

CFTE O'TOOLE RESPONSE

Randal O'Toole and the "Center for the American Dream" have recently released a report entitled "Great Rail Disasters." With its focus on anti-transit anecdotes, incomplete data and enthusiasm for single occupancy vehicles, this report must not be relied upon by anyone seeking to understand the true story of transit and its impact on communities. This analysis delves beneath the inconsistent and incomplete data presented in the O'Toole report by: (1) Illuminating the TRUE benefits of transit to the nation and communities; (2) Refuting the "Rail Livability Index"; (3) Refuting underlying assumptions of the report; and (4) Refuting a few key examples from the report

(1) True Benefits to the Nation and Communities:

From Salt Lake City to Dallas and from Washington, DC to Atlanta, transit, and rail-based transit in particular have had an unquestionably positive impact on growth and quality of life in our urban areas. Investments in public transportation yield tremendous benefits, including reductions in congestion and travel time and increases in economic development in the community.

- ✓ If investments in rail have been "disastrous", as the report claims, how does one explain the fact that public expenditures in transit net a gain in sales of local businesses of 3 times that amount¹? A return ratio of more than 3 to 1 hardly seems disastrous.
- ✓ If investments in rail have been "disastrous", how does one explain that the average downtown vacancy rates for cities without rail was 12.8% in 2000, but only 8% for cities with rail transit.²
- ✓ If investments in rail have been "disastrous", how does one explain the fact that for every \$10 million invested in public transportation, over \$15 million is saved in transportation costs to both highway and transit users?³
- ✓ If investments in rail have been "disastrous", how does one explain the fact that in 2001, public transportation has saved Americans over 1 billion hours of delay due to congestion resulting in almost \$21 billion in savings.⁴

And the list goes on and on... Even in the individual communities that the report rates as "failures", the facts show:

¹Cambridge Systematics, Inc. and Economic Development Research Group, *A Quantitative Analysis of Public Transportation's Economic Impact*, October, 1999

² CB Richard Ellis, United States Office Vacancy Index, 2nd Quarter Flash Report

³ Cambridge Systematics, Inc. and Economic Development Research Group, *A Quantitative Analysis of Public Transportation's Economic Impact*, October, 1999

⁴ Texas Transportation Institute, 2003 Annual Urban Mobility Study, Exhibit A6
http://mobility.tamu.edu/ums/appendix_a/exhibit_a-6.pdf

- ✓ In Washington, DC, WMATA’s 24 transit joint development projects were generating nearly \$6 million in annual revenue.⁵
- ✓ In Atlanta, \$70 billion in apartments, offices and other developments have been built near rapid transit lines.⁶
- ✓ In St. Louis, approximately 70% of MetroLink riders have been attracted from automobiles – equating to about 93,000 automobile trips “diverted” from the city’s crowded freeways and streets. That’s more than 46,000 parking spaces not needed that day⁷.
- ✓ In Denver, the LRT at peak hour in the peak direction in the target corridor is carrying between 28% and 33% of the total passenger traffic flow. In other words, without the LRT line in service, approximately 30% of corridor passenger traffic would be added to roadway congestion⁸

Try telling the people that live in these communities and rely on public transportation to mobility and economic investment benefits that rail transit is a failure.

Refuting the “Rail Livability Index”

Instead of utilizing....	Look at....	And Discover....
Change in total transit ridership between 1990-2000	Ridership growth in the U.S.	In the past six years, public transportation ridership has grown 24%, faster than highway or air travel. Source: APTA, 2003
Change in transit share of motorized urban travel between 1990-2000 (all travel, including freight, 24-7)	Transit share of peak hour commuters, where transit is available Source: USDOT	Where rail transit is available, transit’s share has consistently increased over the past 30 years, especially when new lines open.
The cost effectiveness of rail relative to freeways	The total cost of auto-based infrastructure (ie, auto ownership, roads, emergency services, fuel, etc.) Source: WRI, 1992	Rail transit consistently provides cheaper mobility options than auto-based transportation.
The estimated cost of building rail transit vs. its actual cost	25 years of publicly available records on actual and forecasted rail costs. (post-alternative analysis forecasting!!!!)	No project is without unexpected cost overruns (ie. Big Dig), but experiential data and increased FTA oversight

⁵ Transit’s Value-Added: Effects of Light and Commuter Rail Services on Commercial Land Values, Cervero and Duncan, US-Berkley, November, 2001

⁶ Some Economic Benefits of Sustainable Transportation, SUSTRAN, May 1996.

⁷ How Transit Benefits Those Who Do Not Ride It: A Conservative Inquiry

⁸ Ibid

		has refined this technique, and has actually led to <i>under-estimates</i> .
--	--	--

The “Great Rail Disasters” report claims to have constructed a “Rail Livability” Index that assesses the effects of rail transit on urban areas. However, a careful examination of the factors used to determine this “Index” makes clear that these factors have been chosen and weighted for the sole purpose of discrediting transit.

In light of these facts, let’s take a look at some of the claims made in the “Great Rail Disasters” report.

General Points

Transit’s share of the commuting pie is shrinking.

In fact, actual ridership numbers collected from transit agencies nationwide by the American Public Transportation Association indicate that transit ridership nearly doubled from 1990 to 2000. While it may be true that transit’s *share* of trips declined from the end World War II, when increased car ownership and new zoning regulations caused a shift in transit habits the important thing to note is that since 1991, transit has hit a twenty year high and is on the rise.

For five straight years now, transit ridership nationally has grown faster than highway use. Between 1996 and 2001, trips made on public transportation in the U.S. went up 21%, while highway use increased only 12%

The recent increase in ridership is remarkable since Americans have far more access to an automobile than they do transit. The U.S. has over 8.2 million lane miles of roads. Only 4.3% of those roads are served by transit.

Rail Transit is Expensive: Buses and Automobiles are Less Expensive

The “Great Rail Disasters” report goes to great lengths to imply that rail transit is an economically inefficient and costly form of transportation, especially when compared to other modes. In fact, in looking at the full story, it is clear that the benefits of transit far outweigh costs, whether compared to buses or autos.

- According to the AAA, the cost of driving on average is 51.7 cents per mile, an increase of 1.7 cents from 2002. The average car costs \$7754 per year to fuel, insure and repair. According to the Federal Transit Administration, transit costs a comparable 45 to 56 cents per mile.
- Further, many public transportation critics’ estimates of the cost of driving do not include the full cost of automobiles, including road building, maintenance and

design, whereas estimates for the cost of public transportation do include the cost of the entire transit system.

- Perhaps most important, the critics' numbers fail to take into account the incredible cost-savings that transit can provide. Transit financially aids our public health system, environmental protection efforts, and families across America.

Investments in transit can serve to:

- Reduce the annual cost of health damage from motor vehicle pollution (between \$29 billion and \$530 billion)
- Reduce the costs of asthma-related treatments (\$14.5 billion annually, including over \$3.2 billion per year to treat increasing rates of childhood asthma)
- Increase savings for all Americans (for every \$10 million invested in public transportation saves more than \$15 million, for both highway and transit users, including savings of about \$1,500 and 200 gallons of gas per year)
- Reduce families' needs for additional cars, a yearly expense of between \$4,800 and \$9,700.
- Help all citizens realize the American dream of owning a home through Location Efficient Mortgages (LEMs). These special mortgages allow homebuyers who purchase homes near transit or their workplace to qualify for a larger loan. For example, a potential buyer who would avoid \$500 in auto costs by living in a convenient area could qualify for a larger mortgage.
- In terms of buses, it is clear that they cost significantly more to operate than rail. The Federal Transit Administration's 1999 National Transit Database shows an average operating cost per passenger mile on light rail of 45¢, compared to 55¢ on buses.
- To be fair, it should be noted that **capital** costs are significantly higher for light rail than for buses. Capital costs for an initial bus system range from \$1-8 million per mile compared to light rail at \$10-30 million per mile. But these costs are more than paid back in long term benefits for the community.

“Commuter Rail and light rail can be quite dangerous because they so often intersect streets and pedestrian ways.”

Actually, little investigation is needed to refute this claim. Road-based transportation systems have consistently proved more deadly than rail-based ones. Just look at annual fatalities among the modes:

Mode	Annual Fatalities (2001)
Bus	100
Commuter Rail	78
Heavy Rail	34
Light Rail	16
Automobiles	42,116

Source: APTA 2003 Public Transportation Handbook, Bureau of Transportation Statistics

“Rail transit is ineffective at reducing congestion.”

This argument relies on subjective criteria on what constitutes ‘effectiveness’. One criteria that might help is to compare the carrying capacity of each mode.

In fact, it would take a twelve lane freeway going in one direction to equate the same amount of capacity of one light rail line.

A look at any transportation engineering manual will show that light rail can outperform highways. According to the Highway Capacity Manual, highway operations are described as Level of Service (LOS), ranging from LOS A to LOS F. Peak highway capacity is typically regarded as LOS E (2,000 passenger cars per hour per lane). If you multiply that number by the Average Vehicle Occupancy (AVO) which averages 1.25 persons, you get **2,500** persons per lane per hour on a highway. For transit, a typical 6 car train can carry 750 passengers. Running at 20 trains per hour, per direction, that equates to **30,000** passengers.

Funds spent on public transportation would be better spent on highways

How can this be when a billion dollars will buy fifty miles of new Light Rail line versus only a few miles of highway lanes? And even as these multi-billion dollar investments are made in highways, studies have shown repeatedly that adding lane miles to roads does not significantly relieve congestion. New roadways quickly fill to capacity and show little effect on surrounding arteries. “How Transit Benefits People Who Do Not Ride It: A Conservative Inquiry”, reviews all the available data and comes to the conclusion that “transit benefits non-riders by reducing traffic congestion”.

“Attempting to solve the problem of traffic congestion by building more roads or adding lanes to existing freeways not only doesn’t work; it also costs a fortune”

A study by Xuehao Chu, a professor at UC Berkeley, states that increasing roadway miles by one percent “would reduce (congestion) by one-eleventh of a percent on freeways.”¹⁰

Some Points on Specific Communities

Denver’s light rail line is the most dangerous transit route in the nation, killing more than 38 people per billion passenger miles.

⁹ “How Transit Benefits Those Who Do Not Use It: A Conservative Inquiry”

¹⁰ Chu, Xuehao, *Measuring Transit Performance Using Data Envelopment Analysis*, UC-Berkeley, 1990,

Denver's light rail system opened in 1994 and has not yet carried a billion passenger miles. Further, since its inception, there have been only 6 fatalities. Of these, three of the fatalities were pedestrians, not passengers; one was a passenger in a car that illegally went around a crossing border; and the other two were ruled suicides. Clearly, this analysis is flawed. Further, it should be noted that O'Toole has been hired by the Independence Institute, based in Boulder, to mount a campaign against a Denver light rail expansion project, called FasTraks, which voters will decide on in November.

The Dallas Fort Worth System "DART" is a failure because the share of travel for transit decreased.

DART's light rail ridership grew by 45% in 2002. O'Toole argues that most of these riders came from bus systems: However, surveys show a consistent figure of about 30% of riders diverted from automobiles to the DART light-rail system.¹¹

At the same time, DART is boosting North Texas and state economies with an overall regional impact of \$3.7 billion and more than 32,000 jobs generated through 2003. Consider the following:

- DART's recent investment of \$1 billion in new light rail lines will generate over \$2.3 billion in regional economic investment and will support over 27,500 jobs.
- DART's investments in daily operations generate more than \$230 million in regional economic activity per year.¹²

Clearly, these numbers do not reflect "failure" of the system in any way, shape or form.

Conclusion

Clearly, the basic information upon which this report relies is fundamentally incomplete. When one considers all the evidence available regarding the benefits of public transportation both nationally and on a community-by-community basis, it is clear that the "Great Rail Disasters" report is flawed and should not be relied upon to tell the whole story.

¹¹ www.lightrailnow.org

¹² All facts from "Center for Economic Development and Research at the University of North Texas"