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THE CHARLOTTE, NC-SC URBAN AREA

Coordinated Public Transit-Human Services Transportation Plan

Appendix B: Public and Stakeholder Engagement Results

PREPARED FOR:



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Appendix B: Public and Stakeholder Engagement Results

This Appendix provides a more detailed summary of public and stakeholder engagement efforts in support of Coordinated Public Transit-Human Services Transportation Plan update.

Stakeholder Engagement

Stakeholder Interviews Overview and Key Themes

As part of the plan update, numerous stakeholder agencies were engaged as part of participation on the Steering Committee for the study and through stakeholder interviews. These stakeholders included transportation agencies in the Charlotte Urban area, and other organizations that work closely with seniors, veterans, or those with disabilities. Below is a list of stakeholders that were engaged:

- Centralina Regional Council
- Charlotte Area Transportation Services (CATS) Bus Operations
- Centralina Council Mobility Management Committee
- Disability Rights and Resources

- Gaston County ACCESS
- Catawba County Medicaid Transportation
- CK Rider
- Iredell County Area Transportation (ICATS)
- Mecklenburg County Transportation Services
- Union County Transportation Services
- The Department of Veterans Affairs (Salisbury VA Clinic)

Each of these stakeholders were interviewed and asked a series of questions regarding their transportation systems and services, including opportunities and challenges the agency faces and the biggest needs they hear from their clients. A summary of these interviews can be found in the Appendices.

The following needs and gaps were identified based on stakeholder feedback:

- Bus stop access and amenities: bus stop locations might be far from the origin and destination; bus stops often lack a shelter or a bench
- Long wait times (low frequency of service on existing fixed routes)
- Scheduling of ADA Paratransit trips can be onerous or inconvenient to individuals with disabilities (STS trips- have to schedule two hours prior to the appointment time)
- There is a need for additional staff support to focus on regional Mobility Management (Centralina Regional Council currently hosts quarterly Mobility Managers meetings, which includes both on-demand and fixed route service providers)
- There is a lack of community education around what transportation services are available
 - Regional Transit Guide currently in development will help
 - Additional education needed both for potential riders and for family members, medical, and social workers to explain what transit services might be available
- Difficult for transit providers to communicate their schedules and routes while using a variety of different scheduling platforms; driver-to-driver communication is difficult, so if transferring a passenger between two different providers, drivers must communicate via two dispatch centers which slows down the response time
- Lack of funding makes it difficult for community transportation providers/on-demand transportation providers to meet the existing needs and provide a greater variety of trips
 - In many cases, on-demand transportation is limited to seniors, those with disabilities, and transportation for medical appointments
 - Fleet size and driver staffing limitations are a contributing factor
 - As the region is growing, the disconnect between the transportation needs and the services available is expected to increase
- Fixed route and deviated fixed route providers are also facing challenges
 - General funding challenges

- Keeping up with fleet replacement and driver staffing
- Hours of service expansion and frequency of service expansion would require additional investment
- COVID-19 pandemic has disrupted ridership, many routes had to be reduced in terms of frequency of service or cut and service has not yet returned to pre-pandemic levels
- Medicaid Brokerage System transition is also having an impact on public transportation providers, especially on-demand/community transportation providers - some have felt it more than others; full impacts not yet known
- Existing transit system set-up in the region makes it difficult for commuters, especially those traveling across county lines - a lot of transfers required, even if a connection is available

Stakeholder Interviews Summaries

Disability Rights

Disability Rights provides training to seniors and people with disabilities on how to utilize public transportation through a program called *Let's All Go* or Travel Training. This program is funded by a grant. Funding is only allotted for Mecklenburg County services. This program primarily partners with the Special Transportation Services (STS) of CATS.

Problems they often encounter in this program include bus stop proximity (often not close to those that are utilizing the stop), stops with no seats, and a lack of sidewalks. Long wait times at the bus stop are an issue in addition to the need to schedule two hours before your appointment time with STS.

Centralina Regional Council

As part of the Centralina Regional Council, staff provide a variety of senior services through the regional Area Agency on Aging. This group works with services providers and networks and administer and monitor federal funds for senior programs as well as state senior program funding. They also work with local providers to administer funds and meet standards for federal and state funding. The Centralina Regional Council have indirect services, a senior employment program, evidence-based health programs, work planning, and coordinating with aging service providers.

When asked about FTA Section 5310 Funding, Centralina Regional Council staff indicated that they used to be able to apply for FTA 5310 grant funding through NCDOT. In the past, the grant only required a 20% match for mobility management services, but the funding category was re-classified, and a 50% match was required. Centralina Regional Council now typically applies for FTA 5310 grant funding through the Charlotte Urban Area call for projects (administered by CATS). A few years ago, they also received funding through Concord Urban Area call for projects.

An ongoing initiative for Centralina Regional Council has been their Mobility Management Plan and quarterly meetings. These are an opportunity to bring transit providers together to discuss the regions mobility and

includes on-demand and fixed route service providers. This program also developed a volunteer transportation program (now discontinued). Some of the other Mobility Management Plan 2013 recommendations have informed the work of Centralina Regional Council when applying for 5310 grant funding.

Other items noted were that community education is largely important to improving mobility and transportation in the region. Currently, Centralina Regional Council is working on a Regional Transit Guide to inform and educate transportation options for surrounding counties. Regarding technology, it is very important that Transit Operators and Providers are utilizing similar technologies.

CONNECT Beyond Study Team

In addition to interviewing the Centralina Regional Council, an interview was held with CONNECT Beyond study team, made up of Centralina Regional Council staff, CATS staff and HDR staff. CONNECT Beyond is a 12-county regional transit vision and plan that includes a variety of mobility solutions. The study area overlapped with, and was slightly larger than, the Coordinated Public Transit-Human Services Transportation Plan study area (CONNECT Beyond excluded Catawba County but included Rowan, Anson and Stanly Counties which were not included as part of the Coordinated Public Transit-Human Services Transportation Plan. The study was managed by the Centralina Regional Council. The study recommendations were organized around five key themes:

- Create mobility-friendly places
- Expand mobility choices
- Strengthen rural to urban connections
- Build a better bus network
- Invest in strategic corridors

CONNECT Beyond study team was able to share some of the relevant GIS files with the Coordinated Public Transit-Human Services Transportation Plan study team, including identified mobility hub locations and strategic transit corridors. The study was adopted by the CRTPO in October 2021 and recommendations are available at <https://www.connect-beyond.com/plan/all-recommendations/>

Mecklenburg Transportation Services

Mecklenburg Transportation Services (MTS) predominately serves Mecklenburg County. They do often coordinate with Gaston County Access and Union County for transportation services. Most programs are limited to seniors (65+), those with disabilities, or individuals with medical needs. Additional funding opportunities would greatly improve the ability for the agency to have a more regional transportation approach. Currently, they have funding through the Rural General Public Fund (RGP), CARES Act, 5307, and a half-cent sales tax.

Although the region is growing quickly, MTS has not been able to meet that growth within their own vehicle fleet or staffing capacity. The current system is at full capacity and is struggling to meet service demand. Most trips are currently occurring with contracted vendor vehicles. They do provide transportation to Nutrition Congregate Services. Technology-wise, MTS is utilizing TransWeb and Route Match.

Gaston County Access

Gaston County Access provides non-emergent medical transportation. They also provide transportation for day programs to adult day care for seniors, meal deliveries, congregant meal sites, and DOT transports. In 2018, they divested out Medicaid trips and had three different transportation vendors to the private sector. Typically, Gaston County Access can only take trips within the county line, but they do reach into Salisbury and Charlotte from time

to time. In 2019, they attempted a deviated fixed route service, but it did not have enough ridership to sustain the service. They do have a deviated fixed route service to Gastonia and out to Gaston College.

In partnership with the City of Gastonia, Gaston Access focuses on rural areas while the City focuses on urban areas. Gaston Access has a fully equipped fleet. The fare is anywhere from \$1 - \$3, operating from 4:00 am to 6:00 pm, Monday through Friday. Staffing has been a challenge, particularly due to divesting out Medicaid trips to private vendors. In Fiscal Year 2020, they saw 44,870 riders and in Fiscal Year 2021, they've served 34,690 riders. In the future, the agency would like to open another fixed route to Bessemer City. For funding, they receive 5311 funds.

Iredell County Area Transportation System (ICATS)

ICATS predominately serves Iredell County, but often reaches into Charlotte, Salisbury, Concord, Winston-Salem, Hickory, and Conover for other trips. They provide paratransit, demand response, and deviated fixed route service, as well as an express route (to Charlotte). They operate two deviated fixed routes in Statesville and Mooresville. Outside of the agency, ICATS partners with the Iredell Council on Aging, Department of Social Services, Statesville Dialysis, Centralina Regional Council, Rowan County, Goodwill Industries, among others.

Currently, they're in need of additional operators and more funding opportunities. For technology, they've utilized RouteMatch in the past, but have recently shifted to EcoLane. To grow as an agency, ICATS would like to increase their fleet size to 30 vehicles, but this would require additional reporting requirements to FTA as they would be in a new transportation agency category.

Issues that have become apparent are the inequities of funding for On-Demand and Paratransit Services. More coordination is needed with the regional MPO, along with more funding from the County. Additional challenges include geographic penetration in which the bus often does not come close enough to those that need it (geographically). Riders would like to see an extension of service in the morning, later in the day, and on weekends.

Catawba County Medicaid Transportation Services

The Catawba County Medicaid Transportation Services provides trips for those with Medicaid benefits for medical appointments. The county has 10 vehicles for Medicaid purposes solely. These vehicles are not equipped with a wheelchair lift. In that case, they have contracted out three companies (Premier, Lake View, and Greenway) to provide services, especially for those passengers in wheelchairs. Service is from 8:00 am – 5:00 pm, Monday – Friday. They partner with Greenway as a local fixed route provider. Their services do sometimes require driving into other counties, especially Charlotte, in the event a request to travel outside county lines must be submitted. Transportation issues in this region are often due to the rural makeup of the county, making it difficult to reach everyone.

For funding, they received FTA 5310 funding for about \$400,000 for the County. On average, they experience 2,300 one-way trips a month, with about half of those done solely by the county, and the other half by vendors.

Concord Kannapolis Area Transit (Rider)

Concord Kannapolis Area Transit (Rider) operates seven fixed routes and an express bus route from Cabarrus County to the JW Clay light rail station in Charlotte. ADA Paratransit is provided within $\frac{3}{4}$ mile service area of the seven fixed routes. Fixed route and ADA Paratransit services are available seven days a week. Currently fares must be paid in cash or tickets need to be purchased at the Rider Transit Center. However, Rider has been transitioning

to a digital fare payment system, TouchPass. Once fully implemented, mobile phone and smart card technology payment options will be available for payment.

Rider connects to CATS light rail (via express bus to JW Clay light rail stop) and via a stop at the Concord Mills Mall that is served by CATS route 54, University Research Park. Rider used to inter-connect with Salisbury Transit, but this service ended in 2021, which cut off a link to the largest VA Hospital in the region (in Salisbury).

Some of specific issues and challenges noted included the following:

- A need for improved scheduling software interoperability between agencies
- A need for more regional connections
- Fare interoperability issues
- Medicaid Brokerage system in North Carolina is having an impact on public transportation providers, full impacts not yet known
- COVID-19 has had an impact on both ridership and transit agency financials; paratransit trips have come back quickly but fixed route trips are only back to 70-75% of pre-COVID-19 levels
- There is a need for additional resources to support education around available public transit services in the region
- On the County side (Cabarrus County Transportation Services), a lot of people have to be placed on a waiting list to get services (10-month waiting list)
- Difficult for commuters, especially those traveling across county lines, to utilize transit – limited direct routes, a lot of transfers; Mecklenburg to Cabarrus commute trips are common

Union County Transportation

Union County Transportation Services provide transportation for those 60 years or older, individuals with disabilities, and most recently, to anyone over 18 years of age. They can provide transportation to nutrition sites, doctors' appointments, work, school, or various other needs. They require a flat fee of \$2.00 for Rural General Public trips but most passengers do not have to pay a fare (i.e. if urban funding passengers, or clients of human services agencies). Their Medicaid trips represent 18-20% of all trips. For funding, they have received FTA 5307 funding. They work with various organizations, including Metrolina Kidney, Council on Aging, and the Salisbury Veterans Hospital. Union County also often partners with Anson County, North Carolina through relay sites into the City of Charlotte. The county has 24 vehicles – including minivans, leisure travel vans, and larger transit vehicles. Their largest obstacles come regarding funding and FTA requirements on how they can spend it.

Salisbury Veterans Affairs Medical Center

While Salisbury VA Medical Center is located in Rowan County, outside of the nine-county study region, Salisbury VA Medical Center is a regional medical center providing a full spectrum of medical services for the veteran populations including surgery, critical care and mental health. The South Charlotte VA Clinic and North Charlotte VA Clinic are set up as community-based outpatient clinics and provide the most common outpatient services that do not require a hospital stay. The locations of the three VA clinics in Charlotte region are as follows:

- Salisbury VA Medical Center at 1601 Brenner Avenue, Salisbury, NC 28144
- South Charlotte VA Community-Based Outpatient Clinic at 3506 W Tyvola Road, Charlotte, NC 28208
- North Charlotte VA Community-Based Outpatient Clinic at 8601 University E Drive, Charlotte, NC 28213

Salisbury Veterans Affairs Medical Center is served by Salisbury Transit system which stops six to seven times a day at the center. CATS system serves the two Charlotte VA clinic locations. Most of community transportation providers in the nine-county region travel to the Salisbury VA Medical Center at least some days of the week. The VA Medical Center also has their own transportation – Veteran’s Transportation service. This service is a wheelchair-accessible van (the Medical Center owns 3). Clients can schedule a pick-up service through an online portal (www.vetride.va.gov/app/home). Additionally, the Disabled American Veterans (DAV) assists with many transportation needs to the Medical Center, but only provides rides to ambulatory passengers

Charlotte Area Transportation Services (CATS)

The CATS system serves much of Charlotte, operating a 70-bus route, that includes 3 deviated fixed routes, 17 express bus routes, 3 circulator routes, and 47 regular bus routes. The system’s paratransit service, Special Transportation Service (STS), is provided within a $\frac{3}{4}$ mile of the regular fixed route service. Generally, for all CATS transportation options, services run between 5:00 am – 2:00 am. For STS, users can purchase monthly passes or individual tickets at the Charlotte Transportation Center or at various locations where CATS tickets are sold.

Like many transportation agencies, CATS STS saw their trips decline by 50% over the COVID-19 pandemic but have quickly risen 70-80% within 2021. Users of STS must complete an eligibility process to identify if they are eligible for STS transportation. STS has a mixed fleet of vehicles – some vehicles have wheelchair lifts, while others do not. CATS is hoping to expand their STS fleet in the coming years, acknowledging that the Charlotte region is growing quickly and is in need of more expansive transportation options.

Public Engagement

Public engagement efforts consisted of a series of online and in-person pop up public meetings. An online survey was set up in MetroQuest format, and short form survey (postcard) responses were collected during the in-person pop up public engagement events.

Public engagement events were held in the January-February 2022 timeframe to let participants know about the online public survey and to solicit response for short form postcard surveys during in-person events. The long form online survey and the short form (postcard) survey both asked about the public transportation needs and gaps in the region, and opportunities to improve the existing public transit services.

The following public engagement meetings took place, with approximately 160 participants engaged during the meetings:

- Virtual public engagement meeting held on Wednesday, January 19, from 10 AM-11 AM
- In-person pop-up public engagement meeting held at the CTC station in Uptown Charlotte on Thursday, January 20th from 4-6 PM
- Virtual public engagement meeting held on Tuesday, January 25, from 12:Noon-1 PM
- In-person pop-up public engagement meeting held at the CTC station in Uptown Charlotte on Thursday, January 27th from 10 AM-12:Noon
- Virtual public engagement held on Thursday, January 27th from 5:30-6:30 PM

- In-person pop-up public engagement meeting held at Scaleybark Light Rail Station on Thursday, February 3rd from 4-6 PM



Study Team Collecting Feedback during Pop Up Public Engagement Events at the CTC Station (Left) and at Scaleybark Station (Right)

Participants' Geographic Distribution throughout the Region

Both online survey participants and short form (postcard) respondents were asked to fill in their home zip code. Not all participants (especially for the short form in-person survey) chose to share their home zip code. Looking at the geographic distribution of responses received for both online survey and in-person short form (postcard survey), the following can be observed (Figure B1):

- Zip codes 28206 and 28208 located in Mecklenburg County with 6 and 8 responses respectively have the most responses
- Zip codes 28212, 28203, and 28209 in Mecklenburg County with 4 responses have the second high number of responses
- There are 3 responses for zip codes 28216, 28204, 28205, and 28210 located in Mecklenburg County
- There are 2 responses for zip codes 28269, 28202, 28227, 28105, 28277 in Mecklenburg County have
- There is only 1 response for zip codes 28078, 28214, 28213, 28215, 28217, and 28226 in Mecklenburg County, 28025 in Cabarrus County, 28092 mostly in Lincoln County, and 28625 in Iredell County

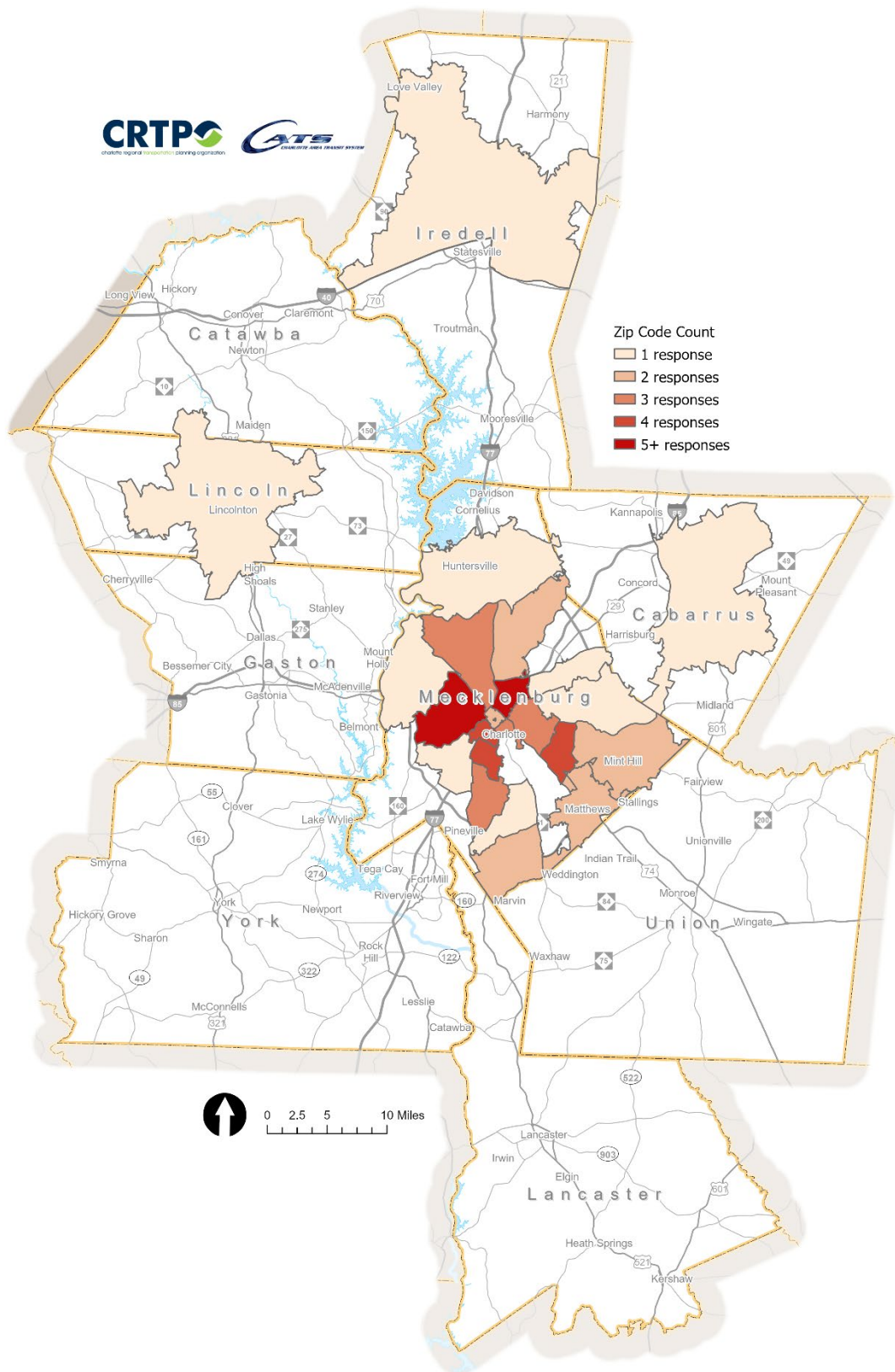


Figure B1: Survey Respondents' Geographic Distribution

Short Form Public Survey Results

A total of 128 short form survey responses were collected during the pop-up public engagement events. The majority of comments received in response to the short form survey focused around frequency and schedule of buses (i.e. long waits, late bus arrival times).

When summarizing responses received by type of concern (see Figure B2), the following categories emerged as most frequent:

- timing and frequency were mentioned in 54 percent of short form responses received
- scheduling concerns such as buses running late and missing transfers was the second most frequent concern noted by participants (mentioned by 30 percent of short form respondents)
- customer service concerns and the need for better schedule information-sharing through a variety of means was mentioned by 18 percent of respondents (including paper schedules, real-time information at transit stops, an improved app)
- route issues and request for additional services were tied at 16 percent of respondents mentioning each of the concerns; Wi-Fi was one of the additional services frequently requested
- the need for 24/7 transit service was mentioned by 15 percent of short form respondents

Of note, respondents surveyed at the CTC transit station were more likely to mention the need for a 24-hour service and/or additional late routes at night. Respondents at the Scaleybank Station made more comments regarding the cleanliness of trains, buses, and additional elements of stations such as bathrooms and Wi-Fi. Numerous respondents made comments about drivers' tone and attitude when responding to riders, or bus drivers leaving the stop even while a passenger might be running to catch the bus (categorized with "customer service" concerns). Some respondents acknowledged that there is a shortage of bus drivers.

The image shows a 'Short Form Survey (Postcard)' form. At the top right is the CRTPO logo (Charlotte Regional Transportation Planning Organization) and the CATS logo (Charlotte Area Transit System). The form contains three main questions, each with a horizontal line for an answer:

- Question 1: "Or, provide brief comments below. What is your home zip code? Work/school zip code?"
- Question 2: "What do you think are the most important gaps in existing public transportation services and human services/paratransit services in the Charlotte Urbanized Area?"
- Question 3: "What area of Charlotte region needs additional transit service/improved access."

There are small icons of a bus and a person walking near the bottom of the form.

Short Form Survey (Postcard)

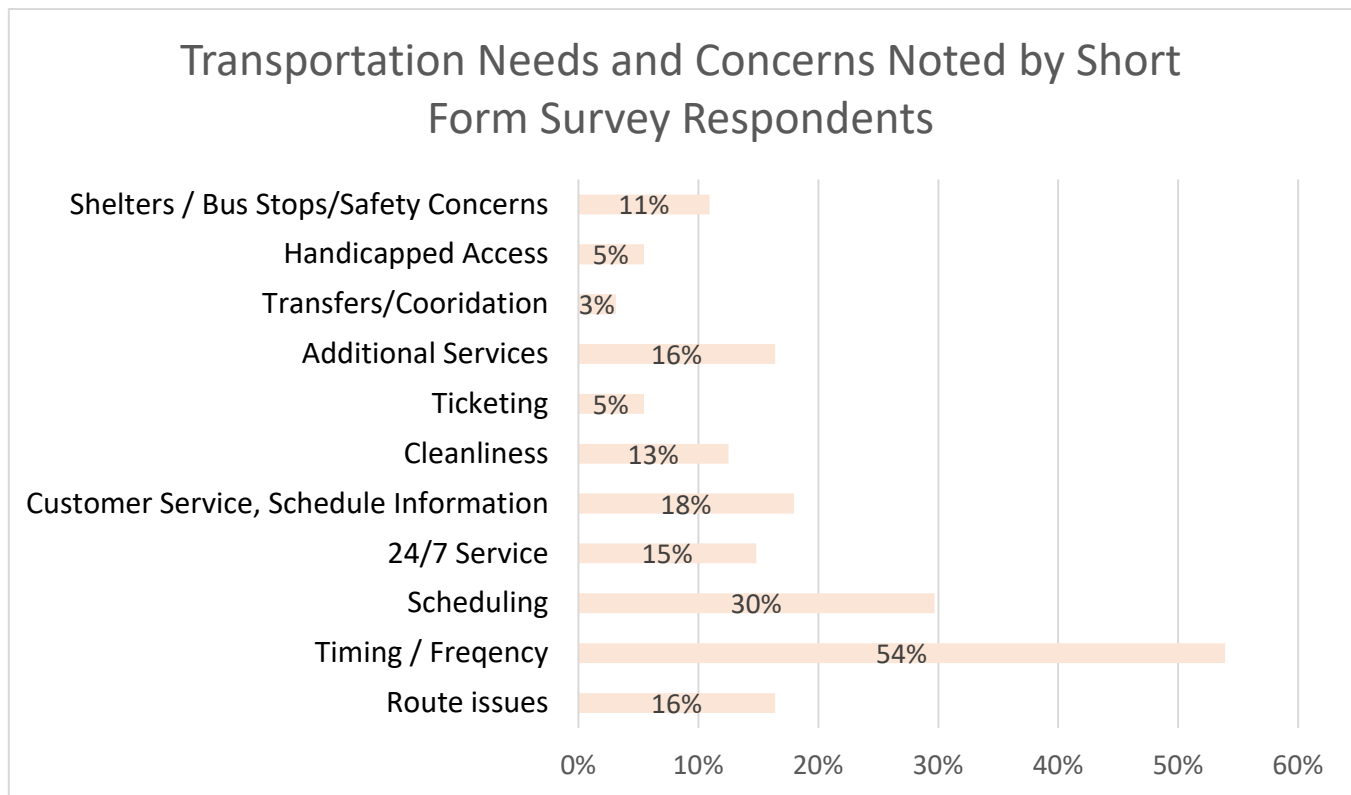


Figure B2 Short Form Survey (Postcard) Transportation Needs and Concerns Noted

Online Public Survey

The online survey was available starting on December 15th, 2021, until February 6th, 2022. The data was collected through an online platform, MetroQuest. 28 participants responded to the online survey. The online survey asked about participants' preferences for public transportation improvement priorities. Demographic data were also collected for online survey responses, whereas they were not collected for short-form (postcard) survey responses.



Online Survey Included Five Screens asking about Priorities, Strategies, and Locations of Specific Concerns

Online Survey Results- Demographics

Detailed demographics were not available for the responses to the short form survey collected during in-person public engagement. The following demographic data are only applicable to the online survey results. Out of the 28 respondents, 60 percent were female, 35 percent were male, and five percent of the respondents identified

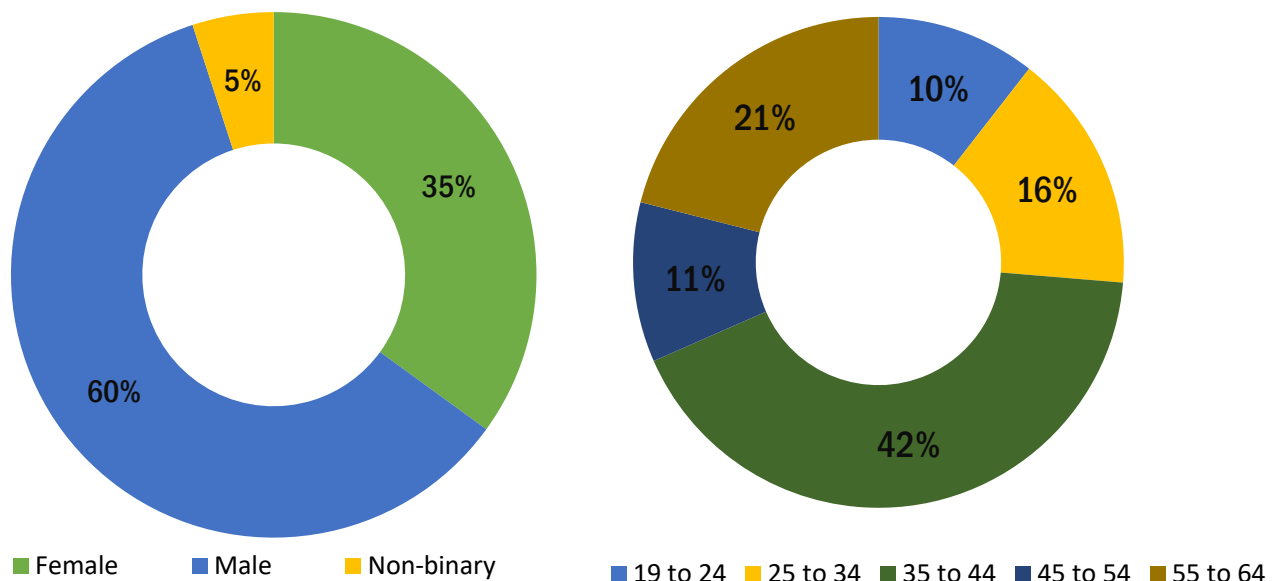


Figure B3: Online Survey Participants Gender (Left) and Age (Right)

as non-binary (Figure B3). Looking at the age distribution of the online participants, 42 percent of the respondents are in the 35 to 44 years old category, while only 10 percent are less than 24 years old.

Looking at respondents' race, 45 percent self-identified as African-American, 40 percent as Caucasian, 5 percent as Asian-American and 10 percent as "some other race." (Figure B4)

With self-reported income, 25 percent of the participant identified as having an annual income of less than \$25,000, 15 percent self-identified as having annual incomes of between \$25,000-50,000, 30 percent self-identified

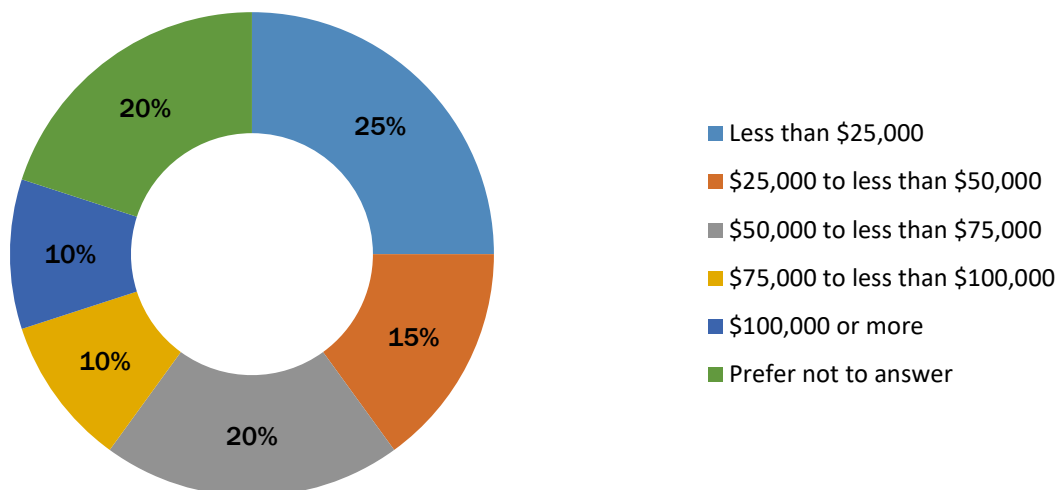
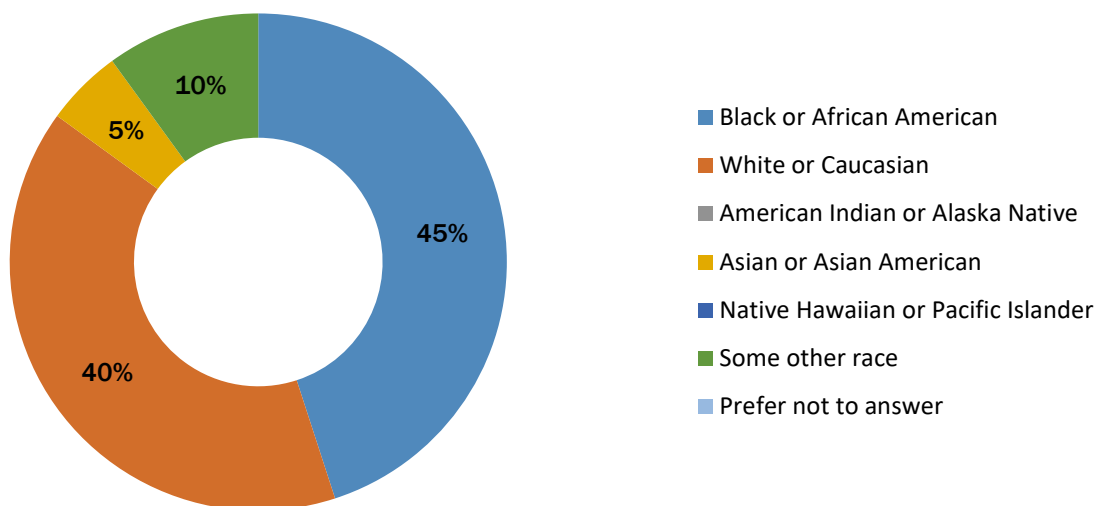


Figure B4: Online Survey Participants Race (Top) and Income (Bottom)

as having annual incomes between \$50,000-100,000, 10 percent indicated they have annual incomes of more than \$100,000, and 20 percent chose not to respond to the question (Figure B4).

Online Survey-Priority Ranking of Potential Improvements

The following public transit improvement priorities were ranked the highest by online survey respondents (see Figure B5):

- Increase frequency was the highest-ranked priority for transit improvements, at 2.31 average ranking (on a scale of 1 to 5 where 1 would be the highest priority)
- Same day reservations was the second highest-ranked priority, at 2.63
- Connect to more neighborhoods was the third highest-ranked priority, at 2.73
- Seamless transfer between systems was fourth-highest ranked priority
- Improved accessibility to bus stops was in fifth place

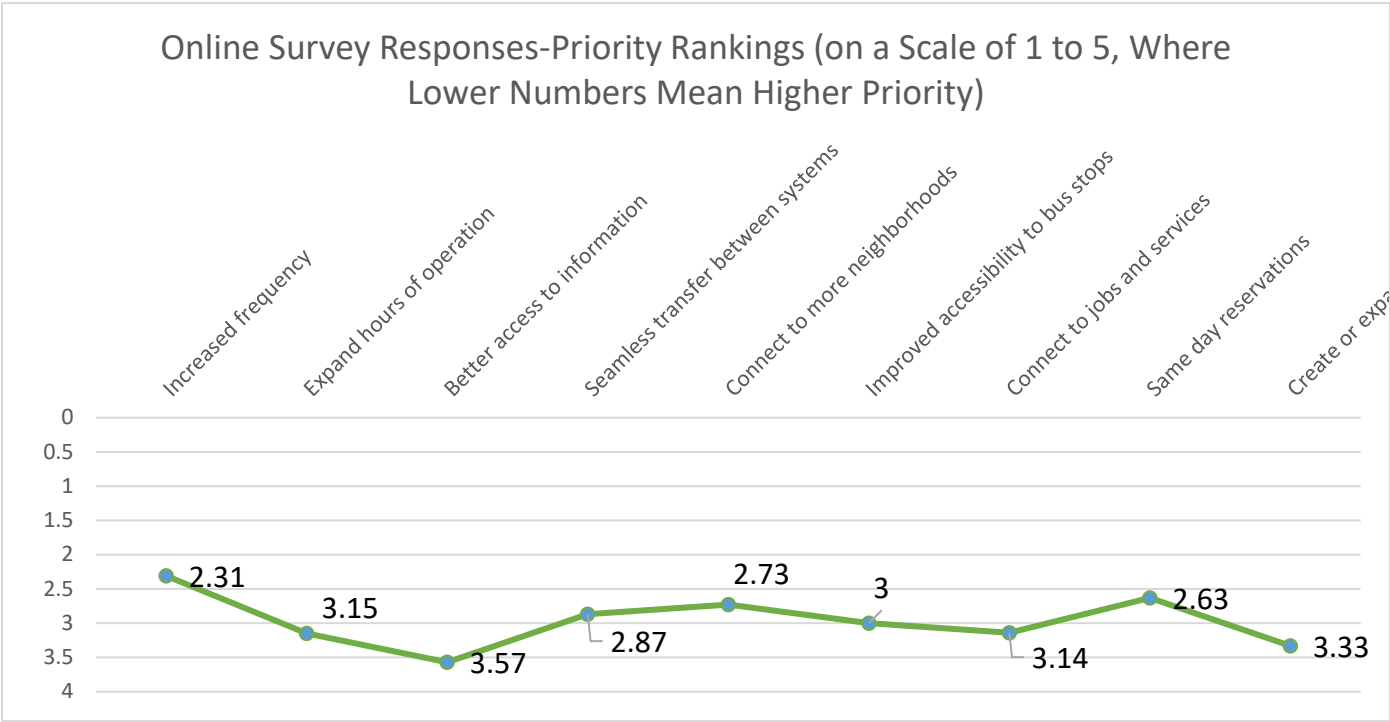


Figure B5 Public Transit Improvements Priorities Ranked by Online Survey Respondents

Online Survey-Strategy Rating

Charlotte Region Coordinated Public Transit Plan <https://charlottenc.gov/cats/transit-planning/Pages/coordinated-services-plan.aspx>

WELCOME

PRIORITY RANKING

STRATEGY RATING

2

3

4

5

Strategies

Please give input on at least 5 of the 21 items.

Increase Frequency

○○○

Expand Hours of Operation

○○○○

Better Access to Information

○○○○

Seamless Transfer between Systems

●○○

Connect to More Neighborhoods

○○○○

Connect to Jobs and Services

○○○

Better Access to Information

Use technology to distribute information about the existing transit options and to connect potential riders to ride-sharing, shared mobility and other mobility options.

Display Screens at Transit Stops

Add display screens at bus stops for arrival and departure times or similar relevant information.

★★★★★

Connect to Ride Sharing

Integrate ride-sharing services with the transit network (add designated pick-up/drop off and waiting areas at key stations, info kiosks) to supplement transit mode choices.

★★★★★

Mobile Apps

Utilize mobile apps for information on transit trips and the network.

★★★★★

Centralized Web Portal

Create a centralized regional website as a one-stop point of information for riders to find out which transit agency serves their home location, and what types of services they may be eligible for.

★★★★★

MAP MARKERS

WRAP UP

Online Survey Strategies Question

Looking at proposed public transit improvement strategies, “increase frequency” set of strategies received the highest number of responses. Zooming into the details of this strategy category, increasing frequency for weekend service (4.05 on a scale from 1 to 5 where 5 was the highest) and peak weekday travel (4.04) received higher ratings while increasing frequency for midday services had a lower preference (3.64). (Figure B6).

The next strategy class with second-highest preference overall is “connect to more neighborhoods”. Looking at the detailed strategies in this class, “expand demand-response services to new areas” had the highest ranking (4.44), “same day on-demand transit” (4.35) and “routes to serve new neighborhoods” (4.13) ranked second and third in this category based on the survey results, respectively, and “neighborhood circulator routes” (4.05) had the lowest ranking (Figure B7).

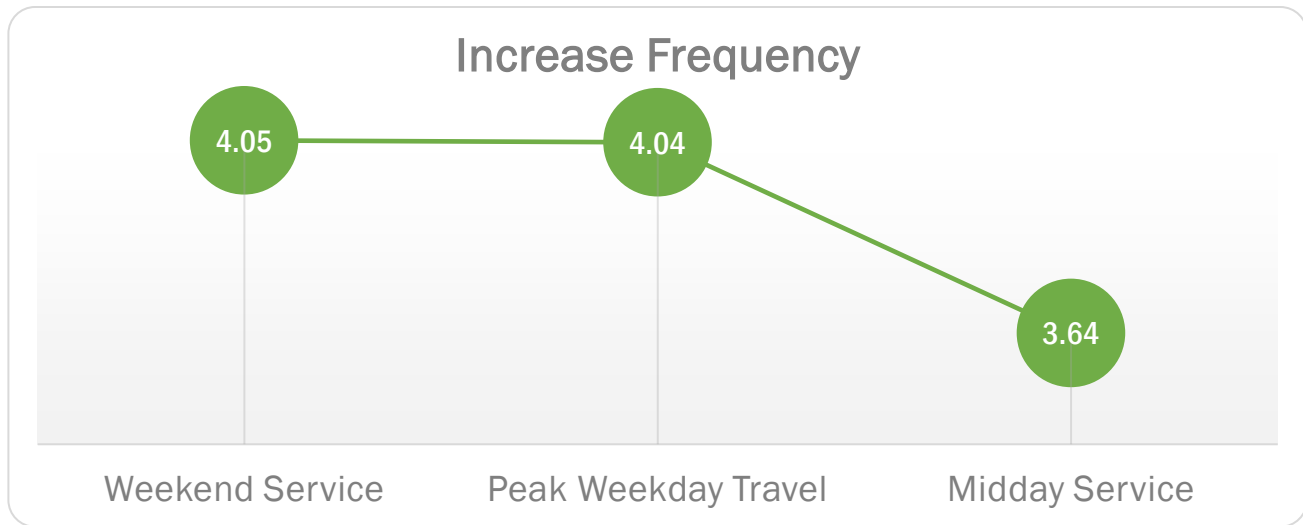


Figure B6 Preferred "Increase Frequency" Strategies Rankings based on Online Survey

The fourth highest-ranking group of strategies is "seamless transfer between systems and schedule coordination". Among the three sub-strategies in this class, "schedule coordination" (4.62) was ranked highest, "free transfer between systems" (4.53) was ranked in second place and "improved transfer locations" (4.10) was ranked as less important for respondents (Figure B8).

"Connect to jobs and services" is the next ranked group of strategies. In this category, "build a variety of housing types", and "transit oriented development" sub-strategies were ranked equally high at 4.50, while "regional service"(4.35) was ranked lower (Figure B9).

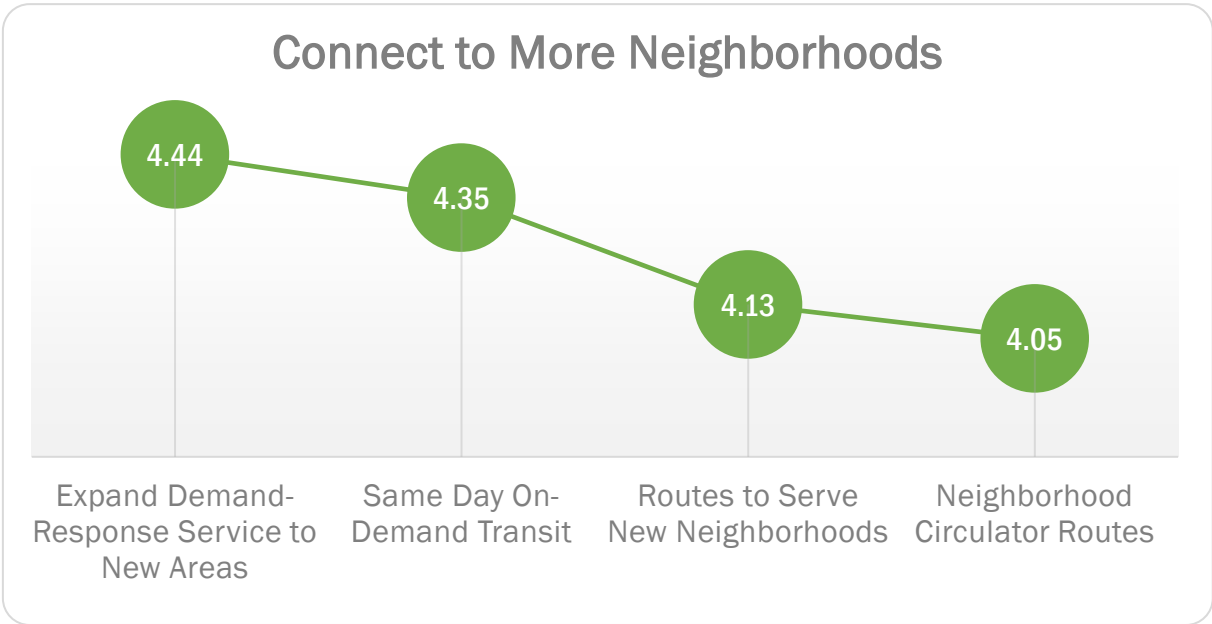


Figure B7 Preferred “Connect to More Neighborhoods” Strategies Ranking based on Online Survey

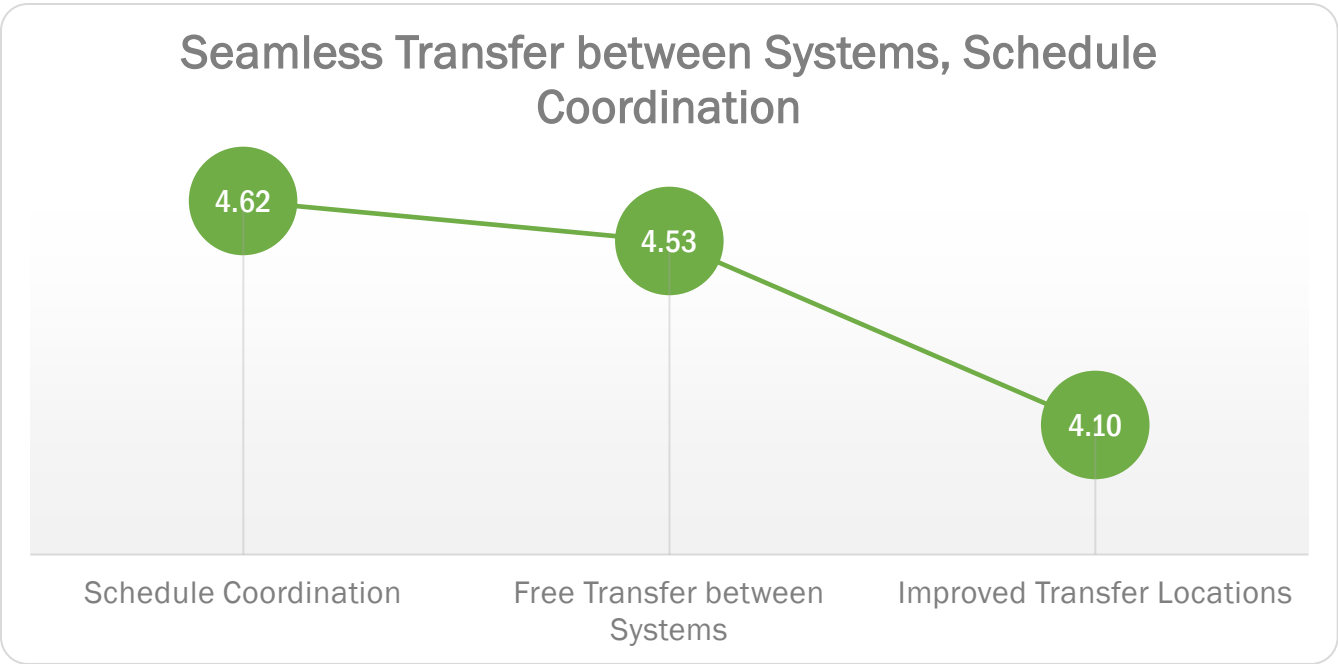


Figure B8 Preferred “Seamless Transfer between Systems” Strategies Ranking based on Online Survey

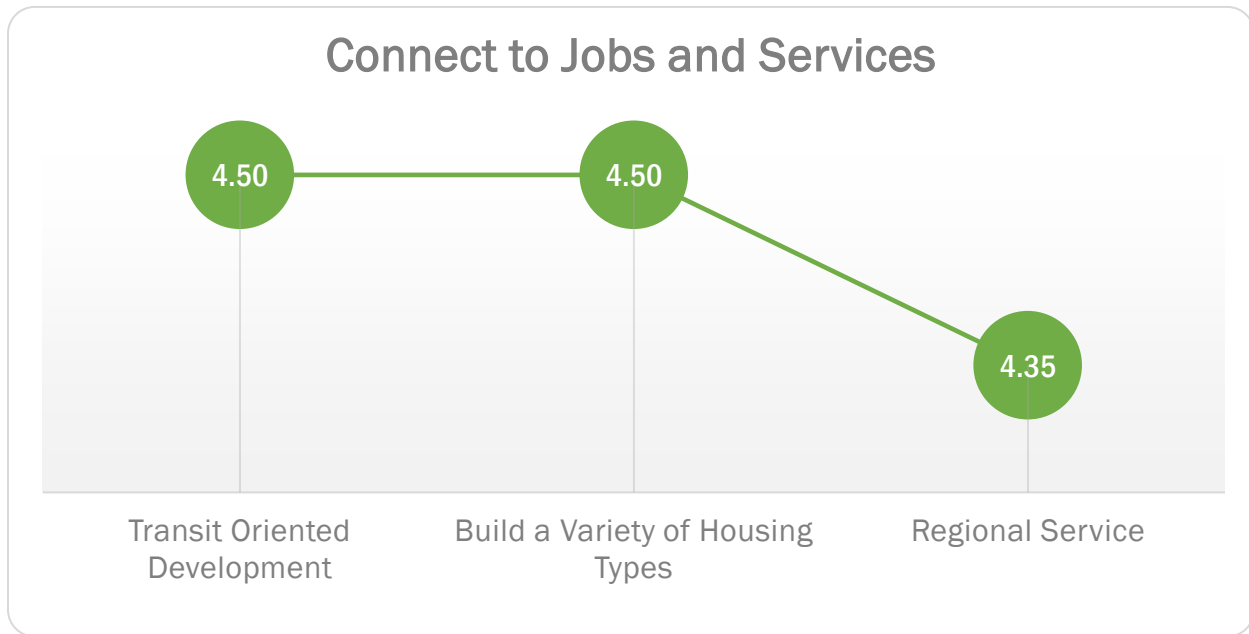


Figure B9 Preferred “Connect to More Neighborhoods” Strategies Ranking based on Online Survey

As part of “expand hours of operations” strategies grouping, “local bus routes and rail” (4.30) were the most preferred strategy, followed by “on-demand and community transportation-evening service” (4.20) and “on-demand and community transportation-weekend service” (4.15). Expand frequency on regional express bus routes strategy was less preferred at 3.37 (Figure B10)

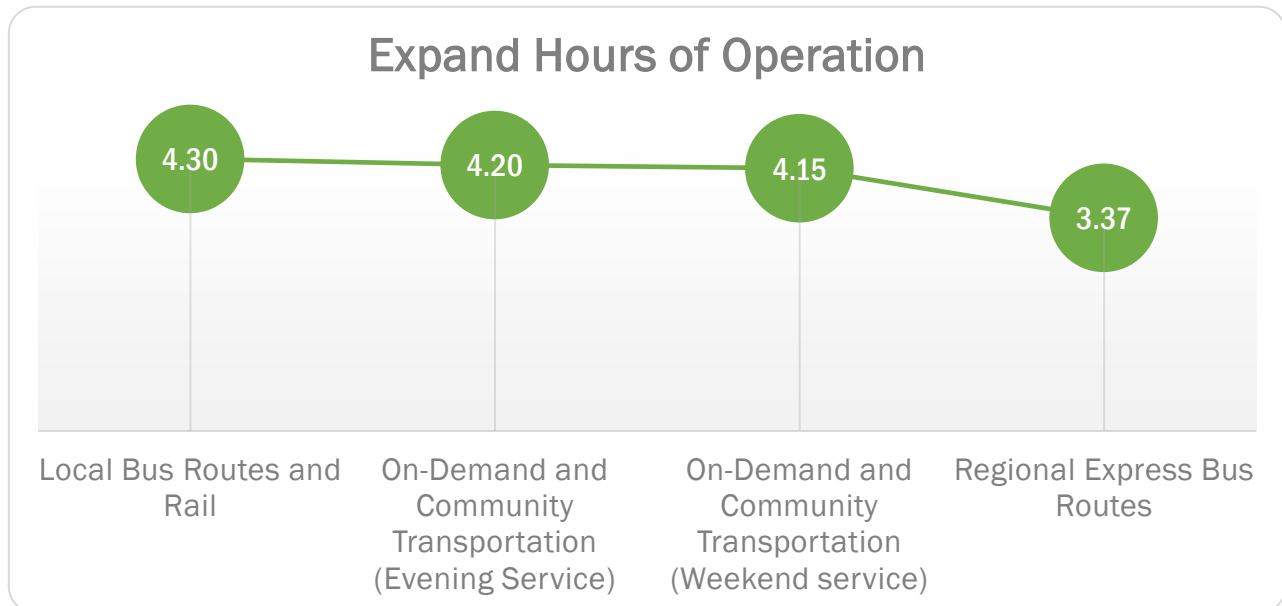


Figure B10 Preferred “Expand Hours of Operation” Strategies Rankings based on Online

As part of “better access to information” group of strategies, “mobile apps” (4.37) and “display screens at transit stops” (4.21) received the highest ranking from online survey participants. A “centralized web portal” (4.10) was the third preferred strategy under this grouping and “connect to ride sharing (3.94) received the lowest preference score. (Figure B11)

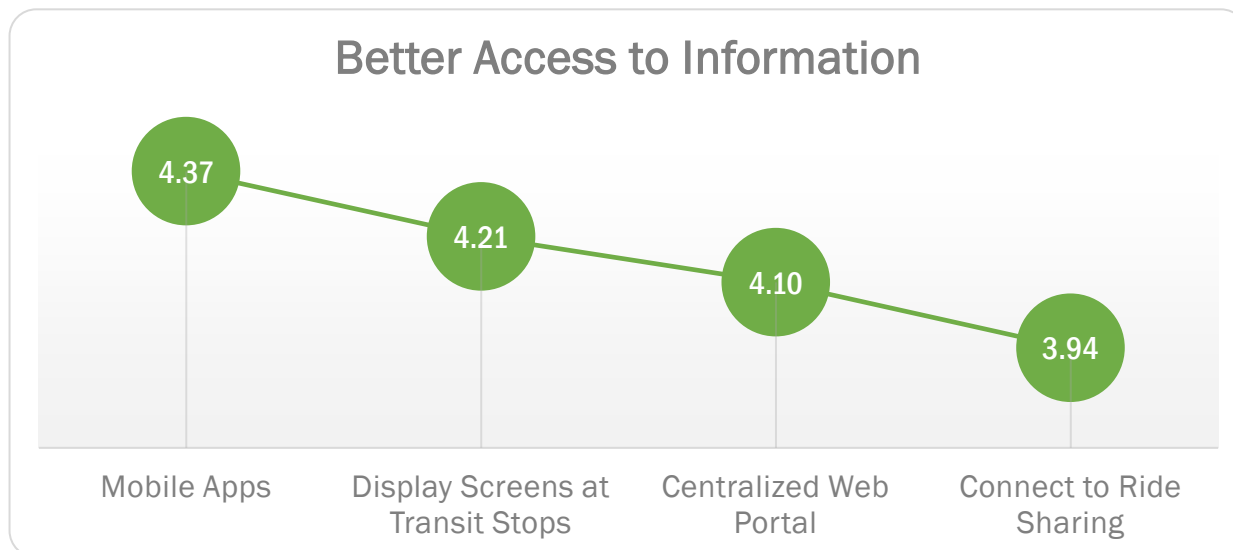


Figure B11 Preferred “Better Access to Information” Strategies Ranking based on Online Survey

Map Markers for Frequency, Improvements, Safety

Online survey participants had an option, as part of the survey, to place map markers through an interactive tool asking for additional transit service improvements such as improved access to transit stops, increased frequency and expand service.

General Results

Looking at the number of responses in the context of suggested map-markers shows that out of 83 observations, 33 percent of respondents requested additional transit service, 20 percent recommended improving transit stops, 17 percent asked for increasing frequency/hours, 13 percent identified safety and security issues, 10 percent of responses focused on improved access to existing transit stops, and 7 percent of responses focused on providing a better bike connection to transit (Figure B12).

Looking at map marker locations by type (Figure B13 and B14), the following trends can be observed:

- Map marker responses placed in northeastern Mecklenburg County near I-485 and North Tryon Road focused on improved bike connections, improving access and safety issues, and more transit stops. This area is generally in proximity to the University of North Carolina and sees a high presence of apartment homes.
- Map markers placed in southeastern Mecklenburg County, in and around the Town of Matthews, primarily focused on additional transit services, as well as safety and security improvement.

- Map markers placed in the urban core of Charlotte area asked for improvements in accessibility and addition of more transit stops.

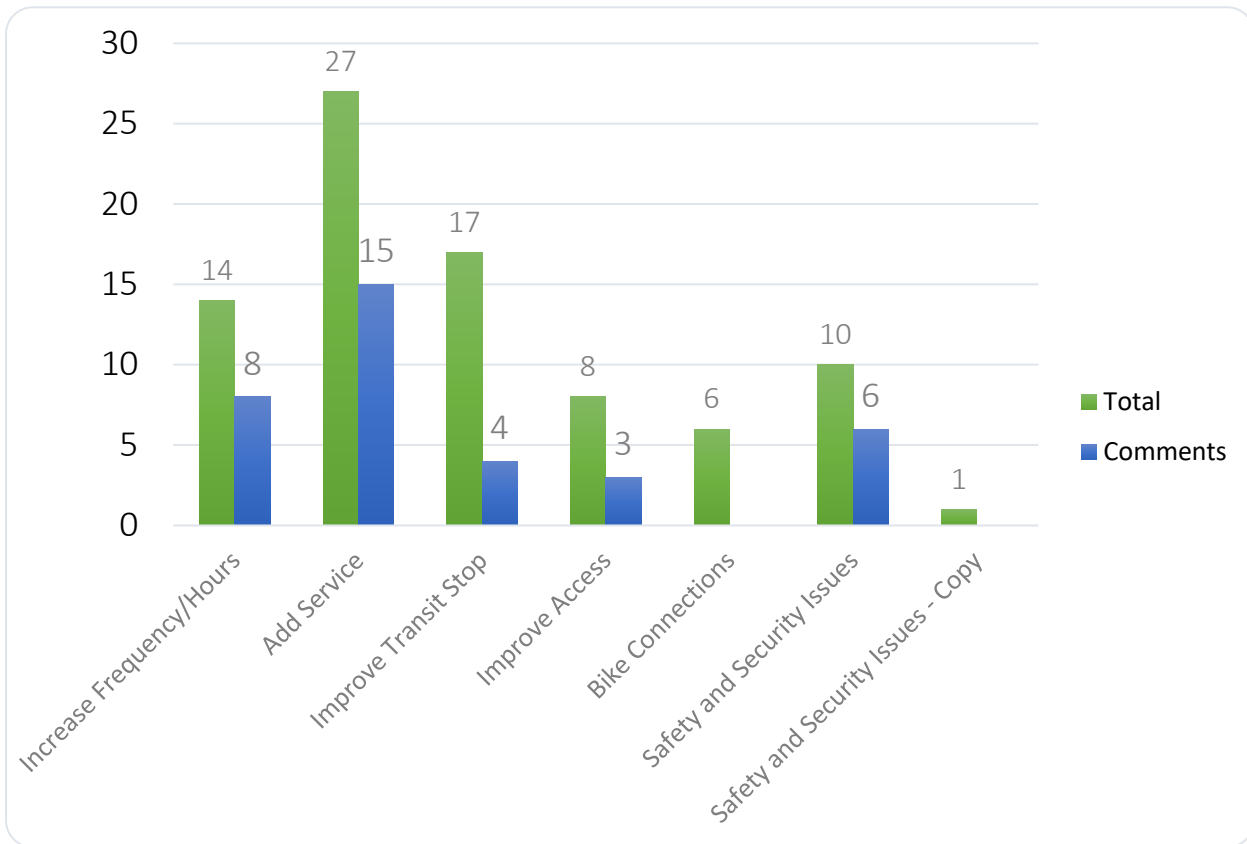


Figure B12 Map Marker Types based on the Number of Responses

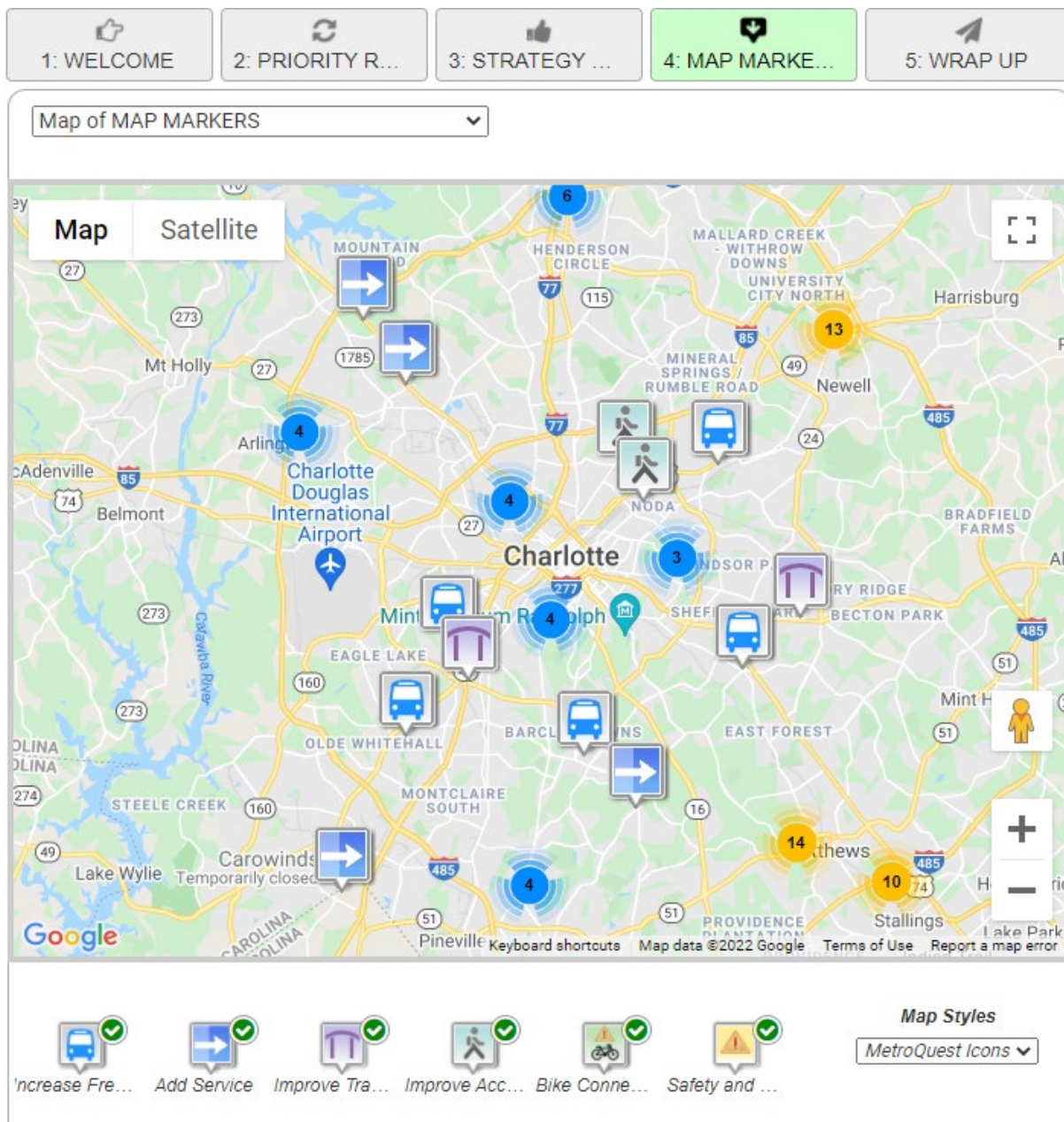
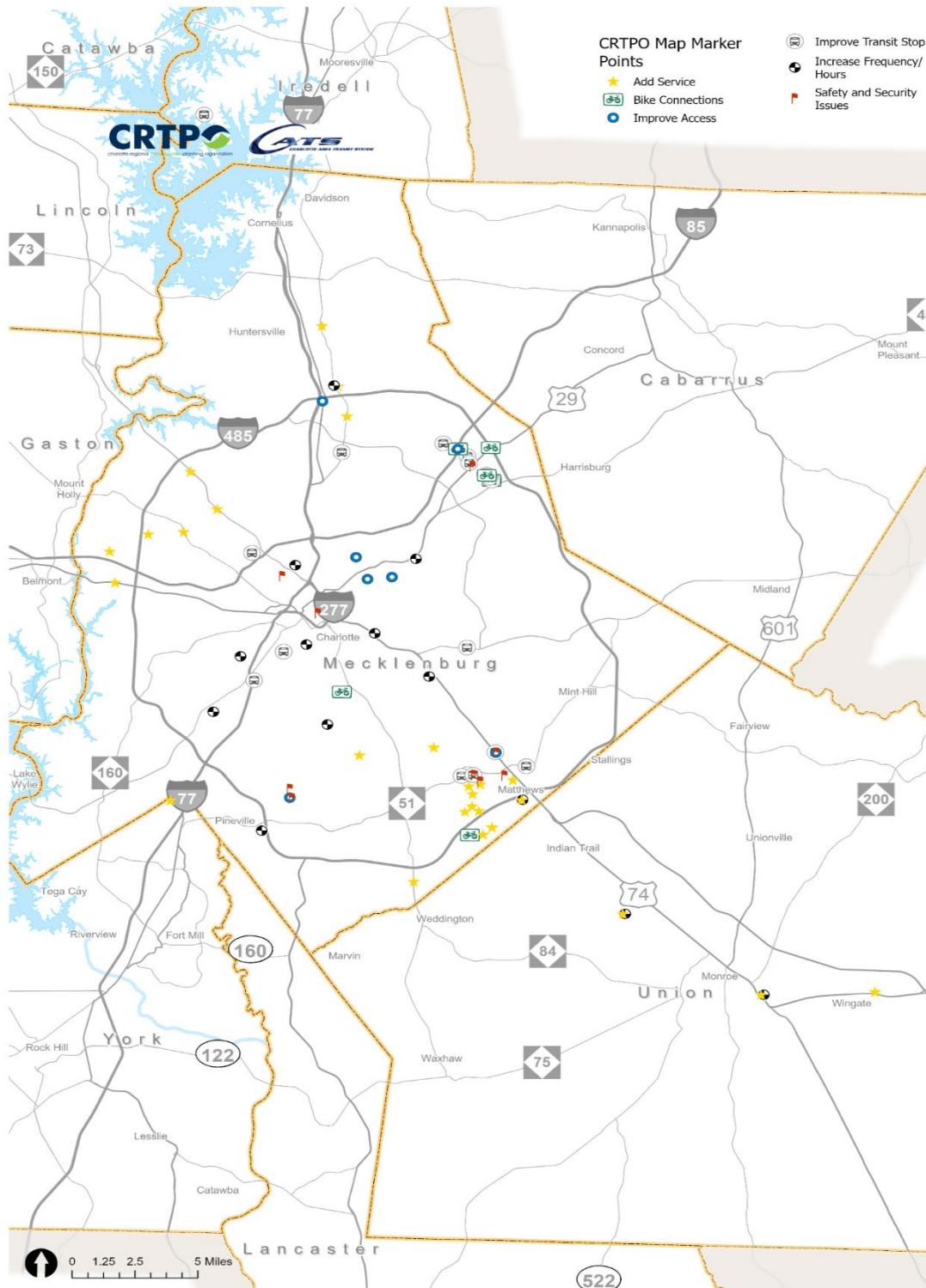


Figure B13 Map Marker Locations



Add Service

Out of the 27 map marker responses, 78 percent (21) specified the type of services they recommended to be added to the network.

Results show that out of the 21 observations in this category, 52 percent wanted a new bus route to be added, and 43 percent asked for the extension of existing bus routes in their area (Figure B15).

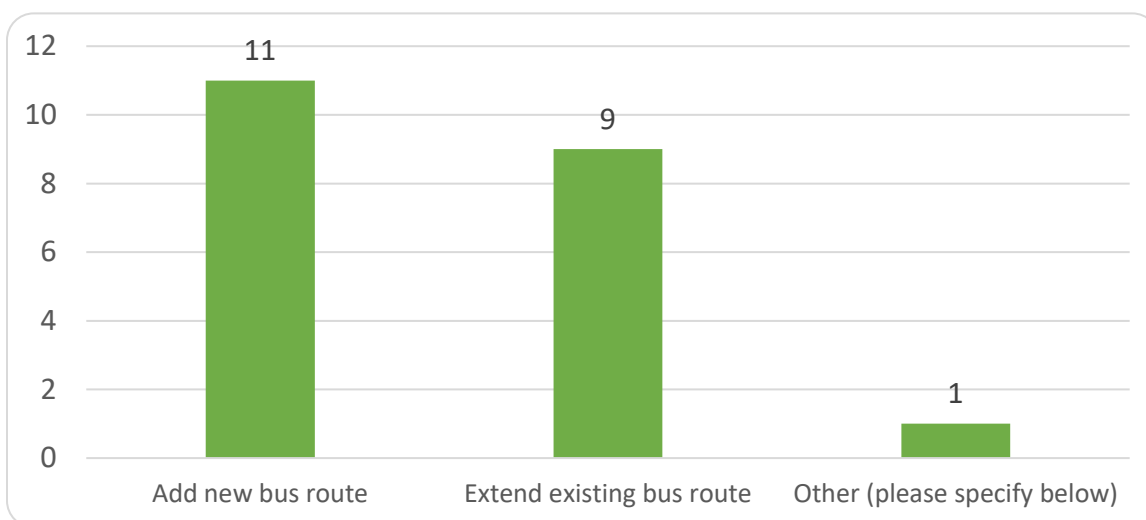


Figure B15 Additional Service Types Requested by the Number of Responses to Online Survey

Out of the 11 areas where participants suggested adding new bus routes, the following locations were specified:

- Three requests are located near Mathews downtown area, two are next to South Trade Street and one at Fullwood Lane.
- Three points are located near Squirrel Lake Park and Arthur Goodman Memorial Park at Pleasant Plains Road and Weddington Road.
- One location is near Carmel Road Park across from the New City Church at Carmel Road and Colony Road intersection.
- One location requested near I-77 (exit 90) and Carowinds Boulevard.
- Two locations requested are south of I-485, along McKee Road, near a Publix grocery store, Brace Family YMCA, a local park (Hellenic Recreation Park) and a senior living community
- One request was located near the intersection of McKee Road and Pleasant Plains Road.

For the nine locations where survey participants requested to extend an existing bus route. The following are additional location details:

- One area recommended for a transit route extension is near Walmart Supercenter at the intersection of Eastfield Road and NC 115 (Old Statesville Road) (CATS route 21)

- An additional area recommended for route extension is at the intersection of Hucks Road and NC 115 (Old Statesville Road) which is close to several warehousing and logistics centers including an Amazon site (Extension of CATS route 21).
- Two locations along NC 16 (Brookshire Boulevard) were requested for route extensions, located in proximity to Pleasant Grove Road intersection (near Mountain Island Lake academy).
- One response requested an extension of bus route 27 near Freedom Drive and Old Little Road intersection
- Another extension of service request is located near Moores Chapel Road and Kendall Drive next to Food Lion grocery store.
- One requested extension location is at US 74 (Wilkinson Boulevard) and Sam Wilson Road where several manufacturing and warehousing and logistics complexes are located
- One requested extension location is near Sardis Road North and Kilcullen Drive, in a residential area about a mile west of Monroe Road corridor served by CATS route 27
- One location was on the south side of I-485 at NC 16 Providence Road, near a commercial area (Whole Foods, a variety of restaurants).

Improve Transit Stops

Out of the 17 respondents' requesting an improvement to a transit stop as part of online survey map markers exercise, 41 percent (7) specified their preferred type of infrastructure to be improving the transit network in the area.

57 percent of map marker requests under “Improve Transit Stop” category asked for a shelter to be added to the stops, 14 percent focused on addition of benches, and 29 percent of responses asked for other improvements (Figure B16).

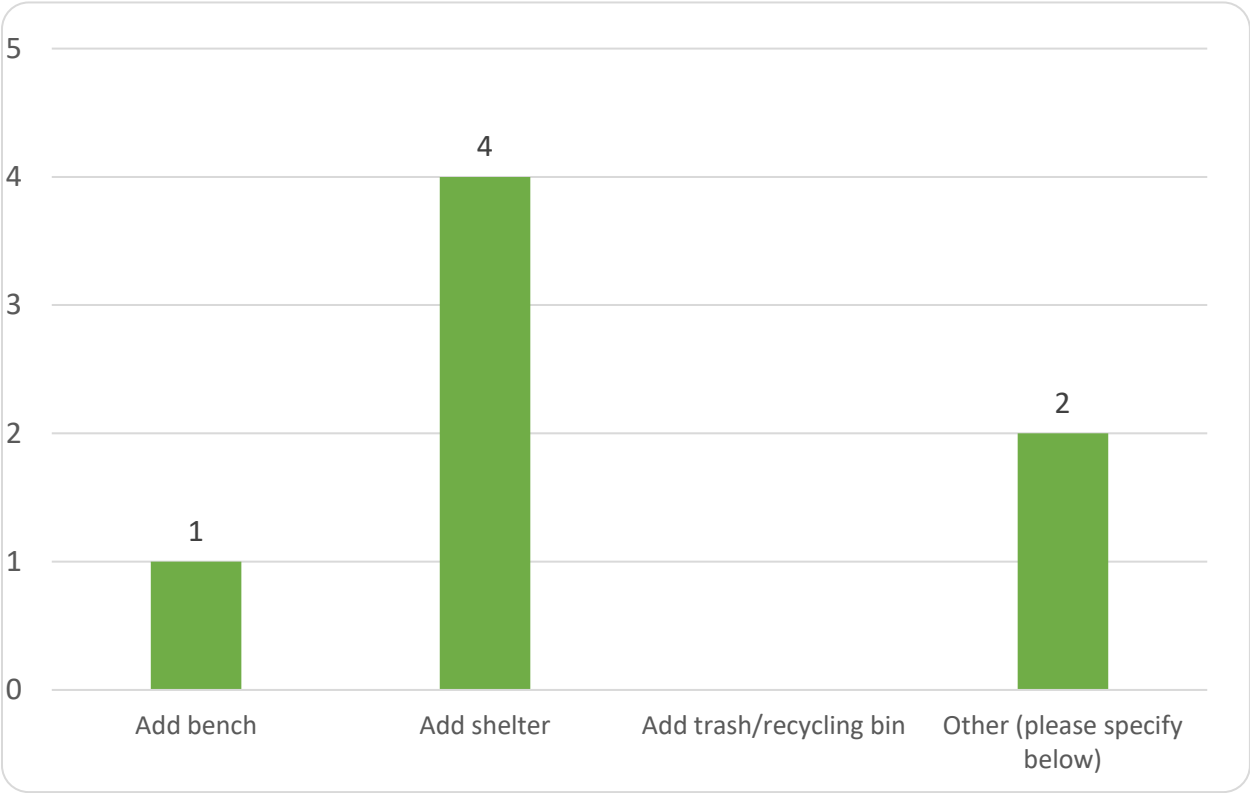


Figure B16 Improve Transit Stop: Requested Improvement Types by Number of Responses

A bus shelter addition was requested in the following areas:

- In Sedgefield neighborhood of Charlotte behind Harris Teeter, near Elmhurst Road and Berkshire Road
- In east Charlotte at Albemarle Road and Farm Pond Lane (commercial area including a Family Dollar store, fast food)
- In Matthews on the north side of NC 51 (Matthews-Mint Hill Road) and Brandywine Drive, in a residential area
- In Matthews at the intersection of Mathews Township Parkway and East John Street (Aldi’s grocery store, Covenant Day School nearby).

The second most frequent category in the grouping of “Improve Transit Stop” map markers is focused on adding a bench. A specific location requested was on NC 115 (Old Statesville Road) south of NC 24 (W. T. Harris Boulevard), near Griffith Lakes. CATS route 21 travels along this corridor.

Bike Connections

As part of the online survey-map marker responses, one response requested an addition of new bike lanes near a transit stop. The location of the request was south of I-485, along McKee Road, near Publix shopping center and Brace YMCA. Bicycle lane was requested.

Safety and Security Issues

Seven percent of participants who mentioned safety and security issues as part of map marker comments asked for unsafe pedestrian crossing issues to be addressed, and 14 percent indicated that there might be suspicious activity taking place at the transit stop that requires attention (Figure B17).

Among the four locations identified by residents to have unsafe pedestrian crossing:

- Two are located along West John Street in Matthews downtown near Covenant Day School (Middle School campus) and a neighborhood shopping plaza.
- One is at US 74 (East Independence Expressway) and Sam Newell Road next to a shopping center.
- The fourth location was identified at Park Road at Southminister Retirement Court Drive, near the South Mecklenburg High School and Southminister Retirement community (CATS bus routes 19 and 43 stop at this location).

One location reported to have suspicious activities is located near the Charlotte Spectrum Center along the South Brevard Street.

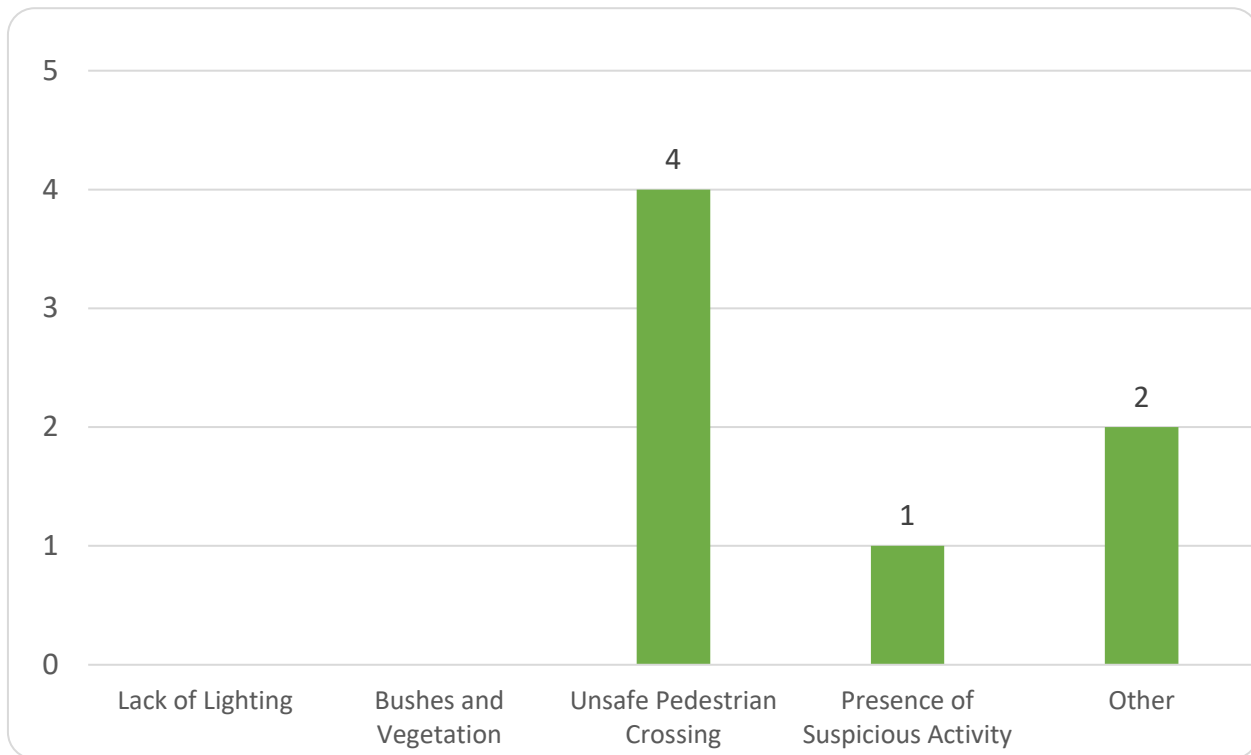


Figure B17 Safety and Security Issue Types based on the Number of Responses

Increase Frequency/Hours

14 of the map marker comments submitted focused on adding more frequent transit service. The following locations were recorded:

- Two recorded locations are along NC 115 (Old Stateville Road), in northern Mecklenburg County, of which one is on NC 115 (Old Statesville Road) near Eastfield Road (close to Walmart) and another one is near Laborde Ave and Griffith Lakes.
- One location is along the Beatties Ford Road corridor, on Dundeen Street near the intersection with Campus Street.
- Another requested location is near North Tryon Street, on Pumpernickel Road where there is a commercial center nearby.
- Several requested improvements were along US 74 (Independence Boulevard/Independence Expressway):
 - one in a residential area near Vista Commons near the intersection of Commonwealth Avenue and Rockway Drive.
 - another one at the intersection of Idlewild Road and Monroe Road, next to a commercial center (including an Aldi's grocery store, 7-Eleven, etc.).
 - one is just outside of I-485, at Central Piedmont Community College.
- Another service frequency improvement request was placed at South Piedmont Community College-old Charlotte Highway Campus, along Old Charlotte Hwy north of Airport Road.

- One frequency of service improvement request was located in Monroe on US 74 (Andrew Jackson Highway) at South Sutherland Avenue. Of note, the Monroe location is about two and a half miles south of the Monroe Crossing Mall which serves as the Union County Express Bus route stop.
- One location is between East Boulevard and East Worthington Avenue on Ewing Avenue near a commercial center
- One location is on Pressley Rd, at a shopping mall near Fairview Rd and in proximity to Pressley Ridge Apartments
- One location is on NC 49 (South Tryon Street) at Land Grant Road, close to Sugar Creek Greenway
- The last map marker comment requesting an improvement in the frequency of service was in Pineville, at the Carolina Place shopping mall, on the south side of US 51 (Pineville Matthew Rd) and Carolina Place Parkway intersection.

Improve Access

Three access improvement elements were suggested by online survey participants as part of map marker comments received. One comment in southern Mecklenburg County along Park Road near the South Mecklenburg High School asked for adding or improving a pedestrian signal (Figure B18).

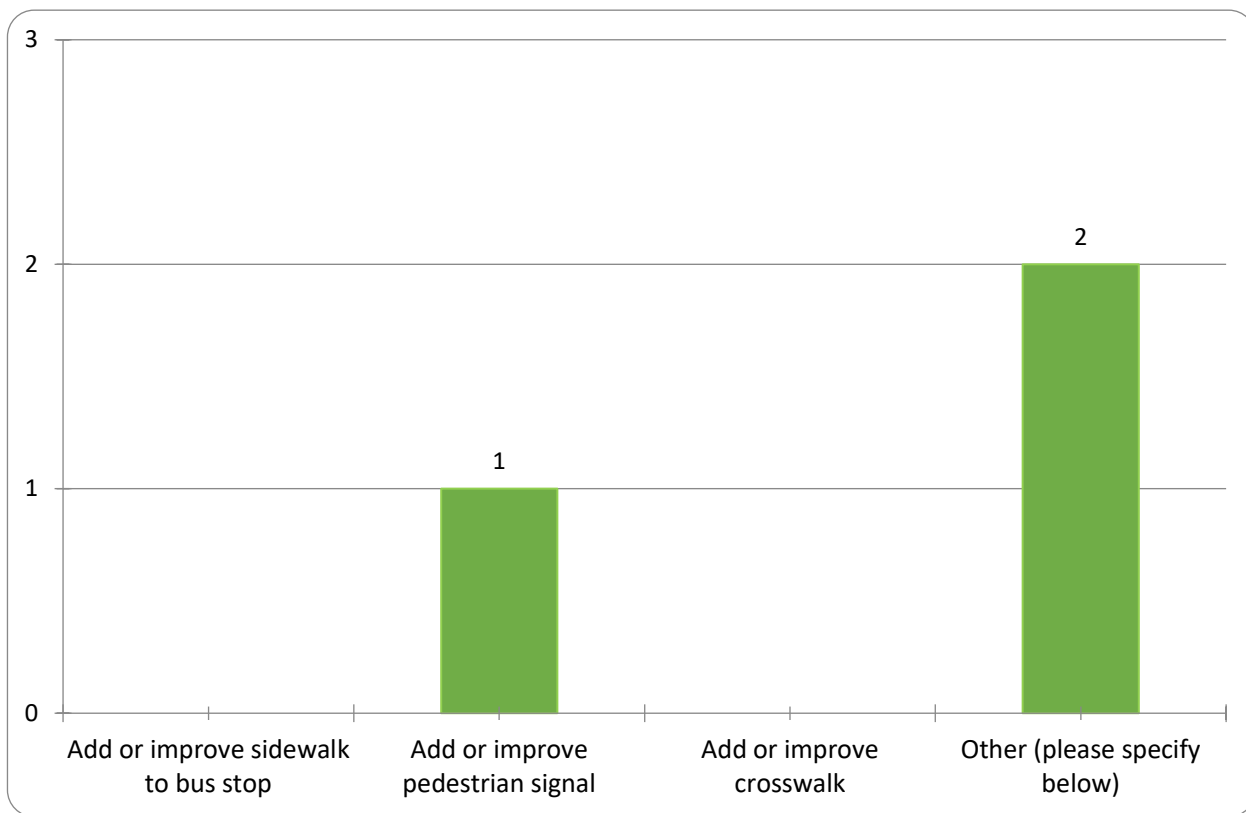


Figure B18 Improve Access Map Improvement Types based on the Number of Responses

Map Marker Comment Summary by Applicable Bus Route

Table B1 shows a partial summary of participants' Map Marker comments with requested improvements organized by CATS bus route.

Table B1 Respondents Comment Summary

Location	From	To	Item
CATS bus route 14	Walmart @ Arboretum	Charlotte Transportation Center.	Add service
CATS bus route 28	Charlotte Transportation Center in Uptown	Eastland Community Transit Center	Increase frequency
CATS bus route 4	Sugar Creek Station Bay	Charlotte Transportation Center	Improve access/ add stops
CATS bus route 9	Charlotte Transportation Center	Albemarle Rd & Lawyers Rd Park and Ride	Improve transit stop/seat & shelter
CATS bus route 21	W Sugar Creek Rd @ Food Lion	Charlotte Transportation Center	Add service
CATS bus route 99	Northlake Mall	Sloan St & Eden St	Increase frequency
CATS bus route 19 S/ 19 C	Carolina Place Mall	Charlotte Transportation Center	Increase frequency
CATS bus routes 27, 51	John Street crossing south of Matthews Township Pkwy		Safety & security issue
CATS bus route 39	Billingsley Rd & Randolph Rd	Old Concord Road Light Rail Station	Increase frequency