

CLARKSVILLE TRANSFER CENTER RELOCATION FEASIBILITY STUDY

FINAL REPORT



CLARKSVILLE TRANSFER CENTER RELOCATION FEASIBILITY STUDY

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PREPARED FOR:

CLARKSVILLE URBANIZED AREA METROPOLITAN PLANNING ORGANIZATION (CUAMPO)

PREPARED BY:



AND IN COOPERATION WITH THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND THE TENNESSEE DEPARTMENT OF TRANSPORTATION

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INTRODUCTION

The Clarksville Urbanized Area Metropolitan Planning Organization (CUAMPO), along with the City of Clarksville, Tennessee and the Clarksville Transit System (CTS), is undertaking a study to examine the need for and feasibility of improving the downtown transit transfer center. The options under consideration include a no-build or do nothing option, renovating, expanding, and/or improving the existing center, or potentially relocating the facility. CUAMPO hired the Nashville office of the engineering consulting firm WSP|Parsons Brinckerhoff to conduct this study.

PURPOSE AND NEED

The purpose and needs of the study are:

Purpose: To examine the need for and feasibility of relocating the existing CTS Transfer Center to another location preferably in the downtown area of Clarksville, Tennessee, and in close proximity to the existing center, so that operations can continue in an efficient hub and spoke routing pattern, downtown transit user trip-ends (origins and destinations) are best served, and transit user transfers between the radial routes are provided as seamlessly as possible.

The following section outlines the current needs and issues with the existing center, which predicates the relocation study efforts:

Needs:

- **Aging Facility** - The existing transfer center (Figure 1) is 25 years old, having been built in 1992. As such, it requires periodic maintenance and repairs, not only to the transfer center and the busway area, but also to the City owned parking garage, its exterior walls, and ceiling below the transfer center. Since it was constructed, CTS has spent over \$490,000 on services, repairs and modifications to the facility. Water infiltration, spalling of concrete, settling, and other issues are deteriorating the

structure. CTS periodically enlists the assistance of a structural engineering firm to evaluate the structure and recommend repairs, which are then executed. In the past, the busway area has been resurfaced and reinforced and the concrete structural “T” supports in the parking area have been reinforced with steel. As the facility continues to age, the costs for maintenance will increase.

- **Lack of Expansion** – The horseshoe shaped pull in/pull out area surrounding the building has reached its capacity for accommodating CTS buses. There is no more room to accommodate additional buses at the transfer center as it is currently configured. Also, there are no location(s) for co-locating any other types of

Figure 1: Existing CTS Transfer Center



multimodal first/last mile services often desired, such as taxis, ridesharing, bicycles, intercity buses, or CTS paratransit vehicles. The current shape and configuration constrain CTS' ability to expand and respond to changing markets and future needs.

- **Interior Limitations** - The interior is ill suited for modern customer service, dispatch, and other transit operations that must take place in the building. The one main room has a dispatch center/customer service window in the center. This area is often crowded, as only two (2) staff can fit in the area at one time. It is often difficult to perform customer service functions and dispatch buses at the same time from this area. In addition, the restroom facilities are the only ones publicly available in the immediate area. As such, they are shared by transit customers, the general public, and the CTS operators. As currently configured, the interior spaces are not optimal or conducive to simultaneous operations of a customer service window and dispatch operations.
- **Service Disruptions** – When festivals, parades, or other events happen, the transfer center is often closed as the immediate area surrounding it is needed for the event. CTS operations are relocated to Cooper Place between Academy Avenue and Union Street. While this only happens a handful of times per year, it none the less poses an inconvenience for CTS and its customers. The Rivers and Spires Festival closed a number of streets adjacent to the transit center for days, causing CTS to create a temporary on-street facility south of the current transfer center. However, the 15th Annual Festival in April of 2017 will be its final one. Other community events that would require streets around the current facility to be similarly closed are likely to occur in the future.
- **Downtown Development Objectives** – The transfer center and parking garage are located in the core of downtown Clarksville where significant development/redevelopment potential exists. The one-story parking garage is obsolete and lacks sufficient parking spaces to support the retail core along Franklin Street.

PREVIOUS STUDIES

Over the past several years, multiple studies and plans have been conducted that identify various potential locations for a new transfer center for CTS and Clarksville. The efforts and recommendations of these studies and plans have served as a backdrop and foundation for the development of this current effort. This section provides a brief overview of these studies and plans and their most significant findings and recommendations in regards to the relocation of the existing transfer center.

CLARKSVILLE TRANSIT SYSTEM STRATEGIC PLAN – OCTOBER 2010

The October 2010 update of the Clarksville Transit System Strategic Plan served as the short range plan for the transit agency leading up to 2015. The strategic plan is updated every five years and was updated in 2015. The plan examined the existing conditions and challenges of the system as well as showcased the system's operating environment (i.e. Clarksville/Montgomery County). It provided a list of recommendations to the transit system that could be carried out during the five year period of the plan from its adoption that included changes to the route network and internal structural changes.

The plan also continued the efforts of studying the feasibility of relocating the transfer center by offering up 11 sites for consideration. The plan surveyed each site based on five criteria: distance from downtown, ease of ingress/egress, availability, size, and topography. The sites were scored based on the criteria and ranked accordingly.

Key Findings/Recommendations

The plan recommended that five of the original 11 sites be further reviewed in a study solely to determine the feasibility of relocating the existing transfer center. The five sites that were recommended included the following:

- Franklin Street at 8th Street
- Summer Street between the Foy Center and APSU football stadium
- Northeast corner of 1st Street and College Street
- Southeast corner of Madison Street and Academy Street
- Southwest corner of Main Street and 7th Street

CLARKSVILLE TRANSIT SYSTEM FACILITY FEASIBILITY STUDY – JANUARY 2011

A similar study to this current one was completed in late 2010/early 2011 but took into account all CTS facility needs and requirements, not just those involving the transfer center. The study also looked at existing and future needs for administrative services, maintenance, bus wash facilities, fueling, and bus storage. The goals of the facility study included are:

- Understand the current functional space utilization and identify critical areas where the existing space limitations pose challenges to meeting current and future CTS needs;
- Understand how the physical layout and condition of existing facilities may be influencing the CTS staff's effectiveness and their ability to perform critical job functions;
- Evaluate the physical condition of all existing building components, and identify critical areas of concern (i.e. building code, environmental, ADA, etc.);
- Provide a cursory evaluation of properties surrounding the facility with respect to possible expansion of operations onto these properties; and
- Determine if the existing facilities or specific portions thereof can be successfully and feasibly be incorporated into a long term plan and help satisfy established goals.

The study offered up five sites for consideration and used a set of seven criteria to screen the sites: size and shape, access, safety and operations, site development costs, site acquisition costs, land use compatibility, and environmental considerations.

Key Findings/Recommendations

The plan recommended that only one site of the original five were suitable for existing site relocation - Franklin Street and 8th Street. The site best met the selected criteria and would provide CTS the most flexibility in its design and use. Additionally, the site would provide room for expansion and is located near Austin Peay State University (APSU), which at the time of the study and still today is a growing partner in the development of downtown Clarksville.

CLARKSVILLE TRANSIT SYSTEM STRATEGIC PLAN – DECEMBER 2015

The December 2015 update of the Clarksville Transit System Strategic Plan serves as the short range plan for the transit agency leading up to 2020 and is an update to the October 2010 plan discussed previously. This plan also examined the existing conditions and challenges of the system. The goal of the 2015 update to the strategic plan is as follows:

“...to develop operational and policy recommendations that can be implemented in the next one to five years that will allow CTS to make measurable gains in terms of safety, quality, and efficiency of transit service delivery in Clarksville.”

Recommendations from the plan included slight changes to the existing route network to improve on-time performance, elimination of unproductive diversions, expansion of dial-a-ride services, plans to enhance the facilities and maintenance structure of the agency, and further support of a study that looks into the relocation of the existing transfer center.

Key Findings/Recommendations

In contrast with the 2010 update, this plan does not offer additional sites for consideration, but presents a number of points that support keeping the transfer center in the downtown area or in a strategic location that allows CTS to maintain its existing hub and spoke system, and briefly highlights the operations and cost implications of moving the transfer center too far from its current location.

CLARKSVILLE TRANSIT SYSTEM COMPREHENSIVE OPERATIONAL ANALYSIS – AUGUST 2016

In 2015-2016, a comprehensive operational analysis (COA) was conducted to provide a constructive and independent analysis of CTS to better allocate its resources (i.e. funding, vehicles, etc.) that could potentially increase ridership and help improve efficiency within the agency.

The COA took on a three-stage approach to the analysis of the system. It started by assessing various transit metrics to analyze CTS' existing operations and identified local and regional development trends and barriers. Second, the COA provided a number of operational, capital, and administrative recommendations for the agency and identified funding sources and strategies that could be used for any expansive growth included in these recommendations. Finally, an implementation plan is provided that would help guide CTS in executing any of these recommendations in the coming years.

Key Findings/Recommendations

Only a brief mention of furthering the study to relocate the existing transfer center is mentioned in the COA, as both (COA and this study) were in progress simultaneously. The COA recommended continuing to assess the feasibility of a new location for the transfer center in its administrative initiatives. Other recommendations of the COA outside of the subject of the transfer center are also important in regard to this feasibility study as any route recommendations (e.g. alignment changes or expansion) are likely to be affected by any relocation of the existing transfer center. These include the creation of a downtown circulator and improvements to service frequencies/service spans.

CRITERIA FOR NEW TRANSFER CENTER

With the opportunity to construct a new transfer center, it was important to identify crucial characteristics and desired amenities of a new transfer center to help guide the identification and screening of the potential sites. The consultant team met with the CUAMPO and CTS staff during the project kickoff meeting to discuss a wish list of items for the new transfer center that included characteristics such as size, location, and staff and passenger amenities. The list of criteria for any new transfer center location included the following:

- **Satisfy the Purpose and Need** – A no-build (i.e. do nothing), rehabilitated/expanded existing site, or new relocated facility should satisfy the purpose and need of the study as presented above.
- **Close Proximity to the Existing Center** – CTS is likely to continue the hub and spoke route pattern as recommended in the agency's most recent strategic plan and COA. As such, relocating the new transfer center in close proximity to the existing site is an important criteria to use so CTS can continue to operate its current hub and spoke system to best serve existing and future riders.
- **Cost Considerations** – The cost of agency investments that include capital and operating costs are both important criteria to consider when choosing viable sites for a new transfer center location. Capital costs can include, but are certainly not limited to, the purchase of the land and existing buildings, relocation cost of any residential or business properties on site, construction of a new transfer center, and improvements to the site for buses, cars, bicycles, and pedestrians. While the location of a new site is likely the only characteristic that will determine the operational cost impacts to CTS, many factors (i.e. greenfield vs. brownfield sites) can affect the capital cost impacts that will greatly determine the viability of the site in the screening process.
- **Support of Public and Stakeholders** – Input and general consensus from the community, residents, and transit riders is important in this process, as they can provide valuable input on proposed sites and greatly guide the screening and site selection of a new transfer center. A new transfer center will likely be at its location for many years and affect the development and character of its surroundings. With this, it is important that public input is received and used to inform the selection of a new site(s) such that it contributes positively to the future of Clarksville to its fullest potential.
- **Site Size** – The current site is 0.57 acres and hosts a variety of uses, including CTS customer service and dispatch, rider waiting area, public/staff restroom facilities, and bus stop layover areas. The existing site has reached its full potential and it is desired that any new site be large enough to expand the number of uses that can be accommodated at the new transfer center, including private facilities for agency staff, multi-modal facilities including: ride-share services, intercity bus, and pedestrian and bicycle, and mixed-use development, if desired. The site should also be able to accommodate any future and potential growth of transit services, should CTS find itself in a position to expand that would require additional bus parking and passenger and staff facilities.
- **Topography** – Clarksville is a very hilly city. This is especially the case on the eastside of downtown and all the way to the Cumberland River. This can make it difficult for buses to operate on some roads throughout the city. It is recommended that the new site be relatively flat, and the roads that lead to the site be of a reasonable slope (e.g. less than five percent) that would allow buses to ingress/egress the site with relative ease. It is important to note that a site can be excavated to be less hilly to the point of being flat and adequate for a potential transfer center; however, this can greatly drive up costs and should only be used when all other criteria greatly outweigh the costs of topographically improving a site.
- **Environmental Concerns** – Many vacant sites exist throughout the downtown Clarksville area including those located to the east and north of downtown that could potentially serve as a site for a new transfer center. However, it is important to consider the state of the site in regards to any environmental issues.

Any site would need to be free from potential hazardous materials in the ground, in a building, or otherwise on the property which would require removal, remediation, or additional investment in time and money which could delay the project and add to on-going or uncertain liability. Additionally, a site that would be located within a floodplain (e.g. 500-year floodplain) is also a concern. Transit service is often considered a vital service during times of emergency (i.e. severe flooding). With this, it is important that the main hub of the transit agency be able to operate as unobstructed as possible when these natural events do unfortunately occur.

PUBLIC INVOLVEMENT

Public involvement played a critical role in the pool and selection of sites in this study. CUAMPO reached out to the general public which included Clarksville residents, CTS riders, City Council representatives, City of Clarksville staff, CTS staff, MPO staff, and other stakeholders. Stakeholder groups that were identified included business owners in downtown Clarksville, social service providers, educational providers, and municipal staff from both Clarksville and Montgomery County.

To gather input and feedback from the public, three (3) public meetings were held throughout the course of the study for invited and interested parties to inform and solicit specific feedback regarding the project, as well as its analysis and conclusions. The three meetings were structured as the following: 1) introduce the project and initial potential sites, 2) provide updates on the project and initial screening of sites, and 3) present the final screening and project recommendations. Comment cards and surveys were passed out at each of the public meetings so that attendees could provide their input. Additionally, the surveys were also provided online (www.cityofclarksville.com) for those who could not make any or all of the meetings or those who wanted to provide comments at a later time. Surveys were available up to two (2) weeks after each public meeting.

The goals of the various public involvement initiatives were to provide regular updates and information on the progress of the study, to better understand the role of the transfer center within the community and how a new location could affect or enhance that, and to gather input about ideas and opinions on the project and the individual sites under consideration. Meetings were held in an open-house format with a short presentation and then a question and answer session at the displays.

PUBLIC MEETING #1

The initial public meeting was held on Tuesday, August 16, 2016, at the Clarksville-Montgomery County Public Library on Pageant Lane. The initial meeting (Figure 2) was used to introduce the public to the project, the reasons for the relocation efforts, and to present the initial set of 22 sites to be considered for the new transfer center. Attendees were asked to comment on the initial set of sites but were also able to suggest additional sites to consider either via a map of downtown Clarksville or via a comment card or paper survey that were also provided. The engagement process added a total of seven additional sites to be included in the screening process, making a total of 29. These additional sites included the following:

Figure 2: Initial Public Meeting



- 1650 Wilma Rudolph Boulevard – Former Toyota Dealership
- College Street and Red River Street (southwest corner) – Vulcan Corporation Property
- APSU N 8th Street Parking Lot (east of APSU Fortera Stadium)
- Riverside Drive (north lot between Jefferson Street and McClure Street) – Kia/Volkswagen Dealership
- Riverside Drive (south lot between Jefferson Street and McClure Street) – Kia/Volkswagen Dealership
- Main Street and N 7th Street (northwest corner) – Corlew Auto Inventory Lot
- 1330 College Street (from Farrell-Calhoun Paint to Eagle Signs)
- N 1st Street and College Avenue (southeast corner) – C&M Supply

The materials presented at the initial public meeting and completed surveys are provided in Appendix A.

PUBLIC MEETING #2

The second public meeting was held on Tuesday, October 4, 2016, at the CUAMPO Main Office on Main Street. The second public meeting provided an update to the public on the progress of the project, presented the initial screening of sites, and revealed the nine sites that would be forwarded into the detailed screening process. Attendees were asked to comment on the initial screening of sites, and to provide information that may be useful about the remaining sites that could be incorporated into the detailed screening process.

While Site 14 was initially screened out due to abandoned underground storage tanks on the site, a further examination of these underground storage tanks revealed that they had been removed and remediated. Thus, Site 14 was retained for further screening.

Site 18 was also questioned as to why it was screened out at this phase of the project. It was originally screened out due to topographical issues with the site. Through the public participation process, it was suggested that the transfer center structure and any mixed-used development could be built on the portions of the site that would prove to be too difficult for buses to operate due to its steep grade. However, after re-visiting the site after the public meeting, it was confirmed that the ingress/egress access points along Franklin Street would require too much re-grading for it to be financially feasible.

The materials presented at the second public meeting and completed surveys are provided in Appendix A.

PUBLIC MEETING #3

The final public meeting was held on Thursday, November 17, 2016, at the CUAMPO Main Office on Main Street. This public meeting provided an update to the public on the progress of the project, presented the detailed screening of sites, and revealed the sites that would ultimately be part of the final recommendations of this study. Attendees were asked to comment on the detailed screening process, and to provide information that may be useful about the recommended sites, and what amenities they envisioned at the transfer center for incorporation into the final recommendations of the report.

The materials presented at the third public meeting and completed surveys are provided in Appendix A.

INITIAL SCREENING OF SITES

The initial screening of sites sets the initial criteria against the entire pool of sites that includes recommended sites from previous studies (discussed earlier), sites identified during the project kick-off meetings with CUAMPO and CTS staff, potential sites identified by the consultant team during field observations, and additional sites identified at the initial public meeting that introduced the project. In total, 29 sites were screened as part of the initial stage of the

project, which also included a no-build or “do nothing” option. A no-build option must also be considered in order to create a baseline scenario against which all other proposed sites and actions could be measured and evaluated. In this no-build scenario, CTS would continue its existing operations and continue to monitor and rectify issues with the transfer center as they arise. The remaining 28 sites are considered the action-oriented or build-options of this project. The 29 sites screened are presented below and in Figure 3.

1. 200 Legion Street – Existing CTS Transfer center

1a. Existing Transfer center (200 Legion Street) with expansion/addition including 215 & 217 Franklin Street

2. 804 Franklin Street – Conwood/Old A&P Property

3. 723 Franklin Street – Hooker Funeral Home

4. Cumberland Street (west side of Cumberland Street/north of Washington Street) – PDI Property

5. Frosty Morn Drive (west side of Frosty Morn Drive between Kraft Street and Red River Street)

6. Pageant Lane and Crossland Lane (southwest corner) – Haskins Property

7. N 1st Street and College Street (northeast corner) – Batson Property

8. University Avenue/N 6th Street and Madison Street – Austin Peay State University (APSU) parking lot

9. Franklin Street between N 8th Street and N 9th Street (lot east of Foston Funeral Home)

10. APSU Drane Street Parking Lot (west of APSU Fortera Stadium)

11. 1144 Franklin Street – Smyrna Red Mix

12. 1025 Franklin Street – Burt Cobb Center

13a. Main Street (north side of Main Street between N 4th Street and N 5th Street) – APSU Property

13b. Main Street (south side of Main Street between N 4th Street and N 5th Street) – APSU Property

14. 518 Madison Street – Two Brothers Automotive

15. Main Street and University Avenue/N 6th Street (southwest corner) – Cumberland Arts Center

16. 608 Main Street – Mt. Olive Missionary Baptist Church

17. Madison Street (south side of Madison Street between S 3rd Street and Union Street) – Dollar General site and parking lot

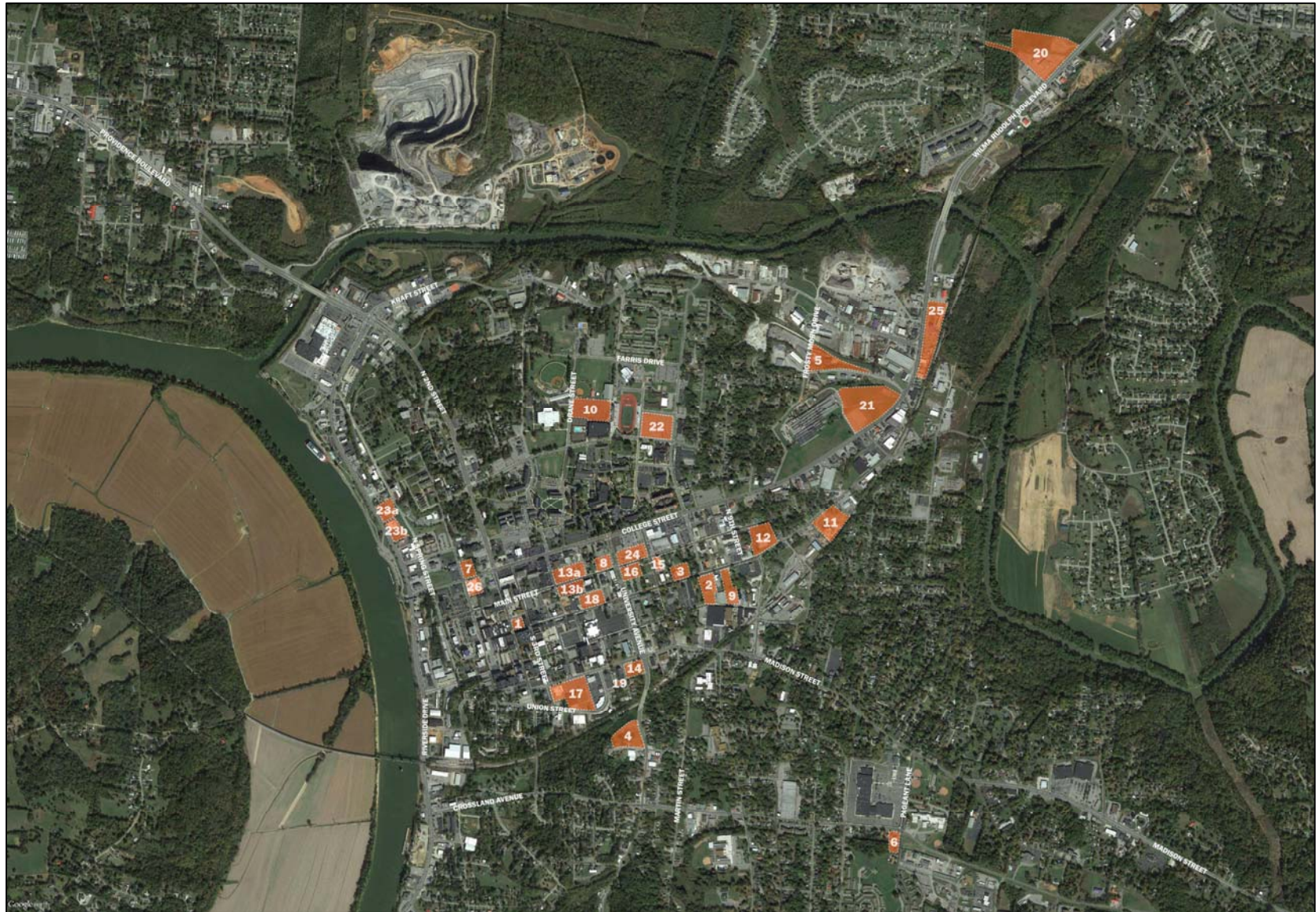
18. Franklin Street and N 5th Street (northwest corner) – Howell School parking lot

19. Cooper Place and Academy Avenue (northwest corner)

20. 1650 Wilma Rudolph Boulevard – Former Toyota Dealership

(List continued on page 10)

Figure 3: Initial Sites for Screening



- 21. College Street and Red River Street (southwest corner) – Vulcan Corporation Property*
- 22. APSU N 8th Street Parking Lot (east of APSU Fortera Stadium)*
- 23a. Riverside Drive (north lot between Jefferson Street and McClure Street) – Kia/Volkswagen Dealership*
- 23b. Riverside Drive (south lot between Jefferson Street and McClure Street) – Kia/Volkswagen Dealership*
- 24. Main Street and N 7th Street (northwest corner) – Corlew Auto Inventory Lot*
- 25. 1330 College Street (from Farrell-Calhoun Paint to Eagle Signs)*
- 26. N 1st Street and College Avenue (southeast corner) – C&M Supply*

INITIAL SCREENING CRITERIA

There were four distinct criteria used in the initial screening of these 28 build sites. Sites were either marked as “PASS” or “FAIL” based on their performance for each criteria. A site was not forwarded into the second screening of sites if they failed any of the initial set of criteria. The first criteria was the proximity of the proposed site in relation to the existing transfer center. Sites failed this criteria if they were located more than 0.5 miles (straight-line distance) from the existing transfer center. Ten sites failed the first criteria.

The second criteria was the evaluation of the topography of each of the proposed sites. Sites that had slopes greater than five percent or had adjacent roadways greater than five percent failed this criteria. Additionally, sites that were located within the FEMA 500-Year floodplain also failed this criteria. Seven sites failed the second criteria.

The third criteria was the size of the lot of each respective site. As mentioned above, the existing transfer center is located on a lot that is 0.57 acres. It was important to identify a site that was larger than the existing lot that could provide room for expansion and could accommodate additional staff and rider facilities, in addition to more buses and other modes (e.g. intercity bus, bicycles, etc.). The ideal site would be between one and two acres in size. Therefore, sites that had lot sizes less than one acre failed this criteria. There was no maximum lot size for which a site could fail this criteria. Only two sites failed the third criteria.

The final criteria was the identification of any potential environmental concerns on site or in any existing structure on the site. In other words, this criteria aimed to identify any issues that could potentially cause a site to fail an initial National Environmental Policy Act (NEPA) evaluation should it be recommended as a potential site as a future transfer center location. Six sites failed the fourth criteria.

At the completion of the initial screening of sites, nine sites were forwarded into the second round of screening (Figure 4). These included Sites 1, 1a, 2, 3, 8, 13b, 14, 17, and 24. The results of the initial screening of sites are presented in Table 1 with the rationale behind the screening provided in Appendix B. It is important to note that while Site 1 (existing CTS Transfer center) failed the second and third criteria, the site was ultimately forwarded into the second screening as it serves as the no-build option/baseline comparative for the project and remains a feasible (no-build) alternative despite its shortcomings in topography and size.

Figure 4: Sites for Detailed Screening



Table 1: Initial Screening of Sites

Map No.	Site Criteria				
	Proximity to Existing Transfer center (0.5 miles)	Area Topography (Access roadway/ site grade < 5%; floodplains)	Site Size (Ideal: 1 to 2 acres)	Proximity to Hazardous Elements (On site USTs; building issues)	Carry Forward?
1	PASS	PASS	PASS	PASS	PASS
1a	PASS	PASS	PASS	PASS	PASS
2	PASS	PASS	PASS	PASS	PASS
3	PASS	PASS	PASS	PASS	PASS
4	PASS	PASS	PASS	FAIL	FAIL
5	FAIL	PASS	PASS	FAIL	FAIL
6	FAIL	PASS	PASS	PASS	FAIL
7	PASS	FAIL	PASS	PASS	FAIL
8	PASS	PASS	PASS	PASS	PASS
9	FAIL	PASS	PASS	PASS	FAIL
10	FAIL	PASS	PASS	PASS	FAIL
11	FAIL	PASS	PASS	FAIL	FAIL
12	FAIL	PASS	PASS	PASS	FAIL
13a	PASS	FAIL	PASS	PASS	FAIL
13b	PASS	PASS	PASS	PASS	PASS
14	PASS	PASS	PASS	PASS	PASS
15	PASS	PASS	FAIL	PASS	FAIL
16	PASS	FAIL	PASS	PASS	FAIL
17	PASS	PASS	PASS	PASS	PASS
18	PASS	FAIL	PASS	PASS	FAIL
19	PASS	PASS	FAIL	PASS	FAIL
20	FAIL	PASS	PASS	FAIL	FAIL
21	FAIL	PASS	PASS	PASS	FAIL
22	FAIL	PASS	PASS	FAIL	FAIL
23a	PASS	FAIL	PASS	FAIL	FAIL
23b	PASS	FAIL	PASS	PASS	FAIL
24	PASS	PASS	PASS	PASS	PASS
25	FAIL	FAIL	PASS	FAIL	FAIL
26	PASS	FAIL	PASS	PASS	FAIL

DETAILED SCREENING OF SITES

With the nine sites that were forwarded from the initial screening, the detailed screening of sites evaluated these sites under a more stringent set of criteria that better highlighted the strengths and weaknesses of each of the sites under four different evaluation classes:

- Transit Operations;
- Transportation;
- Community and Environment; and
- Agency Considerations.

Each of the four evaluation classes are comprised of four criteria that build off of the respective evaluation class and are used to enhance the screening of the remaining sites.

DETAILED SCREENING CRITERIA

Transit operations is used to better evaluate the sites in regards to their impact to the operations of the CTS route network beyond simply the location of the new site as used in the initial screening. In this evaluation class, the site's pulse system compatibility, effects to operations and maintenance (O&M) costs, proximity to origins and destinations, and driver and rider safety are considered. For pulse system compatibility, the alignments of existing CTS routes are slightly augmented to serve the new transfer center and the change in revenue miles to reach the new location are calculated and compared to the existing system's revenue mileage. For the effects on O&M costs, the changes in revenue mileage for each site are annualized and used to calculate the change in annual revenue miles for each new location and compared to the existing system's annual revenue mileage. Additionally, the change in deadhead mileage between the site and the CTS garage (430 Boillin Lane) are calculated and presented. Deadhead miles are the total accrued miles between an agency's garage and the bus's starting point where revenue service begins. For a site's proximity to origin and destinations, the population and number of jobs within a walkable distance (0.25 miles) is calculated to broadly estimate the amount of potential activity and transit propensity around each site based solely on area population and employment. For population and employment figures, the 2010 US Census and 2014 Longitudinal Employer-Household Dynamics (LEHD) data was used, respectively. Finally, for driver and rider safety, roadway and sidewalk networks were observed around the immediate area of each site and used to identify any problems or obstacles that could make it difficult to reach the site.

Transportation is used to better evaluate the site in regards to the roadway, bicycle, and pedestrian network around each site other than simply the topography of the site as evaluated in the initial screening. In this evaluation class, the accessibility of each site in regards to roadway width and scope, adjacent roadway congestion, and pedestrian and bicycle interfaces are considered. For roadway accessibility, characteristics such as roadway width, turning radii of adjacent street intersections, existing street parking conflicts, one-way street networks, and known future street closures due to various festivals and parades are recorded for each site. For congestion, the projected level of service (LOS) of the main ingress/egress roadway for each site is presented. LOS is a grading system used to identify a roadway's quality of service that often uses speed, congestion, and capacity as factors in the analysis. LOS grades between A (high) and E (low) are assigned to roadways and indicate the general operating state of the roadway indicating vehicle density and speed limit attainment. The projected LOS grades were recorded from the 2035 Metropolitan Transportation Plan (MTP). For pedestrian interface, the existing sidewalk and crosswalk networks were observed around the immediate area of each site and used to identify any missing links that would create obstacles for pedestrians walking to/from each site. For bicycle interface, the existing but limited bicycle network was observed around the immediate area of each site, in addition to any proposed bicycle infrastructure.

improvements that were included in the Clarksville Long-Range Transportation Plan and the Downtown Parking Study.

Community and environment is used to identify the potential impacts a new transfer center would have on the community and any positive and negative externalities that could result from the relocation of the transfer center. In this evaluation class, the compatibility of the transfer center with the existing development, any joint development/redevelopment potential, historic preservation, and environmental concerns are all considered. For the compatibility of the proposed transfer center with the existing development, the immediate area of each site was reviewed in regards to its existing and future land use patterns and zoning and how a new transfer center would complement the existing/future uses. For joint development/redevelopment potential, the existing/future land use of each site was considered in addition to the lot size of the proposed site, and its relative location within the downtown Clarksville area. For historic preservation concerns, the historic status or eligibility of any building on or near each site was considered, as the proximity to sites that belong to or are eligible for the National Register of Historic Places (NRHP) often makes it difficult to make any type of changes or improvements to adjacent sites whether or not they too are eligible or are on the NRHP. Finally, for environmental concerns, additional environmental factors that were not observed in the initial screening (e.g. demolition of existing structures) are included in this criteria.

The agency considerations class is used to better evaluate the impacts of the proposed site for CTS beyond the size and location of the new transfer center. In this evaluation class, size and shape, site acquisition costs, existing business/residential displacement, and other general site concerns are identified and presented. For adequate size and shape, the size of the site is once again considered, in addition to the overall shape of the lot, in order to adequately accommodate the wish list of items (e.g. larger structure, pull-through bus ways) that could only be included on larger lot sizes. Site acquisition costs is a major component of the capital costs associated with the relocation of the transfer center and can greatly affect the recommendation of a site to be forwarded for further evaluation. The total appraised value calculated by the Montgomery County Assessor of Property was used for this criteria. For business and residential displacements, an inventory of owners and tenants was compiled using assessor data and site visits to determine the number and magnitude of displacements that could occur at each individual site. Finally, for site concerns, comments from public meetings, CUAMPO and CTS staff, and various public services and utility representatives (e.g. electrical, water, city engineer, etc.) were compiled and included in this criteria to highlight opinions and observations for each of the remaining nine sites.

DETAILED SCREENING METHODOLOGY

Upon completion of the rationale for each evaluation class, criteria, and site, a scoring scheme was used to measure how adequately each site performs under each criteria within the four evaluation classes. Each site was scored between one (1) and five (5) with one (1) being the lowest score, suggesting that that respective site performs poorly under that criteria. A score of five (5) was the highest score a site could receive, suggesting that the respective site performs well under that criteria. Six different individuals from CUAMPO, CTS, and the consulting staff (with over 100 years of combined experience in transit planning, operations, and capital investment), took part in the scoring of each of the sites and their scores were later averaged and calibrated to represent a total score out of a possible 100. Additionally, each of the evaluation classes were individually weighted to represent their relative impact to the relocation of the transfer center and their importance to the purpose and need of the project. Transit operations was weighted the highest at 35 percent. Transportation was the second highest at 25 percent and both community and environment and agency considerations were weighted equally at 20 percent. The heavier weighting of the first two evaluation classes represents a greater importance on CTS operations, accessibility, and multi-modality of the relocation efforts. Please note that if the four evaluation classes were weighted equally, the relationship between the top five and bottom two sites would have remained unchanged.

It is important to note that the scoring activity and methodology of the nine remaining sites does not constitute a preferential ranking of these sites but rather identifies the best performing sites under the criteria used in the detailed screening. The top performing sites would likely be recommended to be carried forward into the next phase of project development – further environmental studies and preliminary engineering, both of which serve as the first phase of a major capital investment project such as this and formed within a local legislative body’s budget. Under the Federal National Environmental Policy Act of 1969 and US DOT policies, an environmental assessment must be undertaken for all projects that receive federal funding. Additionally, regardless of its score in the detailed screening, the no-build option (Site 1), must be carried forward as the baseline comparison for all build options.

DETAILED SCREENING – SITE 1 PERFORMANCE

With a total score of 77 out of a possible 100, Site 1 (Figure 5) is tied with Site 1A as the highest scoring site among the nine remaining sites in this phase of the screening. With Site 1 being the existing transfer center, it is no surprise that the site scores highly in the transit operations evaluation class, as it requires no change to the routes of the pulse system, or has any effect on CTS O&M costs. Additionally, since it is located near the central core of downtown Clarksville, it had the highest population and number of jobs within walking distance among the sites. There were very few issues with Site 1 in regards to driver and rider safety, as it already operates as the existing transfer center for CTS.

Site 1 also scores highly in the transportation evaluation class as the accessibility to/from the transfer center and the pedestrian interfaces are already in place since the transfer center is in an established location. However, there are some future accessibility concerns with Site 1, as the new Civic Plaza is slated to be built across the street and will likely cause some street closures and accessibility obstacles when large gatherings and celebrations are held. LOS for 2035 is projected to be at LOS B, which should pose no issues for Site 1. While bicycle infrastructure is non-existent for most of the area, futures bike lanes are proposed for N 2nd and 3rd Streets, which adds to the overall high score for this site in this evaluation class.

Site 1 does not fare well in the community and environment evaluation class. While the site does blend well with the rest of the downtown core, as it is located near a variety of uses, and there are no environmental concerns, the site offers no opportunities for joint development/redevelopment because, as mentioned earlier, the site is currently maxed out of its existing footprint. Additionally, the site is located within the Clarksville Architectural District of the NRHP, which makes it difficult to implement any major changes to the existing transfer center.

This site performs above average in the agency considerations evaluation class. The site scores highly in three criteria: site acquisition costs, business/residential displacements, and site concerns. The site receives high scores in the first two criteria, as it has no site acquisition costs or additional costs related to business/residential displacements. Additionally, for site concerns, it also received a high score, as it was the most favored site indicated in the public involvement surveys. Where the site scores poorly is in regards to its size and shape, since it is the smallest of the remaining sites and offers no room for expansion or improvements.

Figure 5: Site 1



DETAILED SCREENING – SITE 1A PERFORMANCE

With a total score of 77 out of a possible 100, Site 1a (Figure 6) is tied with Site 1 as the highest scoring site among the nine remaining sites in this phase of the screening. Since Site 1A includes Site 1 and the adjacent parcels to the east, it is no surprise that both sites received identical scores for many of the criteria. The site scores highly in the transit operations evaluation class, as it requires no change to the routes of the pulse system or has any effect on CTS O&M costs, as it is partially located on the existing site. Additionally, since it is located near the central core of downtown Clarksville, it also had the highest population and number of jobs within walking distance among the sites. The APSU Morgan University Center is 0.5 miles from the site, and on-campus student housing is even further. There were very few issues with Site 1A in regards to driver and rider safety, as it already operates as the existing transfer center for CTS and the ingress/egress for the site would be similar to the existing setup.

Site 1A also scores highly in the transportation evaluation class, as the accessibility to/from the transfer center and the pedestrian interfaces are already in place. However, there are some future accessibility concerns with Site 1A, as the new Civic Plaza is slated to be built across the street and will likely cause some street closures and accessibility obstacles when large gatherings and celebrations are held. Roadway LOS for 2035 is projected to be at LOS B, which should pose no issues for Site 1A. While bicycle infrastructure is non-existent for most of the area, futures bike lanes are proposed for N 2nd and 3rd Streets, which adds to the overall high score for this site in this evaluation class.

Site 1A performs above average in the community and environment evaluation class. The site blends well with the rest of the downtown core, as it is located near a variety of uses, and there are no environmental concerns. In contrast with Site 1, this site offers some opportunities through reconstruction for joint development/redevelopment since it expands the current footprint to include the adjacent parcels to the east of the existing transfer center. However, the site is located within the Clarksville Architectural District of the NRHP, which will make it extremely difficult to implement any major changes to the existing transfer center and the adjacent parcel as long as other viable sites remain.

This site also performs above average in the agency considerations evaluation class. The site receives average scores in size and shape, site acquisition costs, and business/residential displacements. Since Site 1A is slightly larger than

Site 1, there is some improvement in the size and shape of the site, as it gains about 0.2 acres but, due to the surrounding road topography, it will require a similar layout as the existing transfer center. With the expansion to the east comes site acquisition costs of approximately \$770,000 and business displacements of the two properties on the adjacent sites. However, for site concerns, it received a high score, as it was the most favored site indicated in the public involvement surveys, as it is an extension of the popular existing site.

Figure 6: Site 1a



DETAILED SCREENING – SITE 2 PERFORMANCE

With a total score of 73 out of 100, Site 2 (Figure 7) had the second highest score among the nine remaining sites in this phase of the screening. This site also scored highly in the transit operations evaluation class, as its location within the CTS network allows for a decrease in revenue miles per pulse leading to a 0.74 percent decrease in annual revenue miles for fixed-route services. Additionally, its location in relation to the CTS garage saves the agency 0.3 miles per deadhead trip. The site also scores well in driver and rider safety, as only a few traffic signals are required near adjacent intersections, and the sidewalk network appears to be complete. Site 2 scores poorly in origin and destinations as it has the lowest total population and number of jobs within walking distance of all the sites, largely due to the industrial, commercial, and institutional nature of the surrounding area.

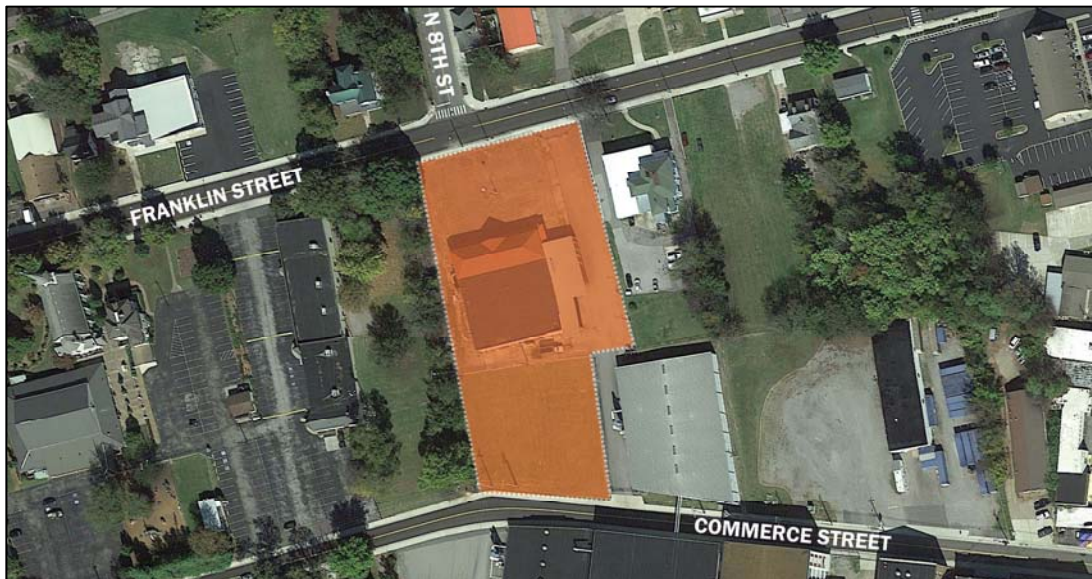
Site 2 scores highly in the transportation evaluation class, as the site fronts on three streets and the pedestrian accessibility to/from the site and the future LOS of Franklin Street are highly favorable. Where Site 2 falls short is in accessibility and bicycle interface. Franklin Street is narrow at only 33 feet wide, with on-street parking on the north side of the street making it difficult for buses to turn into the site in addition to passing other vehicles on the street. Ingress/egress of the site will also require off-site intersection improvements (to address the inadequate length of the westbound left-turn lane on College Street at Eighth Street) and require some on-street parking to be removed along Franklin Street. For the bicycle interface of the site, there are no existing bike facilities in the immediate area of the site, nor are there any plans for any in the future.

The performance of Site 2 in the community and environment evaluation class is poor. While the site has ample room for joint development of the site into a transfer center with a small mixed-use component, the surrounding land use provides little incentive to do so, as much of the development around the site is institutional and industrial

and far from the core downtown of Clarksville where most of the activity in this area is concentrated. Furthermore, the site is adjacent to the Immaculate Conception Church and School, the Foston and Hooker Funeral Homes, and the Clarksville Central Fire Station complex. Another issue with Site 2 is the empty building owned by Conwood on the site which is eligible for inclusion in the NRHP in addition to a few other sites in the immediate area. The existence of these historic buildings could make it difficult for any changes/construction on the site to be implemented.

This site also performs well in the agency considerations evaluation class. The site receives high scores in size and shape, site acquisition costs, and business/residential displacements. Since Site 2 is relatively large with access from both Franklin Street and Commerce Street (allowing for a bus pull through), this appears to be a desirable location for CTS. Site acquisition costs for the site are estimated around \$665,000; but with only one owner and a building that is not in use, relocation costs should be minimal. However, the site will require additional storm water drainage facilities to comply with Tennessee Department of Environment and Conservation (TDEC) requirements. Additionally, Site 2 was the second most favored site in the public involvement surveys, which contributed to the overall high score in this evaluation class.

Figure 7: Site 2



DETAILED SCREENING – SITE 3 PERFORMANCE

With a total score of 64 out of 100, Site 3 (Figure 8) has an average overall score and is in the middle of the pack among the nine remaining sites. This site received an average score in the transit operations evaluation class. Its location within the CTS network allows for a decrease in revenue miles per pulse leading to a modest decrease of 0.52 percent in annual revenue miles for fixed-route services. Additionally, its location in relation to the CTS garage also saves the agency 0.3 miles per deadhead trip. The site scores well in driver and rider safety, as only a few traffic signals are required near adjacent intersections and the sidewalk network appears to be complete, similar to Site 2. Site 3 also scores poorly in origin and destinations, as it has the second lowest total population and number of jobs within walking distance of the sites, largely due to the industrial and sparse residential nature of the surrounding area. The APSU Morgan University Center is nearly 0.5 miles from the site, and on-campus student housing is even further.

Site 3 also scores about average in the transportation evaluation class, as the pedestrian accessibility to/from the site and the future LOS of Franklin Street are highly favorable. Similar to Site 2, Site 3 does not score well in its accessibility and bicycle interface. Franklin Street is narrow at only 33 feet wide with on-street parking on the north side of the street making it difficult for buses to turn into the site in addition to passing other vehicles on the street. Ingress/egress of the site will also require some on-street parking to be removed along Franklin Street. For the bicycle interface of the site, there are no existing bike facilities in the immediate area of the site nor are there any plans for them in the future.

The performance of Site 3 in the community and environment evaluation class is very poor. The site is on the smaller side which restricts the amount of space available for joint development of the site into a transfer center with mixed-uses. The surrounding land use provides little incentive to for redevelopment, as much of the development around the site is institutional and sparse residential and far from the core downtown of Clarksville where most of the activity in this area is concentrated. Another issue with Site 3 is that the Hooker Funeral Home building on the site was recently renovated and is eligible for inclusion in the NRHP, in addition to a few other buildings in the immediate area. The existence of these historic buildings could make it very difficult for any changes/construction on the site to be implemented.

This site also performs about average in the agency considerations evaluation class. The site receives average scores in size and shape, site acquisition costs, and business/residential displacements. Site 3 is on the smaller side at only 1.2 acres and has access via Franklin Street only, which restricts the number of ingress/egress points to the transfer center for buses. Site acquisition costs for the site are estimated around \$490,000, but with only one owner/tenant, relocation costs should be minimal. Additionally, the site will require additional storm water drainage facilities to comply with TDEC requirements.

Figure 8: Site 3



DETAILED SCREENING – SITE 8 PERFORMANCE

With a total score of 59 out of 100, Site 8 (Figure 9) has an average overall score and is in the middle of the pack among the nine remaining sites. This site scored above average in the transit operations evaluation class. Its location within the CTS network allows for a decrease in revenue miles per pulse leading to a decrease of 0.87 percent in annual revenue miles for fixed-route services. Its location in relation to the CTS garage also saves the agency 0.2 miles per deadhead trip. However, the site scores poorly in driver and rider safety, as University Avenue/N 6th Street is a busy corridor and would be difficult for drivers to cross to/from Main Street onto University Avenue/N 6th Street. The intersection is also potentially difficult for pedestrians to cross, as a number of surrounding intersections lack crosswalks. Site 8 also scores about average in origin and destinations, as it has a good base total population and number of jobs within walking distance due to its proximity to APSU and some residential and retail/commercial buildings in the immediate area.

Site 8 also scores very poorly in the transportation evaluation class, as the bus accessibility to/from the site and the future LOS of Franklin Street are not at all favorable. Ingress/egress to from the site via University Avenue/N 6th Street is limited due to the raised median and lack of signalized intersection at Main Street. This would limit bus turning movements and access to the site would be severely limited for buses and other vehicles. Additionally, 2035 LOS projections for the main roadways in the area range between LOS D and E, which would prove to be a real obstacle for day-to-day transit operations. However, the pedestrian interface is decent but would require adding a few crosswalks (though difficult to signalize) to ease pedestrian access to/from the site. Also, University Avenue/N 6th Street is slated to be a potential bike route, which will also support bicycle access to/from the site.

The performance of Site 8 in the community and environment evaluation class is excellent. The proximity of the site to APSU and the surrounding medium density residential and retail/commercial are very compatible with a new transfer center. While the site is on the smaller end of the other nine sites, its location close to the university and other retail/commercial centers affords opportunities for a transfer center and mixed-use development. The site also has no historic or environmental concerns making construction of a transfer center/changes to the site easier to implement here compared to some of the other sites.

This site also performs very poorly in the agency considerations evaluation class. Site 8 is on the smaller side at only 1.1 acres and site acquisition costs for the site are estimated around \$435,000. However, since the site is part of the APSU Master Plan, it is highly unlikely that the site will be obtainable for the use of a transfer center making this site a non-starter.

Figure 9: Site 8



DETAILED SCREENING – SITE 13B PERFORMANCE

With a total score of 56 out of 100, Site 13b (Figure 10) has the second lowest score among the nine remaining sites. This site scored about average in the transit operations evaluation class. Its location within the CTS network allows for a slight decrease in revenue miles per pulse leading to a small decrease of 0.19 percent in annual revenue miles for fixed-route services. The site also has an average score in driver and rider safety because a number of traffic signals and crosswalks would be needed in order to improve bus and pedestrian flow. Site 8 scores above average in origin and destinations, as it has a good base total population and number of jobs within walking distance due to its proximity to APSU, medium density residential, and light commercial buildings in the immediate area.

Site 13b also scores very poorly in the transportation evaluation class, as the bus accessibility to/from the site and the future LOS of Franklin Street are not at all favorable. Ingress/egress to/from the site via Main Street could prove to be difficult without traffic signals at strategic intersections near the site (such as College Street at N 4th Street and University Avenue at Main Street). Additionally, narrow turning radii at adjacent intersections and on-street parking could also prove to be difficult for buses to access the site. LOS projections for 2035 for the main roadways (i.e. Main Street) in the area is LOS E, which would also be a real obstacle for day-to-day transit operations. However, the pedestrian interface is decent but would require adding a few crosswalks to ease pedestrian access to/from the site. The site lacks any existing or future bicycle infrastructure that would facilitate bus connections to the transfer center.

The performance of Site 13b in the community and environment evaluation class is average. The site's proximity to APSU and surrounding medium density residential and light commercial lend themselves to being very compatible with a new transfer center. Additionally, the size of the site would be desirable for a transfer center and mixed-use development. The site also has one NRHP site across the street but no environmental concerns, making construction of a transfer center/changes to the site somewhat easier to implement here compared to the other sites.

This site also performs poorly in the agency considerations evaluation class. Site 13b is a large lot at 1.7 acres and site acquisition costs for the site are estimated around \$375,000. However, this site will likely be part of a future APSU Master Plan due in 2017 making it also highly unlikely that the site will be obtainable for the use of a transfer center.

Figure 10: Site 13b



DETAILED SCREENING – SITE 14 PERFORMANCE

With a total score of 59 out of 100, Site 14 (Figure 11) has a score on the lower end among the nine remaining sites. This site scored poorly in the transit operations evaluation class. Its location within the CTS network actually causes a slight increase in revenue miles per pulse leading to an increase of 0.36 percent in annual revenue miles for fixed-route services. Despite this increase, its location in relation to the CTS garage saves the agency 0.4 miles per deadhead trip. The site also has an average score in driver and rider safety as a number of traffic signals and crosswalks would be needed in order to improve bus and pedestrian flow. The site scores highly in origin and destinations as it has a good base total population and number of jobs within walking distance due to its proximity to light and medium density residential, institutional (e.g. Work Force Development), and retail/commercial buildings in the immediate area.

Site 14 scores about average in the transportation evaluation class, as bus accessibility to/from the site and the future LOS of Madison Street at University Avenue/N 6th Street are not at all favorable. Ingress/egress to from the site is via Madison Street only, which could be difficult due to the close proximity of the traffic signal at the intersection of Madison Street at University Avenue/Cumberland Street. Additionally, LOS projections for 2035 for Madison Street east of University Avenue/Cumberland Drive is LOS D, which may affect the day-to-day operations of CTS. However, the pedestrian interface is decent, but would require adding a few crosswalks to ease pedestrian access to/from the site. The site lacks any existing bicycle infrastructure, but improvements are proposed along Madison Street that would, in the future, facilitate access to the transfer center.

The performance of Site 14 in the community and environment evaluation class is below average. The proximity of the site to the commercial and institutional land uses along Madison Street and the surrounding apartments lend themselves to be very compatible with a new transfer center. However, the size of the site would limit any joint

mixed-use development. There is also a number of NRHP sites in the immediate area that could make it difficult to construct a new transfer center or implement any changes/improvements to the area.

This site also performs poorly in the agency considerations evaluation class. Site 14 is a small lot at only 1.3 acres and site acquisition costs for the site are estimated around \$525,000. Additionally, this site is comprised of two lots with two different owners and two different businesses that will require additional costs for relocation.

Figure 11: Site 14



DETAILED SCREENING – SITE 17 PERFORMANCE

With a total score of 68 out of 100, Site 17 (Figure 12) has a score on the higher end among the nine remaining sites. This site scored below average in the transit operations evaluation class. Its location within the CTS network actually causes an increase in revenue miles per pulse, leading to an increase of 0.80 percent in annual revenue miles for fixed-route services. Despite this increase, its location in relation to the CTS garage saves the agency 0.2 miles per deadhead trip. The site also has an average score in driver and rider safety, as a number of traffic signals and crosswalks would be needed in order to improve bus and pedestrian flow. The site scores highly in origin and destinations, as it has a good base total population and number of jobs within walking distance due to its proximity to the core of downtown Clarksville, low and medium density residential, commercial, and institutional buildings along Madison Street.

Site 17 scores very high in the transportation evaluation class, as the bus accessibility to/from the site and the pedestrian and bicycle interfaces with the site are all favorable. Ingress/egress to/from the site is via Madison Street and possibly S 3rd Street and Union Street which would require a few traffic signals at nearby intersections to improve traffic flow and ensure easy access to/from the site for buses. Pedestrian access is also good with a few crosswalks required to improve access for pedestrians to/from the site. There is no existing bicycle infrastructure near the site, however Madison Street is proposed to have a bike path that will formalize bike access to/from the site. LOS projections for 2035 for Madison Street is LOS B, which should cause only minor, if any, issues for CTS operations.

The performance of Site 17 in the community and environment evaluation class is very high. The site's proximity to the core of downtown Clarksville, the commercial and institutional uses along Madison Street, and the surrounding low and medium density apartments lend themselves to being very compatible with a new transfer center.

Additionally, the size of the site would allow for plenty of opportunities for joint development, especially since some of the existing retail lots would likely be used for new mixed-use opportunities. There are a number of NRHP sites in the immediate area that could make it somewhat difficult to construct a new transfer center or implement any changes/improvements to the area.

This site performs about average in the agency considerations evaluation class. Site 17 is the largest site of the nine remaining sites and could potentially include multiple parcels totaling up to approximately 4.02 acres. The acquisition cost for these lots ranges between \$975,000 and \$1.5 million depending on the number of lots acquired. Additionally, this site is comprised of multiple owners and tenants and would require additional funds for the relocation costs of these retail/commercial tenants. Any off-street parking for the Madison Street United Methodist Church must be replaced in-kind. Finally, the size of the site allows for flexibility in the development of the site for mixed-use development as well as transit center design.

Figure 12: Site 17



DETAILED SCREENING – SITE 24 PERFORMANCE

With a total score of 55 out of 100, Site 24 (Figure 13) has the lowest total score among the nine remaining sites. This site scored about average in the transit operations evaluation class. Its location within the CTS network allows for a decrease in revenue miles per pulse leading to a modest decrease of 0.97 percent in annual revenue miles for fixed-route services. The site scores poorly in driver and rider safety as University Avenue/N 6th Street is a busy corridor and would be difficult for drivers to cross to/from Main Street onto University Avenue/N 6th Street and would also be potentially difficult for pedestrians to cross as a number of the surrounding intersections lack crosswalks. Site 24 also scores about average in origin and destinations as it has a good base total population and number of jobs within walking distance due to its proximity to APSU and some residential and retail/commercial buildings in the immediate area.

Site 24 scores very poorly in the transportation evaluation class, as the bus accessibility to/from the site and the future LOS of University Avenue/N 6th Street are not at all favorable. Ingress/egress to/from the site via University Avenue/N 6th Street is limited due to the raised grass median and lack of signalized intersections along Main Street.

This would limit bus turning movements and access to the site would be limited for buses and other vehicles. Additionally, 2035 LOS projections for the main roadways in the area range between LOS D and E, which would prove to be a real obstacle for day-to-day transit operations. However, the pedestrian interface is decent but would require adding a few crosswalks (though difficult to signalize) to ease pedestrian access to/from the site. Also, University Avenue/N 6th Street is slated to be a potential bike route, which will also ease bicycle access to/from the site.

The performance of Site 24 in the community and environment evaluation class is very poor. The proximity of the site to APSU and surrounding medium density residential and retail/commercial would be very compatible with a new transfer center. While the site is on the smaller end of the other nine sites, its location among the university and other retail/commercial centers would make it a great site for a transfer center and mixed-use development. The site also has no historic concerns making construction of a transfer center/changes to the site easier to implement here compared to some of the other sites. However, the reason Site 24 does so poorly in this evaluation class is because an underground retention area and sinkhole injection wells exist on site making this site unbuildable. This makes this site a non-starter.

This site also performs very poorly in the agency considerations evaluation class. Site 24 is a large lot at 2.02 acres that may allow for a number of different configurations that include a bus pull-through. Acquisition costs for this site are approximately \$860,000. The in-kind replacement of off-street parking for the Corlew Auto Dealership is problematic because the surrounding land-use zoning prohibits auto dealerships. However, the underground retention area (discussed above) makes this site unbuildable.

Figure 13: Site 24



DETAILED SCREENING – RECOMMENDATIONS

At the completion of the detailed screening of sites, four sites were forwarded into the second round of screening (Figure 14). Despite being tied with the highest overall score, Site 1 would have been included in the final recommendations of this study regardless, because an environmental assessment under the National Environmental Policy Act (NEPA) of 1969 and USDOT policies requires the no-build option to be carried forward as the baseline comparison for the build options. Site 1a was also included to provide a build option that avoids having to totally relocate the existing transfer center, but rather expands the footprint of the site. Sites 2 and 17 are both

recommended to be forwarded into the next phase of project development (environmental studies and preliminary engineering) because they have the next highest scores after Sites 1 and 1a. The results of the detailed screening of sites are presented in Table 2 with the rationale behind the screening provided in Appendix C.

Table 2: Detailed Screening of Sites

Map No.	Site Criteria				Total Score
	Transit Operations	Transportation	Community and Environment	Agency Consideration	
1	90	75	65	70	77
1a	85	75	75	65	77
2	80	80	50	75	73
3	70	65	50	65	64
8	65	40	85	45	59
13b	70	35	65	50	56
14	50	70	60	60	59
17	55	80	80	65	68
24	75	40	55	40	55

Figure 14: Preferred Sites



PREFERRED SITES

The four sites (Site 1, 1a, 2, and 17), depicted on the previous page are the four options/sites recommended by this effort for the next phase of project development (environmental studies and preliminary engineering) to serve as the site of a new CTS Transfer Center, with the exception of Site 1 which will remain as-is and serve as the no-build option per NEPA. The three remaining build sites offer CTS the capability of maintaining their existing hub-and-spoke network with little required realignment of routes to reach the new location and offers the opportunity for a larger transfer center with additional bus bays for expansion. Additionally, a new and larger transfer center could also accommodate a number of modern amenities that would enhance both the CTS operation and the rider experience. These include the following:

Exterior Operations

- Accommodations for current CTS vehicles – seven 30-foot buses
- Accommodations for future CTS vehicles + 30% = 3 additional vehicles
- Accommodations for CTS supervisor vehicles
- Accommodations for CTS paratransit vehicles, other human services transit vehicles
- Accommodations for taxis/ridesharing services
- Airport or other private shuttles
- Bicycle racks/lockers
- Kiss and ride drop off area
- CCTV surveillance/lighting

Interior Operations

- Pass sales, information, transfer, etc.
- Dispatch function (separate room)
- Restroom – (1 set for public, 1 set for drivers)
- Driver/employee lounge/break room
- Waiting area for public
- Convenience retail (coffee, newspaper, ATM, etc.)
- Clarksville Chamber/Visitor information
- CCTV surveillance

In addition, the new site should also be capable of accommodating some aspect of private sector development in a joint development scenario. That development could include one or more of the following:

- Restaurant (deli, fast food, or small sit down)
- Daycare center
- Retail sales
- Postal mailing and reproduction services
- Social service one-stop agency
- Bank (with ATM utility bill pay, etc.)
- Parking

Because of the size and layout of the candidate sites, not all of the proposed development types listed above could be accommodated. With this, it will also be up to the private sector to show interest in a joint development concept once the site is selected and design commences.

The following section takes a closer look at the top four scoring sites to be carried forward into the next stages of project development, and provides some options for possible layouts for a new transfer center involving the three build alternatives.

PREFERRED SITES – SITE 1

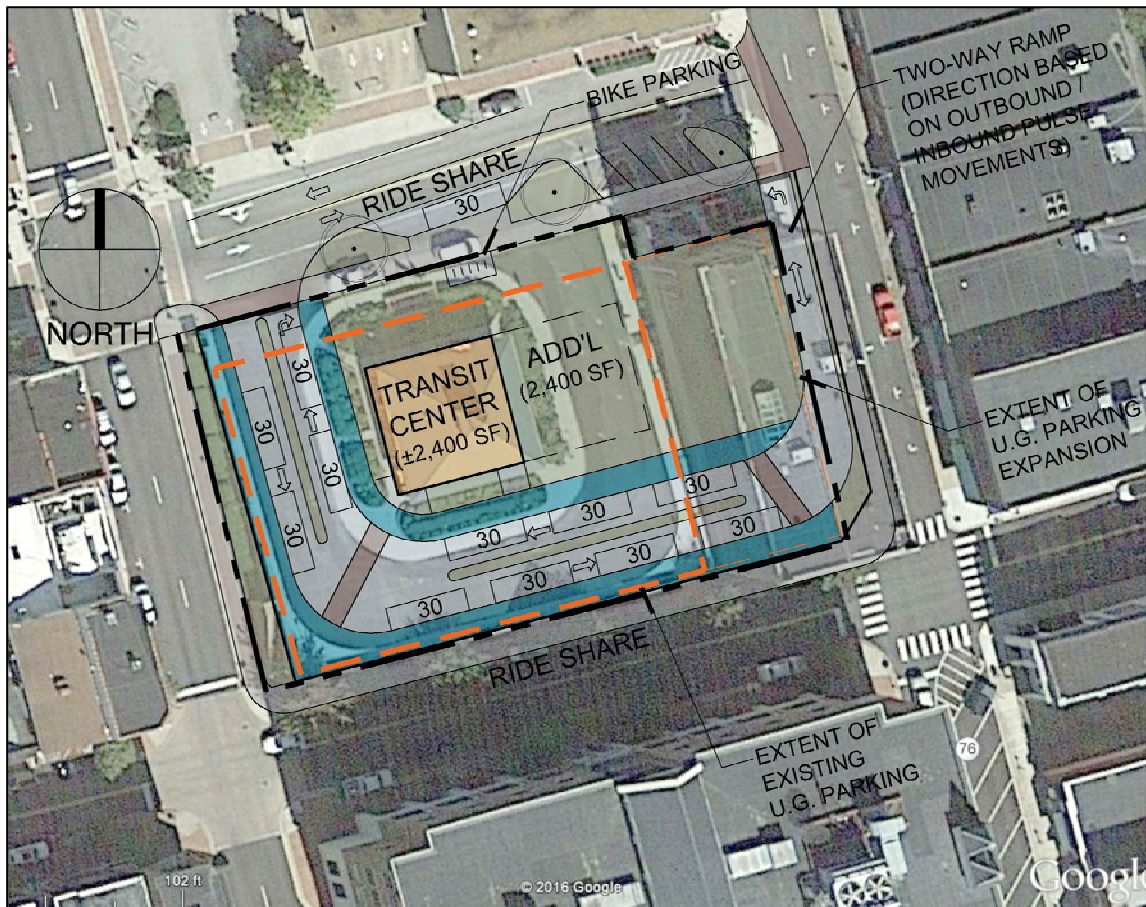
Site 1 was recommended as a preferred site and represents the no-build option of the project. There are no recommended changes to the no-build option as it serves as the baseline comparison to the three other build options. The original architectural plans for the transfer center allow for expansion to the edges of the roof canopy, providing more space on the inside for a larger waiting area or CTS needs, but eliminates the space allotted for landscaping and outdoor waiting areas located around the existing structure. However, this site only serves as an option for the transfer center should the no-build option be pursued. This option would also include the periodic monitoring and maintenance associated with the settling and leaks from the existing deck and the parking garage.

PREFERRED SITES – SITE 1A

Site 1a is the first build option and offers an incremental improvement to the existing site, as it takes the two existing parcels just to the east located within the same block and offers room for expansion. The expansion allows for the transfer center to take up the entire southern block face of Legion Street from N 2nd Street to N 3rd Street.

One possible layout for a renovated/expanded transfer center is presented in Figure 15. Due to the steep grades that are experienced along N 2nd and 3rd Streets, the garage located under the existing transfer center on Franklin Street is maintained and expanded east to N 3rd Street in order to maintain the same level of the existing transfer center on Legion Street to the east as well. Site 1a allows for the existing structure to double in size to approximately 4,800 square feet. It allows for up to 11 bus bays for 30-foot buses or slightly fewer should CTS expand to larger 35 or 40 foot buses. The bus bays are set up in a similar arrangement as the existing transfer center which includes two rows of buses arranged in a horseshoe/U-shaped pattern. Due to the size limitation of the site, buses are lined up one after another, which doesn't allow bus bays to be assigned (i.e. first-in/first-out) and requires that buses wait until buses ahead of them are in motion to depart the transfer center. This can cause operational issues if one bus in front of the line-up breaks down. The ramp on the east side of the site is a one-way bus ramp that changes directionality based on the pulse movement. Bike and ride-share parking is also made available on the north side of the site along Legion Street. Site 1a, or the expansion option, would allow for very limited joint development/redevelopment potential such as the expansion of the parking garage under the transfer center and use of the front of the garage along Franklin Street for commercial uses (retail and office).

Figure 15: Site 1a Possible Layout



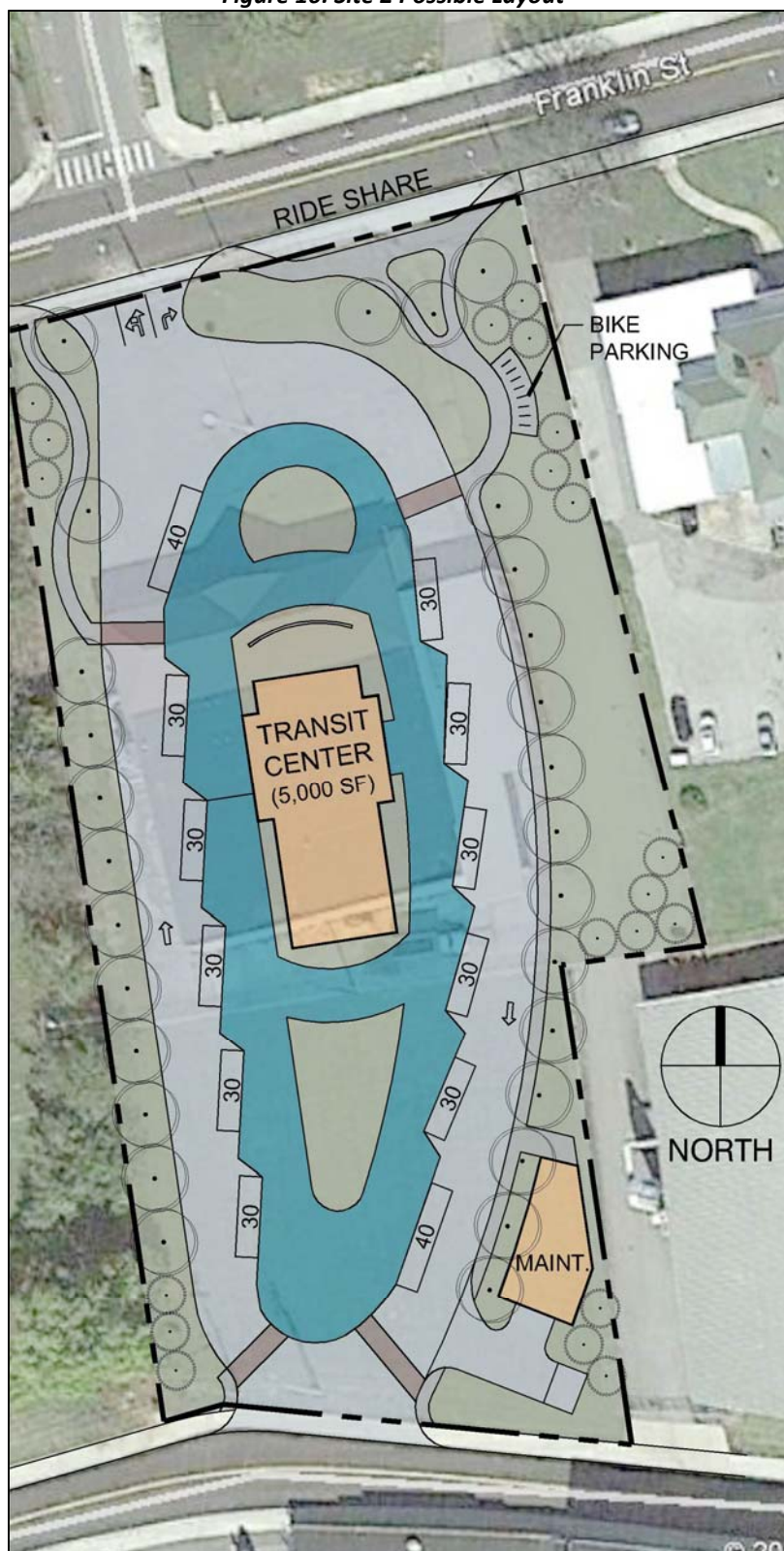
PREFERRED SITES – SITE 2

Site 2 is a build option involving construction of a new transfer center on a new site as opposed to the no-build option (Site 1) or expansion option (Site 1a). Site 2 is the only one of the preferred sites that allows for a bus pull-through since access to the site is available via both Franklin Street and Commerce Street.

One possible layout for a new transfer center on Site 2 is showcased in Figure 16. As mentioned above, access from both Franklin Street and Commerce Street allows for a bus pull-through design which provides access to/from the site based on each route's alignment. The site entrance on Franklin Street aligns with N 8th Street. The site allows for ten 30-foot bus bays and two larger bus bays (40-foot) should CTS expand to larger 35 or 40 foot buses, or allow for intercity buses (e.g. Greyhound) to serve the site. The spacing and staggering of the bays also allows buses to enter/exit the transfer center individually rather than the first-in/first-out set-up used and envisioned with the existing transfer center and Site 1a respectively.

The site also allows for a 5,000 square foot transfer center building – double the existing transfer center size – and a separate maintenance facility with adjacent parking for upkeep of the transfer center and grounds. The site layout also provides space for bicycle and ride-share parking and ample greenspace in keeping with the less developed character of the surrounding area. Due to the shape and size of the lot and the desire for a pull-through operation, the potential for joint development is limited at this site. It could take place, although at a smaller scale inside the transfer center or adjacent to or on top of the proposed maintenance building.

Figure 16: Site 2 Possible Layout



PREFERRED SITES – SITE 17

Site 17 is the final build option, and also requires construction of a new transfer center on a new site as opposed to the no-build option (Site 1) or expansion option (Site 1a). The new site is much larger than the three previous sites and is the only option that adequately allows for transit oriented development (TOD) or truly mixed-used space on the site. However, due to the topography along Union Street on the southern side of the site, a bus pull-through design is not feasible as shown in Site 2.

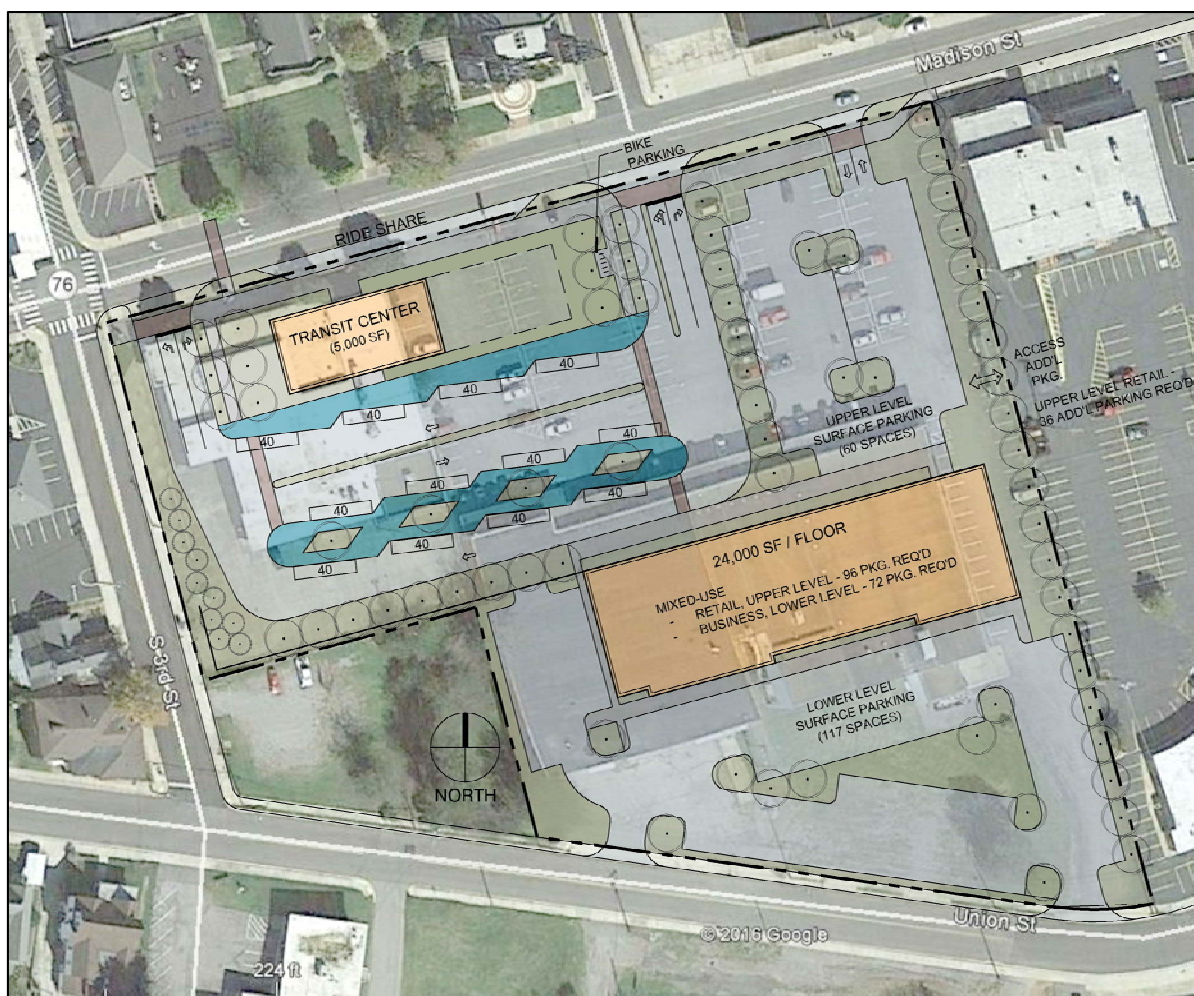
Due to its size, two possible layouts are provided for Site 17. The first layout (Figure 17) allows for almost 20,000 square feet of mixed-use storefront along Madison Street that will help recover some of the loss in commercial/retail space taken from the site acquisition, such as the loss of the existing Dollar Store and Habitat Restore. The site also allows for a 5,000 square foot transfer center located along Madison Street to provide easy access for pedestrians and bicyclists in the area. Fourteen 40-foot bus bays are allocated for the site which permits adequate expansion by CTS in both bus and fleet size and/or intercity bus service (e.g. Greyhound). The spacing and staggering of the bays also allows buses to enter/exit the transfer center individually rather than the first-in/first-out set-up of the existing transfer center or envisioned for the expansion option (Site 1a).

Additionally, a two story TOD/mixed-use development building is also shown on the southern side of the site along Union Street which allows for up to 24,000 square feet per floor of additional space amounting, to over 40,000 square feet of development opportunity. While the site plan may not provide off-street parking for marketing (as zoning does not require off-street parking in the Central Business District), adjustments may be made to the parking layout, building size or uses, or development of the northeast corner of Union Street at S 3rd Street to meet off-street parking requirements. Due to the drop-off of the site from Madison Street to Union Street, a public parking garage below the transfer center of mixed-use development is a possibility dependent on the economic feasibility of the use.

[illegible]

The second layout (Figure 18) only allows for 24,000 square feet of TOD/mixed-use development, as the amount of parking for the site is drastically reduced by the elimination of the underground parking deck. The site allows for a 5,000 square foot transfer center that could be expanded by another 5,000 square feet towards the east for joint development such as a relocated downtown post office. The transfer center is located along Madison Street to provide easy access for pedestrians and bicyclists in the area. Twelve 40-foot bus bays are allocated for the site which allows for adequate expansion by CTS in both bus and fleet size and/or intercity bus service (e.g. Greyhound). The spacing and staggering of the bays also allows buses to enter/exit the transfer center individually rather than the first-in/first-out set-up of the existing transfer center and expansion option (Site 1a). Additionally, bicycle and rideshare parking are provided along Madison Street. East of the transfer center, there is also an off-street parking area to serve joint use development that would also provide parking for the Madison Street United Methodist Church.

Figure 18: Site 17 Possible Layout – Version 2



PROJECT COST CONSIDERATIONS

The costs for relocating the transfer center for each of the build options as well as the no-build or do nothing option were estimated in 2017 US Dollars – not inflated to the year of expenditure. A full build up price for each option was estimated including the following activities or costs:

- Site acquisition
- Site development (grading, drainage, etc.)
- Transfer center design and construction
- Contingency

The projected costs for each of the activities highlighted above are presented below in detail.

PROJECT COST - SITE ACQUISITION

For this project, a certified appraiser traveled to the build sites and developed an estimate of the acquisition costs for each site. Please note that this is not an appraisal for purchase of the properties by a public entity. Rather, it is a budget-based estimate for purposes of developing an early project development phase cost for programming purposes, and includes the cost of the land and any structures on the site. The appraiser's projected costs for each of the sites are presented in Table 3. As the no-build option, Site 1 has no additional site acquisition costs. The additional land of Site 1a is estimated to cost \$1.03 million. Site 2 has the lowest cost of the three sites and is estimated at \$655,000. Site 17 has the highest cost of the three sites as it is composed of multiple parcels and buildings, and is estimated at \$3.12 million. The appraiser's work and details can be found in Appendix D.

Table 3: Appraiser Site Acquisition Estimates

	Site Acquisition Costs – Appraiser Estimates
Site 1	\$0
Site 1*	\$920,000
Site 1a	\$1,030,000
Site 2	\$655,000
Site 17	\$3,123,000

**Land value of Site 1 if redeveloped*

Site 1, the existing transit center has a residual value of \$920,000 as calculated by CUAMPO and the study's consultant (WSP | Parsons Brinckerhoff). This is based on the adjacent land sales in the area of downtown Clarksville which have recently been as high as \$1 million per acre, as well as some similar values as calculated by the appraiser. Additionally, the value of the garage below the transfer center and its land value for development were taken into consideration. This value assumes that there is no required payback to the Federal Transit Administration (FTA) since the useful life of the transfer center built in 1992 has been all but realized. The disposal of the transfer center and the land it sits on would take place only after a new transfer center is up and running.

PROJECT COST - SITE PREPARATION

Site preparation costs for each of the sites were also estimated. Site preparations include earthwork (i.e. soil/rock movement), water drainage, pavement, and retaining wall construction, if required. Note that these site preparations costs do not include costs related to site work utilities. The estimated costs are sourced from various publications by the Tennessee Department of Transportation (TDOT). The site preparation costs for each of the sites are presented in Table 4. As the no-build option, Site 1 has no additional site preparation costs. The additional work for the Site 1a expansion is estimated to cost \$725,000. Site 2 has site preparation costs estimated at \$670,000. Site 17 Option A has site preparation costs of \$955,000; however, these costs do not include any site preparations for a parking garage as indicated in the site plan above, as the amount of TOD for the site is variable and the amount of parking required will determine the need of a parking garage on site. Site 17 Option B has the highest initial site preparation costs of all of the sites estimated at \$1.48 million.

Table 4: Site Preparation Estimates

	Site Preparation Cost Items					
	Earthwork	Retaining Wall	Parking Garage	Drainage	Pavement	Total Cost
Site 1	\$0	\$0	\$0	\$0	\$0	\$0
Site 1a	\$25,000	\$0	\$600,000	\$0	\$100,000	\$725,000
Site 2	\$175,000	\$0	\$0	\$180,000	\$315,000	\$670,000
Site 17-A	\$280,000	\$0	\$0*	\$175,000	\$500,000	\$955,000
Site 17-B	\$280,000	\$375,000	\$0	\$325,000	\$500,000	\$1,480,000

*Parking Garage costs not included as magnitude of TOD in Site 17 Option A is variable.

PROJECT COST – SITE CONSTRUCTION

Site construction costs for each of the sites were estimated and include construction of the following: transfer center, canopies, passenger area/bus lanes, and areas not related to transit operations including landscaping, curbing, signage, etc. The estimated costs are sourced from various projects designed by the consultant team in addition to RSMeans which provides rough order of magnitude (ROM) level costs for parking structures and buildings. Note that these site construction costs do not include costs related to the TOD/mixed-use and parking garage construction, as these are all variable additions to Site 17 Options A and B. The projected site preparation costs for each of the sites are presented in Table 5. As the no-build option, Site 1 has no additional site preparation costs. The additional land in Site 1a is estimated to cost \$2.42 million. Site 2, with the bus-pull through lanes, is estimated to cost \$6.00 million. Site 17 Option A has site construction costs of \$9.92 million, however, these costs do not include any constructions costs for the various TOD/mixed-use buildings or parking garage. Site 17 Option B has construction costs estimated at \$9.15 million.

Table 5: Site Construction Estimates

	Site Construction Cost Items					
	Transfer center	Canopies	Passenger Area/Bus Lanes	Non-Transit Site Area	Design Contingency (15%)	Total Cost
Site 1	\$0	\$0	\$0	\$0	\$0	\$0
Site 1a	\$737,500	\$480,000	\$700,000	\$187,500	\$315,750	\$2,420,750
Site 2	\$1,475,000	\$942,500	\$1,575,000	\$1,225,000	\$782,625	\$6,000,125
Site 17-A	\$1,475,000	\$2,250,000	\$2,275,000	\$2,625,000	\$1,293,750	\$9,918,750
Site 17-B	\$1,475,000	\$2,430,000	\$1,925,000	\$2,125,000	\$1,193,250	\$9,148,250

PROJECT COST – TOTAL COSTS

The total costs associated with each site are presented in Table 6. The total estimated cost includes all of the costs for each phase presented earlier in this section, in addition to a 10 percent escalation of total costs (e.g. acquisition + preparation + construction) for contingency. Once again, Site 1 has no additional costs as it is the no-build option. Site 1a has the lowest additional cost of the build options estimated at \$4.59 million. Site 2 has an estimated cost of approximately \$8.06 million. Both Site 17 Options A and B are both priced similarly at over \$15 million, but do not include the costs associated with TOD/mixed-use and parking garage construction as shown above in the sample layouts.

Table 6: Total Cost Estimates

	Total Cost Estimates by Phase				
	Site Acquisition	Site Preparation	Site Construction	Contingency (10%)	Total Estimated Cost
Site 1	\$0	\$0	\$0	\$0	\$0
Site 1a	\$1,030,000	\$725,000	\$2,420,750	\$417,575	\$4,593,325
Site 2	\$655,000	\$670,000	\$6,000,125	\$732,513	\$8,057,638
Site 17-A	\$3,123,000	\$955,000	\$9,918,750	\$1,399,675	\$15,396,425
Site 17-B	\$3,123,000	\$1,480,000	\$9,148,250	\$1,375,325	\$15,126,375

PROJECT CONCLUSIONS AND NEXT STEPS

Upon completion of the initial and detailed screening of sites, it is the consultants' recommendation that Sites 1a, 2, and 17 be further reviewed and studied as required by federal requirements for projects that involve federal funding. Additionally, further studies may be required as the existing transfer center site used federal funding for its construction and has, based on the consultant's professional opinion, reached the end of its useful life. If the transfer center is moved to an entirely new site and opened for operations, the land value of approximately \$920,000 may be recovered by the City / CTS for the existing site, providing the FTA agrees that no residual value or "payback" is necessary due to the age of the facility – any recovered transit capital funds must go back toward CTS transit services. If this is not the case, money owed to the FTA will off-set or reduce this amount. Site 1 remains the no-build option, and remains an option as the existing site serves CTS and its customers adequately and will continue to do so as long as CTS continues to maintain the aging structure properly. In the case of street closures around the existing site, CTS will continue to operate under its existing operations plan when these instances occur. The three build options were all screened accordingly and are believed to provide CTS and the community with a number of benefits that not only maintain the operations of CTS, but provide for future expansion opportunities and additional development opportunities and revenues should CTS be inclined to venture into this market.

It is important to note that while three different sites are recommended as possible sites for a new transfer center, this is only one step of many in a multi-year process that is required before a new transfer center is constructed. An optimistic and aggressive timeline of studies and steps is presented in Figure 19, assuming funding sources are identified and in hand. However, FTA capital project funding is discretionary (in competition with other transit agencies nationwide) and the magnitude of such funding has been essentially flat for many years. Nevertheless, the infrastructure reinvestment promises of the Trump Administration provides encouragement for public transit initiatives although the magnitude and nature of increased funding are not yet known. As shown, this study was completed at the end of 2016. Should CUAMPO, the City of Clarksville, and CTS collectively decide that relocation of the existing transfer center is necessary, at least six years will pass under the most optimistic schedule before a new

site is in operation. Then, and only then, can the existing transfer center be closed, possibly sold and redeveloped. In the years that pass until the opening of the new transfer center, a number of studies are required to be completed and constant coordination with FTA and the Tennessee Department of Transportation (TDOT) will be required during the process to ensure the proper title transfer between the existing site and the proposed new site, if one of the build options is selected. In other words, this study and the recommendation of the three build sites, is only the first step of many to come in the realization of a new transfer center for Clarksville and CTS. Finally, the next step in project development is to begin talks with FTA and TDOT, to present the project to elected officials (i.e. City Council), and to gain community consensus for proceeding with the project. Next, is the creation of a major capital improvement project by local government with funding approvals by the City for further environmental studies, preliminary engineering and future project development, including construction. Although a City department CTS cannot on its own authorize the capital investment for any phase of project development. That authorization has to come from the City. Based on optimistic and aggressive project development, a more detailed timeline of steps, roles and responsibilities is outlined below and on the next pages.

Figure 19: Sample Project Development Timeline

PROJECT DEVELOPMENT TIMEFRAME						
KEY STEPS						
2016	2017	2018	2019	2020	2021	2022
Relocation Feasibility Study Conclusion	New Facility in MTP / TIP	Complete Environmental Analysis	Site Acquisition	Project Construction		Occupancy / Testing
	Environmental Studies / Analysis	Final Project Funding	Final Design			Operate New Facility
	Preliminary Project Funding	Preliminary Design	Hire Contractor			Sell Old Facility
	FTA Coordination	FTA Coordination	FTA Coordination	FTA Coordination	FTA Coordination	FTA Coordination

FUTURE PROJECT DEVELOPMENT

Although candidate sites for relocating the existing transit center have been identified, much more work in terms of project development would have to be accomplished in order for the actual relocation to take place. To that end, a sample of needed actions and a proposed timeline are presented below.

2017

The relocation is subject to an environmental review regardless of where the new transfer center is built. The use of Federal funds requires this analysis. An environmental study and analysis would need to be undertaken and action (or build options) would need to be weighed against a no build option in more detail than this current study provides.

Beginning in 2017, City / CTS would begin discussions with FTA and TDOT about project development, present the project to the Clarksville City Council, and gain broad community support for the project.

Next, the City would need to identify a future capital project with the approval of the City Council. Along with placing the project in the “pipeline” for the MPO, the City would need to do the same and begin its budgeting process; identifying a working range of costs and sources of funds. At the time of this report’s conclusion, no sources of funds have been identified specifically for transit centers at the Federal level (FTA) or State level (TDOT) or local level (City of Clarksville). Although there is potential that new Federal programs can always be developed or expanded, a conservative approach dictates that local project sponsors not count on that becoming a reality. It is therefore assumed that sources of future project development and programming, including environmental studies and clearance, design and engineering, as well as capital funding for site acquisition, site development, and construction, all will need to come from local sources.

Having created the capital project and appropriated funding for the necessary environmental study and preliminary engineering phase, as well as site acquisition and ultimately construction, the City / CTS as the sponsors would request this phase be placed in the MPO’s Transportation Improvement Plan (TIP) and Metropolitan Transportation Plan (MTP). Once, this has been done, a consultant would be selected to proceed with the environmental and preliminary engineering studies.

The project sponsor, the City of Clarksville / CTS as the FTA’s designated recipient, would continue to contact the FTA at the Region IV office in Atlanta, and inform and consult with them continuously on the project. Future and on-going coordination will be needed throughout the relocation project timeline.

2018

The environmental analysis started the previous year would be completed. Some of the details from this study could be used in the scoping process, but some additional work on the full spectrum of impacts will need to be analyzed.

Project funding will need to be more finalized and sources of funds, be they local, state and/or Federal, would have to be identified and secured.

Preliminary design of the facility would take place. The design process will be necessary to inform both the environmental analysis and the funding plan because design details will be need to be identified for both activities.

City / CTS will continue to coordinate with the FTA Region IV office in Atlanta.

2019

After the environmental process is complete, the document approved, and a Record of Decision (ROD) obtained from the FTA, funds can be expended and the site can be acquired. Likewise, final design can commence through the hiring of an architecture firm, with experience in transit facility design, and proceed to a final design along with a construction package and bid specifications. After the bid package is produced, a procurement could be held, and a contractor for the new transfer center could be hired. Like in other years, the City / CTS would continue coordination with the FTA.

2020 – 2021

During 2020 to 2021, the transfer center would be under construction. This would involve necessary site work, utility relocation, and all construction activities. FTA coordination would continue, and construction inspection and/or owner’s inspection and coordination services would likely be needed to ensure the center is constructed with the highest quality and adheres to the approved design and contract specifications.

2022

After construction is largely complete, occupancy and testing/startup of the facility and its systems can begin. Once that is complete, CTS can begin shifting operations from the old facility. Once the new facility is fully operational, City / CTS can coordinate with the FTA to have the old transfer facility declared surplus. Only then can the old property be sold or otherwise disposed of by City / CTS.

In conclusion, the project development timeframe is merely illustrative of the many steps to be taken by the City / CTS to obtain City Council, FTA and TDOT approval and funding of the project, to gain broad public support for the project, to determine and lock-in those funding sources, and to execute the project construction as determined in the environmental and preliminary engineering studies. This study serves as a guidebook on how to proceed to address the on-going and future public transportation needs of the community.



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