

# Chicago Transit Authority

## Red Line Extension Alternatives Analysis Study

### Screen 1 Public Involvement Responses to Public Comments and Questions

15 July 2008

Written questions and comments regarding the Red Line Extension Alternatives Analysis Study were submitted by a variety of individuals and groups from throughout the Chicago region at the study's Screen 1 Public Meetings held on April 10 and 11, 2007. In addition, public comments and questions on Screen 1 were submitted directly to the Chicago Transit Authority (CTA) via e-mail and postal mail through May 11, 2007.

All of the questions and comments have been collected and compiled to provide a comprehensive review of the issues raised along with CTA's responses. Every question, comment, and suggestion, submitted during the public comment period has been compiled in the "Outreach Comment Database" (see separate document). Each question has been recorded verbatim and assigned a number that corresponds with the answers provided in this document, ensuring every question or comment submitted has been reviewed and answered or acknowledged. Collectively, the public comments and preferences will be considered in the evaluation of alternatives and concepts introduced through the public involvement process and may be evaluated and/or reflected in advancing alternatives as appropriate.

Many of the comments received were very similar in nature. As a result, similar comments and their responses have been grouped by topic and "General Comment" heading below to avoid duplicative responses. Questions or comments requiring individual or specific responses are also included below along with unique responses. In order to understand some terms used in the Comments and Responses, it may be necessary to review the original Screen 1 presentation materials which are posted on CTA's Web site [www.transitchicago.com](http://www.transitchicago.com).

The list below shows the index of topics covered in the report, along with the number of comments received for each. Because comments often refer to more than one topic, the numbers associated with each do not equal the total number of comments received.

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## **FTA's Alternatives Analysis Process**

### **General Comment:**

Please Describe the Federal Transit Administration's (FTA) Alternatives Analysis process and its components.

### **Pertains to specific comments:**

9, 38, 54, 72, 77, 98, 158, 159, 162, 163, 167, 178, 180

### **Response to Overall Category Comment:**

Alternatives Analysis has for over 25 years been a key part of FTA's decision-making process for awarding grant funding to support fixed guideway transit projects. Federal law requires that projects seeking grant funding from FTA's New Starts program be based upon the results of an alternatives analysis study and subsequent preliminary engineering. Alternatives analysis has also been a part of established transportation planning practice in the United States for several decades. At its core, alternatives analysis is about supporting local decision-making. An effective alternatives analysis answers the questions: What are the transportation problems in a corridor? What are their underlying causes? What are viable options for addressing these problems? What are their costs? What are their benefits?<sup>1</sup>

The Red Line Extension project is currently conducting its Alternatives Analysis study. The Red Line Extension Alternatives Analysis study will have three steps or "screens." Screen 1, which has just been completed and presented to the public, has issued preliminary findings regarding corridors, alignments, and vehicle technologies that should be advanced to Screen 2 for further analysis. These findings have determined 3 vehicle technologies, 3 potential corridors and 3 alignments that should be studied further. Screens 2 and 3 will further refine these corridors, technologies and alignments. In each successive screen, the potential locations, vehicles and alignments will be discussed in more detail, costs and ridership will be projected and operational questions considered. Ultimately, this process will result in the selection of a Locally Preferred Alternative (LPA) which, with FTA approval, will subsequently undergo environmental analysis and preliminary engineering.

A detailed description of the formal FTA Alternatives Analysis process is available at the Federal Transit Administration's web site: [http://www.fta.dot.gov/16363\\_ENG\\_HTML.htm](http://www.fta.dot.gov/16363_ENG_HTML.htm) .

### **Other Specific Comments Noted on this Topic:**

#### **Comment:**

81: Given that PB did a feasibility study for CDOT that came to most of the conclusions we've heard tonight, what is new in this AA?

#### **Response:**

The feasibility study that was conducted for CDOT served as a starting point to build the "Universe of Alternatives" for the Red Line Extension's Alternatives Analysis. The results presented in Screen 1 represent a shortlist of alternatives that merit further consideration in the alternatives analysis study. In subsequent screens, increasingly rigorous evaluation criteria will be applied to the remaining alternatives with the objective of identifying a Locally Preferred Alternative. Unlike a feasibility study, a formal alternatives analysis (AA) must follow guidelines as prescribed by the Federal Transit Administration. The AA considers additional transit alternatives not considered during the feasibility study introduces public involvement in the planning process and represents the first formal step in the application for New Starts funding.

#### **Comment:**

85: What is the relationship of Parsons-Brinkerhoff (PB) to CTA? How committed is PB to the CTA's strategic plan?

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<sup>1</sup> "Additional Guidance on Local Initiation of Alternatives Analysis Planning Studies." Federal Transit Authority Web site.

**Response:**

PB is a paid consultant to the CTA, performing the technical services for the Red Line Extension Alternatives Analysis. CTA relies on transportation consultants like PB to assist in the completion of project analysis and deliverables for special projects for which it is more cost effective to contract for the necessary expertise for limited time rather than adding to CTA planning staff. PB is a widely recognized consulting firm that participated in a competitive bidding process against other consulting companies to assist the CTA with the completion of the Red Line Extension Alternatives Analysis. The CTA awarded the contract to PB due to their technical skills and extensive experience performing similar work. The project team assisting with the Red Line Extension is local to Chicago and familiar with the city, the study area and its related transportation needs. CTA has oversight on all work completed by PB and the CTA and PB are partners in the Red Line Extension Alternatives Analysis; both parties are committed to the goals and success of the project.

**2. Relationship of Red Line Extension to Other Proposed Transit Projects**

**General Comment:**

Are other transit projects being considered by CTA, and if so, what is the relationship between the Red Line Extension and these other projects?

**Pertains to specific comments:**

94, 102, 126, 158, 178, 180

**Response:**

Every five to six years, the United States Congress enacts legislation that authorizes federal funding for highway, transit, motor carrier, safety, and research programs across the country. This federal support represents the primary source of capital funding for CTA and other transit agencies throughout the U.S. The current legislation, known as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users), authorizes the federal transit and highway programs through 2009. President Bush signed the act into law on August 10, 2005.

The SAFETEA-LU legislation authorized CTA to seek federal New Starts grant support for five new rail lines or line extensions including: the Red Line Extension to 130th Street; the Orange Line Extension to Ford City; the Yellow Line Extension to Old Orchard; the Circle Line; and the Ogden-Carroll-Navy Pier Transitway. In order to qualify for New Starts funding, CTA is required to perform comprehensive Alternatives Analysis studies for each. Alternatives Analysis studies for all five projects are currently underway following the same federally mandated process as the Red Line Extension study, but addressing the unique transportation needs of their respective study areas.

A key objective of the Federal Transit Administration's Alternatives Analysis process is to measure all transit projects from across the nation by the same set of standards. This process ranks projects based on this measurement and not on where they are located. In this way, the benefits and costs of a project can be objectively measured in comparison to all others. Acknowledging that each project has a unique Purpose and Need, the process allows multiple projects from the same region to be rated highly. It is not unusual for a large region such as Chicago to seek approval for several major transit initiatives at the same time. In the late 1990s, CTA won New Starts funding approval for both the Cermak (Douglas) Branch reconstruction and the Brown Line capacity expansion project at the same time. Metra has also received New Starts funding for multiple projects at the same time. New York City in 2005 had two multi-billion dollar transit projects approved for New Starts funding.

In order to qualify for federal funding, regional transportation projects must also be included in an official Regional Transportation Plan. Chicago's Regional Transportation Plan is prepared by the Chicago Metropolitan Agency for Planning<sup>2</sup> (CMAP) with input from local and state government agencies

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<sup>2</sup> CMAP was created in 2006 by the merger of the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC).

(including CTA), community organizations, and the general public. The plan is updated regularly and the Red Line Extension project is included in the plan. The most recent comprehensive update of the 2030 Regional Transportation Plan (RTP) was prepared in 2006 and involved extensive public outreach meetings throughout the region in May and June of 2006. A technical update of the 2030 RTP was also completed earlier this year. Additional information on this plan can be found on CMAP's "Shared Path 2030" Web site [www.sp2030.com](http://www.sp2030.com).

### **3. Relationship between Far South Sub-Regional Study and Red Line Extension Project**

#### **General Comment:**

We have questions relating to the Far South Sub-Regional Study and its impact to the Red Line Extension Project.

#### **Pertains to specific comments:**

79, 80

#### **Response to Overall Category Comment:**

CTA's Far South Sub-regional Study seeks to better meet transportation needs in a relatively short timeframe (approximately one to two years) through potential restructuring of existing bus routes and/or creation of new bus services. Guided by comments voiced by the local communities, the objective of the sub-regional study is to implement solutions that can address transit needs in a shorter time frame. The Red Line Extension project not only examines existing conditions, but it also accounts for what is anticipated to be problems over a longer planning horizon, out to year 2030. As a result, the scope of the Red Line Extension project is focused on a more permanent long-term solution that can not only solve the study area's current day problems, but can mitigate growing transportation problems projected for future years.

### **4. Overall Red Line Extension Project Schedule and Timeline, Purpose and Need**

#### **General Comment:**

What is the timeline of the project? How long will it take from design until operation?

#### **Pertains to specific comments:**

70, 77, 98, 121, 125, 126, 139, 155, 157, 159, 160, 162, 163, 176

#### **Response to Overall Category Comment:**

The FTA New Start grant program requires conceptual transit project proposals to proceed through a formal process of planning, design, and construction. Upon completion of this process, the project is ready for operation. The process involves five formal steps: Alternatives Analysis (AA); Environmental Impact Statement (EIS); Preliminary Engineering (PE); Final Design (FD); and Construction. Each of these steps typically takes 2-3 years to complete. Initiation of each step is also contingent upon continued availability of federal and local funding, the timing of which will also affect the overall project schedule. For highly complex projects the Final Design and Construction steps take longer, particularly if construction is implemented in sequential phases rather than all at once.

In the Alternatives Analysis step, the project's purpose and need is identified, alternatives to address the purpose and need are developed and evaluated, comprehensive and on-going public involvement is initiated, and a Locally Preferred Alternative (LPA) is determined. The Red Line Extension project's "purpose and need" is to improve transportation access and enhance opportunity for economic development within the study area. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95<sup>th</sup> Street Red Line station; reduce lengthy

bus trip times to access the 95<sup>th</sup> Street Red Line station from neighborhoods south of 95<sup>th</sup> Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95<sup>th</sup> Street is intended to stimulate economic development and enhance job opportunities by improving access to, within, and beyond the study area and shortening transit travel times through faster and more direct transit service.

The Red Line Extension project is currently in the Alternatives Analysis phase. The next step is preparation of an Environmental Impact Statement (EIS). In this step, potential environmental, financial and economic impacts of each alternative are identified, potential environmental impacts of the LPA are analyzed; environmental mitigation strategies are developed, public hearings are conducted to receive input, and a formal Record of Decision is received from the FTA upon successful completion. The Preliminary Engineering step involves engineering effort to support the EIS (30% design level), development of project phasing and construction staging, and feasibility review of mitigation approaches for construction or operational impacts. In the Final Design step the engineering design started in PE is completed, capital and operating cost estimates are updated and construction drawings are prepared, and a Full Funding Grant Agreement is obtained from the FTA upon successful completion. The Construction step commences when federal and local matching funds are secured.

The current Red Line Extension Alternatives Analysis study is expected to conduct public involvement meetings for Screens 2 and 3 in 2008. Identification of an LPA and completion of the study is anticipated in 2008.

## **5. Red Line Extension Study Area**

### **General Comments:**

How large is the project study area? How were the boundaries of the study area determined?

### **Pertains to specific comments:**

9, 58, 70, 83, 133

### **Response to Overall Category Comment:**

A key component of the Alternatives Analysis process is specifying a study area of a definite size for the project. The goal is to establish a specific area and to define the transit challenges and opportunities within this particular space, so that potential solutions can be measured against these defined challenges. Keeping the study area focused also helps to avoid confusion between multiple unique transit project proposals within the same city or region. Too large a study area can make it too difficult to determine accurately whether the potential solutions effectively address the identified transportation needs.

The Red Line Extension study area is bounded by the current terminus of the existing CTA Red Line at 95th Street (9500S) on the north, the Little Calumet River (approximately 13000S) on the south, Ashland Avenue (1600W) on the west, and Stony Island Avenue (1600E) on the east. The study area is four (4) miles east-to-west and approximately five (5) miles north-to-south. These boundaries define an area with numerous opportunities for improving transit connections and growing transit market share. A key goal of the Red Line Extension is to improve transportation access and enhance opportunities for economic development. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95<sup>th</sup> Street Red Line station; reduce lengthy bus trip times to access the 95<sup>th</sup> Street Red Line station from neighborhoods south of 95<sup>th</sup> Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95<sup>th</sup> Street is intended to stimulate economic development and enhance job opportunities by improving access and shortening transit travel times through faster and more direct transit service. The study area boundaries encompass the areas that would benefit most directly from such transit service improvements.

For more information on the details of the study area population, please see the Screen 1 report document, which is available for download at the CTA's website [www.chicagotransit.com](http://www.chicagotransit.com) as noted in the introduction to this document.

**Other Specific Comments Noted on this Topic:**

**Comment:**

We have questions relating to the "Gray Line" proposal and its consideration in this Alternatives Analysis.

**Pertains to specific comments:**

55, 56, 57, 209

**Response:**

The "Gray Line" proposal calls for operational changes to increase service frequency on the Metra Electric District Line and improve CTA connections to this facility as well as fare integration between regional transit services.

Opportunities for changes or improvements to the existing Metra commuter rail service and CTA bus services within the corridor will be evaluated in detail during both the Screen 2 and 3 processes. These types of "lower capital cost investment" opportunities will be considered within the no-build and TSM alternatives described in Topic 6, as well as in conjunction and coordination with other more capital intensive options. Additionally, CTA is focusing attention on identifying possibilities to enhance intermodal interchange on the various alignments. See Topic 16 for additional information about connections with existing regional transit services.

A proposed "Gray Line" meets some of the needs of the study area, such as reducing the lengthy transit commute times experienced by many residents of the study area. However, it will not be included as a build alternative in the current Alternatives Analysis because it does not comprehensively address all of the needs of the project, including alleviating the bus and passenger congestion at 95<sup>th</sup> Street Red Line station, reducing travel times of passengers that transfer from bus to CTA rail to best access their destination, or stimulating economic development in the region. Additionally, as noted in Topic 9, commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail).

**Comment:**

7: If extended again, will this line serve the Gary Airport and extend onto South Bend, Indiana?

**Response:**

The scope of this Alternatives Analysis study is strictly tied to the project's purpose and need (see Topic Area 4) and the project's defined study area (above). While consideration can be made to preserve other future opportunities for expansion, any initiative to further expand service to Gary Airport and South Bend, Indiana would merit further investigation and its own planning study.

## **6. Evaluation Criteria Used in the Alternatives Analysis Study**

**General Comment:**

How are screening criteria applied throughout the analysis to advance the alternatives being evaluated?

**Pertains to specific comments:**

18, 38, 48, 53, 54, 61, 90, 145, 167

**Response to Overall Category Comment:**

A three phase evaluation methodology is being used for the Red Line Extension Alternatives Analysis. With each screen increasingly detailed and comprehensive evaluation criteria are applied to a decreasing number of alignment alternatives that have been identified as the best potential transportation

investments. Each step in the evaluation process is thus designed to increase the level of detailed planning and engineering analysis on progressively fewer alternatives.

In Screen 1, the Alternatives Analysis began with identifying a “universe” of alternatives—all of the conceivable transit service improvements that may address the purpose and need for the project within the study area. These alternatives included a wide array of transit vehicle technologies, six potential corridors through the study area, and three possibilities for vertical profiles (above ground, below ground, and at ground level). This universe of alternatives was evaluated in Screen 1 to identify a shortlist of specific technologies, corridors, and profiles that may best satisfy the project’s goals and objectives.

In Screen 1, the transit vehicle technologies were evaluated for study area suitability according to the length of commute, typical station spacing, operating speed and system applicability. Simultaneously, the corridors through the study area were evaluated according to social factors (land use, neighborhoods and communities, and population access) and transportation factors (system usage and accessibility). Next, in combination with possible vertical profiles (subway, trench, at-grade, or elevated), the corridors and technologies that were found to be suitable to the study area were then evaluated according to general environmental, transportation, and economic parameters. These general evaluation criteria were used to eliminate alternatives that were not capable of meeting the project’s goals.

For more information on the Screen 1 evaluation criteria or evaluation results of each alternative, please see the detailed summaries available for review on the Screen 1 presentation boards, which are available for download at the CTA’s website [www.chicagotransit.com](http://www.chicagotransit.com) as noted in the introduction to this document.

**Other Specific Comments Noted on this Topic:**

**Comment:**

3: Would like more information on no-build and baseline?

**Response:**

The No-Build Alternative incorporates only those transportation improvements that are included in the 2030 Regional Transportation Plan for which need, commitment, financing, and public and political support are identified and are reasonably expected to be implemented. The second alternative that is developed for consideration is called the Transportation System Management (TSM) Alternative and is defined as the best that can be done for improving mobility without constructing a new transit guideway. The TSM Alternative can include applicable transportation system upgrades such as intersection improvements, bus route restructuring, shortened bus headways, express and limited-stop service, signalization improvements, and timed-transfer operations.

The Federal Transit Administration must approve the definition of the No-Build and TSM Alternatives; however, only one of these alternatives advances as the Baseline Alternative. Because the Baseline Alternative should represent the best that can be done to improve transit service in the study area without major capital investment in new infrastructure, it is often the TSM Alternative that is used as the Baseline Alternative. The Baseline Alternative should be designed to address identified transportation needs in the Red Line Extension study area and demonstrate the extent to which these problems can be solved without a proposed major capital investment.

The definitions and selection of the No-Build and TSM Alternatives – and the alternative chosen as the Baseline Alternative – occur in the next stage of the project, Screen 2. At that time, definition of the specifics of these alternatives will be presented to the public in one of the future project public forums. Additionally, measured benefits from the alignment, mode and vertical profile alternatives (or build alternatives) that have advanced to Screen 2 will be compared with the FTA-required Baseline Alternative. This comparative analysis is a key activity that the FTA uses in their annual rating of New Starts transit projects.

## **7. Alignments (Corridors) Analyzed**

**General Comment for UPRR Corridor:**



There is a strong level of support within the community for extending CTA Red Line service along the Union Pacific Railway corridor.

**Pertains to specific comments:**

1, 4, 15, 16, 17, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 44, 45, 64, 69, 77, 95, 107, 110, 111, 112, 113, 114, 115, 116, 119, 183, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 200, 201, 203, 206, 208

**General Comment for Michigan Avenue / Halsted Street Corridors:**

There is support within the community for extending CTA Red Line service along the Michigan Avenue and/or Halsted Street corridors.

**Pertains to specific comments:**

41, 46, 68, 109, 123, 129, 134, 135, 136, 198

**General Comment for Various Corridors Analyzed:**

There is support for other corridors and/or please provide clarification on the various corridors considered.

**Pertains to specific comments:**

8, 14, 22, 43, 48, 53, 60, 62, 63, 67, 78, 103, 121, 122, 127, 128, 133, 149, 175, 184, 199, 204, 205

**Response to Overall Category Comment:**

Several recommendations and preferences for potential alignment extensions were provided on the question/comment cards submitted by the public. Many are derivations of the alternatives already defined. Others significantly differ from the alternatives proposed by the CTA. Staff will review all suggestions and incorporate in the analysis those that offer merit for further consideration. Suggested alignments that are predominantly or entirely outside the defined study area will not be considered.

Regarding the defined alternatives, nine (9) different north/south corridors were defined and reviewed as part of the universe of alternatives. Collectively, these alternatives encompass the entire study area. From west-to-east across the study area alternatives include: 1) I-57 Expressway Corridor that, similar to the existing Red Line would be an extension of the rapid transit service in the median of the expressway. 2) The next corridor is Halsted, one of the major north/south arterial streets in the study area. Halsted is a wide street with four lanes of traffic, parking and a median. The corridor attracts a large amount of activity and includes a concentration of retail stores. Several local bus routes currently use Halsted. 3) The Union Pacific (UP) Railroad corridor is the freight railroad corridor and then continues south-east parallel to the Bishop-Ford/130th Street area. This alternative would serve the center of the study area and then shift to the southeast. 4)Wentworth is predominantly a residential street, that narrows significantly towards the south. 5) The State Street alternative is also a narrow street that is mostly residential. The latter two alternatives are not currently served by bus service.

Continuing to the east is: 6) Michigan Avenue, which is a major commercial corridor through the heart of the study area with several local bus services operating on it; towards the south end (south of 120<sup>th</sup>) the land use becomes residential. 7) King Drive is the next corridor to the east. King Drive has bus service over a portion of it, and much of the surrounding land use is residential; the street ends at 115<sup>th</sup> Street. 8) Cottage Grove/Metra Electric alternative would extend east along 95<sup>th</sup> Street and then generally operate parallel to the Metra Electric service (along Cottage Grove) and then head to the southeast, adjacent to the South Shore Line, ending in the vicinity of the Bishop Ford and 130th Street. The ninth (9) and last corridor is the I-94 - Bishop Ford alternative. This corridor has been studied previously and would use the expressway median from 95th Street and continue down I-94. This is a low density non-residential corridor over the majority of its length.

**Other Specific Comments on this Topic:**

**Comment:**

42. Why don't you reconsider taking the Red Line Extension down the Bishop Ford Expressway and reroute buses into station?



**Response:**

The ninth alternative considered does propose use of the Bishop Ford expressway median from 95th street to 130<sup>th</sup> Street. Optimizing existing, and potentially expanding, transit service, including feeder bus and suburban bus services, are important considerations in developing this and other alternatives being studied. One concern with this alternative is that it is somewhat removed from the population centers in the study area. While it is true that feeder buses could link the population centers to the new stations, travel time reductions from reduced transfer activity is a key purpose of this extension. All of these factors will be considered in greater detail as the Alternatives Analysis advances.

## **8. Vertical Profiles Analyzed**

**General Comment:**

Please provide additional information on the issues involved with elevated, at-grade, trench and underground alignments.

**Pertains to specific comments:**

27, 41, 66, 110, 113, 165, 169

**Response to Overall Category Comment:**

Four alignments (or profiles) are possible for any transit service: below ground (subway), open cut (trench), above ground (elevated), or at-grade (street level). The current CTA system features trains that operate on each of the four alignments at various points within the rail system. Following modern transit industry practice, CTA-compatible heavy rail will only be considered in elevated, trench, or below ground alignments in the Red Line Extension analysis (not at street level).<sup>3</sup> Bus rapid transit will only be considered on street level, because the benefits of lower construction costs could not be realized if it used an elevated structure or subway alignment like heavy rail.

In Screen 1, vertical profiles for corridors and transit technologies (rail, bus, etc.) were evaluated according to general environmental, transportation, and economic parameters. These general evaluation criteria were used to eliminate alternatives that were not capable of meeting the project's goals. See Topic Area 6 for more information. Preferences for potential vertical profiles that were provided on the question/comment cards submitted by the public will be reviewed by staff and profiles that offer merit will be incorporated into the analysis for further consideration.

**Other Specific Comments on this Topic:**

**Comment:**

23. The UP option looks good. Would the CTA build an elevated line beside the tracks, as they did with the Orange Line, or is the UP line abandoned and they could simply build on the embankment?

**Response:**

For the Red Line Extension Alternative Analysis, elevated and trench rail profiles are being considered for the UP corridor alternative.

The UP Line is an active rail line and is an important corridor linking Chicago and the south. This freight line is at-grade from the north end of the study area to State Street (south of 115<sup>th</sup>) and then elevated through the center of Roseland. It returns to an at-grade alignment after crossing over the Metra Electric/Canadian National rail lines around 119<sup>th</sup> Street. The UP Line is also being evaluated by Metra as a possible commuter rail route for the South-East Service, which is in its own Alternatives Analysis planning process. CTA will coordinate with both Metra and UP to accommodate the existing freight line and any potential transit improvements.

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<sup>3</sup> Although there are section of CTA's Brown, Pink, and Purple heavy rail transit lines that currently operate at-grade, this characteristic is due to the design standards that were in place at the time these lines were built nearly 100 years ago. Modern design practice for newly-built heavy rail transit lines calls for complete grade separation to promote faster, safer, and more reliable service for transit customers.

**Comment:**

59. Are you considering elevated trains for the Halsted and Michigan models?

**Response:**

In the case of the Halsted and Michigan alignments, both subway and elevated rail profiles continue to be analyzed.

## **9. Transit Vehicle Technologies (Modes) Analyzed**

### **General Comment for Heavy Rail Rapid Transit:**

There is support within the community for Heavy Rail Rapid Transit.

### **Pertains to Specific Comments:**

1, 16, 24, 27, 41, 61, 65, 66, 68, 93

### **General Comment for Various Transit Vehicle Technologies Analyzed:**

There is support for other vehicle technologies and/or please provide clarification on the various modes considered.

### **Pertains to specific comments:**

44, 73, 120, 136

### **Response to Overall Category Comment:**

Several recommendations and preferences for modes were provided on the question/comment cards submitted by the public. Staff will review all suggestions and incorporate in the analysis those that offer merit for further consideration.

During Phase 1, eleven (11) transit technologies were evaluated applying a series of screening factors including vehicle operating speed, station spacing requirements, capacity, reliability, and daily use in revenue transit operations. Preliminary findings for Screen 1 identified two technologies to advance to more detailed evaluation -- Bus Rapid Transit, or BRT, and Heavy Rail Transit, or HRT -- the existing type of Red Line technology -- to be carried forward. The other nine technologies were deemed not as well suited to this study area due to factors like the operating speed and other compatibility issues. Bus Rapid Transit will be considered only as an at-grade application or in-street operation. For Heavy Rail Transit, three different options in terms of profile will be considered including; elevated, in-trench and underground (or subway). HRT and BRT technologies will now be evaluated within the operating context of the alternatives being carried forward.

### **Other Specific Comments on this Topic:**

#### **Comments:**

- 49. Why was commuter rail rejected?
- 50. Why was a viable commuter rail alternative rejected?

#### **Response:**

In Screen 1, the transit vehicle technologies were evaluated for study area suitability according to the length of commute, typical station spacing, operating speed and system applicability. Commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail). Commuter rail is typically used for longer distance trips, such as from the suburbs to the central city, and station spacing is usually three to seven miles apart. Meanwhile, the study area for the Red Line Extension is four (4) miles east-to-west and approximately five (5) miles north-to-south. Preferred modes in the study area would need to have closely spaced stations to facilitate trip making both within and beyond the study area. Additionally, the frequency of service required to effectively serve short distance trips anticipated in this study area is not conducive to commuter rail. Commuter rail service

tends to be oriented toward peak period travel; in contrast, the technology selected to serve the study area demand would be intended for operation seven days per week and up to 24-hours per day.

**Comment:**

100. In order to save money, can the rapid bus transit be made possible for the corridors listed instead of rail?

**Response:**

Bus Rapid Transit (BRT) along with Heavy Rail Transit (HRT) are the two technologies that based upon the analysis will be brought forward into the next planning and evaluation phase. While BRT can utilize separate lanes, station construction, special signalization, and other infrastructure, BRT within this study will be confined to at-grade (or in-street) operations. This reduces the infrastructure requirements -- and costs -- often associated with BRT as confirmed by several of the BRT services in operation throughout the U.S. The planning process is not yet in an advanced stage that would support any statement regarding capital or operating costs.

Screen 1 findings recommend BRT alternatives to operate on Halsted and Michigan at-grade. Heavy rail is recommended to be carried forward to further evaluate its operation along the Halsted and Michigan Avenue corridors in either subway or elevated. For the UP Railroad, operating along an elevated right-of-way or in trench will be considered. Many factors in addition to cost will be evaluated in the consideration and eventual selection of the mode best suited for the projected level of ridership, including the appropriateness for the corridor, environmental compatibility, traffic impacts, safety, and visual impacts. Positive impacts will be identified as well, such as the anticipated positive impacts on community and commercial development and expanded employment opportunity.

**Comments:**

101. What impact would hybrid busing bring to the community? Cost?

141. What source of fuel will be used to power the selected technology?

**Response:**

The planning process has not yet advanced to a stage that would support any statement regarding the impacts of various propulsion system alternatives.

## **10. Proposed Red Line Extension Stations**

**General Comment:**

Where would stations on the proposed Red Line Extension be located?

**Pertains to Specific Comments:**

3, 19, 26, 61, 108, 166

**Response to Overall Category Comment:**

Prospective station locations for advancing BRT and HRT alternatives will be reviewed as part of Screen 2.

Physical constraints, the ability to transfer between lines, cost, property acquisition and other critical station design issues will all be addressed in the preparation of the federally required Environmental Impact Statement (EIS). The EIS process is a requirement for federal funding and mandates that any negative environmental impacts—including impacts upon the built environment—must be mitigated in order to receive federal approval. The EIS process begins after the Alternatives Analysis process ends and an LPA is determined.

## **11. Proposed Red Line Extension Operations**

### **General Comment:**

How will the service operate? Will the trains run 24 hours and what will be the fare?

### **Pertains to Specific Comments:**

15, 46, 92, 103, 120, 165, 170

### **Response to Overall Category Comment:**

At this time, specific operating hours, fares, and other operational issues of the Red Line Extension have not been determined. As a part of Screen 3, FTA guidance requires CTA to conduct additional analysis of ridership, travel times, and cost-effectiveness ratings (cost per travel time savings) on the proposed routes and transit technologies. Until these additional reviews have been made, operating recommendations will not be developed. It is expected, however, that any new CTA service will be generally consistent with current CTA operating practices and seek to provide customers with safe, frequent and reliable travel options. Any new CTA service and associated facilities recommended by this study would be consistent with the Americans with Disabilities Act (ADA) requirements.

## **12. Potential Property Acquisition and Impacts**

### **General Comment:**

Alternatives with less residential displacement are preferred. How will you handle displaced residents due to property acquisition?

### **Pertains to Specific Comments:**

4, 18, 24, 90, 91, 127, 131, 149, 150, 151, 153, 164

### **Response to Overall Category Comment:**

At this early stage in the Alternatives Analysis study CTA cannot determine how much private property, if any, would need to be acquired in order to construct and operate the selected alternative. A final determination on the vehicle technology, alignment and vertical profile will need to be established before potential property impacts can be assessed. Potential property impacts are determined in detail as a part of the Preliminary Engineering (PE) phase of project development, which proceeds concurrently with the preparation of the Environmental Impact Statement (EIS). The EIS process is a requirement for federal funding and mandates that any negative environmental impacts—including impacts upon private property—must be mitigated in order to receive federal approval. The EIS and PE processes both begin after the Alternatives Analysis process ends and an LPA is determined. Public acquisition of private property is governed by federal and local laws. In accordance with these laws, affected property owners would be compensated for their properties based on fair market values and can be provided relocation costs. See Topic 18 for additional details about potential economic and environmental impacts of the Red Line Extension project.

## **13. Alternatives Analysis Public Involvement Process and Format**

### **General Comment:**

Does the public involvement process for the Red Line Extension Alternatives Analysis study allow individuals to have a voice in the decision in the corridor selection? Is all the information (evaluation criteria, etc.) available to the public?

**Pertains to Specific Comments:**

5, 54, 82, 87, 96, 97, 99, 104, 105, 106, 143, 145, 146, 147, 148, 168, 174, 179

**Response to Overall Category Comment:**

Public involvement is a key component of this process. The outreach has already begun including a community stakeholders meeting with representatives and leaders of various community groups throughout the study area. We also have met with all the elected officials and reached out to all the aldermen representing the Red Line Extension study area and adjacent areas. Many of the state representatives and senators from the area have been given a briefing on this presentation. Meetings also included faith-based organizations, other community organizations, and city and state agencies such as the Chicago Department of Transportation, Illinois Department of Transportation, Regional Transportation Authority, Metra, and Pace. If your organization would like to be included in the stakeholder's meetings please contact Darud Akbar, CTA Government and Community Relations at [dakbar@transitchicago.com](mailto:dakbar@transitchicago.com).

The public involvement process for the Red Line Extension Alternatives Analysis study also includes a total of six public involvement meetings, two each at the conclusion of the Screen 1, Screen 2, and Screen 3/LPA analyses. The Screen 1 meetings were held at Chicago State University and West Pullman Public Library. Meeting locations for Screen 2 and Screen 3 have not yet been determined nor have the dates. The meeting locations must be close to public transit and accessible to people with disabilities. Suggestions for meeting locations may be sent to Darud Akbar, CTA Government and Community Relations at [dakbar@transitchicago.com](mailto:dakbar@transitchicago.com).

Meetings are announced through ads in neighborhood newspapers and publications as well as public alerts on CTA trains and buses, at rail stations, on the CTA Web site, and distributed to print and broadcast media via news releases.

The format of the meetings included groups of presentation boards containing detailed information on each area of analysis in the study, where individual conversations between the public and project staff knowledgeable about that area of analysis could take place. The public meetings also included a community presentation that provided information in a slideshow format led by the study's project managers (available at [www.transitchicago.com](http://www.transitchicago.com)). Meeting attendees were requested to submit questions and comments in a written format. CTA's goal in emphasizing written questions and comments has been to ensure everyone's thoughts are collected and reviewed, rather than only those individuals who might choose to speak publicly at a meeting or monopolize available time thus precluding others from voicing their questions and comments. The intent has been for everyone to have an equal opportunity to participate in the process. In addition, by reviewing and responding to similarly worded questions, the presenters efficiently addressed multiple individuals at once and avoided repetition during the public meetings. CTA and the consultant team staff have also been available to answer any individual questions on a one-on-one basis following the general question and answer period at each meeting.

The written comments received at the public meetings and other detailed comments submitted subsequently are being answered individually for the record in the format of this document, which will be made available publicly on the CTA Web site, by email to public meeting participants, and in hard copy by written request. All of the comment cards and other written communications (primarily emails) will collectively become part of the evaluation process and will be submitted to the Federal Transit Administration as a part of the official documentation for the Alternatives Analysis study.

**Other Specific Comments on this Topic:**

**Comment:**

10. Will representatives come out to groups to provide a presentation?

**Response:**

Presentations can be scheduled by contacting Darud Akbar, CTA Government and Community Relations at [dakbar@transitchicago.com](mailto:dakbar@transitchicago.com).

**14. Funding of Red Line Extension Construction and Operations**

**General Comment:**

How will the construction and operation of the Red Line Extension be funded? How much funding for this project has already been received by CTA? How much with the project cost?

**Pertains to Specific Comments:**

12, 13, 53, 87, 144, 156, 161, 163

**Response:**

The Red Line Extension will seek approval and funding for construction from the federal government through the Federal Transit Administration's "New Starts" grant program. This program provides funding for major public transit infrastructure projects throughout the U.S. For projects that ultimately receive a "Full Funding Grant Agreement," the federal government typically provides 50% or more of the project's capital costs. State and local funds comprise the remainder. Other sources may also be used to provide funding for the project, but the federal New Starts grant program is the program most capable of supporting transit projects of this nature. Securing a New Starts grant requires the project to be evaluated as part of a nationally competitive process.

To secure the federal New Starts funding, matching funds of at least 20% are required from non-federal (i.e., state and local) sources. From 2000 through 2004, the Chicago region's matching funds came from the State of Illinois through the Illinois FIRST legislation. The Illinois FIRST legislation expired on June 30, 2004. Since that time, CTA has been working with the Illinois Legislature to enact a replacement to Illinois FIRST and ensure that all future federal transit funds available to the Chicago region can be utilized.

Estimates of the Red Line Extension capital costs will depend on route and alignment and will be prepared during the second and third analysis phases, or Screens. Once the line is built and operational, the funds to operate the system will come from fare revenue as well as local and state funding sources, consistent with the funding mechanisms that support CTA's current bus and rail transit services.

At the present time, CTA only has sufficient funding to initiate this Alternatives Analysis study; it has received no federal funding for completing the remaining steps involved in planning, designing, and constructing the Red Line Extension project. Although the project was listed as "eligible" to receive federal funding in the SAFETEA-LU legislation of 2005 (see Topic 4), no funding for environmental analysis, preliminary engineering, final design, or construction of this project has been appropriated by the U.S. Congress (nor the Illinois State Legislature) at this time.

**Other Specific Comments on this Topic:**

**Comment:**

11. If non-federal funds were used, would this project move faster?

**Response:**

It is possible to build a major transit improvement such as the Red Line Extension without using any federal funding. Due to the high cost of this type of project and the limited availability of non-federal (i.e.,

state and local) funds seeking federal support is desirable. If sufficient state and local funds were identified so that no federal funding would be needed, there may be some time savings from avoiding federal requirements. This time savings may be limited – the project development process would still include similar steps. The Alternatives Analysis step remains a prudent planning process to ensure that the proposed public investment is best suited to addressing the identified purpose and need. Environmental studies will still be required per state and local laws, and the duration of design and construction steps would not change significantly due to a change in funding sources.

## **15. Potential Red Line Extension Impacts on Existing CTA Services**

### **General Comment:**

How would the Red Line Extension impact current CTA services, both during construction of the new service and ultimately during operation of the new service?

### **Pertains to specific comments:**

88, 94, 123, 124, 137

### **Response to Overall Category Comment:**

While the specifics of construction staging and the exact route of the Red Line Extension have not yet been established, a general guideline is that impacts to existing transit services must be minimized during construction. Bus reroutes are possible on paralleling streets through much of the study area.

The structure of existing bus routes in the study area may be changed to complement new high-capacity transit service. Depending on the specific route of the high-capacity service, the number of routes feeding into the 95<sup>th</sup> Street Red Line station may be reduced, which would reduce congestion in and around this facility.

## **16. Potential Red Line Extension Connections with Existing Regional Transit Services**

### **General Comment:**

Will the Red Line Extension connect with existing CTA and Metra lines? Will I be able to transfer from one service to another?

### **Pertains to specific comments:**

20, 58, 74, 76, 83, 107, 108, 124

### **Response to Overall Category Comment:**

A key goal of the Red Line Extension is to utilize and integrate existing regional transit infrastructure to the greatest extent possible. CTA's bus and rail lines, Metra's commuter rail lines, and Pace's suburban bus services are interrelated. The Red Line Extension will be designed to establish and maintain convenient connections between transit services it intersects. In the Alternatives Analysis study, suggested connection points between the Red Line Extension, CTA bus and rail lines, and Metra commuter rail lines will be identified. In particular, opportunities may exist to develop new connections between the proposed CTA Red Line Extension and the Metra Rock Island District, Metra Electric District and/or the NICTD South Shore Line commuter rail systems, possibly at either existing Metra stations or at new station locations. Similarly, opportunities for connections between the CTA Red Line Extension and Pace bus services will also be explored. These connection possibilities will be further described and analyzed in Screen 2 and 3.

While transit integration is a key goal of the project, regional transportation integration of multiple modes is also a priority. As a part of the Alternatives Analysis process, CTA meets regularly with its counterparts at Metra, Pace, RTA, the Chicago Department of Transportation, the Illinois Department of



Transportation, and the Chicago Metropolitan Agency for Planning to promote coordination within all components of the region's transportation network. The Red Line Extension's Purpose and Need includes effectively managing future traffic growth in the study area. The CTA seeks opportunities to connect with other transportation elements as opportunities permit.

**Other Specific Comments on this Topic:**

**Comment:**

47. If the goal is to improve transit, why not increase frequency of Metra services on both sides of corridor and restructure east-west bus service connections without major capital projects?

**Response:**

Opportunities for changes or improvements to the existing Metra commuter rail service and CTA bus services within the corridor will be evaluated in detail during both the Screen 2 and 3 processes. These types of "lower capital cost investment" opportunities will be considered within the no-build and TSM alternatives described in Topic 6, as well as in conjunction and coordination with other more capital intensive options.

**Comments:**

51. Can you explain the intermodal modes at 130<sup>th</sup> and UPRR?

52. Is Intermodal transfer being evaluated at 130<sup>th</sup> and the Metra Electric Line on the Michigan Avenue Alternative?

**Response:**

The study area and alignments under consideration have locations where significant intermodal interchange facilities could be built. For example, at Michigan/Kensington a number of local bus routes could interchange with high-capacity transit service (regardless of the technology selected). As noted in a previous response, it is also possible that Metra's Southeast Service might operate over the UP alignment, and so also serve this intermodal facility. At 130<sup>th</sup>/Bishop Ford, a similar bus interchange is possible, which could also include a South Shore Line interchange station. For various corridor alternatives, an intermodal facility is also possible at 130<sup>th</sup> and the Metra Electric District (MED) Line, although a new 130<sup>th</sup> Street MED passenger station would need to be constructed.

## **17. Potential Red Line Extension Parking Facilities**

**General Comment:**

Will parking facilities be proposed and where will they be located?

**Pertains to specific comments:**

2, 6, 21, 107, 108

**Response to Overall Category Comment:**

Parking facilities associated with the proposed transit improvements in the study area are considered along with station locations. The amount of parking to be constructed is determined by forecast station usage. Proposed station locations will be addressed in the Screen 2 process. At that time, the location of each station, the area served, and proximity to major arterials and/or highways will determine whether parking is recommended at each station. If parking is determined to be advantageous at a proposed station, patronage forecast for those stations will determine the number of parking spaces and the type of parking facility required (e.g. parking lot, parking garage).

## **18. Potential Red Line Extension Economic and Environmental Impacts**

### **General Comment:**

What will be the economic and environmental impact of the Red Line Extension? What will be the community and economic benefits of the Red Line Extension?

### **Pertains to specific comments:**

25, 27, 36, 48, 64, 74, 75, 77, 84, 102, 109, 112, 114, 115, 126, 127, 130, 134, 140, 142, 152, 154, 155, 159, 169, 171, 178, 180, 181, 199, 202, 203, 205, 207, 208

### **Response to Overall Category Comment:**

An Environmental Impact Statement (EIS) will analyze in detail the social, economic, and environmental consequences and benefits of the proposed Red Line Extension. The environmental review process required by the *National Environmental Policy Act* of 1969 (NEPA) and related laws includes environmental impact analyses and the preparation of documentation for public review. Per FTA guidance, the environmental evaluation begins upon completion of the Alternatives Analysis study, and it will result in a detailed written statement on the anticipated environmental impacts of the Red Line Extension and the steps that will be taken to reduce any negative impacts to the community and the natural environment.

Typically, environmental reviews for proposed transit projects address the potential impact areas of air and water quality, noise and vibration, historic and cultural properties, parklands, contaminated lands, displacement of residences and businesses, and community preservation. During the federal environmental review process, the CTA will work concurrently with state and other local agencies to also comply with state and local environmental laws. See Topic 12 for additional information about potential property acquisition and impacts.

Regarding the economic impact of the Red Line Extension, FTA guidance requires an economic analysis of the Red Line Extension to be conducted as a part of Screen 3 of the Alternatives Analysis. In general terms, it may be noted that numerous transit studies suggest that transit investments result in economic development. A recently conducted study by the U.S. Department of Transportation, found that for every \$1 billion invested in transit projects, 47,500 jobs are created or sustained. Specific projections for the Red Line Extension may be developed in later studies.

### **Other Specific Comments on this Topic:**

- 89. What are the environmental justice impacts in the AA and why weren't they made public?
- 172. Presidential Order 12898 detailed environmental justice principles, will CTA include this Order while making decisions about this development?
- 173. How is environmental justice issues being applied to this development of transportation?

### **Response:**

Environmental justice will be considered throughout the subsequent levels of screening. During these periods the evaluation will identify potential environmental justice situations. These will be noted and alignment and station alternatives will be modified accordingly. Environmental justice is a specific focus in the preparation of the federal environmental impact statements which will begin after the selection of the Locally Preferred Alternative.

### **Comment:**

- 86. Who will get to bid on these contracts for transportation jobs?

### **Response:**

All contract procurement will follow CTA's competitive bidding requirements open to all qualified firms. More information about CTA's competitive bidding requirements is available on the CTA web site at [www.transitchicago.com](http://www.transitchicago.com).

## **19. General Customer Service Questions/Compliments/Complaints**

### **General Comment:**

We have some general comments related to CTA and/or CTA service.

### **Pertains to specific comments:**

15, 33, 70, 71, 93, 95, 117, 118, 132, 138, 139, 177, 180, 182

### **Response to Overall Category Comment:**

CTA Customer Service representatives were also in attendance at the public meetings for the Red Line Extension and were available to answer specific questions on existing CTA services and to take suggestions for improvements to those services. Many questions submitted to the Red Line Extension study team also covered these topics, which are outside the purview of the study itself. The study team notes these questions and comments for the record and has referred them to the CTA Customer Service Department for an independent response and filing through CTA's established Customer Service procedures.