

Joe Obi

RECORD OF DECISION

St. Louis Light Rail Transit Project
(Metro Link)

St. Louis, Missouri

DECISION: The Urban Mass Transportation Administration (UMTA) has decided to provide financial assistance to the Bi-State Development Agency (Bi-State) for the construction of a light rail transit (LRT) project in the cities of East St. Louis, Illinois and St. Louis, Missouri, and St. Louis County, Missouri. The project consists of approximately 18 miles of rail line with 20 stations, a storage and maintenance facility, and 31 articulated railcars. The alignment runs from Fifth and Missouri in East St. Louis, Illinois across the Mississippi River via the Eads Bridge rail deck into downtown St. Louis, Missouri, beneath downtown to Union Station via the Washington Avenue/ Eighth Street Tunnel and a baggage tunnel, and terminates at Berkley, Missouri near the McDonnell Douglas industrial area. An approximate one mile spur will run from the Northwest Park and Ride Station to Lambert Field (St. Louis International Airport). The shuttle bus component of this preferred alternative will connect the St. Louis Galleria and the County Government Center in Clayton, Missouri and points in between with the LRT alignment. The total estimated cost of the 18 mile project is \$383.6 million. The total federal share is \$287.7 million in Section 3 discretionary funds.

ALTERNATIVES CONSIDERED: The East-West Gateway Coordinating Council (EWGCC) was the local lead agency for alternatives analysis and preliminary engineering (PE). Five primary alternatives were examined in the Alternatives Analysis/ Draft Environmental Impact Statement (AA/DEIS): 1) No-Action; 2) Transportation Systems Management (TSM); 3) Busway; 4) LRT from East St. Louis to Clayton and Lambert Field; and 5) LRT from East St. Louis to Lambert Field with connecting shuttle bus service to Clayton.

A Final Environmental Impact Statement, approved in September 1987, assessed three alternatives: 1) No Action; 2) TSM; and 3) LRT from East St. Louis to Lambert Field with connecting shuttle bus service to Clayton, which is the locally preferred alternative.

It also identifies three intermediate length options which were not previously studied during the Alternatives Analysis and the

development of the DEIS: 1) Building LRT from East St. Louis westward to the Central West End Station; 2) Building LRT from East St. Louis westward to the Delmar Station; and 3) Building LRT from East St. Louis westward to the University of Missouri at St. Louis (UMSL)-South Station.

Two alternatives which were studied during alternatives analysis and were identified in the DEIS, the Busway and the LRT with Alternative LRT Connections to Clayton, were not updated or studied further during the PE stage.

The No-Action, TSM, and LRT/Bus shuttle alternatives, the latter of which is the locally preferred alternative, were updated and refined during PE.

The updated No-Action and TSM alternatives are described below, along with brief descriptions of the two unchanged alternatives, which were not studied further during PE. The locally preferred alternative is fully described below.

No-Action Alternative

This is defined as maintaining the Bi-State bus routing, headways, and fleet in service as of December 2, 1985 and programmed north Missouri corridor improvements without change through the design year 2000. This definition reflects the first service changes made in Bi-State's Transit Action Plan (TAP), which is a program to completely reorganize Bi-State bus service to improve the responsiveness of transit service to the needs of Missouri and Illinois residents and to address changing population/employment patterns and service major new activity centers. This level of service involves 616 buses on 134 routes covering the a.m. peak period, 53 of which provide express, rapid, or park-n-ride service (to 7 Missouri and 14 Illinois park-n-ride lots) and 81 of which provide local service.

TSM Alternative

This provides for the completion of Bi-State's TAP program as well as service-level expansion exceeding the TAP program's financial constraints in order to accommodate projected demand which cannot be served with the current bus service levels that are held constant in the No-Action alternative. Upgrading existing (No-Action) park-n-ride lots and adding more park-n-ride lots, freeway bus ramps, and other bus stop improvements will complement the TSM bus service reorganization and expansion. The freeway bus ramps include a ramp at: a) northbound I-55/I-44 to Gravois/Russell; b) the I-70 reversible lanes with eastbound-on and westbound-off ramps to/from Kingshighway; and c) the I-70 reversible lanes to North Broadway. Miscellaneous bus stop improvements include providing: a) a bus turn-out and stop at the I-55 interchange with 4500 South Broadway; b) bus turn-outs, stairs, and bus stops at Lindbergh and Page and Lindbergh and Olive; and c) a pedestrian overpass at Lindbergh and Corporate Square.

Busway Alternative

This incorporates TSM improvements with special bus lanes to speed the flow of buses operating in the priority corridor during peak periods. The busway concept involves channeling multiple bus routes into a single high-speed corridor connecting outlying areas to the core area, with limited intermediate stops.

LRT Alternative

This incorporates some TSM improvements with a light rail route connecting major activity centers in the region. LRT stations will be provided at selected major cross streets and at multiple points in the core area; several park-n-ride lots will be developed in outlying areas. Bus routes will be modified, as appropriate, to connect with LRT. Some track segments will be developed across or in existing street right-of-way in which case trackage will be constructed flush with the roadway pavement to permit mixed (LRT and auto) traffic operations. Six alternative LRT Clayton connections involve development at grade, on structure (where right-of-way is constricted), and in tunnel (where traffic congestion may otherwise be a problem). Options along I-70 will avoid mixed-traffic operating conditions which were previously considered along Natural Bridge Road.

LRT/Bus Shuttle Alternative

This is the locally preferred alternative which involves 18 miles of light rail alignment from Metro-East and downtown St. Louis to Lambert Field and the McDonnell Douglas industrial area. The shuttle bus component of the alternative will connect the St. Louis Galleria plus the County Government Center in Clayton and points in between with the LRT alignment. This alternative incorporates some TSM bus service improvements and involves a number of bus service modifications designed to integrate the proposed LRT alignment with the existing bus network.

The LRT alignment will use the existing Eads Bridge rail deck and the Washington Avenue/Eighth Street tunnel to be acquired from the Terminal Railroad Association of St. Louis (TRRA) through downtown St. Louis, the northernmost edge of TRRA right-of-way from downtown to Grand Boulevard, and the Norfolk and Western (N & W) trackage from Grand to a point north of Natural Bridge Road. Railroad freight operations will potentially be accommodated on separate parallel tracks along part of the LRT alignment and on a time-sharing basis over part of the LRT alignment. New right-of-way will be developed in downtown East St. Louis, in the vicinity of Kiel Auditorium in downtown St. Louis where the alignment will tie in with the existing baggage tunnel beneath the train shed at St. Louis Union Station, and from the UMSL along I-70 to Lambert Field. An unused railroad facility between Jefferson and 21st Street immediately southwest of Union Station will be adapted to become the LRT maintenance/storage facility.

The LRT alignment will include a total of 20 stations, six of which will initially include 1,801 park-n-ride parking spaces. The station platforms will be high level permitting ready access for elderly and handicapped persons. Both center and side platforms will be used depending on the station location. A variety of compatible materials and finishes will be specified in the station design, and landscaping will be incorporated where appropriate. Closed-circuit television, lighting, public emergency telephones plus security personnel staffing will be used to enhance safety for system users. A proof-of-payment barrier-free fare collection system will be used. An initial fleet of 31 articulated light rail vehicles will be required to serve the projected year 2000 patronage. Bi-State, the region's bus system operator, will operate the LRT system.

BASIS FOR DECISION:

The basis for the local decision to support the preferred alternative is threefold: focusing development, economic growth, and cost effectiveness.

Implementing any of the action alternatives will potentially enhance land development opportunities and continued development of downtown St. Louis. The most significant difference among the alternatives is that the LRT options also provide a number of station sites which are attractive for development. More of this development is likely to be refocused rather than net growth. This development is expected to occur as a result of improving accessibility, concentrating passenger volumes, reducing site-specific parking requirements, and demonstrating a long-term public commitment at station locations. Specifically, these LRT development factors are expected to enhance developments like St. Louis Union Station and Laclede's Landing, which will be more closely tied with the core area of downtown and with each other.

By creating additional people traffic, LRT could strengthen retail sales in the corridor. It will increase office absorption within the corridor by enhancing its competitiveness and permitting economic benefits to accrue sooner to both the public and private sector than might otherwise occur. It will enhance the tourism/convention packages by connecting Lambert Field, numerous hotels, the convention center, and multiple entertainment destinations. The EWGCC estimates that a total of \$488.2 million in capital investment entailing 6,758 construction jobs could occur at sites near LRT stations through the year 2000. (These numbers differ from the AA/DEIS numbers presented for the preferred alternative because of increased development activity.)

The preferred alternative, the LRT from East St. Louis, Illinois to Lambert Field with a bus shuttle to Clayton, is the most cost effective of the fixed guideway alternatives. Cost effectiveness is represented by the incremental costs and effectiveness of fixed

guideway alternatives compared to the TSM alternative and is measured in terms of changes in transit ridership, travel time savings for existing riders, and reductions in operating and maintenance costs. The total cost-effectiveness ratio for the preferred alternative is \$9.50 per added rider. This is the lowest, most cost effective, of all the fixed guideway alternatives.

The operating costs for the TSM alternative are estimated to be about five percent more than the costs of the No-Action alternative, and the LRT/Bus Shuttle alternative operating costs will be about seven percent more than those of the No-Action alternative.

The basis for decision from the federal perspective was Congressional direction: The United States Congress mandated that the project be funded. Specifically, the House Committee on Appropriations' report language for FY 87 (with which the Senate Appropriations Committee concurred) stated the following:

The Committee directs the Secretary of Transportation to enter into negotiations for a full funding contract with appropriate local government officials to construct the St. Louis light rail transit project, Metro Link. The Secretary shall submit a proposed full funding contract to appropriate local authorities and commence negotiations with these officials no later than 30 days after enactment. The Secretary shall report the status of these negotiations, including a schedule of meetings held, issues which have been resolved, and the remaining differences on such a full funding contract to the House Committee on Appropriations 90 days after enactment.

Environmental Factors

The only significant environmental factor which influenced the decision was the possibility of mixed-traffic operating conditions on Natural Bridge Road. This option was found unacceptable at the public hearings held in conjunction with the AA/DEIS. Instead, the alignment will follow the I-70 right-of-way.

Transportation Factors

The TSM alternative is expected to produce 152,200 total daily transit trips, an increase of approximately 4.2 percent, while the preferred alternative is expected to produce 160,800 total daily transit trips, an increase of 10.1 percent over the No-Action alternative in the year 2000. The TSM alternative would provide transit travel-time savings of about one minute over the No-Action alternative, while the preferred alternative will yield an average systemwide savings of about three minutes per transit trip compared with the TSM alternative. The travel-time savings accrued by the preferred alternative is estimated to be \$10.5

million annually for year 2000 riders. The action alternatives are expected to reduce the demand for parking spaces at corridor activity centers. The TSM alternative would lead to a net reduction in the demand for parking spaces by about 2,800 spaces daily, while the preferred alternative would reduce the demand for parking spaces by about 6,700 spaces daily.

The action alternatives will not significantly affect highway traffic volumes in the year 2000 and will cause minimal interference with cross traffic.

Environmentally Preferable Alternative

None of the alternatives considered had particularly significant environmental impacts which would cause them to be environmentally preferable to the other alternatives.

MEASURES TO MINIMIZE HARM:

Relocation assistance will be provided for single-family dwelling unit owners to help them relocate. Commercial displacees will also be compensated for their property and assisted in relocating.

LRT construction will be sequenced to maintain necessary vehicular and pedestrian flow on all key roadways.

All utility relocations will be closely coordinated with each utility company to protect their lines during construction to minimize any disruption in service.

To reduce the possibility of accidents, railroad-style flashers and gates with optional bells will be installed at at-grade street crossings, except at the three Broadway crossings in East St. Louis where traffic lights will be installed.

Landscaping will be undertaken, as appropriate, to minimize project effects.

To minimize interfering with the UMSL campus, the LRT alignment will be built on structure over East Campus Drive and in cut under Mark Twain Drive. The latter condition will necessitate relocating West Campus Drive as proposed in the University's 1981 UMSL 2000 Master Campus Planning Report.

Ultra-light catenary trolley wire and direct suspension trolley wire may be considered in final design to reduce the extent of overhead wiring in visually sensitive areas.

All construction activities creating significant noise in residential areas will be limited to normal daytime hours, and construction noise control measures for work in the vicinity of

the hospital complex will be developed during final design in consultation with the City of St. Louis and the affected hospitals.

The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings will be applied in any alterations affecting the National Historic Landmark Eads Bridge and St. Louis Union Station. Metals in America's Historic Buildings: Uses and Preservation Treatments by Margot Gayle and David W. Look (1980) will be used as a guide in cleaning and repainting Eads Bridge metal surfaces.

The appropriate State Historic Preservation Officer will be notified immediately in the event that any archaeological resources are unearthed during construction in order to ascertain their significance.

These mitigation measures are also enumerated on pages S-19 through S-21, pages 5-40 through 5-41, page 5-44, page 5-50, pages 5-56 through 5-57, pages 5-60 through 5-62, pages 5-74 through 5-76, page 5-78, and Appendix I (Memorandum of Agreement [MOA] and Letters) in the Final Environmental Impact Statement (FEIS).

The mitigating measures will be a condition of the Full Funding Contract, and the Project Management Oversight (PMO) contractor will be directed to review at quarterly meetings the progress in implementing these mitigating measures.

DETERMINATIONS AND FINDINGS:

Section 14(c)

The environmental record for the St. Louis Light Rail Transit Project includes a DEIS (May 1984) and an FEIS (September 1987) for an 18-mile light rail line and alternatives covering other transit modes and variants of the locally preferred rail alignment. These documents represent the detailed statement required by Section 14 of the Urban Mass Transportation Act of 1964 on:

- the environmental impact of the proposed project;
- adverse environmental effects which cannot be avoided should the proposed project be implemented;
- alternatives to the proposed project, and
- irreversible and irretrievable impact on the environment which may be involved in the proposed project should it be implemented

Based on the information contained in the FEIS and after consideration of the written and oral comments offered on the draft and final documents, UMTA has determined in accordance with Section 14(c) of the Urban Mass Transportation Act of 1964, as amended that:

- adequate opportunity was afforded for the presentation of views by all parties with a significant economic, social or environmental interest, and fair consideration has been given to the preservation and enhancement of the environment and to the interest of the community in which the proposed project is located;
- all reasonable steps have been taken to minimize adverse environmental effects of the proposed project, and where adverse environmental effects remain, there exists no feasible and prudent alternative to avoid or further mitigate such effects.

Section 4(f)

Section 4(f) of the Department of Transportation Act [49 U.S.C. 303(c)] affords special protection to certain parks, recreation areas, wildlife refuges, and historic sites.

The project authorized by this Record of Decision (ROD) involves properties protected by Section 4(f). The action authorized in this ROD will be carried out in accordance with the FEIS and the MOA developed and executed in accordance with Section 106. These two documents detail mitigation measures for affected properties which are enumerated at pages 5-64 through 5-84 and in Appendix I.

This project would affect the following properties protected by Section 4(f): Parklands-the Jefferson National Expansion Memorial, Forest Park, Gwen Giles Park, St. Vincent Park, and the Bellerive Bird Sanctuary; Historic Sites-May Company Department Store, Post Office Annex Building, Dillard's Building, Arcade/Wright Buildings, Central West End Historic District, Delmar Station, Eads Bridge, and St. Louis Union Station.

Based on the Eads Bridge Preliminary Case Report/Section 4(f) Evaluation, the St. Louis Union Station Preliminary Case Report/Section 4(f) Evaluation, the MOA, and the agreements reached with the various agencies having a consultative role or jurisdiction in these matters, UMTA has determined that (1) there is no feasible and prudent alternative to the use of such lands, and (2) all possible planning has been undertaken to minimize the harm resulting from such use.

Section 3(i)

Section 3(i) of the Urban Mass Transportation Act of 1964, as amended, requires the Secretary of Transportation to determine that the proposed fixed guideway system or extension of any fixed guideway system:

- (1) is based on the results of an alternatives analysis and preliminary engineering;
- (2) is cost-effective; and
- (3) is supported by an acceptable degree of local financial commitment, including evidence of stable and dependable funding sources to construct, maintain, and operate the system or extension.

In making grants and loans under this section, the Secretary may also consider such other factors as the Secretary deems appropriate. The Secretary shall issue guidelines that set forth the means by which the Secretary will evaluate cost-effectiveness, results of alternatives analysis, and degree of local financial commitment.

Section 303(b) of Public Law 100-17 provides that Section 3(i):

shall not apply to any project-

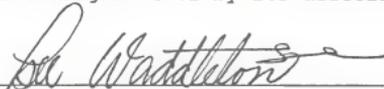
- (1) for which a letter of intent or full funding contract has been issued under section 3(a)(4) of the Urban Mass Transportation Act of 1964 before the date of enactment of this Act; or
- (2) which was in the preliminary engineering, final design, or construction stage as of January 1, 1987.

Since this project was in the preliminary engineering stage as of January 1, 1987, Section 3(i) does not apply to this project and no Section 3(i) determination is required.

Wetland and Floodplain Findings

None of the proposed LRT alignment or its associated facilities lie within a 100 or 500-year floodplain as established by the Federal Emergency Management Agency. Thus, there will be no encroachment on any floodplain nor will the LRT alternative directly or indirectly stimulate floodplain development or increase the risk of flooding.

No wetlands will be affected by the activities proposed along the LRT alignment or by its associated support facilities.



Lee Waddleton, Midwestern Area Director

June 16, 1988

Date

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