MINUTES
I-26 Fixed Guideway Alternatives Analysis
Land Use Sub-Committee Workshop

DATE: 4/9/2015

TIME: 1:00 PM – 3:00 PM

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

PURPOSE: Technical Advisory Subcommittee Land Use Workshop

ATTENDANCE: See attached Sign-In sheet

Agenda:

I. Project Overview
II. FTA Land Use and Economic Development Rating Criteria
III. Station Area Typologies
IV. Corridor Typology Selection/Potential Transit Supportive Areas
V. Project Next Steps

Discussion/Comments:

The intent of the workshop was to solicit input from local planning professionals regarding the current and future land use and zoning in the region that is supportive of transit oriented development. Consideration was given to the following during discussions:

- Transit Oriented Development and existing/future ordinances
- Affordable Housing/Inclusionary Zoning
- TOD incentives to developers
- Public perception of TOD and TOD densities
- Potential corridor alignments
- Station locations and typologies
- Station spacing and quantities
- Infrastructure needs/challenges
- Connections to secondary transit modes
- Vacant/Developable land
- Other potential opportunities and Obstacles for High Capacity Transit

The following comments were noted:

- Certain locations that have the potential to be transit stations/stops (Trident Health area, for example) do not have a developed street grid network that supports the connectivity needed to link the uses and activities surrounding a more typical, built-out

transit station. There is a need to consider how an area's current roadway system will serve a station and its land use and what changes need to be made to enhance connectivity in the future.

- Comment was made about the density thresholds associated with the various typologies (core/center/village/destination) identified. The densities provided are illustrative of typical density figures provided from a more national perspective. Through the study process the study team with the input from the Technical Advisory Committee, will have to develop suggested density thresholds that are relevant to the region and local conditions.
- The City of Charleston identified that higher densities that provide support for transit are currently being focused along the King and Meeting Street corridors up to Morrison Drive. There are no specific density limits, but the 100'-120' height restrictions in certain areas generally translate to residential densities of 40-50 units/acre. The City's mixed-use areas (MU-1/MU-2) are primarily focused between Meeting and King Streets which allows for high density residential and commercial uses along these corridors. There are also areas zoned Mixed Use, Workforce Housing (MU-1/WH and MU-2/WH) which require that 15% of housing units in proposed developments are made available to individuals making 80% (rental) or 120% (owner-occupied) of the area median income or that the majority of the ground floor is dedicated to non-residential uses. Affordable housing units are protected for 10 years.
- The proposed plan and zoning designations for the Magnolia development north of Mt. Pleasant Street is supportive of TOD principles.
- The 2011 City of Charleston Comprehensive Plan identifies potential transit stops. The City is also looking at open air trolleys, which could provide a guideway on which BRT could share. The project team will look at these plans for potential stop locations/connections to future modes of transportation. There is an opportunity for BRT to
- LRT and other dedicated-guideway modes are potentially suitable north of Line Street. Transit south of Line Street will likely need to operate in mixed traffic (streetcar/bus).
- BRT could be supported in the urban core area if it allows for flexibility in the potential alignment. If BRT is implemented, the MUSC area could serve as the potential terminus / turn-around location. A BRT system could potentially travel south into the Peninsula along Meeting Street, west along Calhoun Street, north along Ashley Avenue, and then outbound along the Crosstown.
- The project team discussed the viability of operating commuter rail service on existing freight lines, and some of the operational challenges that will need to be considered.
- The City of North Charleston does not have specific zoning categories that are supportive of TOD; however, the Rivers Avenue corridor has been identified to potentially support fixed-guideway transit (BRT) along its median which extends south to Durant Street. South of Durant, the system would likely be required to operate in mixed traffic. Potential stations along this alignment include Mall Drive at Rivers Avenue, the Stromboli corridor, Shipwatch Square, and the Mixson area.
- The City of North Charleston suggested that once potential station locations are identified, they would be willing to revisit current zoning around these locations to provide support in the form of, for example, TOD overlays (Charleston County expressed support of this approach).

- Though there is currently no zoning designation to allow for mixed-use development, Shipwatch Square (currently zoned B-2) is designated for mixed use development in the Future Land Use plan (allowing of residential densities of approximately 29 units/acre).
- The current CARTA Super Stop intersection (Cosgrove@Rivers) raises concern as a future transit hub based on the proposed Intermodal Container Facility Plans. The proposed plan affects the character of the facility and its surroundings due to changes in truck routing and a potential fly-over at the subject intersection. These changes will negatively affect pedestrian use and safety and discourage the application of the TOD principles required for a high-capacity transit hub. The Shipwatch Square area offers a better option for a future station location.
- Other identified high activity nodes/potential station areas include Trident Technical College and the Northwoods Mall area which serves as a regional shopping destination.
- Redevelopment potential also exists around the current K-Mart Park-and-Ride facility as it is an existing and highly-utilized transit location that serves multiple systems (TriCounty Link and CARTA).
- The project team should evaluate the Boeing campus and Palmetto Commerce Parkway as major employment areas. The 2010 Census and TAZ density data does not reflect these major employment areas. The BCDCOG is currently working on updating the CHATS Regional Transportation Model which will account for these major activity centers. More current model data will be available once the update is complete (anticipated end of May 2015).
- Comment made that the project team should research Boeing's support of transit in Seattle and how similar partnerships could be applied to support our local transit system. Project team answered that the peer system review offers a forthcoming opportunity to evaluate partnerships in other regions.
- Comment made that the project team should be mindful of Clear Zones and Accident Potential Zones as different alignments are considered.
- The Trident Health Center provides a natural northern transit station location that could be developed into a future transit hub since it serves as a connection point between multiple transit systems (TriCounty Link and CARTA) and its location could accommodate connections to Summerville and to the Goose Creek areas.
- The subcommittee questioned if this location (Trident Health Center) should serve as the corridor's main transfer hub since it offers connection opportunities to Summerville, Goose Creek and Moncks Corner, and could also serve as a gateway to areas served by Ladson Road and Dorchester Road. Users from these areas could be pooled at this northern terminus and then transported along a common alignment through North Charleston and into the Peninsula.
- It was noted that the alignments along utility corridors may encounter large wetland impact issues.
- The alignment along Dorchester Road was identified as a less successful corridor since it bypasses many of the corridor's major activity centers and higher density areas. It was also noted that the current ridership on routes along the Dorchester corridor are not as high as along other routes. Additionally, overlays and current zoning discourage TOD principles and high-density mixed-use developments.
- US 78 should be considered as a potential connection between North Charleston and Summerville, since this alignment would also serve Lincolnville.

- The Summerville Azalea/Nexton area has the potential for a significant transit market due to the proposed Carnes Crossroads and Nexton developments. This area may support a Park and Ride facility to serve these large, yet somewhat low-density, adjacent communities.
- Henry E. Brown Jr. Boulevard should also be considered potential as a transit corridor.
- Downtown Summerville has a good street grid network, but it may not have the density necessary to support a high-capacity transit station (residential densities 4-5 units/acre).
- There are other Summerville locations that may better support the higher densities needed for transit station locations. The Berlin G. Myers corridor has higher densities, and its planned northern extension will tie into Sheep Island Road.
- Due to the low infrastructure costs and the ability to connect Goose Creek, Hanahan, Daniel Island, and North Charleston, a ferry system along the Cooper River should be considered as a viable transit option.

MINUTES
I-26 Fixed Guideway Alternatives Analysis
Land Use Sub-Committee Workshop 2

DATE: 6/24/2015

TIME: 2:00 PM – 3:30 PM

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

PURPOSE: Technical Advisory Subcommittee Land Use Workshop

ATTENDANCE: See attached Sign-In sheet

Agenda:

I. Welcome and Introductions
II. Project Overview/Schedule and Public Meetings/Transit Talk Recap
III. Land Use Analysis Workshop
IV. Project Next Steps

Discussion/Comments:

The intent of the workshop was to present the methodology and findings from the Land Use Analysis and Alignment Rankings to the Land Use Subcommittee for approval and subsequent recommendation to the Steering & Technical Advisory Committee. Consideration was given to the following during discussions:

- Methodology for mapping exercise and Alignment Ranking Matrix
- Each alignment's adjacency to future and existing points of interest
- Each alignment's relationship with existing and future high density areas
- Prohibitive zoning overlays and restrictions
- Potential for Transit Oriented Design (TOD) overlay zones
- AICUZ zones and how they affect TOD
- Significant pockets of developable vacant land
- Environmentally and culturally sensitive areas
- Infrastructure needs/challenges
- Desirable alignments within the Charleston peninsula
- Known and anticipated future development areas
- Other potential opportunities and obstacles for High Capacity Transit

The following comments were noted:

- Each of the restrictive zoning overlays shown in the analysis has increased setbacks prohibitive to TOD; however, zoning can be changed to accommodate TOD.
- Dorchester County has a Transitional Overlay District which requires a 40' buffer along the primary corridor and increases to 80' at intersections. Along other rights-of-way in the district, the required buffer is 15'. Fifty foot residential buffers are also required in these areas. Care should be taken in discussions with communities in this area to distinguish between Transit Oriented Design and Transitional Overlay District, both of which are more commonly referred to by the acronym TOD.
- Buffers, such as the Dorchester County Overlay described above, do offer unique opportunities for the development of a fixed guideway transit system because they have reserved large acreages of land directly adjacent to existing rights-of-way. That said, Dorchester County does not recommend placing the proposed system along Dorchester Road as it is not a suitable alternative for high density development or high capacity transit.
- Consideration should be given to proposed development within and directly adjacent to the corridor. There are several residential, commercial, and industrial developments underway and anticipated for the future, and any transit should plan for these changing populations. Specific developments mentioned include Nexton, Carnes Crossroads, Cane Bay, Ingleside and Palmetto Commerce Parkway, the future Volvo plant, and the proposed extensions and interchanges that will connect Sheep Island Road to I-26.
- Density mapping should be updated as new data is available. The TAZ maps used in this analysis are based on 2035 projections. 2040 projections will be available soon and incorporated into the study. Adjustments will be made to the recommendations of the analysis based on any significant changes to projected population and employment densities.
- Phasing of the system may be ideal to offer service to more established areas first, and to adapt its alignment to accommodate future growth as densities and uses change.
- Once the alignments and modes are narrowed down, consideration should be given to how and where the system will operate south of the Neck within the Charleston peninsula. For BRT or LRT, the terminus will likely be Line Street. For rail, the terminus will likely be Mount Pleasant Street.
- General consensus was that the rankings accurately reflect the land use goals of the region.