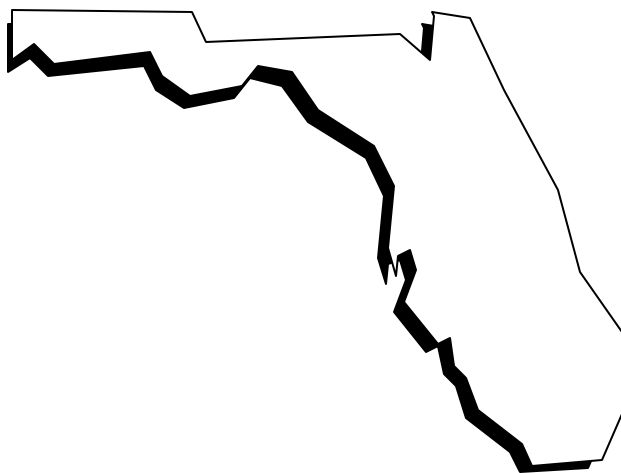


FLORIDA HIGH-SPEED RAIL PROPOSAL

WENDELL COX CONSULTANCY
RESPONSE TO COMMENTS
BY THE
FLORIDA DEPARTMENT OF TRANSPORTATION



November 10, 1997

Addendum to
James Madison Institute
Policy Report #21

Background

In April 1997, The James Madison Institute released a study authored by Wendell Cox of the Wendell Cox Consultancy entitled *Evaluation of the FDOT-FOX Miami-Orlando-Tampa High-Speed Rail Proposal (JMI Evaluation)*. At recent public hearings the Florida Department of Transportation (FDOT) presented information about the proposed high-speed rail system to interested parties. At one such hearing the leadership of a concerned citizens group requested FDOT to provide specific comments on the *JMI Evaluation*, a request subsequently complied with by the agency.

Those FDOT comments were later forwarded to the Wendell Cox Consultancy by the citizens group in question and Mr. Cox's point-by-point response to those FDOT comments are presented below.

Florida Overland Express (FOX) was given a franchise agreement by FDOT to construct and operate a high-speed rail line from Miami to Tampa to Orlando. FOX would receive substantial state subsidies to complete this project.

The *JMI Evaluation*, based upon FDOT, FOX and generally available planning and market data found that:

- High-speed rail is likely to cost much more, carry many fewer passengers and expose the state to enormous financial expense --- far more than presently anticipated.
- Because the state would be required to guarantee project completion and operation, the state's obligation would be open-ended. FOX's risk would be small by comparison.
- High-speed rail would not materially improve the environment, air traffic congestion or highway traffic congestion, despite the claims of promoters.

Response By Mr. Cox To Issues Raised By FDOT

Issue #1:

Transportation infrastructure projects tend to cost more and attract less revenue than projected.

FDOT Comment: Criticizes the *JMI Evaluation* for not citing major infrastructure projects that have been completed under budget or exceeded revenue forecasts.

Cox Response: *DISAGREE*

A recent National Academy of Sciences report confirms that underestimation of costs and overestimation of

usage is a normal pattern for large infrastructure projects:¹ The report stated that:

... cost overruns of 50 to 100 percent are common and that overruns of more than 100 percent are not uncommon. Traffic forecasts that are off by 20 to 60 percent when compared with actual development are frequent in large transportation projects.

Moreover, in recent years some US urban rail project promoters have claimed to deliver their projects within budget and achieved ridership above projections. In-depth analysis usually reveals that such claims are based upon subsequent rather than original cost estimates and that ridership projections have been sharply reduced during construction. It has been rare for project costs or ridership to be within projections available to policy makers at the time the decision is taken to proceed with construction. As the *JMI Evaluation* indicates, projections on major transportation infrastructure projects in Florida have been particularly inaccurate. (See page 15 and 16 of *JMI Evaluation*.)

And here's another comparison. The government of Taiwan recently granted a provisional franchise to a private developer/operator for a high-speed rail line that will be 205 miles in length--one-third shorter than the line proposed for Florida. The costs of the Taiwanese project, however, are estimated at \$11.8 billion--double to triple the costs projected for the Florida high-speed rail line. This further suggests that the Florida cost estimates are too low. And, considering that, unlike the FOX developers, the developers in Taiwan will be putting up all of the money and taking all of the risk for that project, it's likely that their cost estimates are very realistic.

Issue #2:

Florida taxpayers are likely to pay more than \$6.5 billion.

FDOT Comment: The maximum state contribution will be \$6.5 billion.

Cox Response: *DISAGREE*

The high-speed rail project is likely to cost considerably more than projected based upon experience with other major transportation infrastructure projects (the project could easily double or triple in cost). The state of Florida's "covenant to complete" will require the taxpayers of the state to pay whatever deficit develops. The \$6.5 billion would be more appropriately viewed as a *minimum* state contribution (see Issues #1, #4b & #12 in this response).

Moreover, a final route has not yet been selected, which means that any cost projection is little more than speculation.

Issue #3:

Florida high-speed rail ridership would be far lower than current ridership in Japan and France.

FDOT Comment: Agreement with JMI *Evaluation* finding that high speed ridership in Japan and France is higher than can be anticipated in Florida due to different demographic characteristics, especially when compared with Florida's lower population density.

Cox Response: *AGREE*

Because Florida's high-speed rail ridership will likely be much lower than ridership in Japan and France, it is also more likely to make the system exceedingly unprofitable while having virtually no perceivable impact on traffic congestion at any point along its 300 mile route.

Issue #4(a):

Cost overrun projections are justified.

FDOT Comment: The JMI *Evaluation* provides no evaluation or data to support the projection that costs could be \$14 billion to \$39 billion more than the present \$6.2 billion estimate.

Cox Response: *DISAGREE*

The JMI *Evaluation* includes a full explanation of the analysis and data that is the basis of the conclusion that costs are likely to be much higher than projected.

Issue #4(b):

Florida taxpayer contributions cannot be capped.

FDOT Comment: (FDOT) "Secretary Watts has clearly stated on numerous occasions that the maximum state commitment is \$70 million per year over 40 years."

Cox Response: *DISAGREE*

The assurances of (now former) Secretary Watts, any other state official, agency or unit of state government

cannot prevent state government from increasing the state's subsidy in future years. Nothing short of a Constitutional prohibition could provide a binding limitation on the amount of state subsidy that might ultimately be allocated to this project.

Moreover, despite former Secretary Watts' promise, the present plan calls for FDOT to *escalate* minimum support payments by 33 percent above inflation annually, and *extend* the payments through 2039. (See page 35 of *JMI Evaluation*.)

In the *JMI Evaluation* (see page 32, Table 10 of *JMI Evaluation*) it is projected that project revenues will

be insufficient to service debt before the fifth year of operation. The state will be legally obligated to pay the resulting deficit under its "covenant to complete and operate." There is no cap on the financial obligation of the taxpayers. In this regard, Florida taxpayers are in no better position than a buyer who relies on the promises of the proverbial used car salesman only to find that a "lemon" has been acquired.

It's highly improbable that the state would simply liquidate the project by paying bond holders and allowing the system to stand idle by refusing to subsidize its operation (see Issues #2 & #12). It is not hard to envision an eventual successor to Secretary Watts as a chief proponent of a taxpayer-funded bailout.

Issue #5

High-speed rail is not commercially viable in the United States.

FDOT Comment: (a) The Federal Railway Administration (FRA) report and (b) Transportation Research Board (TRB) reports do not reach the conclusion that high-speed rail is not commercially viable in the United States.

Cox Response: *DISAGREE*

The *JMI Evaluation* is correct in characterizing these reports as finding that high-speed rail is not commercially viable.

- FRA found that commercial revenues would fall far short of costs in all studied corridors over the period from 2020 to 2040.² FRA projected that commercial revenue in the Miami-Orlando-Tampa corridor would cover 37.7 percent of costs, requiring a public subsidy of 62.3 percent. ***FRA concluded that some routes would be commercially viable by counting subsidies as commercial revenue,***³ which may set a new standard for bureaucratic obfuscation. (See page 13 of *JMI Evaluation*.)
- According to the TRB report:⁴

In nearly all these markets, break even operation would require not only low costs but also the ability to charge premium fares well above airline levels. The combined occurrence of both these conditions in any one market would be extremely unlikely.⁵

Issue #6:

The finding of excessive optimism in ridership projections is reasonable.

FDOT Comment: The *JMI Evaluation* provides no data for its conclusion that ridership and revenue forecasts are optimistic “except to say that other transportation projects have overstated these estimates.” Further, an independent “peer” group of experts are reviewing project data.

Cox Response: DISAGREE

The *JMI Evaluation* provides analysis of the ridership estimates, especially the very high ridership projections in the Orlando-Tampa corridor. Moreover, it is appropriate to predict the likelihood of future behavior based upon past experience. Just as it would have been reasonable to predict that Florida State’s 1996 football team, which had 9 wins and no losses, would defeat Maryland, which had five wins and five losses (FSU won 48-10), it is reasonable to predict that the Florida high-speed rail line will attract fewer riders than projected based upon the pitiful experience of such projections for other projects.

Peer review provides little guarantee. It is routine for projects to have peer review committees, just as it is routine for the costs of such projects to be grossly underestimated and revenues to be optimistically overestimated. Also, the independent peer group process is not independent. Press reports indicate that at least one peer group member serves as a paid consultant to the project.

Issue #7:

High-speed rail will barely impact traffic congestion.

FDOT Comment: High-speed rail will divert “automobiles equivalent to the capacity of one highway lane” in the early years and in future years will “further reduce congestion on the state’s intercity highways.”

Cox Response: DISAGREE

FDOT’s own data does not support its assertion. At no point along the route does FDOT project that diversion from automobiles would equal even one-tenth of a freeway lane’s capacity. This diversion, even in the unlikely

event that it were achieved, would have no perceivable impact on traffic congestion. Future high-speed rail growth would not materially alter this situation --- traffic reduction would be so slight that no one would notice. Floridians would notice the higher taxes necessary to subsidize construction and operation of this costly project.

Issue #8:

The projection of much higher operating costs is justified.

FDOT Comment: The *JMI Evaluation* provides no data to support its projection that operating costs would exceed projections by 29 percent to 122 percent.

Cox Response: *DISAGREE*

The operating cost overrun projections were based upon the experience reported in the Transportation Research Board report (see Issue #5), and were so noted.

Issue #9:

The financial plan contains insufficient contingency funding.

FDOT Comment: The *JMI Evaluation* indicated that the project costs do not include contingencies.

Cox Response: *DISAGREE*

The *JMI Evaluation* did not state that there were no contingencies, rather it indicated that there were not sufficient contingencies (see page 3 *JMI Evaluation*):

*... the forecasts do not include a contingency fund to accommodate **the significant cost escalation characteristic of projects of this size.** (Emphasis added)*

Contingencies sufficient to accommodate the potential cost escalation would more than double the current project budget.

Issue #10:

Airfares are well below projected high-speed rail fares.

FDOT Comment: Airfares are higher than projected high-speed rail fares.

Cox Response: *DISAGREE*

Average airfares *are* lower than projected high-speed rail fares (inflation adjusted) in the high-speed rail corridor, according to United States Department of Transportation data. Since publication of the JMI *Evaluation* airfares have fallen further relative to projected high-speed rail fares.

Weighted Average Air Fare Relative to Proposed High-Speed Rail Fare Tampa & Orlando to South Florida	
Date	Air Fare Over (Under) Rail Fare
FOX: 1995	+66.7%
<i>Evaluation</i> : April 1997	(13.6%)
US DOT: July 1997	(38.4%)

The lower airfare will require high-speed rail to lower its fares to compete, increasing the likelihood of an early project bankruptcy, or massive subsidies by Florida taxpayers.

Issue #11:

Air service frequencies exceed rail frequencies in some markets.

FDOT Comment: The JMI *Evaluation* states that high-speed rail service frequencies cannot exceed that of airlines.

Cox Response: *DISAGREE*

The JMI *Evaluation* does not contend that high-speed rail frequencies cannot exceed that of airlines. It rather disputes the FOX contention that high-speed rail would offer “more departures than is possible by air,” and shows that airlines provide more departures already in two markets (Orlando-Miami and Tampa-Miami). (See page 24 of JMI *Evaluation*.)

Issue #12:

The required state “covenant to complete” is virtually the same as a “full faith and credit” guarantee of the high-speed rail debt and operating deficit.

FDOT Comment: A state “completion covenant” will not have the same effect as a “full faith and credit” commitment from the state, because a “full faith and credit” commitment is prohibited by state law.

Cox Response: *DISAGREE*

Regardless of legalities, the required state “covenant to complete and operate (completion covenant) will have virtually the same effect as “full faith and credit” commitment --- the state, and by extension the

taxpayers of the state, will be obligated to pay any resulting deficit (which could be from \$14 billion to \$39 billion).

- Cost overruns, and attendant-borrowing costs will be the obligation of state taxpayers, secured by the state’s covenant to complete and operate the project.
- Higher than anticipated operating subsidies will be the obligation of state taxpayers under the state’s covenant to complete and operate the project.

Federal credit guarantees will be limited to only a portion of the debt, and are not likely to be extended to higher levels as construction costs escalate.

Issue #13:

Federal credit guarantees could create a future “savings and loan” style bailout.

FDOT Comment: Federal credit guarantees will not create significant obligations for similar support of projects in other states

Cox Response: *DISAGREE*

The JMI *Evaluation* notes that the federal government would set a precedent by guaranteeing Florida high-speed rail financing, which *could* equal \$130 billion (if all states were dealt with on a similar per-capita basis). The very nature of federal programs is that other states (and local governments) seek federal benefits based

upon federal benefits already conferred on other states (and local governments).

In fact, there are proposals pending to extend federal credit guarantees to other projects in other states on a pilot basis. Federal guarantees of shaky infrastructure projects could lead to taxpayer financed bailouts similar to that of the savings and loan industry.

Issue #14:

Developer profits will be paid before debt, creating a virtual profit guarantee.

FDOT Comment: FOX would receive some profit before debt service is paid.

Cox Response: *DISAGREE*

The developer, FOX would receive *all* of its profit before debt service is paid, according to data in the *Pre-Certification Post Franchise Agreement*.⁶ This, in effect guarantees the FOX profit.

Issue #15:

Florida taxpayers have a much higher risk than the project developer.

FDOT Comment: The state of Florida has greater financial risk than FOX.

Cox Response: *AGREE*

The developer, FOX has minimal risk compared to the risk of Florida taxpayers.

Issue #16:

High-speed rail would not improve transportation safety.

FDOT Comment: The state subsidies that would be granted to FOX could not be used to reduce traffic injuries and fatalities because state law would not allow the same money to be spent on highway projects.

Cox Response: *DISAGREE*

State law could be amended to give priority to projects that improve transportation safety.

Issue #17:

FDOT is proceeding on a presumption favoring high-speed rail.

FDOT Comment: The decision to proceed with high-speed rail development is based on analysis, not on an assumption favoring high-speed rail.

Cox Response: *DISAGREE*

The public purpose at issue is the reduction of traffic congestion and air pollution. All possible alternatives should be exhaustively studied, including an objective analysis of highway expansion options. There is no such analysis.

FDOT is proceeding with high-speed rail development on the presumption that high-speed rail will reduce traffic congestion and air pollution more effectively than other alternatives. Yet its own data shows, at best, negligible impact on traffic congestion and air pollution. This is assumption-based rather than analysis-based decision making.

End Notes

1. Mette K. Skamris and Bent Flyvbjerg, "Accuracy of Traffic Forecasts and Cost Estimates on Large Transportation Projects," *Transportation Research Record* (Washington, DC: Transportation Research Board, National Research Council), 1996.
2. *Overview Report: High Speed Ground Transportation for America* (Washington, DC: Federal Railroad Administration, United States Department of Transportation, August 1996).
3. Section 1036 of the 1991 Intermodal Surface Transportation Act of 1991 required the US Department of Transportation to conduct a study on the commercial feasibility of high-speed rail. The report appears to have violated the congressional mandate, by evaluating high-speed rail on a non-commercial basis. USDOT counted non-user benefits and consumer surplus as commercial revenues. Consumer surplus is the difference between the price paid by a purchaser and the price that the purchaser would be willing to pay for the good or service. No amount of rationalization can convert non-user benefits and consumer surplus into commercial revenues --- they are simply not real money. If they were, the rates of non-user benefit and consumer surplus used by USDOT could be used by Congress and the President to balance the federal budget this year and forever, pay off the national debt in three years and cancel state and local taxation in perpetuity.
4. *In Pursuit of Speed: New Options for Intercity Passenger Transport* (Washington, DC: Transportation Research Board, National Research Council, 1991).
5. National Research Council.
6. *Pre-Certification Post-Franchise Agreement by and between the State of Florida Department of Transportation and Florida Overland Express, L.P.* November 12, 1996.