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Official Study of Alternatives to Overton Park Expressway

Federal Highway Commissioner Lowell K. Bridwell has in his files a study, completed in 1965, of more than a score of alternatives to the Overton Park expressway route for Interstate Highway 40.

The Press-Scimitar obtained a copy so that its readers may see to the extent the expressway route has been studied and also to show why all officials involved, except the new City Council, have backed the Overton Park route as the most "feasible and prudent."

Text of the study follows:

"During the early years of the Interstate Highway program, the Tennessee Highway Department entered into an agreement with Harland Bartholomew and Associates, consulting engineers, to study the traffic problems and needs in Memphis and Shelby County and came up with a desired network of interstate routes. This was done and the report "Interstate Highway Routes in Memphis and Shelby County" showing the desired corridor locations was published in 1955.

"In 1957, another agreement was entered into with Harland Bartholomew and Associates to provide for preliminary studies, preliminary design and preliminary plans of sections of this Interstate network in Memphis. The east-west I-40 route was included in this agreement. This agreement required preparation of necessary alternate location studies and for refinement of the "Estimate" line.

Many Alternates Considered

"From these studies came the report, 'Alternate Location Studies, FAI 505 Memphis and Shelby County, Tennessee' . . ." This report dealt primarily with various alternate routes that would miss Overton Park by utilizing the L&N Railroad right-of-way to the maximum extent possible. Alternates to the north of the park were considered in lieu of to the south because of the availability of this railroad right-of-way and because lines to the south would be too far removed from the desired line of travel. Locations to the south would also be in more developed areas and higher type areas that would result in a large increase in cost.

"As noted in the FAI-505 Alternate Study report, twenty-five (25) distinct study routes were selected for analysis to determine if it was in the public interest to go through the park or around it. This study consisted of a new location throughout Memphis for I-40 in lieu of utilizing parts of the recommended location and relocating just the section at the park. Alternates of this latter type will be brought out later in this report.

"The 25 study routes were chosen on the basis of careful consideration of a number of factors including:

- "1. Present development
- "2. Location of present neighborhood boundaries
- "3. Position with reference to principal traffic desires
- "4. Relationship of route to present and proposed major street system
- "5. Ability to incorporate necessary interchanges and separations with minimal localized land taking
- "6. Relative lack of circuitry of route
- "7. Relationship of route to remainder of approved Interstate System
- "8. Utilization of maximum portions of the L&N right-of-way
- "9. Relationship of routes to elementary, junior high, and high schools.

Following determination of the study routes, a review of

these routes was made with appropriate city and county representatives. The routes studied are as agreed upon by all the parties concerned.

After considerable study, the original approved location that goes through the park was again recommended because of the following reasons:

- "1. The road user benefits were higher for the original location than for any of the alternates that bypassed the park (\$22,081,600 greater than next closest one).
- "2. A slightly higher construction cost of the original location over some of the alternates could not offset the greater benefits resulting from the original location line as compared to the others.
- "3. Numerous interchange problems (spacing, design, traffic service, etc.) were encountered on most of the alternate locations.
- "4. The alternates did not serve the east-west traffic desires as well.
- "5. Less disruption to industrial area south of L&N Railroad and north of Jackson Avenue.
- "6. The alternates did not fit in with the existing and proposed major street network as well.

"At a public hearing, which was held on March 14, 1961, there was some opposition to the location that goes through the park. The opposition came from private citizens where as approval for the route came from city and county authorities, various planning groups and civic groups as well as individuals and businesses.

"Because of the opposition at the hearing and by letters received after the hearing, the State Highway Department had further alternate studies made in 1964. These studies, one to the south of the park and one to the north, were made in detail.

Three Cost Estimates

"The locations of these alternates, A and B, are as shown on a map (see map this page.) Estimates for these

Depression And Tunnel Costs

Federal Highway Administrator Lowell K. Bidwell has already studied the costs of depressing and tunneling the proposed east-west expressway through Overton Park in answer to beautification ideas.

Present plans for the route call for it to be above ground all the way. Engineers' figures on depressing it five to six feet so that traffic cannot be seen by those in the park, and for tunneling it were listed by Bridwell as follows:

1965 Estimate of Cost	\$17,141,000
"Guess" on cost with depression	\$21,000,000
"Guess" on cost with tunneling	\$43,000,000

PSQ 3-26-68

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lines showed a total cost for right-of-way and construction as follows:

Line A	\$26,289,000	3.80 mi.
Line B	31,325,000	3.65 mi.
Original Line (Overton Pk.)	17,141,000	3.50 mi.

"The large increase in cost is because of very high right-of-way costs. These costs were established in detail and were not quick estimates. Very fine homes are located around the park and this, along with taking more commercial property, is the major reason for the high right-of-way cost. The total net economic advantage, taking into account road user cost, right-of-way and construction cost, for the line through the Park is \$18,118,000 as compared with Line "B" and an advantage of \$18,964,000 as compared with Line "A."

* * *

"Other factors that were in favor of the original line are as follows:

"1. The original line was favorable in regard to displacement of persons and destruction of property. (See figures with chart under map.)

"2. The route through the Park would minimize disruption of the existing street layout and traffic patterns. Overton Park is a large area without street crossings and consequently the streets adjacent to the Park have been important multilane arterial highways. These are as follows: North Parkway-Summer on the north; East Parkway on the east; and Poplar Avenue on the south. Each of these is a thoroughfare of long continuity. Our proposed route through the Park will span East Parkway with an Interchange and will not cross either Poplar or North Parkway. Line "A" would result in crossing and recrossing of Poplar Avenue and require an interchange in the vicinity of the intersection of East Parkway with Poplar Avenue. This situation would not be desirable. Line "B" would cross and recross North Parkway-Summer Avenue, and would cross East Parkway near the intersection of North Parkway-Summer which would be undesirable with respect to interchanging."

First Line Shortest

"3. The original line was shorter than either of the alternates.

"4. More curvature in horizontal alignment was needed to bypass the park.

"As a result of these studies, it was felt, as before, that the location through the park was the most desirable for all concerned and it would be in the public interest to proceed with the design.

"The final design of this section of I-40 was to be done by Buchart-Horn, consulting engineers. To minimize damage to the park, the consultant was requested to make studies of alternate locations within the park and to include in his analysis adequate landscaping and design features that would blend the interstate facility in with the park as much as possible. The studies were made with the following items being considered:

"1. The best location for the crossing of East Parkway at the east end of the park.

"2. Feasibility of using the bus line right-of-way through the Park as part of the Interstate right-of-way.

"3. Best location in relation to the Memphis Zoological Gardens and the south entrance to the Zoo.

"4. A determination of whether the Interstate route should go over or under East Parkway North.

"Three basic lines were studied for this analysis. One line "A" was located along the north boundary of the park adjacent to and south of North Parkway. Line "B" was located along the route of the existing bus roadway through the Park. Line "C" was located slightly south of B on the west end and misses the Zoo more than B. After considerable study, line B was selected because of the following reasons:

"1. It leaves the Zoo area undisturbed whereas line A would cause the zoo to be relocated.

"2. Divides the park along the line of existing physical division which is the bus roadway.

"3. Takes smallest area of forest (12.0 acres as compared to 34.4 acres for "A" and 12.5 for "C").

"4. Takes the smallest total park area (21.8 acres as compared to 27.0 to 33.7 acres for "A" and 22.3 acres for "C").

"4. Takes the smallest total park area (21.8 acres as compared to 27.0 to 33.7 acres for "A" and 22.3 acres for "C").

"5. Leaves a large enough area in the north portion of the Park to be useful.

"6. Has lowest right-of-way cost (\$3,146,000 compared to \$3,784,000 for "A" and \$3,251,000 for "C").

"7. Has lower construction cost than "A" by \$533,000 but is only slightly higher than "B" (\$50,000).

"The above noted acreage was for the study route. As a result of more complete and final design the taking of park property is now 23.2 acres plus 3.2 acres of the existing bus right-of-way which is a dedicated right-of-way.

Overpass to Zoo

"The East Parkway interchange was designed to take as little as possible of the park property. Grade lines and typical sections were established to provide a facility that would blend in with the Park and cause little disturbance to existing facilities. A pedestrian overpass to the Zoo is provided and landscaping plans are being developed by the Consultant to further blend the facility in with the character of the Park.

"In summary, a total of twenty-nine (29) alternate locations were studied for the I-40 route. As a result of each study, it was shown that the location going through the Park served traffic better, and higher road user benefits, better design, less right-of-way damages, fits into the existing and proposed major street system better. While incorporating these features, the design of the section through the Park was being developed with special attention toward doing everything possible to make the facility blend in with the Park and have as little as possible disruptive effect on the Park."

\$3.5 Million Loss

If Overton Park were abandoned as the route of the east-west expressway, these would be the losses, as estimated by Federal Highway Commissioner Lowell K. Bridwell's staff:

City of Memphis	
(For rights-of-way through park)	\$2 Million
Engineering already done	
and rights-of-way	\$1.5 Million

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