
Proposed Gateway Transit Bus Transfer Center
City of Goldsboro, North Carolina
Wayne County

DRAFT

**ADMINISTRATIVE ACTION
CATEGORICAL EXCLUSION**

SUBMITTED PURSUANT TO THE
NATIONAL ENVIRONMENTAL POLICY ACT
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United States Department of Transportation
Federal Transit Administration
and
North Carolina Department of Transportation
Division of Public Transportation

Date

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November 2009

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For the:
UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION
AND
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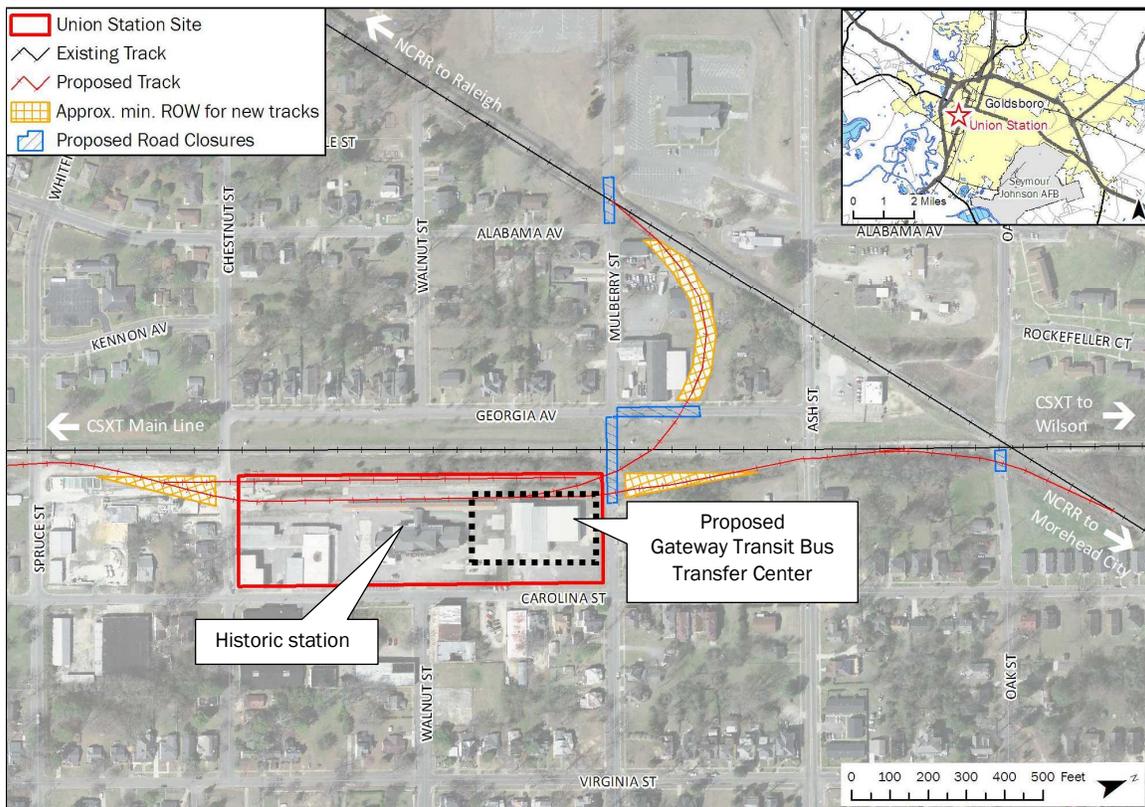
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A. DETAILED PROJECT DESCRIPTION

The proposed project will form part of the Goldsboro Union Station (GUS) Multimodal Transportation Center. This report addresses the impacts related to the proposed Gateway Transit Bus Transfer Center, which will occupy the northern portion of the larger GUS site, between the existing historic station building and Mulberry Street. This transfer station is intended to be the primary transfer point for Gateway Transit bus services, which is the principal operator of transit services in Goldsboro and Wayne County. This location is also expected to become the Greyhound intercity bus station. Initially, the Gateway Transit Bus Transfer Center will accommodate eight bays for Gateway Transit busses and four bays for Greyhound or other motor coach service. At full build-out, which will be completed on an as needed basis, the transfer facility will add a concourse and four additional bays. The ultimate design of the facility will depend on the type and amount of transit service demand in the future.

B. LOCATION

The proposed Gateway Transit Bus Transfer Center is located in western Goldsboro, approximately 0.5 mile west of the Central Business District (CBD). The full GUS site is situated between Mulberry Street and Chestnut Street west of Carolina Street. The transfer facility is to be located at 103 North Carolina Street. See Figure 1 for a vicinity map of the proposed development.



Proposed tracks and ROW are shown for ease of reference but are not part of the Goldsboro Union Station Multimodal Center Study. The ROW shown represents approximate minimum required to accommodate proposed tracks. It is indicative and does not represent specific purchase proposals.

Figure 1 Vicinity Map

The proposed Gateway Transit Bus Transfer Center is in line with the current zoning ordinance for the site. Section 5.3.5.3 of the City's Unified Development Ordinance (UDO) details standards for developments located within the GB zone, including standards for the following:

- outdoor space
- building design
- pedestrian facilities
- setbacks
- mechanical equipment
- parking
- signage
- utilities
- lighting
- landscaping

The proposed transfer facility should be designed and constructed in compliance with all standards set forth in this section of the UDO.

E. TRAFFIC IMPACTS

Currently, there is very little traffic on the roadways surrounding the project site. These roadways are used only by local traffic bound for the few businesses adjacent to the site or the few occupied residences in the area, including heavy vehicles bound for the nearby concrete manufacturer. There are more heavily traveled commuter routes through this area north and west of the site. Although no traffic count data was collected, it is assumed that operations at all surrounding intersections are acceptable given the low volumes observed during site visits.

Currently, Gateway Transit provides four fixed routes within Goldsboro, with plans to add a fifth route in the next year. The proposed bus transfer facility can accommodate up to eight buses in its bays; thus, to maintain a conservative estimate, projected traffic will be based on the potential for eight routes to operate simultaneously. Gateway Transit service operates on a "pulse" system. Meaning that all busses enter the station at the same time, wait for a given time, and all exit at the same time to service their respective routes before all returning again at the same time. Given this operation method, a maximum of 8 entering busses and 8 exiting busses can be accommodated in a given hour.

Although the intention of this facility is to be a transfer station, there will be some new passenger vehicle traffic associated with the facility, station employees and some passengers. It is estimated that the peak hour for this type of non-bus traffic would be at the beginning and end of a work day, when employees are arriving/leaving. These hours are approximately 5:00-6:00 AM and 6:00-7:00 PM. Based on conversations with Gateway Transit, the transfer facility will employ approximately four people on site if there are eight service routes.

Finally, the Gateway Transit Bus Transfer Center is expected to house Greyhound bus service, or some similar motorcoach company. Currently, the Greyhound service in Goldsboro operates with eight departures daily and a maximum of two buses scheduled to be at the station at any one time. At peak travel times, such as holiday weekends, Greyhound may operate additional buses, which

results in 3 buses at the station at any one time. Greyhound uses 45' motor coaches and prefers to pull-in and back-out of bus slips. Greyhound also operates package and baggage service. Current ridership in Goldsboro is 50 passengers per day. Current package service is 15 packages per week. This service is not projected to change in the short-term future. Greyhound, however, would like Gateway Transit to operate rural feeder service from Goldsboro to surrounding communities. It is unclear at this time how many routes would be operated or the size of the vehicles. Gateway Transit would also operate the ticket, package, and baggage service at the bus terminal. Because this expansion is so uncertain, this report assumes the existing level of Greyhound service will continue into the future. Based on the Goldsboro Union Station Multi-Modal Transportation Center Study, dated September 2009, it is estimated that the Greyhound service will require approximately seven parking spaces to account for employees and short-term passenger parking.

As a conservative estimate that assumes all trips associated with bus transfer facility happen during the same hour, there could be as many as 50 total trips occurring in one hour. This estimate accounts for bus trips in and out as well as employee trips associated with the Gateway Transit service and the expected Greyhound service. It is more feasible, though, to assume that a maximum of 20-25 trips will occur during a single peak hour of the facility.

Table 1 and Table 2 summarize the typical and maximum projected trips, respectively, associated with the proposed facility.

Table 1
Typical Projected Trips During a Peak Hour

Traffic Generator	AM Peak Hour of Facility		PM Peak Hour of Facility	
	In	Out	In	Out
Bus Traffic	0	8	8	0
Employee Traffic	4	1	1	4
Gateway Passenger Traffic	1	1	1	1
Greyhound Bus Traffic	0	2	2	0
Greyhound Passenger Traffic	3	3	3	3
Total	8	15	15	8

Table 2
Maximum Projected Trips During a Peak Hour

Traffic Generator	AM Peak Hour of Facility		PM Peak Hour of Facility	
	In	Out	In	Out
Bus Traffic	8	8	8	8
Employee Traffic	4	1	1	4
Gateway Passenger Traffic	5	5	5	5
Greyhound Bus Traffic	3	3	3	3
Greyhound Passenger Traffic	7	7	7	7
Total	27	24	24	27

Assuming the maximum trips projected during a peak hour do occur, there will be no significant negative impacts to traffic on the surrounding roadway network, given the very low existing traffic volumes in the area.

F. CO HOT SPOTS

The proposed Gateway Transit Bus Transfer Center will not create any CO hot spots attributable to serious traffic impacts at surrounding intersections due to the minimal impact expected at these intersections. Because the study area is in attainment, no CO hot spot analysis is necessary.

G. HISTORIC RESOURCES

The project is currently under review by the North Carolina State Historic Preservation Office (NCSHPO). Their comments and determination of effect will be included. This section of the document will be updated pending this review.

The City of Goldsboro is a City rich in local history, dating back to the late 1830's when the Wilmington and Raleigh Railroad was built to the east of Waynesborough. Known then as Goldsborough's Junction, the city was incorporated in 1847, and the name was officially changed to Goldsboro in 1869. There is a local historic district, recognized by the North Carolina State Historic Preservation Office (NCSHPO). This district encompasses the Central Business District and areas east of that, along Park Avenue. The proposed site for the Gateway Transit Bus Transfer Center, as well as the larger GUS site, is located within this district. The local historic district has a commission that regulates all construction and major improvements that occur within the district and ensures that the requests meet the district's guidelines. The City will be the final review authority on all plans for this facility, given its location within the historic district; thus, the City will ensure there are no negative impacts to historic resources in the area.

Through the NCSHPO website, we have found that the existing Goldsboro Union Station building is listed on the National Register of Historic Places. The proposed facility will compliment the architectural style of this building. The Gateway Transit Bus Transfer Center will work in conjunction with the Union Station building in the long term to provide a multimodal center that reflects what the site was historically used for, a transportation depot. In addition, there are six other sites listed on the National Register of Historic Places located within the Goldsboro Historic District, with two located within four blocks from the proposed site, including the Harry Fitzhugh Lee House and the Soloman and Henry Weil Houses.

Many single family homes located in the vicinity of the project are owned by the Downtown Goldsboro Development Commission (DGDC) and are currently for sale. The sale of these properties will include protective covenants for owner-occupied, single family use with a rehabilitation agreement. It is desired that these homes will be privately renovated as part of the Goldsboro Historic Neighborhood Revitalization Plan.

H. NOISE

FTA requires that new transit facilities undergo a noise screening and assessment, if warranted, according to procedures outlined in the publication entitled “Transit Noise and Vibration Impact Assessment” (Harris Miller Miller & Hanson, Inc., 2006). This section will summarize the noise screening and assessment procedures used for the proposed Gateway Transit Bus Transfer Center.

Noise Screening

The screening process is outlined in Chapter 4 of the aforementioned publication. The proposed facility is classified as a Transit Center with unobstructed surroundings; thus, the screening distance, as found in Table 4-1 of that publication, is 225 feet, as measured from the center of the noise-generating activity. Table 3-2 of the same publication provides land use categories and metrics for transit noise impact criteria. Within this screening distance, there are areas classified as Land Use Category 2, which includes residences and buildings where people normally sleep. The noise metric used for this category is L_{dn} . There are two residences that are located partially within the screening radius, and two that are located 10-15 feet outside of that radius as shown in Figure 3; therefore, a general noise assessment was prepared.

Noise Assessment

The noise screening procedure resulted in the need for a general noise assessment, as outlined in Chapter 5 of the Impact Assessment publication.

Assumptions

- **Main Street Traffic:** Ash Street/US 70 Business was determined to be the closest main roadway to the site, located approximately 700 feet north of the site. Although no traffic counts were collected as part of this project, the daily traffic along this roadway is approximately 6,000 vehicles per day according to the 2008 traffic count map for Goldsboro. This translates to approximately 500 vehicles in the peak hour.
- **Population Density:** approximately 1,575 people/square mile according to the 2000 Census data.

- **Bus Traffic:**

- Daytime Peak Hours (7 AM to 10 PM) – up to 10 busses (8 Gateway, 2 Greyhound)
- Late Night Hours (10 PM to 7 AM) – Minimal traffic; assume up to 2 busses (Greyhound)

Determination of Noise Exposure at 50 feet (L_{eq})

The proposed facility is classified as a stationary Bus System Transit Center, which has a source reference level (SEL_{ref}) of 101dBA at 50 feet from the center of the site with reference conditions of 20 busses in peak activity hour (Table 5-5 of the publication). Adjustments must be made to this reference level for day and night volumes following the methodology found in Table 5-6 of the publication. These adjustment calculations are as follows.

The metric used to assess this facility is L_{dn} , due to the presence of residences within the screening area. This is calculated using the following formula:

$$L_{dn} = 10 \log \left[(15) * 10^{\left(\frac{L_{eq}(day)}{10}\right)} + (9) * 10^{\left(\frac{(L_{eq}(night)+10)}{10}\right)} \right]$$

Where,

$$L_{eq} = 10 \log \left[\frac{1}{15} \sum_{7 AM-10 PM} 10^{\left(\frac{L_{eq}(h)}{10}\right)} \right]$$

and,

$$L_{eq}(night) = 10 \log \left[\frac{1}{9} \sum_{10 PM-7 AM} 10^{\left(\frac{L_{eq}(h)}{10}\right)} \right]$$

and,
$$L_{eq}(h) = SEL_{ref} + C_N - 35.6$$

The full calculations can be found in the attached appendix. In summary:

$$L_{dn} = 73.9 - 13.8$$

$$\mathbf{L_{dn} = 60 dB}$$

Estimation of Existing Noise Exposure

The major sources of existing noise in this area are Ash Street and nearby railroad lines. Table 5-7 in the publication was used to determine the existing noise levels (L_{dn}) of these sources. Ash Street is classified as “Other Roadways” and given its distance from the site (~700 feet), its estimated existing noise level is 50 dB. The railroad lines, which carry 5-10 trips per day, located at 135 feet, 220 feet and 860 feet from the site result in a maximum existing noise level of 60 dB. In addition, existing noise exposure can be determined based on population density. Given a population density of 1,575

people/square mile, the existing noise exposure is 50 dB. Therefore the existing noise exposure (L_{dn}) for the existing site is found to be 60 dB, the maximum of the possible existing levels.

Determination of Noise Impact

According to Table 3-2 in the publication, for an existing noise exposure of 60 dB on a Land Use Category 2 site, the noise impact criteria indicate the onset of Moderate Impact will occur at 58 dB, and Severe Impact will occur at a project noise level of 64 dB. Using Figure 5-2 in the publication, it is determined that Moderate Impacts will be experienced at a contour distance of 60 feet from the center of the noise source. Because the project noise level is only 60 dB, which is less than the 64 dB threshold needed to encounter severe impacts, there is no contour distance for Severe Impacts.

As shown in Figure 3, no buildings fall within this 60 foot contour, thus no mitigation for noise impacts are required.

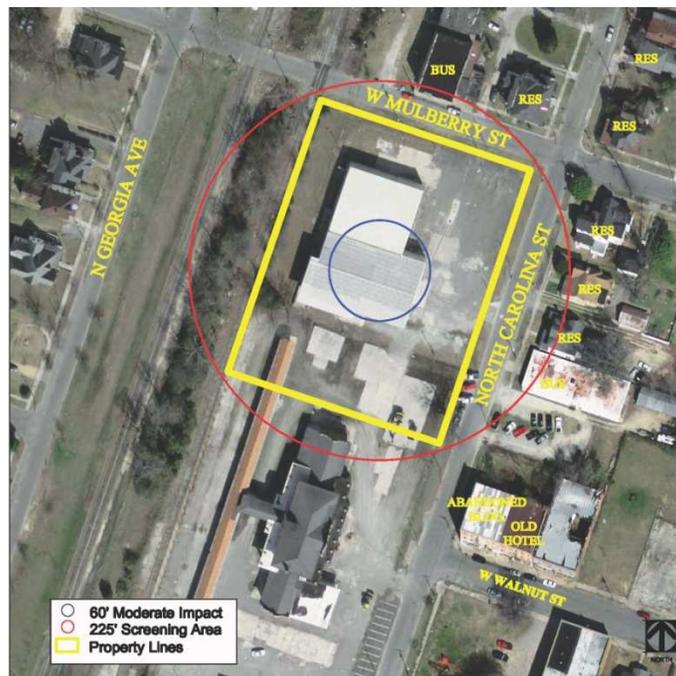


Figure 3 Noise Screening and Impacts

I. VIBRATION

FTA requires that new transit facilities undergo a vibration screening and assessment, if warranted, according to procedures outlined in the publication entitled “Transit Noise and Vibration Impact Assessment” (Harris Miller Miller & Hanson, Inc., 2006). This section will summarize the vibration screening used for the proposed Gateway Transit Bus Transfer Center.

Based on Figure 9-1 of the Impact Assessment publication, this facility does not warrant further vibration assessment beyond the initial screening. Figure 9-1 of the publication presents a yes/no flowchart for which the following path was established for the proposed project:

- START
- Steel-Wheel Steel-Rail Project? NO
- Rubber Tire Vehicles? YES
- Roadway Irregularity? NO (as observed during a site visit)
- Vibration Sensitive Manufacturing or Research? NO
- Vehicles Operating in Building? NO
- NO VIBRATION IMPACT LIKELY

J. ACQUISITIONS AND RELOCATIONS REQUIRED

The North Carolina Department of Transportation previously owned the site for the proposed facility. In 2009, NCDOT deeded the entire Goldsboro Union Station site to the City of Goldsboro. The City, which is a partner in Gateway Transit, will retain ownership and overall management of the entire GUS site. Thus, it is concluded that no further acquisitions or relocations will be required in conjunction with this site and the bus transfer center.

K. HAZARDOUS MATERIALS

There are currently no known hazardous materials present on the proposed site. In addition, it is unlikely that any hazardous materials will be found during construction.

In 2006, a modified Phase I Site Assessment was completed for the parcels contained between Mulberry Street and Chestnut Street, along the west side of Carolina Street (Parcel 2599668494 and Parcel 2599760835) by the Geotechnical Engineering Unit of NCDOT. This assessment was completed as a prerequisite for the purchase of these parcels by NCDOT. That report, dated May 30, 2006, concluded that NCDOT should proceed with acquiring the property, following a geo-environmental assessment of a known former Underground Storage Tank (UST) site on the southern portion of the overall GUS site property.

The report states that the parcel that is to become the Gateway Transit Bus Transfer Center was owned by the train station until it was purchased by a beverage distribution company in 1973. This company operated on this site until 2003; however, there is no indication that any of their trucks were fueled or serviced on-site (i.e. there was no evidence of a UST system or AST). Goldsboro Builders Supply bought this property in 2003 and used the metal warehouse as storage from that time until the NCDOT purchase. Thus it is concluded that the proposed Gateway Transit Bus Transfer Center site is unlikely to have any hazardous materials on site.

As part of the May 2006 Phase I Site Assessment, it was recommended that additional testing be completed for the southern portion of the overall GUS site as it had a documented 5,000 gallon UST removed from the site approximately 15 years ago. However, there is no documented closure

report for this tank. A Limited Site Assessment was performed on that site in 2007, and it was concluded that although there is evidence of an additional UST on the site and some soil contamination from these tanks, the site is classified as a low-risk location and no further clean-up action is required of the owner. This contamination, however, is not part of the Gateway Transit Bus Transfer Center site.

In the event that additional USTs, contaminated soil and/or groundwater are encountered during construction, the material would be properly managed in accordance with all local, state and federal regulations related to that material.

L. COMMUNITY DISRUPTION AND ENVIRONMENTAL JUSTICE

The proposed site is located in an area that is zoned for general business, surrounded by both industrial and residential uses. Many of the surrounding residences are currently vacant, advertising a need for historic renovation. For the residents that are present, or future residents of revitalized homes, the proposed transit transfer facility will provide access to public transportation for residents in the vicinity of the site, yielding increased travel and employment opportunities. Currently, the site is a fenced location that is kept locked. The proposed project would improve the overall aesthetics of the site by providing additional green space and pedestrian amenities.

The City of Goldsboro, NC is comprised of a mix of residents with regard to age, race, and economic characteristics. According to the U.S. Census Bureau, the predominant populations in Goldsboro are White (39%) and Black or African American (56%), accounting for 95% of the total population. Minorities in the area include Asian and Hispanic. Observations resulted in an appearance of a majority of Black residents in the immediate area, first block or two, surrounding the project site, with a mix of Black and White residents in the next couple of blocks. It is concluded that no specific minority will be negatively impacted by the development of this project, given the vacancy rate and varied land uses surrounding the project. Field observations indicated a mix of housing options in the vicinity, in varying stages of renovation and occupancy.

The construction of the Gateway Transit Bus Transfer Center at the proposed location, in conjunction with the Goldsboro Union Station revitalization efforts and renovations of surrounding residences will serve to improve the community, not degrade it.

M. USE OF PUBLIC PARKLAND AND RECREATION AREAS

The City of Goldsboro Parks and Recreation Department operates and maintains 11 parks, three recreation centers and an 18-hole golf course. The proposed Gateway Transit Bus Transfer Center is not located in the immediate vicinity of any of these parks or recreation centers. The closest City park to the proposed facility is the Henry C. Mitchell Park, which features a playground and is the City's smallest park. This park is approximately 0.35 mile straight line distance from the proposed transfer facility or 0.60 mile by road. There are no physical impacts anticipated to this park due to the proposed facility. Thus it is concluded that there are no direct or indirect impacts to public parklands or recreation areas associated with the proposed facility.

N. IMPACTS ON WETLANDS

A countywide wetlands inventory shows that the proposed site is not located in a wetland area, as shown in Figure 4. Field observations verified this information. The closest wetland area is approximately 0.5 mile from the proposed site. Thus it is concluded that there are no direct or indirect impacts to wetlands anticipated as a result of the construction of the proposed facility.

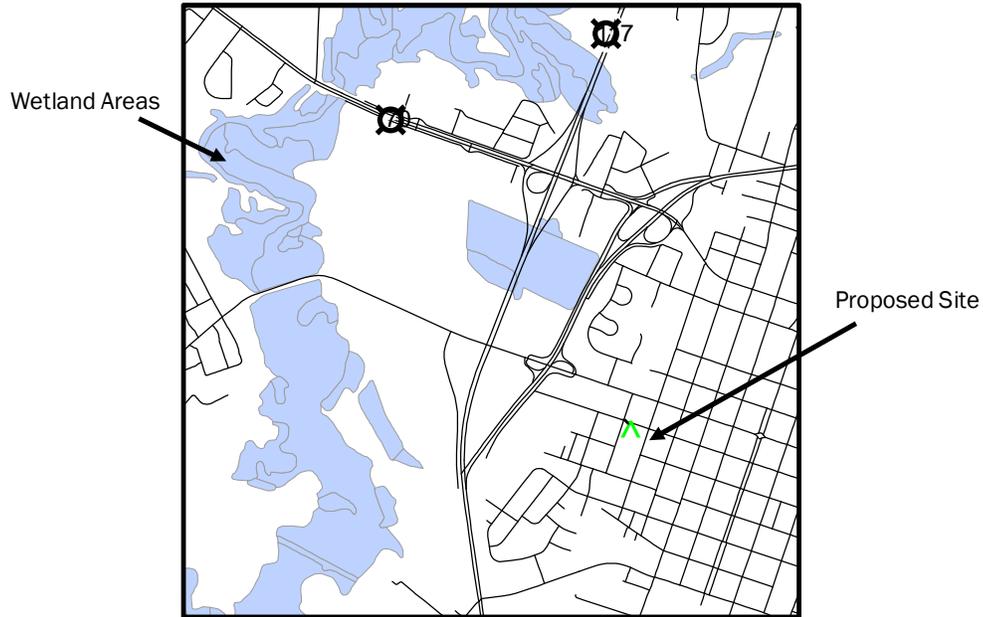


Figure 4 Area Wetland Locations

O. FLOODPLAIN IMPACTS

The proposed site for the Gateway Transit Bus Transfer Center is not located within the 100-year floodplain, as illustrated in Figure 5. It is, however, located just inside the 500-year floodplain, meaning there is a 0.2% annual probability that this site will flood. It is concluded, then that this site will not impact the area's 100-year floodplain capacity.

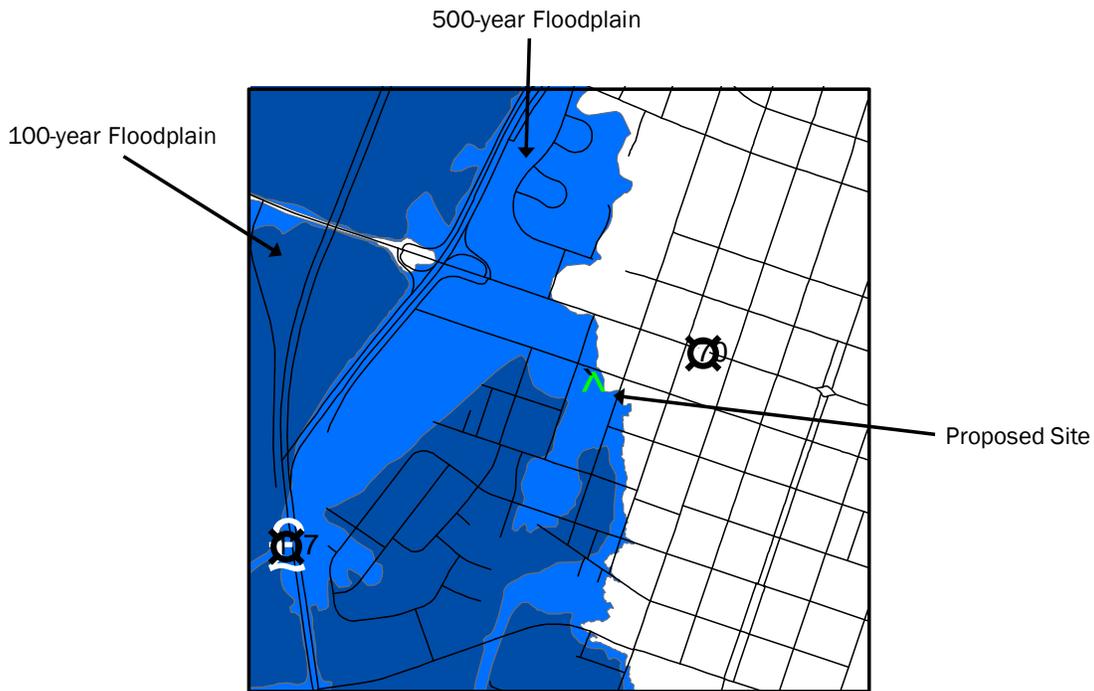


Figure 5 100-year and 500-year Floodplains

P. IMPACTS ON WATER QUALITY, NAVIGABLE WATERWAYS, & COASTAL ZONES

The Gateway Transit Bus Transfer Center will not impact any navigable waterways or coastal zones. There will be no impact to the water quality in the area.

Precautions will be taken to minimize impacts to water resources in the project study area. The NCDOT's Best Management Practices (BMPs) for the protection of surface waters will be followed during the construction phase of the project. Guidelines for these BMPs include, but are not limited to, minimizing built upon area and diverting storm water away from surface water supply as much as possible. Provisions to prevent water resource contamination from toxic substances during demolition and construction phases will also be utilized.

Q. IMPACTS ON ECOLOGICALLY-SENSITIVE AREAS AND ENDANGERED SPECIES

Based on a bio-diversity and wildlife habitat assessment completed by the North Carolina Wildlife Resources Commission which is accessible through their website, the proposed project site is not located in any ecologically sensitive areas or near any endangered species habitats. This assessment categorized the value of conserving areas based on the presence of wetlands, fish and wildlife habitats, and marine resources and ranked them on a relative 1-10 scale, with a ranking of 10 indicating the greatest need for conservation. As shown in Figure 6, the site itself is located in an area of no relative conservation value and is surrounded by areas of low relative conservation value. Within approximately 0.5 mile, there are areas that have minor conservation value due to the presence of watersheds or wetlands.

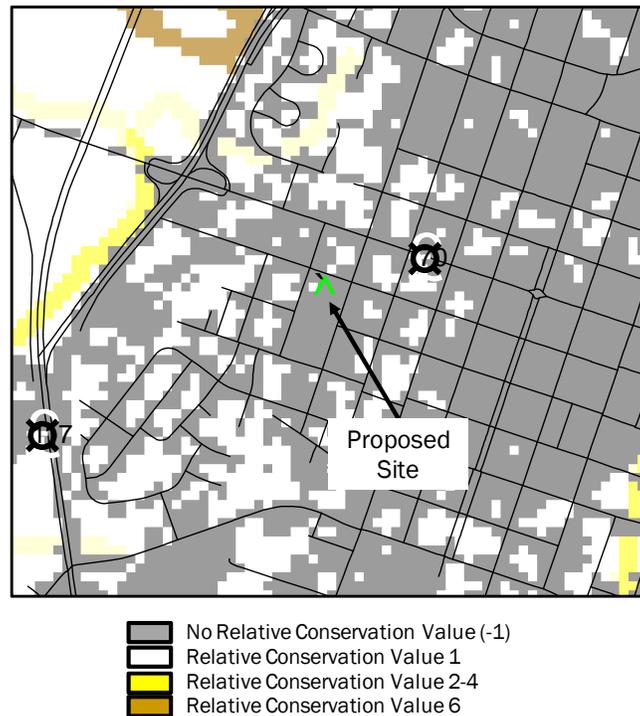


Figure 6 Areas of Biodiversity and Wildlife Habitat Importance

It is concluded that the proposed site will not have any impact on any natural or ecologically-sensitive areas, nor will it impact any endangered species or their habitats.

R. IMPACTS ON SAFETY AND SECURITY

The design of the transfer center will incorporate measures for safety and security. Contractors are responsible for implementing health and safety plans for on-site employees in the construction phase and expected to securely store their equipment and materials. Emergency access to the site will be maintained at all times.

S. IMPACTS CAUSED BY CONSTRUCTION

All construction activity will be maintained on site with the exception of additional traffic on the adjacent roadways as a result of construction. Temporary minor inconveniences may affect surrounding residences due to this construction traffic and additional noise. These inconveniences will only occur during daytime hours. No substantial negative impacts are expected due to construction.

References:

Parks and Recreation:

<http://www.goldsboroparksandrec.com/>

NC GREEN TOOLBOX GIS LAYERS

http://www.ncwildlife.org/greengrowth/Conservation_Data.htm

Floodplain data:

<http://www.ncfloodmaps.com/>