



SHAMROCK DRIVE STREET IMPROVEMENTS PUBLIC MEETING SUMMARY

AUGUST 2017

DRAFT



CHARLOTTI

TABLE OF CONTENTS

- I. Project Overview...PG 3
- II. Public Meeting Summary...PG 5
- III. Online Survey Results...PG 15
 - IV. Next Steps...PG 34
- V. Appendix A Public Meeting Exhibits...PG 36
- VI. Appendix B Online Survey Questions...PG 58





I. PROJECT OVERVIEW





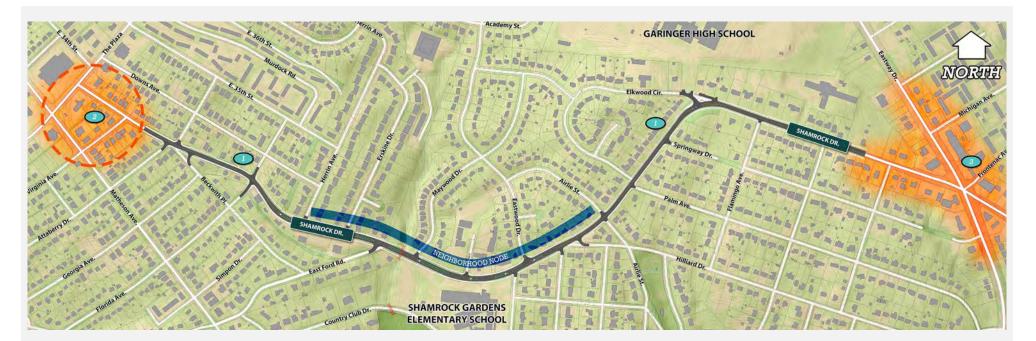


Part of the Central/Albemarle/Shamrock Comprehensive Neighborhood Improvement Program, the Shamrock Drive Street Improvements project will create a more complete street to better serve bicyclists, pedestrians, motorists, and adjacent neighborhoods and businesses.

The project improvements will upgrade Shamrock Drive from The Plaza to Eastway Drive. Potential enhancements include sidewalks, turn lanes, bike lanes, and street crossings. Having been awarded a public art grant, the project team is working with the Arts and Science Council and residents to determine where and what art will be constructed.

Shamrock Drive Street Improvements Project goals are:

- To maintain, stabilize and revitalize the neighborhood through comprehensive infrastructure improvements
- To strengthen the neighborhood and surrounding community
- To improve infrastructure features in the neighborhood such as storm drainage, curb and gutter, and sidewalk features.



MAP OF THE PROJECT AREA







II. PUBLIC MEETING SUMMARY









On August 17, 2017, the first public meeting for the Shamrock Drive Street Improvements project was held at Shamrock Gardens Elementary School from 5:30pm to 7:30pm. With 27 people in attendance, the project team received valuable feedback about the corridor including:

- Public Art What kind of art, what is important to be included in the art and where the art project should be located
- Bike Facilities Preference between a buffered bike lane and a raised bike lane
- Corridor Issues and Opportunities Existing conditions that make walking and biking difficult, opportunities for enhancements, and desired enhancements

The following pages provide a comprehensive review of all comments and feedback received at the public meeting.

Appendix A contains all exhibits presented at the meeting.





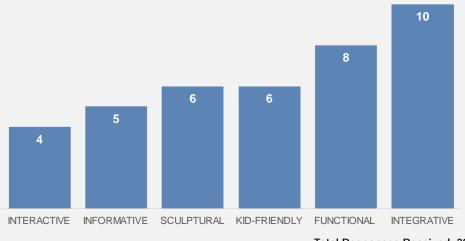






Public Art

WHAT KIND OF ART APPEALS TO YOU?



Total Responses Received: 39





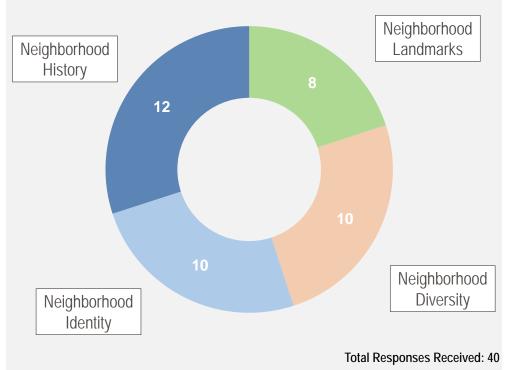




Public Art



WHAT IS IMPORTANT TO YOU?

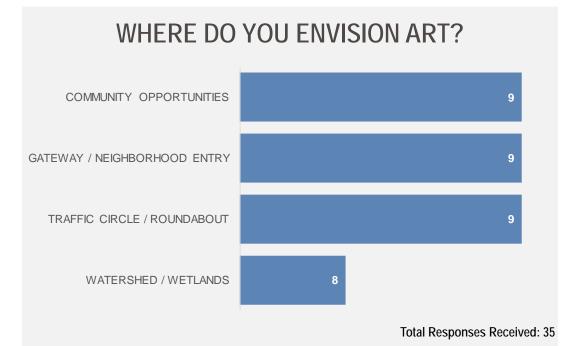


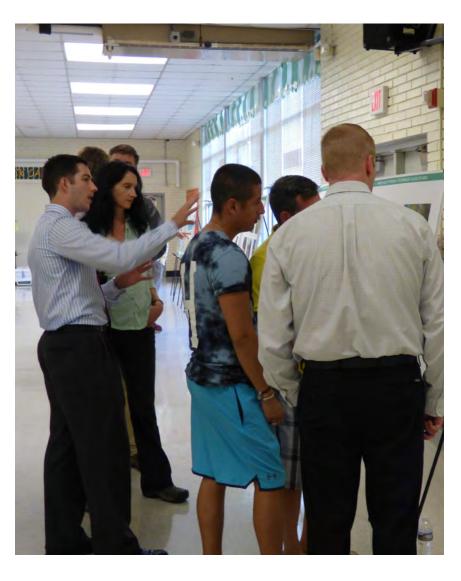






Public Art











WHICH WOULD YOU PREFER?





RAISED BIKE LANES

11

BUFFERED BIKE LANES 0

Total Responses Received: 11









MAP EXHIBIT AT THE PUBLIC MEETING

At the project map exhibit, attendees provided comments and feedback by directly writing on the map, placing sticky notes with comments on the map, or placing thumbs up stickers for proposed corridor enhancements.

With over 60 comments received, the project team gain valuable insight to issues and opportunities to transform Shamrock Drive into a more complete street that is welcoming and safe for all users. Common themes from comments received at the map exhibit include:

PROTECTED STREET CROSSINGS

Many attendees noted that more pedestrian crossings are significantly needed due to a current void of crossings, creating unsafe conditions for both pedestrians and motorists. The proposed crossings at Farley Street, Anne Street and Airlie Street received positive support and it was noted that a pedestrian activated signal might be necessary at Anne Street for students and parents accessing Shamrock Gardens Elementary School. Additionally, there are many bus stops along Shamrock Drive. Bus riders currently have limited protected crossing opportunities. The street improvements should consider the existing bus stop locations to better accommodate riders.









TRAFFIC VOLUME AND SPEEDS

Meeting attendees heavily emphasized the need for traffic calming due to both the volume of cars and to the excessive and unsafe speeds of motorists. Noted as a traffic cut through, traffic calming suggestions included speed humps, better enforcement of speed limits, placement of stop signs and crosswalks, and lowering speed limits. Ultimately, the excessive motorist speeds are a major deterrence for walking and biking and create an unsafe environment for all users. Also noted was traffic calming enhancements and a designated Safe Routes to School specifically for students and parents accessing Shamrock Gardens Elementary School.

SIGHT LINES AND HARD TURNS

Existing conditions along Shamrock Drive create difficult sight lines and turning movements for motorists, creating a hazardous atmosphere for cyclists and pedestrians. Erskine Drive, Herrin Avenue, Eastwood Drive, Anne Street, and Elkwood Circle were all noted as conflict intersections for motorists.

ROUNDABOUTS

Generally, attendees viewed traffic roundabouts as an effective way to calm traffic speeds along Shamrock Drive and enhance the corridor's bicycle and pedestrian environment. One concern noted about traffic circles included effectiveness with the current traffic patterns.







All written comments received at the project area map exhibit are included below.

MAP COMMENTS

Total Respondents: 65

- The Plaza and Matheson Avenue area would like to see more shops, restaurants and become a more walkable area.
- Most cyclists go Virginia Avenue to Matheson Avenue to The Plaza due to median.
- Improve Matheson/Virginia intersection. Too many folks don't get three-way stop. It is dangerous. (x2)
- More pedestrian crossings. (x2)
- People cross regularly to go to the Shamrock Mart. (x2)
- More street lights for safety in high crime areas.
- Nice landscaping look better (drainage area near Herrin Avenue).
- Thumbs up sticker placed on drainage area near Herrin Avenue.
- Hard to look left from Erskine Drive.
- Hard left off of Herrin Avenue.
- Three thumbs up stickers placed at roundabout at Ford Road.
- CMPD enforcement of speed signs/signals.
- Traffic circles are good.
- Speeding down Shamrock from Globe Court to Maywood Drive.
- Five thumbs up stickers placed for street crossing at Farley Street.
- Good (at roundabout at Ford Road).
- High speeds down Shamrock Drive.
- Sidewalk and planting buffer is good.
- Don't back of curb sidewalk.
- Slow people down.
- There is a need for a small park in this area.
- Slow traffic to school put in crosswalks.
- Stop sign at Country Club is not enforced.









- Accidents at Anne Street going to the shopping center.
- Seven thumbs up sticker for crossing at Anne Street.
- Pedestrian activated signal needed at crossing at Anne Street.
- Eastwood and Shamrock is a crash zone.
- Safety along Eastwood Drive and Shamrock Drive is important.
- Raised bike lanes to prevent debris and further slow traffic.
- Slow cars down.
- Slow traffic along Shamrock Drive near Elkwood Circle.
- Topography issue at Elkwood Circle.
- Two thumbs up stickers for crossing at Airlie Street.
- Benches and trashcans at bus stops along Shamrock Drive.
- Stop control needed at Cheryl Street and Libeth Street.
- Difficult left turn onto Eastwood Drive from Shamrock Drive.
- Safe Routes to School needed.
- Speed hump on Libeth Street needed.
- Shift road over some, less impact to property 3351 Airlie Street.
- Crosswalk to Shamrock Park. (x2)
- Hillard Drive corner is an opportunity for public art.
- New bus pull off opportunity at Hillard Drive.
- Stop signs needed at Hillard Drive.
- Lower speed limit to 30 mph.
- Biggest concerns/needs: traffic calming, better facilities for pedestrians and cyclists and improved connectivity across Shamrock Drive.
- ADA many wheelchairs on sidewalk near Brian Center.
- Seven thumbs up stickers for roundabout at Elkwood Circle.
- Definitely need a roundabout at Elkwood Circle due to blind curve.
- Curve (at Elkwood Circle) is traveled fast.
- Sight distance issue in curve (at Elkwood Circle).
- Driveway conflicts along Shamrock Drive.
- Kids crossing road.

- Awkward intersection in curve (at Elkwood Circle).
- Too much traffic the roundabouts may not work.
- Look at Scaleybark as a precedent.
- High pedestrian crossing at Shamrock Mart
- Too fast by school.
- Incorporate dog park into plan.
- 3138 Maywood Drive driveway flooding issues.
- Plaza Shamrock does not have a park.
- Protected bike lane is best does vertical curb accomplish this?
- Reach out to Country Club for neighborhood history.
- Neighborhood history is Charlotte history.
- Functional art could be dog waste bags/cans.









III. ONLINE SURVEY RESULTS







An online survey was made available through the City's project website from August 14, 2017 to September 1, 2017. The purpose of the online survey was to gather additional feedback from attendees as well as provide an opportunity to hear from interested citizens unable to attend the public meeting. Questions addressed the following topics:

- Overall Neighborhood- Top neighborhood concerns and top destinations
- Overall Transportation How people currently use the corridor and how they want to use the corridor in the future
- Pedestrian Facilities Why people walk the corridor and barriers to walking more
- Bicycle Facilities Why people bike the corridor, barriers to biking more, and bicycle facility preferences
- Corridor Issues and Opportunities Desired enhancements along Shamrock Drive

The entire 14-question survey can be found in Appendix B.











Overall Neighborhood

PLEASE RANK THE CONCERNS YOU HAVE ABOUT YOUR NEIGHBORHOOD, WITH 1 BEING THE MOST IMPORTANT.



















Total Respondents: 95

Total Responses Received: 696



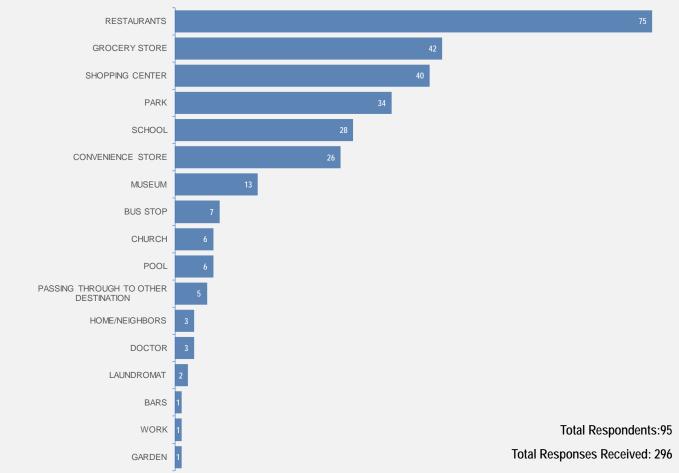
STV = DODD STUDIO





Overall Neighborhood

WHICH DESTINATIONS DO YOU CURRENTLY VISIT IN THE PROJECT AREA? CHECK ALL THAT APPLY.

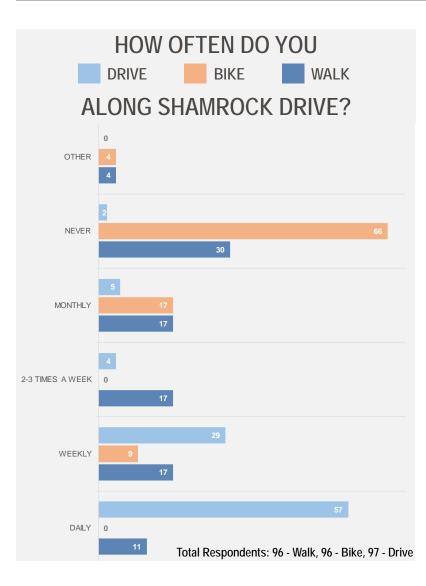




 $\odot STV$ = dodd studio



Overall Transportation







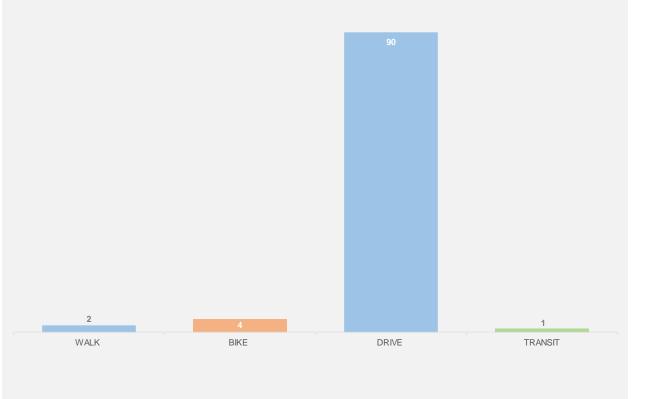




Overall Transportation



WHAT IS YOUR PRIMARY MODE OF TRANSPORTATION ALONG SHAMROCK DRIVE?



€ STV

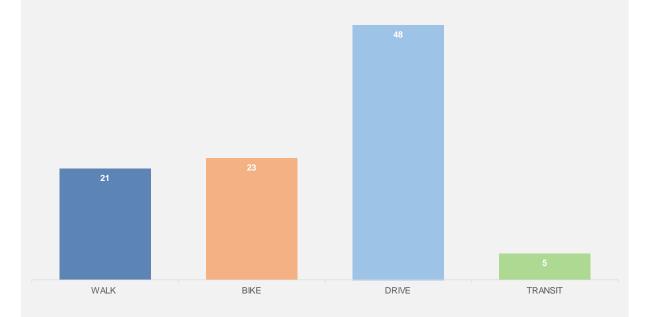
Total Respondents: 97





Overall Transportation

HOW WOULD YOU PREFER TO TRAVEL ALONG SHAMROCK DRIVE?



Total Respondents: 97





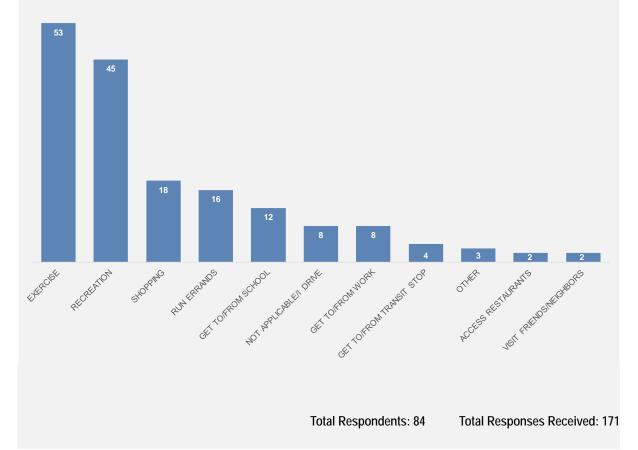




Pedestrian Facilities



SELECT THE REASON(S) YOU WALK ALONG THE CORRIDOR. CHECK ALL THAT APPLY.



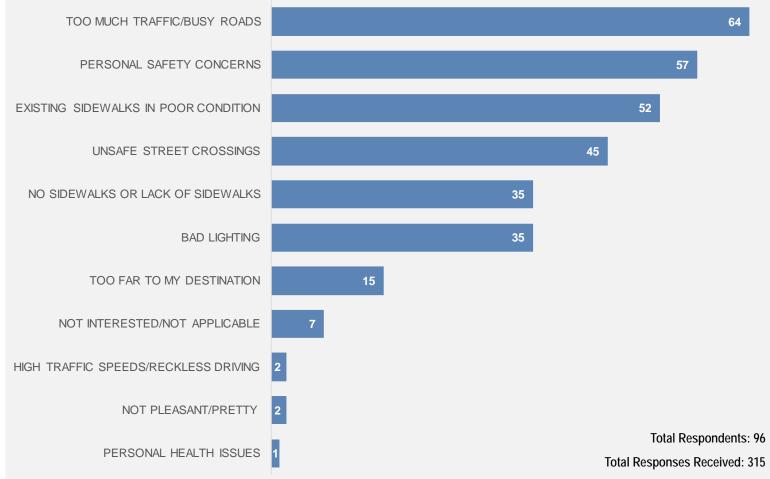






Pedestrian Facilities

WHAT PREVENTS YOU FROM WALKING MORE ALONG THE SHAMROCK CORRIDOR?

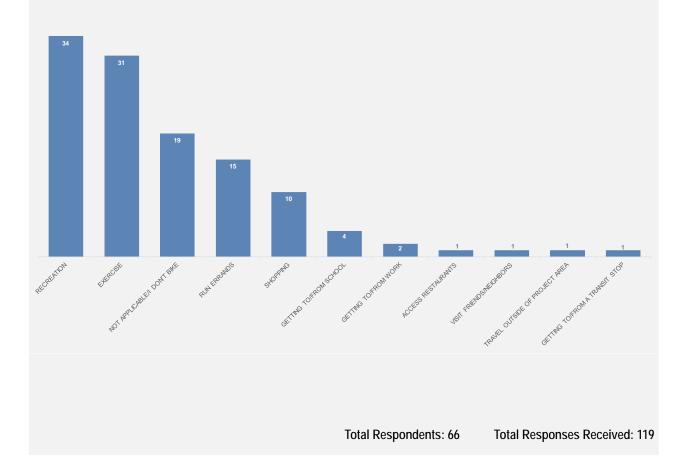








WHY DO YOU BIKE ALONG THE SHAMROCK CORRIDOR? CHECK ALL THAT APPLY.



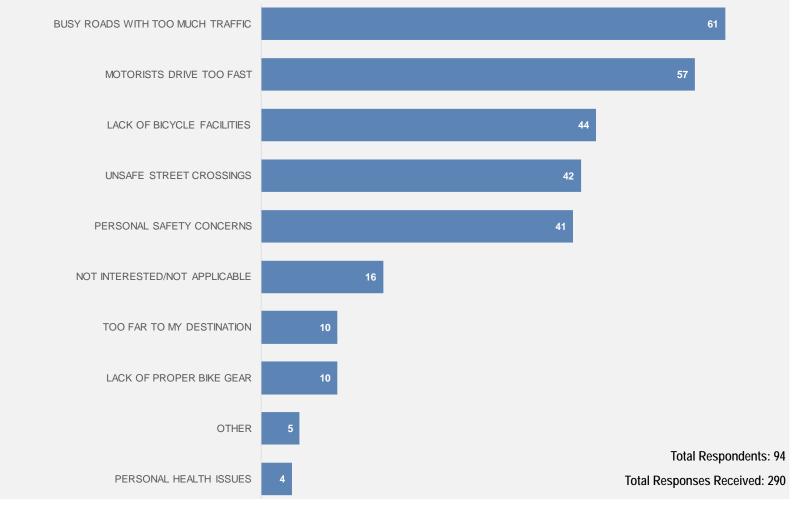








WHAT PREVENTS YOU FROM BIKING MORE ALONG THE SHAMROCK CORRIDOR?

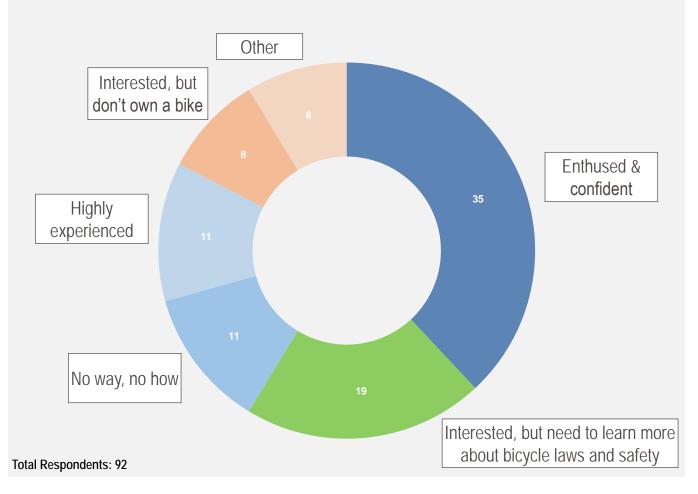




 $\odot STV$ \equiv dodd studio



WHAT SKILL LEVEL DO YOU CONSIDER YOURSELF AS A BICYCLIST?



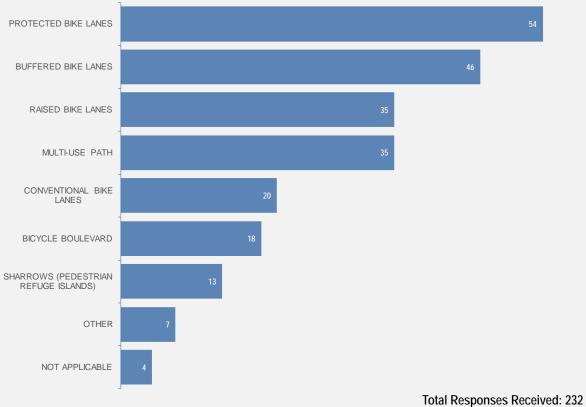








WHAT TYPE OF FACILITY WOULD MAKE YOU FEEL COMFORTABLE RIDING ALONG THE CORRIDOR?



tal Responses Received: 232 Total Respondents: 86









WHAT ROAD AND INTERSECTION IMPROVEMENTS WOULD YOU LIKE TO SEE IN THE PROJECT AREA?

As an open-ended question, survey respondents provided a broad range of answers for desired improvements. Recurring themes from the responses include:

BEAUTIFICATION

While bicycle and pedestrian infrastructure improvements are certainly desired to create a safer environment for all users, beautification was also noted as important along the corridor. From street trees to hardscapes, residents desire a pleasant and inviting streetscape.

SCHOOL TRAFFIC

Both Shamrock Gardens Elementary and Garinger High School create unfavorable driving conditions during certain hours along Shamrock Drive. School traffic volumes as well as issues including left hand turns should be taken into consideration as the street redesign moves forward.

TRAFFIC CALMING

Excessive traffic speeds and the desire for traffic calming enhancements are both heavily emphasized as needing to be addressed. High speeds are a major barrier to walking and biking the corridor.

SHAMROCK/EASTWAY INTERSECTION

As a gateway intersection, residents and attendees emphasized the need for improvements at Shamrock Drive and Eastway Drive.

SIDEWALKS

To create a safer, more pedestrian-oriented corridor, new sidewalks to create a connected walking network as well as repair and maintenance of existing sidewalks is heavily emphasized as needed along the corridor.

BIKE LANES

A dedicated right-of-way for biking was emphasized by respondents as a necessary safety enhancement for cyclists. The corridor is currently not designed to protect cyclists and respondents desire to travel in modes other than the car along the corridor.

SAFE PEDESTRIAN CROSSINGS

Opportunities for pedestrians to safely cross Shamrock Drive are needed. In particular, a safe crossing from Pike's Pharmacy/Letty's to Shamrock Gardens Elementary appears to be a top priority due to high pedestrian activity and with an opportunity to create a neighborhood retail node.

A comprehensive list of all comments received from this survey question can be found on the following page.







WHAT ROAD AND INTERSECTION IMPROVEMENTS WOULD YOU LIKE TO SEE IN THE PROJECT AREA?

Total Respondents: 74

- Bicycle lanes and sometime to slow traffic
- The roads are VERY wide. A bike lane could be put in very easily with paint. Doing so would cause the traffic to move slower and more safely. Repaired sidewalks would help the small shopping centers grow.
- Sidewalk along Country Club Lane between Matheson Avenue and Mecklenburg Avenue.
- I would like to see road improvements that slow traffic and make it safe for walking and biking.
- The Shamrock, Matheson, Plaza collection of intersections leads to cut through traffic through neighborhood streets. In addition, commuter traffic from Plaza along Shamrock past Shamrock Gardens is difficult to manage and often too fast. I would also like to see planned development along that stretch that take homes that border Shamrock into consideration.
- Pedestrian
- Central/Eastway, Kilborne/Central
- Stoplights, crosswalks, sidewalks
- Safer medians/crosswalks for pedestrians throughout the area, particularly around parks, bus stops, shopping
- I would like to see the area at Shamrock Elementary improved: *Lane for cars turning into the SGE parking lot. During pick up and drop off there is a line of cars pulled up on the shoulder while waiting to turn into the lot. This causes backup and congestion for cars traveling in that lane which causes angry drivers. I once had my side mirror knocked off by a cargo van while waiting to turn into the lot. *A no left turn from 3 - 4 pm sign at the lot entrance at SGE. Again, people waiting to turn left into the lot at that time add to the backup and congestion which adds to the backup on Anne Street for cars and school busses attempting to turn left onto Shamrock Dr.

- Shamrock & Eastway (esp. make better for pedestrians & cars to both use intersection... actually, walkability is a problem on this end of Shamrock corridor), dog leg at Shamrock & Matheson, better address Shamrock Elementary & Garinger HS entrance areas...
- Tipperary /Shamrock Eastway /Shamrock
- Shamrock/Eastway redesign and clean up/modernize Shamrock/Sharon Amity clean up area and improve sidewalks, cut back limbs and such overall and make brighter
- Shamrock and Eastway
- Well established & lit crosswalks across Shamrock at Shamrock Elementary & at Airlie St to lead to Shamrock Park. Also, traffic calming to slow down traffic along shamrock. Speed limit is 35 but drivers often grossly exceed.
- Eastway & Shamrock
- Sharon Amity & Shamrock Drive



⊡ DODD STUDIO







- Extend length of school zone near Shamrock Gardens Elementary. Longer/wider sidewalks for pedestrians. Traffic calming or elements that slow down traffic especially near Pike Pharmacy, Libeth St.
- Any Eastway improvement would be great. Anne St intersection is hazardous with school in. Garinger entrance because Garinger is getting better-more traffic to come!
- Frontenac and Shamrock is a difficult intersection for Engine 15 to navigate leaving and returning to the fire station. This is one of the busier fire stations in the city. The entire intersection should be reconfigured for safety of all drivers at the intersection.
- Slower speed limit, roundabout at Shamrock and Attaberry, additional sidewalks, trees/hardscape improvements
- Shamrock/Eastway. I live on Georgia Ave off Beckwith and would love some development to walk to. We take our dog to Shamrock Elementary to run around often, but a greenway system to walk to the school would be awesome!!
- Shamrock needs traffic calming, safer pedestrian crossings and sidewalls, and bike facilities. The biggest issue with Shamrock is that it is a residential road, but people drive on it like it's the highway. The current design of the street encourages that behavior.

- Traffic flow easier, Beautify
- Shamrock and Eastway
- Repaving, more speedhumps and other traffic diversions
- I'd love to see better enforced speed limits for the people who cut through the neighborhoods who endanger anyone walking, playing, or biking. A turn lane on Eastway would help a lot and safer street crossings on Shamrock.
- A light and crosswalk in front of the elementary school across from the pharmacy.
- I'd like to see the intersection of Shamrock and Eastway improved vastly as well as the intersection of North Sharon Amity and Shamrock and Central and North Sharon Amity, they were all atrocious.
- Eastway/Shamrock improvements with safety. Also, beautification. Shamrock can be an ugly street.
- Any!!!!!!!!!
- The Plaza
- Shamrock and Connecticut is a huge cut through and needs curbs, sidewalks, beautification and storm run-off.







- The crossing between Pike's and Shamrock Elementary is very dangerous as drivers go way to fast on the road making it difficult to cross safely.
- Safer crossings with a focus on reducing traffic speed and making the area more pleasant. The area around Letty's should be an inviting pedestrian friendly spot for the surrounding residential areas.
- Anything to slow traffic down and make travel safer for bikes and walkers.
- Shamrock and Libeth
- Add four way stops to intersections in the neighborhood. Add speed humps to Libeth.
- I would like to see pedestrian safety be the top priority.
- Bike lanes. Give Shamrock a street diet from Eastway to Sharon Amity.
- More places for pedestrians to cross safely.
- Shamrock Drive made safer and beautified. Bring new opportunities for shopping developers at Shamrock & Eastway intersection.
- Safe sidewalks are #1. Slow the traffic coming along Shamrock to protect children/ walkers/cyclists. I'd love to see light rail along Eastway, but that's more a 30-year wish.
- Roundabouts at minor intersections will help reduce the speed of motorists through the Shamrock corridor, especially at the Hilliard intersection. motorists do not slow down to turn onto Hilliard, they merge directly onto the street. Major intersections need better pedestrian facilities to promote pedestrian use, and safer pedestrian crossings. The Eastway intersection with Hilliard is dangerous for pedestrian use, better facilities will entice pedestrians to walk to commercial areas. The area is in great need of a street uplift and trees, flowers, planters etc.
- Improved sidewalks and protected bike lanes. Improved crossing at intersections, especially Shamrock/Eastway Dr. intersections.
- Wider well-maintained sidewalks and crosswalks, something to slow down the speed of cars, better lighting and streetscape.
- Providing walkways and decent streets would be lovely. Lighting is a big concern as well. Any beatification would be nice but the safety and usability is a bigger concern to me. Thanks for asking for our feedback!
- Shamrock and Matheson is simply unsafe for pedestrians. There are limited opportunities to cross throughout the corridor.







STV





- The area between Ford and Florida needs revamped with lighting and more commercial space.
- I would love to see more crosswalks, and even crosswalks with their own stoplight (like you see in university area to get to campus) in this area. SO many people walk along these roads (Eastway Dr especially) and have to walk miles at some points to legally and safely cross the road. This is not feasible for most people, so you have people running across the 4 lanes of traffic all the time, which is extremely dangerous for all parties involved.
- Around Shamrock Gardens Elementary
- Better crossings, wider sidewalks, and a MUCH better bike facility.
- Sidewalks, landscaping and street lamps
- I would love to see the area become a pedestrian haven with safe, wide, visually appealing sidewalks that connect to updated shopping centers, restaurants, breweries and coffee shops.
- Ample lighting needs to be installed, along with bike lanes. Ideally, intersections would be visually appealing, similar to the pedestrian walkways in Plaza-Midwood with decorative designs (near the bank on Commonwealth).
- Slowing traffic down. More safety around school zone. Safer to walk my children to school. Make Shamrock look more appealing and less of a blight for the area.
- Beautification
- Transit and easy access
- Sidewalk repair, lighting, better crosswalk
- Speed bumps, speed limit enforcement
- Shamrock Dr. at Springway Dr., Eastway Dr. at Shamrock
- Storm water fixes, traffic calming (speeding is rampant!), bike/pedestrian friendly improvements, beautification.
- Less car dominated, more pedestrian friendly and appealing
- Ped crossing, it's really hard/scary to get across Shamrock. Riding along Shamrock is essentially out of the question because of speeds etc.
- Shamrock & Sharon Amity Rd







- No one location comes to mind. Generally, we need more and better sidewalks everywhere.
- Matheson and the Plaza
- Frequent crossings, street lighting, sidewalks, and protected bike lane/multi-use path
- Curbs, sidewalks, especially Eastway to Plaza link. Better intersection tie-in Shamrock to Plaza aligned with Matheson Ave.
- Shamrock/Eastway, Shamrock/Plaza, Shamrock/Sharon Amity
- Would love to see a dedicated bike path or running trail with increased lighting to connect to parks and access to the future blue line.
- Better bike lanes. Fix the blind curve with the hidden driveway.
- The crossing at Anne St and Shamrock is highly unsafe. Though there is a crosswalk, no cars stop. It needs an in-road sign, or flasher, or other traffic calming measure as folks FLY down Shamrock around that bend.
- It will take a lot to make me feel safe at night along Shamrock. I hate that, because I want my stretch of neighborhood along Shamrock to grow.
- Intersection and pedestrian crossing improvements at Matheson Ave and the Plaza and improvement to the Matheson/Shamrock connection via Virginia Ave Addition of 2 mid-block crosswalks to cross The Plaza with pedestrian refuges at both mid-block crossings 1) one between Matheson and 34th Street 2) the second between Matheson and Holt I think right turns on red need to remain at The Plaza and Matheson and longer protected left turns are needed for traffic volumes but the size of the intersection, volume of traffic, and amount of turning cars (and red light runners) cause my to avoid the crosswalks at The Plaza and Matheson. I cross mid-block by foot and feel it is way safer than crossing at the intersection due because it is easier to simply look left and right than having to watch for turning cars, red light runners etc. on foot it's hard to tell what the motoring public might do and if they're paying attention to see you at that intersection specifically. Mid-block crossing would really help with access by foot to the grocery store and pharmacy which is really important, especially to people that don't drive. it would also improve safe access to the adjacent small business along the corridor in my opinion which would help those business succeed, helping address local access to shopping.





IV. NEXT STEPS







Still in the planning phase, there will be an additional public meeting to gather input about existing conditions and desired enhancements along the Shamrock Drive corridor later this fall. The most up to date details regarding public meeting information can be found on the project's website:

http://charlottenc.gov/Projects/Pages/ShamrockDriveStreetUpgrade.aspx.











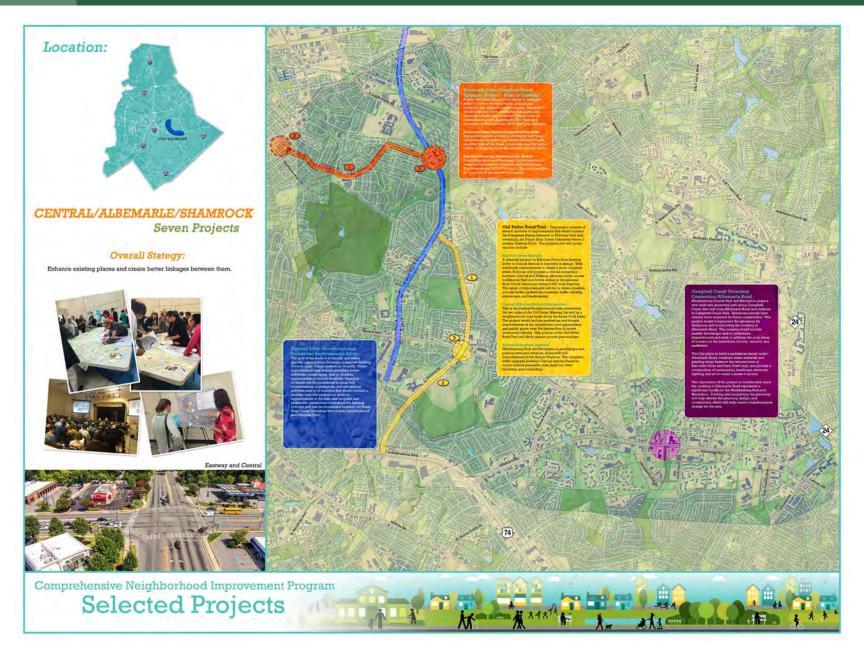




V. APPENDIX A -PUBLIC MEETING EXHIBITS



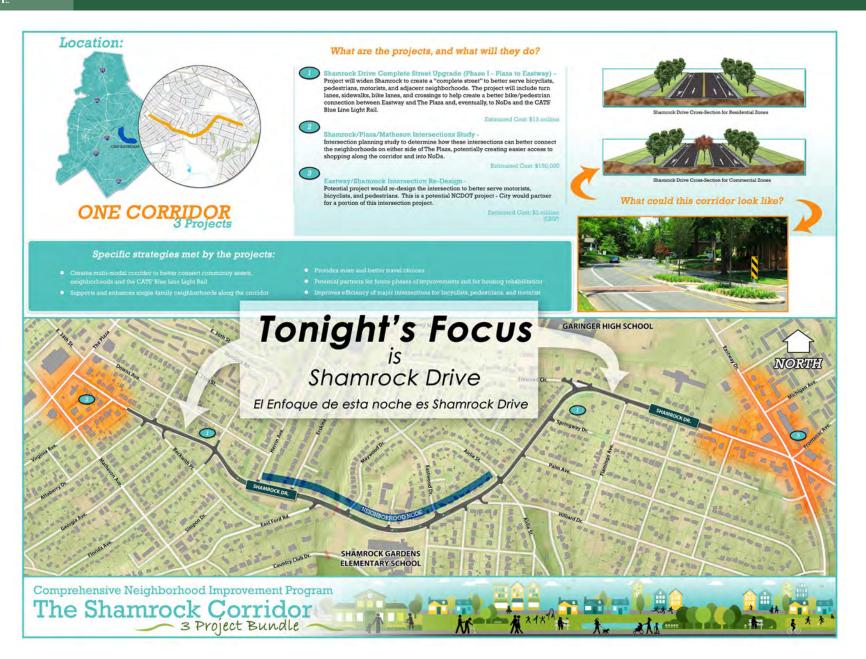


















AREA PROJECTS / PROYECTOS DEL AREA













BUS ACCESS





EXISTING CROSSWALK



MISSING SIDEWALK



STEEP DRIVEWAYS



NARROW WALKING CORRIDOR



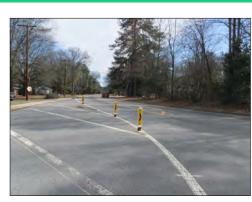
BACK OF CURB SIDEWALK











WIDE UNNEEDED PAVEMENT



UTILITY CONFLICTS



EXISTING CONDITIONS

MISSING TRUNCATED DOMES



MISSING SIDEWALKS



SEVERE SLOPE ADA RAMP



SIGHT LINES











AGING INFRASTRUCTURE





NOTHING LASTS FOREVER. EVEN THE PIPES THAT MOVE STORM WATER FROM STREETS TO STREAMS WEAR OUT WITH AGE. MUCH OF CHARLOTTE'S AGING PUBLIC STORM DRAINAGE SYSTEM IS PAST ITS USEFUL LIFE.



STORM DRAINAGE IMPROVEMENT PROJECTS REPAIR, REPLACE AND INSTALL NEW STORM DRAINAGE INFRASTRUCTURE WHEN IT DETERIORATES OR CANNOT HANDLE INCREASES IN STORM WATER. INVESTING IN INFRASTRUCTURE REDUCES FLOOD RISKS, PROTECTS PUBLIC SAFETY, GUARDS PRIVATE PROPERTY, IMPROVES SURFACE WATER QUALITY AND ENHANCES OUR COMMUNITY.

MORE THAN 40 NEIGHBORHOOD STORM DRAINAGE IMPROVEMENT PROJECTS AND HUNDREDS OF SMALLER MAINTENANCE AND REPAIR PROJECTS ARE UNDERWAY.











WATER QUALITY PROGRAM

PROTECTING WATERSHEDS FROM THE STORMWATER IMPACTS OF LAND DEVELOPMENT IS CRITICAL FOR MAINTAINING WATER QUALITY OF STREAMS AND LAKES. CAREFUL PLANNING, DESIGN AND LONG TERM MAINTENANCE ACTIVITIES ARE NEEDED BOTH DURING AND LONG AFTER CONSTRUCTION IS COMPLETE.

THERE ARE MANY REASONS WHY WATERSHEDS NEED PROTECTION WHEN LAND DEVELOPMENT OCCURS:

1) SOIL EROSION INCREASES

2) LOSS OF WATER QUALITY BUFFERS AND FLOODPLAINS

3) POLLUTION SOURCES INCREASE

CMSWS IMPLEMENTS SOME OF THE MOST INNOVATIVE SURFACE WATER QUALITY MANAGEMENT PROGRAMS IN NORTH CAROLINA, SOME WHICH HAVE BEEN AWARDED NATIONAL RECOGNITION. ALL OF THEM ARE FO-CUSED ON THE GOAL OF IMPROVING THE QUALITY AND USABILITY OF OUR SURFACE WATERS SUCH AS STREAMS AND LAKES.



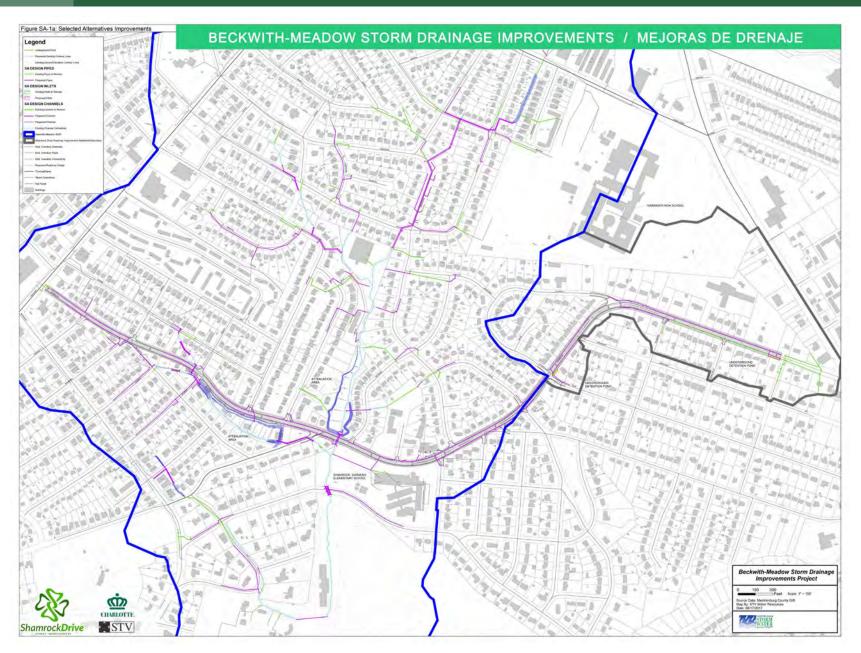








 $\odot STV$ \blacksquare dodd studio









TYPES OF PUBLIC ART / TIPOS DE ARTE PÚBLICO

What kind of art appeals to you?



INTEGRATIVE: . incorporated into environ ment · adds to sense of place

FUNCTIONAL: • useable • gives uniqueness to everday objects • enlivens















KID-FRIENDLY: . scaled for children . content - appropriate















CONTENT OF PUBLIC ART / CONTENIDO DE ARTE PÚBLICO

What is important to you?

NEIGHBORHOOD HISTORY



NEIGHBORHOOD IDENTITY

NEIGHBORHOOD DIVERSITY



NEIGHBORHOOD LANDMARKS

















TYPES OF BICYCLE LANES / TIPOS DE CARRILES PARA BICICLETAS

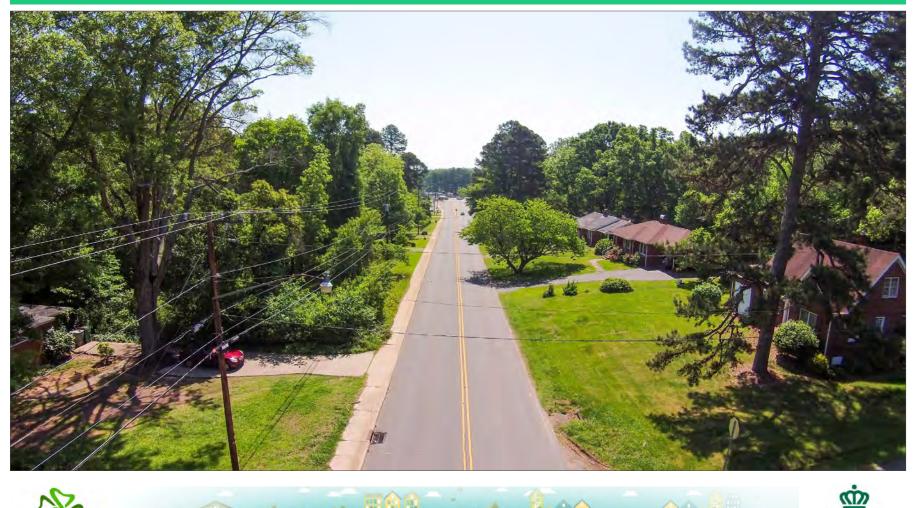








SHAMROCK DRIVE EXISTING CONDITIONS





Shamrock Drive

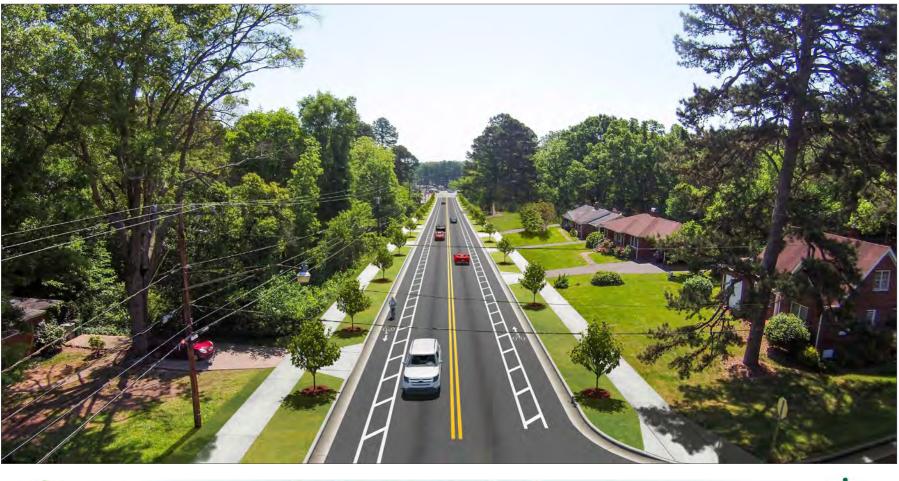
ShamrockDr

PG. 48

CHARLOTTE.

■ DODD STUDIO

BUFFERED BIKE LANES



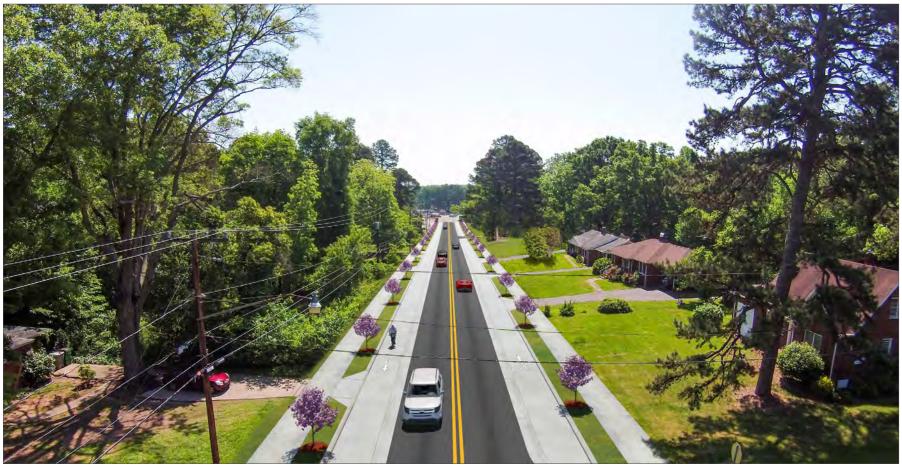








RAISED BIKE LANES











SHAMROCK GARDENS ELEMENTARY SCHOOL - CROSSING / CRUCE



Concept Rendering









SHAMROCK GARDENS ELEMENTARY SCHOOL - CROSSING / CRUCE









ROUNDABOUTS / ROTONDAS



Roundabouts

- Counterclockwise Flow Traffic travels counterclockwise around a center island
- Entry Yield Control Vehicles entering the roundabout yield to traffic already circulating
- Low Speed Curvature that results in lower vehicle speeds, generally 15-25 MPH, throughout the roundabout

Roundabout designs ultimately result in fewer traffic incidents.

<<u></u>
→STV



Benefits of Roundabouts

- Traffic Safety Numerous studies have shown significant safety improvements at intersections converted from conventional forms to roundabouts.
- Operational Performance When operating within their capacity, roundabouts typically have lower overall delay than signalized and all-way stop-controlled intersections.
- Environmental Factors Roundabouts often provide environmental benefits by reducing vehicle delay and the number and duration of stops compared with signalized or all-way stop-controlled alternatives.
- traffic Calming Roundabouts can have traffic calming effects on streets by reducing vehicle speeds using geometric design rather than relying solely on traffic control devices.
- Pedestrian Salety Due to the reduction of vehicle speeds in and around the intersection, roundabouts can improve pedestrian crossing opportunities.
- Aesthetics The central island and splitter islands offer the apportunity to provide attractive entries or centerpieces to communities through use of landscaping, monuments, and art.
- Land Use Roundabouts can be used to demarcate commercial areas from
 residential areas.
- Ongoing Operations and Maintenance A roundabout typically has lower operating and maintenance costs than a traffic signal due to the lack of technical hardware, signal timing equipment, and electricity needs.
- Approach Roadway Width A roundabout may reduce the amount of widening needed on the approach roadways in comparison to alternative intersection forms.

Navigating Roundabouts

- Yield to vehicles already in the roundabout
- Once in the roundabout, you have the right of way
- Use your turn signal when exiting the roundabout
- Always be cautious and look for unexpected vehicles, pedestrians or bicycles



Ⅲ DODD STUDIO



ShamrockDr





EASTWAY-SHAMROCK INTERSECTION PROJECT / PROYECTO DE INTERSECCIÓN









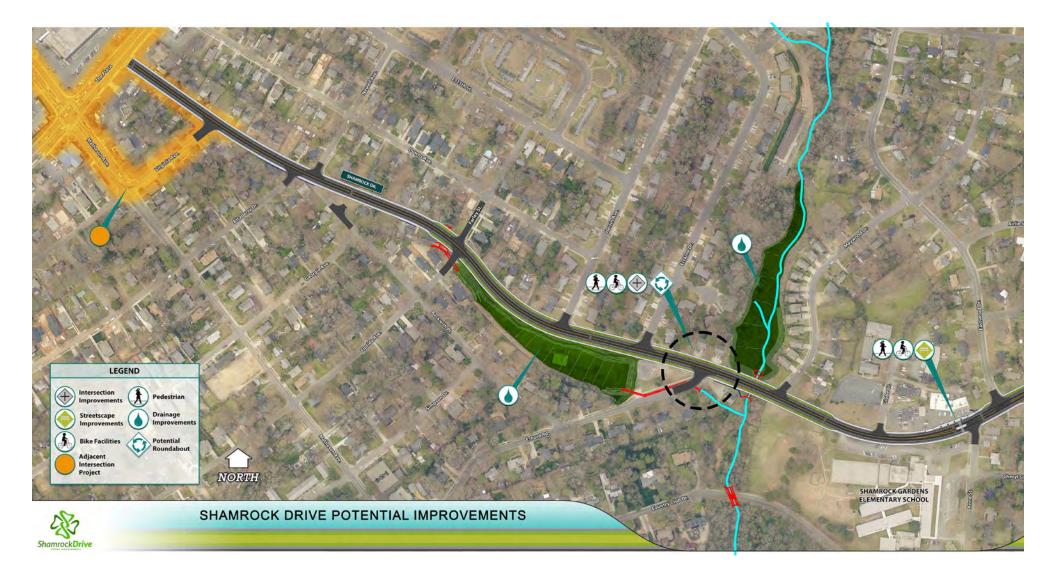


PLAZA-MATHESON INTERSECTION STUDY / ESTUDIO DE INTERCCESIÓN





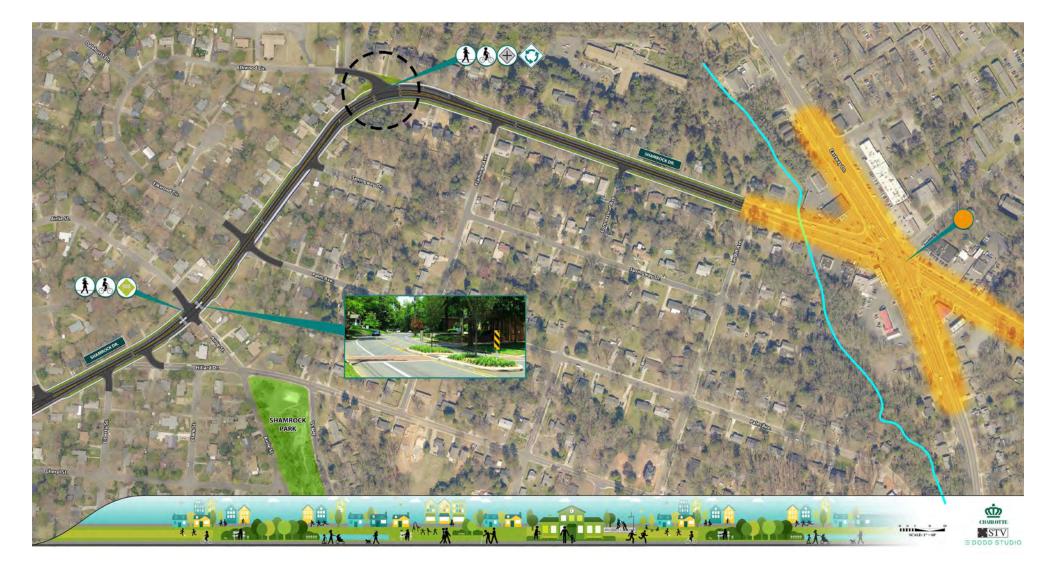






STV ™ DODD STUDIO







STV 📼 DODD STUDIO







VI. APPENDIX B -ONLINE SURVEY QUESTIONS





1. How often do you walk along Shamrock Drive?

Daily Weekly 2-3 times a month Monthly Never Other (please specify)

2. Select the reason(s) you walk along the corridor. Check all that apply.

Exercise Recreation Shopping Get to/from work Run errands Get to/from school Get to/from transit stop Other (please specify)

3. What prevents you from walking more along the corridor? No sidewalks or lack of sidewalks Existing sidewalks in poor condition Too much traffic/busy roads Personal safety concerns Bad lighting Personal health issues Too far to my destination Not interested Unsafe street crossings Other (please specify)

- 4. How often do you bike along Shamrock Drive?
 - Daily Weekly 2-3 times a week Monthly Never Other (please specify)
- 5. Why do you bike along the corridor? Check all that apply. Exercise Recreation Shopping Getting to/from work Run errands Getting to/from school Getting to/from a transit stop Other (please specify)
- 6. What prevents you from biking more or at all along the corridor? Lack of bicycle facilities Busy roads with too much traffic Motorists drive too fast Unsafe street crossings Personal health issues Too far to my destination Not interested Personal safety concerns Lack of proper bike gear Other (please specify)







- 7. What skill level do you consider yourself as a bicyclist? Highly experienced Enthused and confident Interested but need to learn more about bicycle laws and safety No way, no how Interested but I don't own a bicycle
 - Other (please specify)
- 8. What type of bike facility would make you feel comfortable riding along the corridor?
 - Conventional bike lanes Buffered bike lanes Protected bike lanes Raised bike lanes Multiuse path Bicycle boulevard Sharrows (pedestrian refuge islands) Other (please specify)
- 9. How often do you drive along Shamrock Drive?
 - Daily Weekly 2-3 times a month Monthly Never
- 10. What is your primary mode of transportation along the Shamrock Drive corridor? Walk
 - Bike Drive
 - Transit
 - manish

- 11. How would you prefer to travel along the corridor?
 - Walk Bike Drive Transit
- 12. Which destinations do you currently visit in the project area? Check all that apply. School Grocery Store Shopping Center Restaurants Park
 - Convenience Store Museum Church Doctor Laundromat Bus Stop Other (please specify)
- 13. Please rank the concerns you have about your neighborhood, with 1 being the most important.
 Lighting
 Lack of affordable housing
 Congestion
 Lack of shopping/retail close to home
 Storm runoff/drainage
 Crime/vandalism
 Access to transit
- Lack of sidewalks
 - Lack of bicycle facilities

<⊃STV

14. What road and intersection improvements would you like to see in the project area?











THE DODD STUDIO