

**JOINT MEETING  
ALTERNATIVE ANALYSIS TECHNICAL COMMITTEE  
&  
ALTERNATIVE ANALYSIS STEERING COMMITTEE  
MEETING SUMMARY  
OCTOBER 3, 2014**

**I. Welcome and Introductions**

The Berkeley Charleston Dorchester Council of Governments (BCDCOG) Planning Director, Kathryn Basha extended comments welcoming everyone in attendance giving the opportunity to all attendees to make brief introductions.

**II. Project Overview & Update**

A recap of past activity was given in order to bring the committees up to speed noting work on this project was halted because of the Federal Transit Administration's new legislation, Map 21. A Commuter Rail feasibility study Phase II conducted in 2011 recommended the Alternative Analysis report, a FTA Guided process. Awarded in 2012, the alternative analysis study was initiated just as Map 21 was signed into law a few months later, causing the project to pause in order for staff to gain a thorough understanding of the new legislation and its impact on FTA's New Starts - capital investment program requirements. After many conversations between the BCDCOG and FTA, staff now has direction necessary in order to proceed with the study. The criteria rating was dramatically change because of the new legislation which increases the competitiveness of applications seeking project funding.

Davis & Floyd was contracted to conduct the Alternative Analysis (AA) research so that the best transit alternative can be determined to improve transit services along the I26 corridor from Summerville to Charleston. Sharon Hollis with Davis & Floyd is leading this initiative and spoke on work completed, why the study is being done and what to expect over the next 15 months, placing emphasis on the project goals. Six goals identified for the study included (1) a transit alternative that would improve mobility & accessibility for the transit system, (2) a cost effective and financially feasible system that could be implemented within the community, (3) an alternative that supports local land use as well as projected growth, (4) respond to community needs, (5) have community support and (6) a plan that will support a diverse regional economy. Ultimately, the intent is to create a project that qualifies for federal funding of a capital investment in a fixed guideway system.

The BCDCOG, CARTA and TriCounty Link, the two transit providers servicing this corridor from Summerville to downtown Charleston, are the three major partners involved in this initiative along with SC Department of Transportation and the FTA. Moving forward, members of the committee were advised of their involvement as well as what will be expected of them during this process. A comparison of the old and new AA processes was presented.

Ms. Hollis continued sharing information on new criteria used to score projects that will need to be met in order to receive a medium ranking or higher to qualify for FTA funding. Criterion includes mobility improvements, environmental, congestion reduction, cost effectiveness, economic development and land use. The second

component that will be evaluated by the alternative analysis initiative to demonstrate readiness to receive FTA funding is the local financial commitment. The financial condition will include an assessment of the current financial conditions of the area's transit system to demonstrate successful management of the existing system, which includes an overview of the current system. Secondly, commitment of funds is expected at a certain level for each phase typically falling around 80% of the capital cost, but at least 60% in order to remain competitive.

Therefore, other local funding sources must be identified and available for the region to remain competitive with the other projects. Lastly, the reliability and the capacity to operate a sustainable system is the third component considered when looking at the local financial commitment.

Now in the pre-project development phase, a comprehensive operational analysis is necessary for both transit systems within the tri-county, similar to what TriCounty Link recently completed. In tandem will be the alternative analysis that will take into account key factors such as environmental and mobility benefits.

The FTA Travel Demand model will be used during this process as well as surveying of passengers, employers and employees in order to estimate potential ridership. Public involvement will increase to assist with refining the study. RSG services were retained to handle the travel demand forecasting since their firm developed the travel demand model used by FTA and their involvement will be advantageous the region because they have a very strong understanding of what is required.

In preparation for the project development phase, a comprehensive operational analysis consisting of data collection will be done first, to include public input to assess the type of system that would be needed in order to be successful. An additional emphasis will be placed on land use. A funding recommendation memorandum will be drafted giving options of funding sources available to the region to help offset the required match. In addition, preliminary screening criteria will be conducted to assist with determining whether the region is competitive.

As part of the PowerPoint presentation distributed at the meeting, a project timeline was addressed noting public meetings - October/November 2014, CARTA passenger Outreach - October/November 2014, FTA Coordination - CARTA ridership counts October/November 2014, COA/AA Alternative Development - Fall 2014/Winter 2015, and the Next Steering Committee/TAC Meeting - January 2015. Kick off meetings are being scheduled for Summerville, North Charleston and Charleston to acquire comments on the existing transit service in November.

The Planning Director elaborated on why the existing system is looked at in such detail explaining FTA requires examining the existing system to demonstrate that everything possible has been identified towards improving the system prior to requesting dollars to design something different. This will be accomplished through the operational analysis. It will give the region an opportunity to achieve short-term resolution of transit service issues, as well as identify the required match funding that will be brought to the table.

The committee wanted to know what local options are available/envisioned in order to satisfy the match requirement. Currently, existing options are extremely limited consisting of Charleston County's local option sales tax and small state

contribution and federal contribution. The study will include the process of determining funding options, which will have to be a very large capital and operational investment requiring new multi-jurisdictional funding source.

Members of the Committee had strong opinions about introducing new legislation that would fund this project. It was pointed out Berkeley County would have difficulty contributing funds towards this project since their local sales tax program is definitive in the projects it can support.

The topic of commuter rail and previous studies was discussed, with one committee member noting the federal process was not followed in 2008 when the study was completed in addition to the fact that findings revealed the capital investment could not be supported. It was also pointed out if the state fuel tax is not increased, efforts to implement a new and successfully transportation system would be defeated. A consensus among residents was thought to be the key toward achieving this initiative.

**III. Other Items/Discussion**

None.

**IV. Adjourn**

**MINUTES**  
**I-26 Fixed Guideway Alternatives Analysis**  
**Joint Steering & Technical Advisory Committees Meeting**

**DATE:** 3/16/2015

**TIME:** 2:00 PM

**LOCATION:** BCDCOG (Berkeley-Charleston-Dorchester Council of Governments)

**ATTENDANCE:** See attached Sign-In sheet

**Agenda:**

- I. Welcome and Introductions
- II. Project Updates
  - a. Public Meetings (November 2014)
  - b. Comprehensive Operational Analysis Update
- III. Alternatives Analysis Discussion
  - a. Existing Conditions
  - b. Alternatives Screening
  - c. Land Use Analysis
- IV. Next Steps/Upcoming Meetings

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**Discussion Comments:**

1. The project should include “safety” in the defined goals.  
Goal #1: “Improve Mobility, **Safety**, Accessibility and Connectivity of the Transit System and Region”.
2. Suggestion made to also revise Goal #1 to include language that the project seeks to improve the mobility and connectivity within the corridor, to more explicitly address congestion by improving/developing an efficient and competitive transit system.
3. Question was posed to Norfolk Southern (NS) about the current capacity on the NS rail line from Summerville to Charleston and if that capacity might allow for commuter rail along the corridor.

NS could not explicitly answer the level of rail activity or the capacity on the Summerville line, but suggested that if the NS rail alignment was selected as the preferred alignment a more detailed study would have to be done to clearly determine how the future rail needs for passenger and freight could be accommodated along the corridor. NS pointed out that it would have to study and take into account the impact of or schedule of higher use/

frequency of lines through the Summerville area that might result from the projected increase in port activity.

One known is that currently the NS line out of Summerville is an un-signalized main track. For passenger service to run on any NS line, tracks will have to be signalized to accommodate passenger operations.

Again NS stated that projections would have to be completed to determine future levels of service and track needs. A more formal study would have to be undertaken to determine this and would depend on the information needs/requests of the I-26ALT study team.

4. NS was asked what the average timeframe to conduct and complete a study that would answer these questions (current and future rail capacity on line and if excess capacity will allow commuter rail option; as well as the cost to signalize the track along the corridor to allow passenger operations).

NS recently completed a similar study in Raleigh, NC which took a little over a year. If the community had the money to undertake a rail study, the process could take anywhere from 12-18 months which accounts for getting the agreement in place, conducting market and future operations forecasting, and includes determining the signalization needs along the corridor. The cost to signalize the line could run somewhere around a couple \$100 million (average cost/signal mile).

5. Norfolk Southern was asked if there are inactive lines or if NS right-of-way has allowance for an alternative mode like Bus Rapid Transit (BRT) to operate.

NS could not answer the question without the proper research, but suggested that the next step in the process should be a written request from the Study Team that outlines the information needed from Norfolk Southern (signal pricing, right-of-way, track usage, cost of reactivating tracks for use, etc.)

6. The Study Team asked whether Highway 61 had been identified as a possible alignment for fixed guideway. There is a power easement which parallels the road facility that might facilitate BRT service. Suggested that the study group look at this possibility.

7. The next phase of the study is to narrow down the preferred alignments and modes and to evaluate existing land uses in areas where transit stations might be located. The Study Team was asked if there were members of the Committees who are interested in serving on a Land Use Sub-committee of the TAC. Meeting attendees that volunteered include:

- a. William Peagler, Berkeley County
- b. Christopher Morgan, City of Charleston
- c. Andrea Harris-Long, Charleston County
- d. William Werrell, Joint Base Charleston
- e. Wannetta Mallette, City of North Charleston

8. Study Team also requested if any members would be able to help engage Boeing and Joint Base Charleston to participate in the employer survey.

9. Committee members were asked to provide comments or questions on the draft technical documents in review (Existing Conditions Technical Memorandum, Alternatives Screening Criteria Methodology, Potential Alternative Alignments Map, Existing Zoning, Land Development & Planning Studies Map, and High Capacity Transit Land Use Analysis Methodology). These documents are posted on the BCDCOG website.
10. Committee members were informed that a set of Transit Talks are being set up to facilitate dialogues among three types of community groups: development, environmental, and business communities. The next series of public meetings are being planned for April 20, 21, and 22. A MindMixer forum for the project should also be coming online in the next few weeks.

A copy of the presentation used to facilitate the above discussions is attached to these minutes.

**Next Meeting**  
June 2015 - TBD

**MINUTES**  
**I-26 Fixed Guideway Alternatives Analysis**  
**Joint Steering & Technical Advisory Committees Meeting**

**DATE:** 7/28/2015

**TIME:** 10:00 AM

**LOCATION:** BCDCOG (Berkeley-Charleston-Dorchester Council of Governments)

**ATTENDANCE:** Available Upon Request

**Agenda:**

- I. Welcome and Introductions
- II. Project Update
  - a. Public Meetings (April 2015)
  - b. Comprehensive Operational Analysis
  - c. Peer City Review
  - d. Initial Screening
- III. Screen One Alternatives Analysis
  - a. Transit Technology Overview
  - b. Corridor Alignments & Considerations
  - c. Screening Criteria
- IV. Discussion: Alternatives to move forward into Screen Two – Detailed Screening
- V. Next Steps and Schedule

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**Discussion Comments:**

1. Prior conversation was held with Norfolk Southern (NS) Railway about introducing commuter rail in the region. Conversations revealed the very high insurance cost that is associated with providing passenger rail service. A major point of contention during discussions at that time was the allocation of passenger rail liability responsibilities (insurance costs).
2. Comment was made on the ranking of the Dorchester Road alternative. Committee members suggested that the Dorchester Road alternative, which ranked #10 out of 20 in the Screen One Analysis, should be revisited. Major factors identified and presented for consideration that might impact the Dorchester Road ranking include:
  - a. Traffic volumes have increased over time along the corridor.

- b. Residential growth is expected along the Dorchester corridor (partially due to the Wescott and Oakbrook developments located at the northern end of Dorchester Road)
  - c. Dorchester Road has right-of-way available in the large grassed median which runs from Parlor Drive to Cross County Road.
  - d. Dorchester and Charleston counties have entertained the idea of introducing commuter traffic lanes on the Dorchester Road corridor.
3. Committee members elected not to move the utility corridor alternatives (Santee Cooper and SCE&G) forward into Screen Two. Given the screening criteria used to assess alternative alignment suitability, the utility corridors under consideration did not score high in achieving the screen one goals. These goals included:
  - a. Improve mobility, accessibility, safety and connectivity of the transit system and region
  - b. Promote a cost effective and financially feasible transit alternative
  - c. Support local land use objectives
  - d. Plan for projected growth in an environmentally sustainable manner
  - e. Respond to community needs and support
  - f. Support a diverse regional economy

The utility corridors did not serve areas with high employment densities in comparison to other alignments. It was also noted that there will be associated costs with property acquisition since the alignment will impact some private residential properties, as well as with utility infrastructure relocation (poles and lines). Finally, ease and speed of implementation is a high priority for the steering committee, and the utility coordination adds a time and unknown cost element that is greater than the other alternatives.

4. Committee members elected not to move the CSX and Norfolk Southern rail line options forward into Screen Two. From the project staff's experience and peer system review, it was noted that many rail related projects that operate on rail right-of-way typically made use of abandoned or relatively inactive/underutilized rail lines. Both the CSX and Norfolk Southern rail lines in the Charleston area are active lines and lines of interest to the operators because of the planned Port of Charleston expansion. Due to these facts, negotiation of rail right-of-way or the possibility of shared rail lines are limited. Conversations with the rail operators also indicated that a rail related capacity analysis, led by the rail operators and funded by the region, will have to be conducted to determine the future capacity needs of the rail operators along the corridor, the potential operation needs of the proposed fixed guideway and the infrastructure needed to implement passenger service (safety features/signals/crossings, etc.). It was also noted that the CSX rail alignment would have to utilize some roadway facilities to link the Summerville, North Charleston, and Charleston corridor; and the Norfolk Southern rail alignment paralleled much of the US 78/US 52 alternative alignment. When comparison was made between the two similar alignments and the relative costs and level of uncertainty associated with the

two options the committees opted to not move forward with consideration of the rail right-of-way alignments.

5. Given the major project goals identified, committee members were supportive of the US 52/78 and US 52/176 alignment options. These alignments best serve the Summerville-North Charleston-Charleston corridor, operate along the existing high transit corridor (Rivers Avenue), and provide Transit Oriented Development (TOD) opportunities needed to support a high capacity transit option.
6. Comment made that the mode considered should be guided by the overall cost to implement, the implementation timeframe and the likelihood of the project securing federal support/funding.
7. General consensus identified that in the short-term, Bus Rapid Transit (BRT) technology is the most logical of the technologies presented since it can be implemented at the lowest cost per mile, and it has a relatively short implementation time.
8. Although members suggested that BRT technology could be realistically implemented in the short/mid-range timeframe, the Committee suggested moving a Light Rail Transit (LRT) option into a long-range or future project phase.
9. Committee members were supportive of developing a phased project implementation approach. Through this approach, the identified fixed guideway implementation schedule should propose a major segment or foundation segment that should be implemented first, and subsequent segments and phases should also be identified for later implementation.
10. Even though this process should ultimately pick the Locally Preferred Alternative for implementing a fixed guideway option in the Charleston region, members suggested that consideration should be given to other alternatives that could benefit from high capacity transit and how these corridors could be integrated into the greater I-26 transit corridor system. Consideration should also be given to how other routes could benefit from some of the technologies explored during the process such as signal priority technology along select routes.
11. At the end of the Joint Steering and Technical Advisory Committee meeting, the following alternatives were suggested to move forward into the Screen Two Analysis:
  - a. US52/78: BRT
  - b. US52/78: LRT
  - c. US 52/176: BRT
  - d. US 52/176: LRT
  - e. Dorchester Road: BRT
  - f. Dorchester Road: LRT

A copy of the presentation used to facilitate the above discussions is attached to these minutes.

### **Next Meeting**

October/November 2015 - TBD

**MINUTES**  
**I-26 Fixed Guideway Alternatives Analysis**  
**Joint Steering & Technical Advisory Committees Meeting**

**DATE:** 01/15/2016

**TIME:** 10:00 AM

**LOCATION:** BCDCOG (Berkeley-Charleston-Dorchester Council of Governments)

**ATTENDANCE:** Available Upon Request

**Agenda:**

- I. Welcome and Introductions
- II. Project Update
- III. Screen Two Alternatives Analysis
- IV. Financial Analysis
- V. Project Justification Screening
  - a. Travel Demand Forecast
  - b. Cost effectiveness
  - c. Mobility and congestion relief
  - d. Environmental
  - e. Land Use and Economic Development analysis
- VI. Conclusion/Next Steps
- VII. Adjourn

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**Discussion Comments:**

1. The Steering and Technical Advisory Committees were presented with the Screen Two Analysis results and the alternative that overall rated highest in the evaluation: Alternative B-1: US 78/US 52/Meeting BRT.
2. Comment was made on more fully addressing the development potential of both light rail and bus rapid transit systems. Research has shown that the return on investment/development potential is greater for light rail investments. These differences need to be noted in the land use and economic development analysis of alternatives.
3. If a BRT alternative moves forward into implementation, steps need to be taken to limit “BRT creep” – or the loss of a high level BRT plan. A high level BRT plan encompasses specific elements such as use of dedicated bus lanes, enhanced BRT stations, off-board ticketing, bus signal priority, etc. “BRT creep” usually occur as a result of the ease at which BRT can be stripped down in an effort to cut cost. If care is not taken in the

implementation of service the BRT system could easily become an enhanced bus service instead of a premium BRT transit option as originally envisioned.

4. The City of Charleston expressed interest in when in the process will more detailed planning of the system occur (station level planning/more detailed alignment and circulation options) and to what degree would variances in the general alignment be examined?

As the process moves into Project Development, the alignment would be further refined or examined to address items such as system circulation in downtown Summerville, the engineering needs to effectively get buses through the Neck Area (address the high rail conflict in this area), the traffic impact of introducing bus only lanes, or variances in the alignment in the downtown area, etc..

The City of Charleston expressed support of recommending BRT as the preferred alternative for the I-26 Alternatives Analysis Study given the relative cost-benefit of implementing a comparable LRT system. However, it was noted that planning for a BRT system should account for future conversion of the system to LRT. Thus planning for BRT should ensure that right-of-way is preserved and alignment elevations and turn radii are able to accommodate possible light rail in the future.

5. Norfolk Southern (NS) commented that the Neck Area alignment variance on King Street was not desirable because of the limited right-of-way available. NS was more supportive of the US 52 (Meeting Street) alignment under consideration.
6. The City of Goose Creek commented that the “Our Region Our Plan” identified the US 17A/US 176 intersection as a high growth area in the future. Concern was expressed that the northern alignment of the fixed guideway system did not include this area.

It was explained that the US 17A/US 176 area and the corridor along US 176 did have the potential to support a fixed guideway in the future. The higher rating of the US 78 corridor from Summerville to North Charleston resulted from the development that currently exists along that corridor. The study team also explained that in the development of the system, recommendations would be provided on the expansion of the system to include these “spur” corridors such as US 176. Recommendations would include, for example, provision of enhanced bus service along these “spur” corridors that feed into the BRT system. These corridors could be upgraded to BRT corridors in the future as demand warrants and as funds allow.

7. The joint committee expressed support of Alternative B-1: US 78/ US 52/ Meeting BRT as the recommended locally preferred alternative to move forward from the I-26 Alternative Analysis.

A copy of the presentation used to facilitate the above discussions is attached to these minutes.

#### **Next Step:**

Presentation of recommended local preferred alternative (LPA) to the public at Public Meetings (January 25<sup>th</sup>, 26<sup>th</sup> and 28<sup>th</sup>).