STATEMENT OF

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Implementation of New Starts and Small Starts Program

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Good morning. My name is David Lewis. I am Senior Vice President and Chief Economist of HDR Decision Economics, a division of HDR Engineering Inc. I served previously as a Principal Economist of the U.S. Congressional Budget Office. I was trained as an economist at the London School of Economics and I am the recipient of several professional awards, including the Elmer Staats Comptroller General's Award of the International Journal of Government Auditing. I am an elected a Fellow of the Institute of Logistics and Transport and an elected Emeritus Member of the Transportation Research Board (Committee on Specialized Transportation). I specialize in the application of Cost-Benefit Analysis and risk analysis to transportation investment problems. I am a long-serving consultant to the U.S. and Canadian federal governments as well as to local transportation agencies in both countries. For the Canadian federal government I developed the Cost-Benefit Analysis process that helps guide transit

investment decision making. My 1999 book, "*Policy and Planning as Public Choice: Mass Transit in the United States"* (co-authored by Dr. Fred Williams) is a quantitative accounting of the benefits of mass transit.

I would like to thank Sub-committee Chairman DeFazio for inviting me to appear here today. It is my purpose to try and place questions about the New Starts process in the broader context of economic value for money.

The principal message I wish to leave with you is that in not recognizing the full economic value of transit projects, the federal New Starts process creates a risk of underinvestment in transit and, hence, the marginalization of public transportation investment in American urban development.

THE ECONOMIC BENEFITS OF NEW STARTS

Whereas the New Starts process quantifies ridership as the principal benefit of New Starts, the economic benefits of transit actually fall into three categories, congestion management; mobility for transit users; and community economic development. While all three are measureable, albeit with uncertainty, the FTA New Starts program focuses on ridership alone, which is actually a sub-set of the mobility category.

Regarding Congestion management. Increased use of transit in lieu of automobiles can lead to improved traffic flow, shorter highway travel times and reduced unpredictability in travel time. Such benefits accrue to both the passenger and freight sectors. Improved traffic flows and travel times lead, in turn, to reduced vehicle operating costs; improved air quality, reductions in greenhouse gases; improved public health; and fewer traffic

deaths, personal injuries and property losses. Whereas the benefits of highway capacity expansion in congested corridors can erode as new demand is induced to use the facility, my studies for FTA demonstrate that rail systems in congested highway corridors serve to stabilize roadway congestion in the face of population growth and land development.

Regarding Mobility for Transit Users. Increased use of transit creates mobility benefits for riders. For low-income individuals transit is often used in lieu of taxis and other higher-cost modes and thereby releases scarce household resources for more highly valued uses, including shelter, nutrition and childcare. Increased mobility might also lead to cross-sector resource savings through a reduction in the demand for home-based nutrition, dialysis and other social services.

Regarding Economic development. Transit creates statistically measurable economic value for communities, with benefits extending to both transit users and non-users. This value is manifest in increased land values and rents created by the demand for residential and commercial space in transit-oriented urban environments. Scientific statistical studies of how transit stations affect urban development values reflect both the capitalization of transportation benefits (i.e., the manifestation of delay savings) and non-use benefits of transit due to improved neighborhood structure and livability. Studies my firm performed for the Federal Transit Administration indicate that rail transit stations yield in the range of $16.00 greater residential equity value for each foot closer a property is to the station. Findings in San Francisco, for example, indicate that the average home carries $15,000.00 more value for each 1000 feet closer to a BART station.

My studies for FTA also show that proximity to Metrorail here in Washington D.C. station has a positive impact on commercial property values. We find that a 1,000 foot decrease in walking distance to a Metrorail station increases commercial property values by $2.30 per square foot. For the average sized commercial property of about 30,500 square feet, each 1,000 foot reduction in walking distance to a Metrorail station increases the value of a commercial property by more than $70,000.00.

For proposed new starts and extensions, such as rail investment proposals I recently evaluated in Minneapolis-St. Paul, Austin and Toronto, the cumulative projected effect of these projects on downtown and suburban economic development value is in the hundreds of millions of dollars. Although a portion of this increased value reflects the capitalization of transit time savings in the value of land (and is thus reflected in the measurement of congestion benefits) transit can give rise to urbanization and amenity affects that are valued by people who do not use transit. As well, whereas increased land values associated with transit represent, in part, the transfer of development from other parts of the region, the character of development, namely urban as distinct from suburban development, is unique and thus additive to the diversity value of the region.

THE NEED FOR BEST-VALUE INVESTMENT DECISIONS

The New Starts framework does not seek to determine whether projects are economically worthwhile, but rather to rank them against one another as a basis for distributing a pre-determined allocation of congressionally appropriated funds. Yet, without economic yardsticks, decision makers cannot ask how much transit investment is actually worthwhile, nor how transit projects stack up in relation to highway alternatives. In other

sectors, capital investment choices follow from rigorous economic analysis and head-to-head comparisons of alternative solutions. In the urban transportation sector, however, transit and highway projects are treated separately, as if they serve wholly different purposes (which, of course, they don't).

Failure to examine transit and highway projects against a common economic yardstick works to transit's disadvantage in the competition for budgetary resources. Methods exist for examining proposed new highway investments in terms of conventional tests of investment value, (metrics such as net life-cycle benefits and rate of return). This can place highways within the powerful accountability framework of capital budgeting. By benchmarking highway rates of return to alternative uses of funds (such as bond market returns), highway investment decisions can occasion a great deal of financial and economic legitimacy.

The reality that transit cannot as a rule make it financially seems to have created a belief in some quarters that it cannot make it economically either. Evidence indicates the reverse, however. Evidence from the application of mainstream business case methods indicates that the benefits of a single New Start project can exceed its costs by almost $1 billion dollars and produce net benefits greater than those associated with alternative highway capacity expansion projects (Table 1).

Table 1: Cincinnati I-71: Estimated Costs, Benefits, Net Benefits and Ranking of Alternative Strategies, (for the period 2003 – 2032, in dollars of present-day value)

OPTION	TOTAL ECONOMIC COST In millions of 2003 dollars	TOTAL ECONOMIC BENEFITS In millions of 2003 dollars	NET ECONOMIC BENEFITS Benefits minus costs, in millions of 2003 dollars	RANK Rank order of contribution to regional economic welfare
Alternative 1 - *Four-Lane Continuity*	**$616.7**	**$699.9**	**$83.2**	**4**
Alternative 2 - *Four-Lane Continuity plus HOV*	**$605.6**	**$439.2**	**($167.3)**	**5**
Alternative 3 - *Light Rail Transit (LRT)*	**$1,087.9**	**$1,999.4**	**$911.4**	**1**
Alternative 4 - *Peak Period Truck Restriction*	**$65.0**	**$385.5**	**$320.5**	**3**
Alternative 5 - *Combined Four-Lane Continuity and Light Rail Transit (LRT)*	**$1,704.6**	**$2,428.3**	**$723.6**	**2**

Source: HLB Decision Economics Inc. for the Metropolitan Mobility Alliance, Moving Forward: The Economic and Community Benefits and Investment Value of Transportation Options for Greater Cincinnati, April 2, 2001

RECOMMENDATIONS

Broadening the New Starts process to recognize the full economic value of transit proposals would help create a level playing field for urban transportation investment and elevate transit's status in resource allocation decisions accordingly. But this should not, in my view, be executed in such a way as to complicate the already long and involved New Starts procedure. I make the following recommendations:

1. In addition to the benefits directly associated with ridership, FTA should encourage localities to examine the congestion, mobility and economic

development value of transit; FTA should recognize such values in federal decision making;

2. The Federal Highway Administration should require Metropolitan Planning Organizations to compare prospective major highway investments to transit alternatives in terms of conventional business case yardsticks, namely Cost-Benefit Analysis; and

3. The Federal Transit Administration and the Federal Highway Administration should provide coordinated technical guidelines for the application of common business case analysis tools.