Dictionary.
[14] 40CFR1500.2 (b)