

Chicago Transit Authority

Red Line Extension Alternatives Analysis Study

Screen 2 Public Involvement Responses to Public Comments and Questions

17 February 2009

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 2 Public Meetings held on December 3 and 4, 2008. In addition, public comments and questions on Screen 2 were submitted directly to the Chicago Transit Authority (CTA) via e-mail and postal mail through December 18, 2008.

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 2 presentation materials which are posted on CTA's Web site www.transitchicago.com (click on News and Initiatives, then Alternatives Analysis Studies).

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.

Index of Topics

1. FTA's Alternatives Analysis Process (8)
2. Relationship of Red Line Extension to Other Proposed Transit Projects (6)
3. Overall Red Line Extension Project Timeline, Purpose and Need (12)
4. Red Line Extension Study Area (4)
5. Alternatives Analyzed (50)
6. Proposed Red Line Extension Operations (7)
7. Potential Red Line Extension Parking Facilities (4)
8. Evaluation Criteria Used in the Alternatives Analysis Study (15)
9. Ridership Estimates and Related Issues (3)
10. Project Cost Estimation (9)
11. Funding of Red Line Extension Construction and Operations (9)
12. Alternatives Analysis Public Involvement Process and Format (13)
13. Potential Red Line Extension Economic and Environmental Impacts (11)
14. Potential Red Line Extension Impacts on Existing CTA Services (4)
15. Other (8)

1. 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:

17, 19, 22, 25, 27, 40, 65

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?¹

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, completed in April 2007, issued preliminary findings regarding corridors, alignments, and vehicle technologies that should be advanced to Screen 2 for further analysis. Screen 2, just completed in December 2008, further refined the alternatives from Screen 1. These findings have determined three alternatives that should be studied further. Screen 3 will be a quantitative screening process; costs and ridership will be projected and operational questions considered. Screen 3 will result in the recommendation 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/planning/planning_environment_5221.html .

Other Specific Comments Noted on this Topic:

Comment:

6: How can the alternative analysis preferred alternatives be arrived at ahead of the environmental impact analysis when one of the routes- the UP Railroad- has significant environmental issues, effecting isolated communities, like the Altgeld Corridor?

Response:

While the formal federally mandated Environmental Impact Statement (EIS) is not completed until after the selection of a Locally Preferred Alternative, environmental issues and community impacts are considered for each corridor and technology studied in the Alternatives Analysis. The subsequent EIS phase is used to quantify both positive and negative environmental impacts in detail and develop mitigation measures where necessary. See Topic 8 for more information about evaluation criteria used in the screening process.

¹ "Additional Guidance on Local Initiation of Alternatives Analysis Planning Studies." Federal Transit Authority web site.

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

General Comment:

What is the relationship between the Red Line Extension and other projects being considered by CTA? Is the Red Line Extension the highest priority?

Pertains to Specific Comments:

3, 14, 59, 73, 98

Response to Overall Comment Category:

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 four 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; and the Circle Line. In order to qualify for New Starts funding, CTA is required to perform comprehensive Alternatives Analysis studies for each. Alternatives Analysis studies for all four 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.

CTA is preparing all of the New Starts projects to be advanced simultaneously from Alternatives Analysis with the selection of Locally Preferred Alternatives in each study area by fall 2009.

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 Planning² (CMAP) with input from local and state government agencies (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 in 2008. Additional information on this plan can be found on CMAP's "Shared Path 2030" web site <http://www.cmap.illinois.gov/sp2030/sp2030main.aspx?terms=2030>.

Other Specific Comments Noted on this Topic:

Comment:

44: Will the CTA, the RTA and IDOT present the Red Line Extension as a priority project as a public works project to the new Obama Administration?

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

Response:

CTA can only speculate that the President's support for transit will be beneficial to transit and transportation systems in our nation. However, CTA is subject to the federal New Starts process that both guides prudent planning activities and determines the evaluation steps required for additional funding.

Current details of a federal stimulus plan that may include additional funding for urban transit systems suggest that funding would need to be spent in a short time frame to have the desired stimulus and jobs creation. This type of funding, as currently specified, would not be available to New Starts projects; however, CTA is reviewing details of the stimulus package and its likely impacts on the CTA. If New Starts funding were increased through stimulus measures, CTA would propose to advance progress on all of its New Starts projects into subsequent Preliminary Engineering and Environmental Impact Statement project phases.

3. Overall Red Line Extension Project Timeline, Purpose and Need

General Comment:

What is the timeline of the project and when will the Locally Preferred Alternative be selected? How long will it take from design until operation?

Pertains to Specific Comments:

17, 19, 22, 24, 25, 26, 27, 42, 54, 65, 97, 100, 121

Response to Overall Category Comment:

Fixed guideway projects are resource intensive and are rarely funded through local funding sources alone. In order to obtain federal funding for fixed guideway projects such as an extension of a rail line, the FTA developed a funding application process called the New Starts process. 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 95th Street Red Line station; reduce lengthy bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th 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 95th 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 the final, Screen 3, public involvement meetings in summer 2009. Prior to these meetings, CTA will complete the quantitative analysis that will help to identify an LPA in the study area. This LPA will be presented at the Screen 3 public outreach meetings and public comments will be reviewed before CTA makes its selection final in late summer 2009. CTA anticipates completing technical work to support an LPA recommendation and submission to the FTA for project advancement in fall 2009.

Specific Comments Noted on this Topic:

Comment:

100: How important is resolving the train yard congestion at 98th as a factor in choosing the LPA?

Response:

A Locally Preferred Alternative cannot advance if it has technical or operational shortcomings without proposed solutions. However, several alternatives exist for resolving congestion at the 98th Street yard.

4. Red Line Extension Study Area

General Comments:

What are the boundaries of the project study area? How were those boundaries determined?

Pertains to Specific Comments:

52, 110, 111, 112

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 13400S) on the south, Ashland Avenue (1600W) on the west, and Stony Island Avenue (1600E) on the east. The study area is four miles east-to-west and approximately five 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 95th Street Red Line station; reduce lengthy bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th 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 95th 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, please see the Screen 1 presentation materials available for download at the CTA's website 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:

110, 111, 112

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 continue to be evaluated in detail during Screen 3. These types of “lower capital cost investment” opportunities will be considered within the no-build and TSM alternatives (described in Topic 8), in conjunction with other more capital intensive options. Additionally, CTA is focusing attention on identifying possibilities to enhance intermodal interchange on the various alignments.

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 95th Street Red Line station or reducing travel times of passengers that transfer from bus to CTA rail to access their destination. Additionally, as noted in the Screen 1 analysis (available at www.transitchicago.com – click on News and Initiatives, then Alternatives Analysis Studies) commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail).

5. Alternatives Analyzed

General Comment in Support of UPRR Alternatives:

Many comments received support extending CTA Red Line service along the Union Pacific Railroad corridor. Additionally, some comments expressed opposition to advancing the Halsted Street Corridor or Bus Rapid Transit alternatives.

Pertains to Specific Comments:

7, 12, 38, 43, 45, 46, 47, 50, 51, 60, 74, 77, 78, 80, 81, 83, 85, 87, 99, 109, 117, 120, 122, 123, 124, 125, 126, 127, 128, 130, 131

General Comment for Various Alternatives Analyzed:

Please provide more information about the combined corridor-technology-vertical profile alternatives analyzed in Screen 2.

Pertains to specific comments:

13, 30, 52, 72, 74, 90, 94, 116

Response to Overall Category Comment:

In Screen 1, CTA evaluated potential transit corridors, vehicle technologies, and vertical profiles to determine which would be appropriate to meet the needs of the proposed Red Line Extension. From this analysis, three transit corridors (Halsted Street, Union Pacific Railroad (UPRR) right-of-way, Michigan Avenue) and two vehicle technologies (Bus Rapid Transit (BRT), Heavy Rail Transit (HRT)) were advanced. Additionally, for rail alternatives, three vertical profiles (elevated, subway, trench) were advanced and for bus alternatives, one vertical profile (at-grade) was advanced. These components were combined to create specific alternatives and in total, eight alternatives were advanced to Screen 2.

(For more information about all of the alternatives evaluated in Screen 1, see Screen 1 presentation, technical boards and public comments and responses posted on the CTA website www.transitchicago.com – click on News and Initiatives, then Alternatives Analysis Studies).

In Screen 2, two bus alternatives were evaluated, as follows: 1) Halsted Street BRT at-grade, which is proposed to travel via an exclusive travel lane right-of-way from Vermont Avenue/Halsted Street to the Red Line 95th Street terminal station; and 2) Michigan Avenue BRT at-grade, which is proposed to travel via an exclusive travel lane from 127th Street/Michigan Avenue to the Red Line 95th Street terminal station. Both of these alternatives were defined with BRT station stops proposed every half mile on their respective north-south arteries, consistent with BRT stop spacing, and no stops proposed on 95th Street. The vehicles anticipated for the BRT alternatives would be articulated buses that would be hybrid diesel-electric powered or use alternative fuels.

In addition to the two bus alternatives, six rail alternatives were evaluated, as follows: 1 & 2) Halsted Street HRT elevated and underground alternatives. Both of these alternatives would depart the current CTA 95th Street terminal station and follow the I-57 Expressway median, transitioning to either an elevated or underground structure at Halsted Avenue, where these alternatives would travel south on Halsted Street to Vermont Avenue. These proposed alternatives are both 4.9 miles long and have four station stops – at Vermont Avenue, 119th Street, 111th Street, and 103rd Street – consistent with modern rapid transit station spacing. 3 & 4) UPRR HRT elevated and trench alternatives. Both of these alternatives would follow the I-57 Expressway as it traveled south from the 95th Street terminal station until the UPRR corridor, where it would turn south to follow the corridor. The UPRR corridor travels south to approximately 111th Street, and then travels southeast until the proposed terminal location at 130th Street near the I-94 Bishop Ford Freeway. These alternatives are 6.0 miles long and have four proposed stations – at 130th Street, 115th Street, 111th Street, and 103rd Street. 5 & 6) Michigan Avenue HRT elevated and underground alternatives. Both of these alternatives would follow the I-94 Bishop Ford Expressway median and transition to either an elevated or underground structure at Michigan Avenue, where these alternatives would travel south on Michigan Avenue to 127th Street. These proposed alternatives are both 4.1 miles long and have four station stops – at 127th Street, 119th Street, 111th Street, and 103rd Street.

All rail transit alternatives would be powered via an electric third rail, consistent with the existing CTA system and rail cars would be equivalent to those used by the existing fleet. Note that with regard to the UPRR Corridor, CTA and UPRR operate services with incompatible train cars and power systems; therefore, in the proposed UPRR Corridor, CTA will have its own dedicated tracks. The elevated alternative would operate above the existing UPRR freight right-of-way (currently at-grade); whereas the trench alternative would be in a cut below the surface, with the UPRR freight right-of-way relocated in the trench as well, adjacent to the CTA right-of-way.

All alternatives currently have Park and Ride lots proposed in proximity to their terminal stations; for more information about parking facilities, see Topic 7.

Several recommendations and preferences for potential alternative and terminal configurations 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 merit further consideration.

Other Specific Comments on this Topic:

Comment:

41: Has rapid bus in other areas addressed the need for rail service?

82: What is the reasoning behind imposing an additional bus line on an existing bus line?

Response:

Bus Rapid Transit (BRT) is an option for introducing certain features of rail service (for example, dedicated right-of-way and multi-door boarding) at a lower capital cost and on a more accelerated timeline than building new rail lines. Several cities in North America have successfully adopted BRT services, including New York, Los Angeles, Cleveland, Kansas City, Toronto, and Mexico City.

Introducing BRT in a local bus corridor can increase travel options for customers with different needs. For example, BRT routes may be ideal for those who are willing to walk further to a stop in exchange for a faster more predictable trip, while local routes may be a preferred option for those with limited mobility or those making short trips. Providing both services in one corridor ensures that diverse travel needs are met.

Comment:

68: Are 4 stations along the Red Line Extension Heavy Rail alternative really enough stations to alleviate congestion and promote increase[d] usage of the Red Line? Would it really help the South Side Communities?

Response:

Proposed station locations on each of the rail alternatives are consistent with modern rapid transit station spacing – about one-mile between station stops. In some cases, such as on the UPRR corridor, larger gaps exist between station locations due to the lack of development between proposed stops. Additionally, buses on east-west arterials will be able to service the rapid transit station in closest proximity to that bus line, allowing the proposed Red Line Extension to divert many bus trips currently traveling on north-south arterials in the study area to the 95th Street terminal station. Proposed Park and Ride facilities will provide more convenient auto access and promote transit use in the study area.

Comment:

70: Why not extend the red line further south to 130th St on Halsted?

Response:

The Halsted Street BRT and HRT alternatives were designed to capture the majority of potential transit riders in the Halsted Street corridor, without crossing the Calumet Sag / Little Calumet River located at Halsted Street just south of 129th Street where development density drops significantly. The proposed terminal location of the Halsted Street BRT and HRT alternatives is located at Vermont Street, just two blocks north and within walking distance of the southernmost intersection with Halsted Street in the City of Chicago.

Comment:

84: I see an Electrified High Speed Bus way as a LOW COST Alternative Red Line Extension. Agree or Disagree?

115: Incidentally, I thought I could submit an idea to use Eggleston Avenue for a High Speed Electric Bus way-complete with overhead wires from 95th Street south to 127th and Indiana.

Response:

Bus Rapid Transit (BRT) is an option for introducing certain features of rail service (for example, dedicated right-of-way and multi-door boarding) at a lower capital cost (and on a more accelerated timeline) than building new rail lines.

Eggleston Avenue has a similar width as Michigan Avenue, which is too narrow to support a dedicated BRT corridor.

Propulsion technology for the BRT alternatives has not yet been finalized; however, vehicles are anticipated to be articulated buses that would be hybrid diesel-electric powered or use alternative fuels.

Comment:

92. Why exactly was the trench option for the UPRR HRT not recommended? Would the UPRR tracks really need to be in the trench as well?

93. Why was underground Heavy Rail for the UP route shot down?

Response:

Due to the limited right-of-way available for rail infrastructure in the UPRR corridor, if the CTA Red Line Extension were to be placed in a trench, as considered in one alternative in Screen 2, then the UPRR right-of-way would also need to be placed in a trench. The configuration of rail lines require minimum distances on either sides of the rail tracks and a trench alignment increases these requirements. Without

placing the UPRR rail line in a trench as well, the available right-of-way would not be sufficient for both services to operate. While there are some additional environmental impacts from placing the UPRR rail line in a trench, such as transferring higher elevation diesel emissions to ground-level, the primary reason that this corridor was not advanced was due to the increased cost. Additional costs to put the freight line in a trench will not accrue additional benefits to transit users, making this alternative less cost-effective than the elevated UPRR alternative.

Comment:

95: Have there been examples of elevated rail over existing rail right-of-ways like to UP Railroad?

Response:

Portions of the CTA Orange Line are elevated over a freight railroad right-of-way.

Comment:

105: What kind of support facilities are planned/proposed for New Stations? Will any of the Stations have "park and ride" facility? How many? Will passenger facilities (stations) have stores or stands? Is there any proposed construction for area adjacent to stations? Will only currently owned property be used? (for expansions)?

Response:

Park and Ride facilities are planned in all proposed Red Line Extension alternatives. Size, configuration and specific locations will be determined in Screen 3. Additionally, Park and Ride facilities at intermediate stations as well as station details included in the station area plans will also be developed in Screen 3.

Comment:

113: Along Halsted St. or Michigan Ave, will the elevated be over the street like Lake St. or an adjacent alley?

Response:

In Screen 2, the Halsted Street and Michigan Avenue Corridors both included elevated rail alternatives that would travel over the existing street (not in an adjacent alley). However, the engineering design of these elevated structures has not yet been defined. As suggested, an elevated rail line may have a box-shaped support such as on Lake Street. An alternate elevated structure design on the CTA system exists on the Orange Line, which uses hammerhead columns – a center support that opens for the elevated track structure. Modern engineering variations will be considered for elevated structures advancing to Screen 3.

Comment:

114. I believe you are making a mistake by considering only linear two-way travel extension options.

A one-way loop extension at the end of an existing two-way mainline offers many advantages over a two-way linear extension.

Attached is a proposal for a 10 mile long single track loop Red Line south extension. This extension would cost about the same as a two-way 5 mile long extension. But its ten stations would make the Red Line accessible by walking to twice as many residents of the area as any of the nine two-way alternatives in your study.

Response:

A loop alternative would enhance coverage of the study area but would result in longer travel times on the guideway. Many potential customers in the study area are geographically dispersed and are anticipated to access the rail line by bus or auto beyond the immediate station area as they do today and therefore need faster travel times on the guideway such that transit remains competitive with other modes.

6. 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:

1, 54, 102, 113

Response to Overall Category Comment:

CTA assumes 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. CTA assumes that the proposed Red Line Extension will operate the same hours as existing Red Line service and that the fare would be consistent with existing fares at the time of implementation. Any new CTA service and associated facilities recommended by this study would be consistent with the Americans with Disabilities Act (ADA) requirements.

Other Specific Comments on this Topic:

Comments:

29: Where would the yard be located?

71: Is the land at 127th Street for a new longer train yard?

100: How important is resolving the train yard congestion at 98th as a factor in choosing the LPA?

Response:

CTA has explored some preliminary yard location sites for each of the proposed rail alternatives. For the Halsted Street HRT elevated alternative, a preliminary yard location has been identified on the west side of Halsted Street near industrial areas in the middle of the corridor. For the UPRR HRT elevated alternative, possible yard sites could be accommodated along the southern leg of the proposed alignment in adjacent industrial areas.

Identifying yard space in coordination with the proposed alternatives is one way to accommodate additional trains required to serve a rail line extension; however, other operational improvements can achieve similar goals. The feasibility of accommodating additional trains at alternate yard locations in the CTA system will also be considered as part of this study.

7. Potential Red Line Extension Parking Facilities

General Comment:

Where will parking facilities be located? Will you look at vacant and available land/properties?

Pertains to Specific Comments:

4, 30, 105, 127

Response to Overall Category Comment:

The CTA is considering Park and Ride facilities for each of the bus and rail alternatives included in Screen 2. For each corridor, Park and Ride facilities are being considered at the terminal locations of the proposed Red Line Extension alternatives. Additionally, in Screen 3, further analysis on adjacent land use and parking needs at interim station locations will also be considered. The amount of parking proposed is determined by forecast station usage. 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, the ridership forecast for that station will determine the number of parking spaces and the type of parking facility required (e.g. a lot or a garage).

8. 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:

6, 8, 57, 58, 72, 96

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. This universe of alternatives was qualitatively evaluated in Screen 1 using social, environmental, transportation, and economic parameters to identify a shortlist of specific technologies, corridors, and profiles that may best satisfy the project’s goals and objectives.

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, four factors were used to evaluate each alternative’s performance, as follows: physical constraints, such as right-of-way requirements; social and economic factors, using demographics and employment data; environmental factors, including impacts from each alternative on noise, visual, natural and cultural resources; and transportation factors, such as travel time, transit connectivity, and traffic impacts. At the start of Screen 2, eight distinct build alternatives (not including the No-Build and TSM alternatives, which are discussed in more detail below) were considered. Only five of these alternatives advanced after the application of the four evaluative factors used in this first evaluation step.

Next, a more detailed evaluation of the five remaining build alternatives was performed. In this step, preliminary estimates of capital costs, operating costs and projected ridership were used to compare the alternatives. This evaluation was performed with order-of-magnitude estimates to determine which alternatives were most likely to perform well under FTA’s cost-effectiveness evaluation criteria. After this evaluation step, three build alternatives remained, as follows: 1) Halsted BRT at-grade, 2) Halsted HRT elevated, 3) UPRR HRT elevated, plus the No-Build and TSM alternatives.

In Screen 3, these advancing alternatives will be evaluated using detailed and quantitative analysis to identify and recommend an alternative to continue as the Locally Preferred Alternative in the study area. In addition to the quantitative cost, ridership, and cost-effectiveness evaluation performed in Screen 3, evaluation of other FTA criteria, such as analyses of transit-supportive land use and local financial commitment are also prepared.

For more information on the evaluation criteria or evaluation results of each alternative, please see the detailed summaries available for review on the Screen 1 and Screen 2 presentation boards, which are available for download at the CTA’s website www.chicagotransit.com as noted in the introduction to this document.

Other Specific Comments on Socioeconomic Criteria:

What are the socio-economic factors considered in the Screen 2 analyses and how are they weighted?

Pertains to Specific Comments:

10, 34, 56, 57, 58, 104

Response:

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, social and economic factors were considered, among others. Social factors were evaluated by station area: for BRT this included the area within ¼-mile radius of proposed station stops and for HRT, the area within ½-mile radius of proposed station stops. CTA evaluated factors

including total population, population density, employment, employment density, number of households, total zero-car households, zero-car household percentage, total minority population, minority population percentage, total poverty-status households, poverty-status household percentage, number of hospitals, and number of schools and colleges. All of these factors were evaluated based on year 2000 data and, where available, forecasts for year 2030. CTA compared BRT alternatives and HRT alternatives separately, due to the differing station radii used for collecting and analyzing data.

For the eight alternatives evaluated, the data did not significantly differentiate one alternative from any other. For example, the analysis reveals there are no significant differences in the current percent of minority populations among the three alternatives. The minority population for all of the corridors considered is approximately 99 percent, which is significantly higher than the minority population in Cook County at 44 percent. Additionally, all corridors include a proportion of households without cars (ranging from 15-25 percent) similar to Cook County at 17 percent. And all corridors have a higher percentage of poverty-status households (17-24 percent) than Cook County as a whole (at 12 percent).

A comparison of the potential impact on hospitals and schools did not reveal significant differences either. One hospital is located within quarter of a mile of the Michigan Avenue Alternatives and each alternative has three to five schools within a quarter mile of station areas. Since all schools were along the neighboring streets rather than on the main routes, with the exception of Harlan High School on the west side of South Michigan Avenue at West 97th Street, they did not weigh heavily on the overall social rating.

All economic factors were evaluated within a ¼-mile radius of both BRT and HRT proposed station stops. Factors included the number of Tax Increment Financing (TIF) Districts, Enterprise Zones and Industrial Corridors as well as an evaluation of retail locations and transit-supportive land use potential and impacts to the revenue of adjacent businesses during construction.

For the eight alternatives evaluated, all of the alternatives were equivalent in the evaluation of economic factors. All of the corridors have adjacent areas belonging to (TIF) Districts, Enterprise Zones and Industrial Corridors. The Halsted Street and UPRR Corridors have five and six noted areas, respectively. The Michigan Avenue Corridor has only two of these areas; however, the Michigan Ave TIF district encompasses nearly the entire corridor.

In the evaluation of average retail locations and transit supportive land uses, note that the corridors that perform best (the Halsted and Michigan Avenue Corridors) are also the corridors most affected during construction – as noted in the subsequent economic factor “Impacts to revenue of adjacent businesses during construction.” All of the corridors have the potential for enhanced economic development in conjunction with the respective alternative.

Transit-oriented development (TOD) is also an important evaluation factor considered by the Federal Transit Administration (FTA). The FTA evaluation of TOD includes existing land use, transit supportive plans and policies, performance and impacts of these policies, and other land use considerations. As all corridors have the potential for enhanced economic development, there are TOD opportunities for all three alternatives. These opportunities will be further defined and documented during the upcoming station area planning work that CTA will perform to support Screen 3.

Other Specific Comments Noted on this Topic:

Comment:

42: ...With each possibility (HB, HR, UPR) what would the impact be on decreasing the commute time?
103: Will the extension of the Red Line cut the time of getting to your destination...?

Response:

Reducing travel times is one of the key elements in the stated Purpose and Need of the Red Line Extension Alternatives Analysis study (see Topic 4 for more information about the project Purpose and Need). All of the proposed build alternatives advancing to Screen 3 (Halsted at-grade Bus Rapid Transit, Halsted elevated Heavy Rail Transit, and UPRR elevated Heavy Rail Transit) include improvements to reduce travel times in the Red Line Extension Alternatives Analysis study area.

The Heavy Rail Transit alternatives on Halsted and the UPRR both result in travel time reductions on the bus trips currently used to access the Red Line. Local bus trips would serve the proposed extension station nearest the east-west bus lines, reducing the total number of buses serving the current Red Line

95th Street terminal station. Estimated travel time by rail from 130th Street to 95th Street by rail is approximately 12 minutes compared to 25 minutes or more today.

For the Bus Rapid Transit alternatives, travel times on Halsted, the corridor with the majority of bus trips in the Red Line Extension Alternatives Analysis study area would improve due to roadway improvements such as dedicated travel lines and traffic signal priority. Additionally, this alternative includes reconfiguring the current bus terminal at the Red Line 95th Street terminal station, alleviating some of the congestion approaching and accessing the terminal, although still requiring a transfer for trips beyond 95th Street.

Comment:

88: What exactly would the TSM be for the Red Line Study?

89: What is the Baseline Alternative, and does not BRT come closest to the Baseline Alternative?

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 – is the subject of interaction between FTA and CTA Alternatives Analysis study staff and that process is currently underway. When the final alternatives are selected, definition of the specifics of these alternatives will be presented to the public in the next round of outreach, Screen 3. Additionally, measured benefits from the alignment, mode and vertical profile alternatives (or build alternatives) that have advanced from Screen 2 to Screen 3 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.

Comment:

101: How much does existing congestion on Halsted factor into evaluating the BRT option for Halsted?

Response:

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, transportation factors were considered, among others. Transportation factors were evaluated along the corridor length of each proposed alternative. CTA evaluated factors such as the anticipated travel speed of each alternative, new traffic impediments introduced by the alternative, and potentially displaced parking spaces.

Since the Halsted Street BRT at-grade alternative assumes that a dedicated lane exists for the BRT vehicles, average travel speed was derived from known travel speeds in other BRT corridors operating in similar conditions – and was not negatively impacted by existing congestion on Halsted Street. The Halsted Street impacts to traffic in general purpose lanes and parking displacement will be assessed in more detail in Screen 3.

9. Ridership Estimates and Related Issues

General Comment:

How were ridership numbers generated? What is the projected ridership on each corridor?

Pertains to Specific Comments:

40, 55, 66

Response to Overall Category Comment:

As required by FTA guidance, CTA is working in cooperation with other regional transportation agencies and the Chicago Metropolitan Agency for Planning (CMAP) to develop a regional travel forecasting computer model that can be used to predict ridership for the various alternatives being studied using information on projected population, employment, congestion, and other factors. This computer model is based on other models already used by CMAP for other regional transportation planning purposes.

In Screen 2, after identifying each alternative in more detail, two steps of evaluation were performed. In the first step, four factors were used to evaluate each alternative's performance including physical constraints, social and economic factors, environmental factors, and transportation factors. (More detail on the evaluation process is provided in Topic 8.) At the start of Screen 2, eight distinct build alternatives, plus the No-Build and TSM alternatives (also discussed in more detail in Topic 8) were considered. Only five of these build alternatives advanced after the application of the four evaluative factors used in this first evaluation step.

Next, in addition to other evaluation criteria, preliminary ridership estimates were developed for each alternative that advanced to the step 2 evaluation of Screen 2. The ridership model requires calibration with current day transit volumes in order to validate the forecasting outputs. This calibration had not yet been completed in detail at the completion of Screen 2; therefore, the ridership volumes produced by the model are only conceptual estimates and can only be referenced for order-of-magnitude comparisons. However, these estimates suggest that the rail alternatives on the Halsted Street and UPRR Corridors are similar in scale. Additionally, the estimates suggest that the rail alternatives have a ridership volume that is about three times higher than BRT ridership estimates. Specific ridership estimates from the calibrated model will be produced for the Screen 3 and will support the recommendation of a Locally Preferred Alternative.

10. Project Cost Estimation

General Comment:

Please describe the project cost estimating process and how these estimates are used to make decisions regarding alternatives advanced in the study. What are the current estimates for each alternative?

Pertains to Specific Comments:

8, 28, 31, 33, 61, 84, 92, 93

Response to Overall Category Comment:

Constructing transportation facilities, purchasing transit vehicles, providing new transit services, and maintaining existing services require a significant financial commitment. Transit capital investments can last several generations and can require continuing public financial support for maintenance and operations. FTA guidelines require that all of these factors must be considered when evaluating the feasibility of an alternative and in determining which alternatives advance for more detailed analysis.

In Screen 2, the costs used in the analysis were preliminary and conceptual in many cases, based on general knowledge of the costs associated with each alternative being evaluated. For example, in the comparison of the underground versus elevated HRT alternatives on Halsted Street, experience from projects in other U.S. cities indicates that underground HRT in this context would cost two to three times as much as elevated HRT, but would yield comparable benefits—such as capacity and travel times. As a result, although highly detailed and precise economic costs regarding the expenses to create an

underground or elevated HRT alternative were not determined (and are not appropriate at this stage), underground HRT was not advanced to Screen 3 because the identified economic factors strongly indicated that there would be higher costs for the underground HRT system with little or no advantage over an elevated HRT system.

This order-of-magnitude analysis was performed on all alternatives advancing into the second evaluation phase of Screen 2 (see Topic 8 for more information about evaluation criteria). Alternatives were compared with each other to determine which would advance into the more detailed capital costing performed in Screen 3. CTA analysis determined that the Halsted Street BRT at-grade alternative rated favorably compared with others under consideration and will be advanced to Screen 3. As mentioned, the Halsted Street HRT underground alternative and the UPRR HRT trench alternative performed poorly compared with other alternatives, as their costs are expected to be much higher than other HRT alternatives. Finally, while these order-of-magnitude estimates suggest that the UPRR HRT elevated alternative would be more expensive than the Halsted Street HRT elevated alternative due to over a mile more in infrastructure costs, both of these alternatives rated favorably compared with different vertical profiles on the same corridors (the trench and underground alternatives, respectively) and will be advanced to Screen 3.

The upcoming Screen 3 analysis will examine capital and operating costs in more detail as well as how the various cost factors apply to the alternatives being considered. In Screen 3, the reduced number of alternatives creates a manageable set of alternatives to be examined in detail. In accordance with FTA guidance, the analysis in Screen 3 will include a capital cost comparison, an operating and maintenance cost comparison, as well as a comparison of the estimated annualized cost per boarding.

Other Specific Comments on this Topic:

Comment:

8: Subways are cost prohibitive? Why? Are the cost constraints the CTA's or the Federal governments?

Response:

There are no local or federal constraints on the project cost. However, since the Red Line Extension and other projects in Chicago are competing with other cities across the country for a limited amount of federal funding to advance into Preliminary Engineering and Environmental Impact Statement project phases, CTA works to keep all of its projects competitive. The current FTA measure of competitiveness is the project cost-effectiveness rating, which compares project cost with estimated user benefits. The project must provide high benefits (measured in terms of new riders and travel time savings) for the people using the facility for the least amount of cost to remain competitive against projects in other cities.

Screen 2 analyses estimated that the cost of building a subway on the Halsted Street corridor in the Red Line Extension Alternatives Analysis study area would be two to three times the cost of an elevated structure in the same corridor. However, while the cost of a subway line is much higher than an elevated structure, the level of service and travel time savings provided by both are identical. Additionally, since the evaluation analyses to advance alternatives are comparative, the subway alternative did not perform as well as the elevated alternative on the Halsted Street corridor.

Comment:

79: Is it true that the greatest financial benefit to the CTA would be through the selection of the UP route even though the initial cost might be more?

Response:

It is too early to tell which alternative will have the greatest financial or ridership benefits. The Screen 3 evaluation process will develop ridership forecasts based on computerized travel models, and more detailed estimates of capital and operating costs associated with the remaining alternatives. Therefore, at the end of Screen 3, the CTA will be able to address this question. It is important to note that all proposed alternatives are expected to require public financial support for construction, operation, and maintenance.

11. Funding of Red Line Extension Construction and Operations

General Comment:

How will the construction and operation of the Red Line Extension be funded? How are matching funds secured? How is the Red Line Extension funding related to transit fares?

Pertains to Specific Comments:

18, 23, 32, 37, 54, 67, 69, 76, 108

Response to Overall Comment Category:

CTA's operating budget supports day-to-day operations and helps determine the service frequency and hours CTA can offer on its bus and rail system. Half of CTA's operating budget comes from customer fares and revenue generated from sources such as advertising and concessions. The other half of the operating budget comes from regional sales taxes and matching funds from the State of Illinois. No federal funds are available specifically to cover operating expenses. Once the Red Line Extension 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 other bus and rail transit services.

Meanwhile, CTA's capital funding is provided both by the federal government and State of Illinois and is granted specifically for improvement projects such as rail station renovations, track and structure rehabilitation, bus and rail car purchases, and rail extensions. It is federal capital funding that is being sought for the Red Line Extension and other New Starts projects. Capital funds help the CTA maintain and improve its service, but federal rules prevent its use for day-to-day operations expenses.

CTA has initiated this Alternatives Analysis study for the Red Line Extension as a first step towards obtaining capital funding for the project through the Federal Transit Administration's "New Starts" grant program.³ This program provides funding for major public transit infrastructure projects throughout the U.S. through a highly competitive process. Upon successfully advancing through the four phases of project implementation (Alternatives Analysis, Environmental Impact Statement, Preliminary Engineering, and Final Design) a project will be qualified to receive a "Full Funding Grant Agreement" (FFGA) from the U.S. Government. The amount of funding in the FFGA covers up to 80 percent of the project's capital costs. Other federal, state and local funds comprise the remainder of capital funding. It is possible to seek alternative sources of federal and non-federal funding for the project, but the federal New Starts grant program is specifically intended to support transit projects of this nature and is the public funding mechanism generally most capable of doing so.

As indicated above, to ultimately secure federal New Starts grant funding, matching funds for at least 20 percent of the project's capital costs are required from sources other than the New Starts grant program mainly 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 fully utilized.

CTA is simultaneously pursuing solutions to its overall operating and capital funding challenges while also positioning itself (through Alternatives Analysis studies such as this one) to secure capital funding to meet the region's future transit infrastructure needs. While it is necessary and critical for CTA to obtain the capital and operating resources it needs to maintain its system in a state of good repair on an ongoing basis, it is equally important to plan for the future; there is little value in maintaining an existing system if it will not adequately address future travel needs. CTA's overall Capital Improvement Program not only identifies funding needs to maintain the existing system in a state of good repair, but it also identifies and addresses future needs to serve growing regional transit travel demands. With a growing population and shifting travel patterns and travel needs, it is important to anticipate CTA customers' future needs and plan accordingly. For example, many of today's key transit links—including the Blue Line to O'Hare and

³ CTA is also conducting concurrent Alternatives Analysis studies for other candidate New Starts expansion projects that have been authorized by the U.S. Congress—including extending the Yellow Line to Old Orchard, extending the Orange Line to Ford City Mall, and the constructing the Circle Line.

the Orange Line to Midway—were made possible by past generations who understood the need to invest in transit's future even as they addressed significant day-to-day financial pressures.

It is also important to recognize that federal capital funding for transit system expansion projects comes largely from the New Starts grant program funds that are allocated separately from federal formula funds dedicated to ongoing "state of good repair" capital improvements. While federal formula funds may be used for infrastructure renewal projects, New Starts funds are discretionary funds that can only be used for system expansions. Given that CTA has demonstrated need for both formula and New Starts funding, it is prudent that CTA take all necessary steps to obtain funding from both sources and not focus on just one while passing up the other. CTA does not propose diverting its federal formula funds to support system extensions and expansions.

See Topic 10 for more information about Red Line Extension project costs.

12. 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? When will the next round of meetings be held?

Pertains to Specific Comments:

2, 4, 11, 16, 20, 21, 36, 40, 63, 64, 86, 106,107,119

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 offered to meet with all elected officials representing the Red Line Extension study area and adjacent areas. 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.

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. The Screen 2 meetings were held at the West Pullman Historic Visitors Center and the Woodson Regional Public Library. Meeting locations for Screen 3 have not yet been determined nor have the dates; however, CTA anticipates that meetings will be held in summer 2009. 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.

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 Screen 2 outreach meeting information was posted in The Chicago Defender (Nov. 12 & 19), The Crusader (Nov. 13), La Raza (Nov. 23rd), and the Daily Southtown (Nov. 20th). In addition to the CTA website, information was posted on at the websites for the Regional Transportation Authority and the Chicago Metropolitan Agency for Planning. Notices were distributed to elected officials and surrounding suburb's village halls for distribution and posting.

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). 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. 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. All of the meeting materials are available at the CTA's web site (www.transitchicago.com).

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.

13. Potential Red Line Extension Economic and Environmental Impacts

General Comment:

What will be the economic and environmental impacts of the Red Line Extension? What will be the community and economic benefits of the Red Line Extension? How are specific impacts and benefits measured and valued?

Pertains to Specific Comments:

4, 5, 34, 56, 57, 58, 85, 91, 102, 104, 105

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 mitigate 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.

As part of the preparation of an Environmental Impact Statement, the traffic and parking impacts of the proposed transit improvements – at key intersections, at proposed terminal locations, and throughout the study area – will also be evaluated in more detail. Depending on the Locally Preferred Alternative (LPA), local bus routes may be reduced or reconfigured. Where necessary, CTA coordinates with the Illinois Department of Transportation and local municipalities when evaluating traffic issues. Maintaining traffic flow and related efficiencies is a major consideration in CTA's planning of this extension.

Prior to initial engineering work which outlines specific infrastructure needs in coordination with available right-of-way and current land uses, 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 EIS. 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.

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 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. Currently, CTA is working with the Mayor's Office of Workforce Development to ensure that training and jobs access will be available to support the construction of the proposed Red Line Extension.

Other Specific Comments on this Topic:

Comment:

9: Bus pollution of BRT, how will it be mitigated?

Response:

CTA anticipates that any BRT alternatives would use hybrid diesel-electric powered or use alternative fuels-based vehicles. Alternative fuels could include compressed natural gas, clean diesel technology engines, and/or low sulfur fuel. New technologies, such as fuel cell powered buses are also being developed. All of these options have lower pollution than regular diesel fuel vehicles; however, the potential pollution impacts of any vehicle decision will be further evaluated during the subsequent Environmental Impact Statement project phase. Mitigation strategies, if necessary, would be developed at that time.

14. Potential Red Line Extension Impacts on Existing CTA Services

General Comment:

How would the Red Line Extension impact current CTA services? Will there be redesign or expansion to the existing 95th Street terminal station?

Pertains to Specific Comments:

15, 102, 116

Response to Overall Category Comment:

It is anticipated that the structure of existing bus routes in the study area will be changed to complement new high-capacity transit service. Depending on the specific alternative advanced as the Locally Preferred Alternative, the number of bus routes feeding into the 95th Street Red Line station may change. Changes to bus services will be subject to public input and will be implemented after construction.

The use of the air rights over the Dan Ryan Expressway has been considered for expanding the 95th Street Red Line station facility. This type of expansion is very costly and must be weighed against the needs and benefits of expanding the station facility. The Red Line Extension HRT alternatives – including the Halsted Street HRT elevated and the UPRR HRT elevated alternatives – would reduce the number of buses feeding the 95th Street station, while the Halsted Street BRT at-grade and Transportation System Management (TSM) alternatives (more information about these alternatives is available in Topic 8) would result in an increase in the number of buses serving the 95th Street station. During Screen 3, the potential for expanding the 95th Street station facility will be examined as part of the Halsted Street BRT and TSM alternatives. The Screen 3 evaluation and subsequent engineering design phases will determine the necessity for any significant redesign of the 95th Street station based on proposed bus routing changes that affect the terminal.

Other Specific Comments on this Topic:

Comment:

53: Would the 111/115 Pullman Route return to a "shuttle like" route whenever an alternative is chosen?

Response:

Route 111 Pullman/111th Street/ 115th Street bus may be restructured if it results in a simplified route paths and better service to the proposed alternative. The Screen 3 evaluation will include the development of preliminary service plans for the alternatives that would identify any anticipated changes to the bus route.

15. Other

General Comment:

This section includes general comments and viewpoints that can be characterized as public input into the study process.

Pertains to Specific Comments:

2, 48, 49, 62, 129

Response to Overall Category Comment:

These comments do not ask a question or refer to a specific issue, but rather point out general views on the subject, which have been noted. Thank you for your feedback.

Other Specific Comments on this Topic:

Comment:

35: Which projects are being driven by the 2016 Olympics?

39: Is the Red Line- rather the advancement of the project being driven by 2016 Olympics?

Response:

CTA is working closely with the 2016 bid team and believes that the present transit system can handle transit needs for the 2016 Olympics. The Red Line Extension project is not linked with Chicago's bid for the 2016 Olympics. However, any improvements made to the current system could only benefit the City's Olympic candidacy.

Comment:

75: What effect does the Canadian National's RR purchase of the EJ&E RR and subsequent rerouting of freight trains in suburban & city areas have in the final consideration?

Response:

This purchase does not affect any of the alternatives under consideration in the Red Line Extension Alternatives Analysis study.