

CITY OF MONROE
PUBLIC ENTERPRISE COMMITTEE
300 W. CROWELL STREET, MONROE, NC 28112
TUESDAY, AUGUST 1, 2023 - 4:00 PM
AGENDA
www.monroenc.org

1. Public Enterprise Committee Meeting Minutes of July 3, 2023
2. Award contract for 2023 Distribution Leak Survey and Atmospheric Corrosion Inspection Contract
3. Award of contract for Advanced Metering Infrastructure (AMI) Procurement Services
4. Award of Purchase of One Underground Puller
5. Request to Award the Purchase of a Backhoe
6. Request to Award the Purchase of Street Sweepers
7. 2023 Union County Critical Intersection Analysis
8. Request to Award Purchase of Jet-Vac CCTV Equipment

Public Enterprise Committee Minutes
July 3, 2023
City Hall Conference Room
3:00 p.m.

Members Present: Council Member Freddie Gordon (Chair), Council Member Julie Thompson

Staff: Mark Watson, Lisa Strickland, Ken Honeycutt, Eric Howell, Rich Riser, Scott Clark, Kyle Ketchum, Sarah McAllister, Cathy Nance

Guest: Jim Struve

Council Member Freddie Gordon called the July 3, 2023 Public Enterprise Committee meeting to order at 3:00 p.m.

Item #1: Adoption of Minutes of the Meeting

Recommendation:

Council Member Julie Thompson made a motion that the Minutes of the June 6, 2023 Public Enterprise Committee be approved.

Motion: Adopt June 6, 2023 PEC Meeting Minutes

Motion made by: Council Member Julie Thompson

Second: Council Member Freddie Gordon

Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson
Opposed – None

Action: Motion adopted

Item #2. Outside City Service Request

Recommendation:

Staff recommends that the Public Enterprise Committee approve sending the request for outside City water service at 1025 Village Lake Drive to City Council for approval. Staff requests that this item be placed on the City Council consent agenda.

Presentation and Discussion:

Scott Clark, Director of Water Resources, said Water Resources has received a request for outside City service to provide water for a single family home located at 1025 Village Lake Drive. This has gone through the County approval process as well. The Public Enterprise Committee is asked to recommend to City Council that the request for City water service to 1025 Village Lake Drive be approved.

Committee Member Freddie Gordon asked if the request was for water only. Scott Clark said yes, this was water only.

Motion: Approve request, and send to Council for Consent Agenda
Motion made by: Council Member Julie Thompson
Second: Council Member Freddie Gordon
Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson
Opposed – None
Action: Motion is approved

Item # 3: Wastewater Treatment Plant Expansion Phase 1 – Engineering Services

Recommendation:

Staff recommends approval of Budget Ordinance BO-2023-07, and then the award of a contract for the Waste Water Treatment Plant expansion to Hazen and Sawyer, authorization for the City Manager to execute the necessary agreements and recommends forwarding all to City Council for consideration on the July 18, 2023 Strategic Planning Meeting agenda.

Presentation and Discussion:

Scott Clark said Water Resources staff is requesting the Public Enterprise Committee consider an engineering services contract for the Wastewater Treatment Plant expansion, phase one. Water Resources sent out qualification proposals to eight consulting firms and received packages back from three of those. The Water Resources engineering selection team selected Hazen and Sawyer as a preferred qualified engineering firm. Mr. Jim Struve is here on site today, and will give a presentation for the wastewater plant expansion. The cost is going to be \$5,870,755. We believe this is reasonable based upon the anticipated costs of the project and complexity of the design. Funding in this amount had already been appropriated in the amount of \$4 million for the design for the contract and FY22 budget. Additional funding in the amount of \$1,870,755 is requested to be appropriated by the BO-2023-07 from the water and sewer capital project reserve fund.

Jim Struve from Hazen and Sawyer then gave a power point presentation on their plans for the Waste Water Treatment Plant expansion.

Motion: Approve request for BO-2023-7, and send to City Council Strategic Planning Meeting
Motion made by: Council Member Freddie Gordon
Second: Council Member Julie Thompson
Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson
Opposed – None
Action: Motion is approved

Motion: Approve request for award of contract, and send to City Council Strategic Planning Meeting
Motion made by: Council Member Freddie Gordon
Second: Council Member Julie Thompson

Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson
 Opposed – None
Action: Motion is approved

Item #4. Safe Streets and Roads for All (SS4A) Grant Application

Recommendation:

Staff requests approval to apply for a Safe Streets and Roads for All (SS4A) Grant.

Presentation and Discussion:

Sarah McAllister said the City of Monroe has an opportunity to apply for a Safe Streets and Roads for All (SS4A) grant that would be used to develop a comprehensive safety action plan focused on improving roadway safety for all users by reducing and eliminating serious injury and fatal crashes. The Federal share of a SS4A grant may not exceed 80 percent. Recipients are required to contribute a local matching share of no less than 20% of eligible activity costs. The deadline to apply is July 10, 2023. Most plans have been around \$120,000, so our share would be approximately \$30,000.

Motion: Approve request
Motion made by: Council Member Freddie Gordon
Second: Council Member Julie Thompson
Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson
 Opposed – None
Action: Motion is approved

Item #5. Other

Recommendation:

Scott Clark, Director of Water Resources, would like approval to pursue purchase of a small parcel of land that adjoins the Waste Water Treatment Plant.

Presentation and Discussion:

Scott Clark has identified a parcel for sale that is adjoining the parcel of the Waste Water Treatment Plant. He said he would like to begin negotiations with the property owner to see if the City could make the purchase.

City Manager Mark Watson said that would be up to the City Attorney to do any negotiations, since that is his expertise. He suggested that with the concurrence of the Public Enterprise Committee, that Mr. Clark reach out to City Attorney Richard Long to start the process.

Motion: Approve request for City Attorney to negotiate the purchase of the parcel
Motion made by: Council Member Freddie Gordon
Second: Council Member Julie Thompson
Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson

Action: **Opposed** – None
Motion is approved

There being no other business, Council Member Freddie Gordon asked if there was a motion to adjourn.

Recommendation: Adjourn meeting at 3:57 p.m.

Motion: Adjourn Public Enterprise Committee meeting

Motion made by: Council Member Julie Thompson

Second: Council Member Freddie Gordon

Voting: **In Favor** – Council Member Freddie Gordon, Council Member Julie Thompson

Opposed – None

Action: Motion is approved

There being no further business, the meeting adjourned at 3:57 p.m.

Freddie Gordon, Chair

Next Meeting – August 1, 2023 at 4:00 p.m.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Robert Miller, Director of Energy Services

PREPARED BY: Darwin De Los Santos, Energy Services General Manager of Engineering

SUBJECT: Award contract for 2023 Distribution Leak Survey and Atmospheric Corrosion Inspection Contract

SUMMARY STATEMENT

Energy Services staff requests the Public Enterprise Committee to consider approving a contract for EGW Utilities to provide services for completing the 2023 Distribution Leak Survey and Atmospheric Corrosion Inspection for the Natural Gas division.

REVIEW

The Energy Services department completed a Request for Qualifications (RFQ) to determine the most qualified company to perform leak survey and atmospheric corrosion inspection services for the City of Monroe. On June 29, 2023, the City of Monroe Energy Services Department received qualifications from three (3) responders. The review of the qualifications received concluded that EGW Utilities was the most qualified firm to provide these services.

The contract services are for providing a Leak Survey of all distribution mains, services and farm taps, along with an Atmospheric Corrosion inspection of all meter sets and farm taps for the City's natural gas distribution system. The services provided will help the City meet the federal regulations of 49 CFR Parts 192.706, 192.721, and 192.481. The services will be provided over a three (3) year period beginning on the date of the contract and expiring at the end of the calendar year in 2025. Each year is a different geographical area, the total gas system is completed over a three (3) year period. There are sufficient funds budgeted to contract the services.

RECOMMENDATION

Energy Services Staff recommends that the Public Enterprise Committee approve sending this request to City Council for consideration and approval of a contract for EGW Utilities, Inc. in the amount of \$156,072.00 for professional services for distribution leak survey and atmospheric corrosion inspection services over a three (3) year period. Staff requests that this item is placed on the City Council consent agenda to authorize the City Manager to execute the necessary documents.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Robert Miller, Director of Energy Services
Scott Clark, Director of Water Resources

PREPARED BY: Darwin De Los Santos, Energy Services General Manager of Engineering

SUBJECT: Award of contract for Advanced Metering Infrastructure (AMI)
Procurement Services

SUMMARY STATEMENT

Energy Services staff requests the Public Enterprise Committee to consider the approval of a contract for E Source o provide professional services for AMI procurement for the Energy Services and Water Resources department.

REVIEW

On December 29, 2022, the City of Monroe Energy Services and Water Resources departments contracted E Source based on their qualifications for an AMI project assessment for the City of Monroe. The assessment was aimed to determine feasibility, operational impacts, stakeholder impacts, methods and technologies for implementation of an AMI project. The assessment included Energy Services, Water Resources, Finance, Billing, and Customer Service. The results of the assessment concluded that it is in the best interest of the City of Monroe to move forward with the AMI project implementation.

The scope of work for this contract will continue where the Phase 1 (Assessment activities) ended and will move the City of Monroe into the next stage of the AMI project, Phase 2 (AMI Procurement). There are sufficient funds budgeted to contract these services.

RECOMMENDATION

Energy Services and Water Resources staff recommends that the Public Enterprise Committee approve sending this request to City Council for consideration and approval of a contract for E Source Companies LLC in the amount of \$166,293.00 for professional services for the procurement phase of the AMI project implementation. Staff requests that this item is placed on the City Council consent agenda to authorize the City Manager to execute the necessary documents.



STAFF REPORT

TO: Public Enterprise Committee
VIA: Mark Watson, City Manager
DATE: August 1, 2023
FROM: Robert Miller, Director of Energy Services
PREPARED BY: Eric R. Howell, Electric Operations Manager
SUBJECT: Award of Purchase of One Underground Puller

SUMMARY STATEMENT

The Public Enterprise Committee is requested to consider approving the purchase of an Underground Puller for the Energy Services Department – Electric Division.

REVIEW

Staff has identified an Underground Puller that meets all the needs and specifications for the Electric Division through proper bid procedures.

The selected vendor (Sherman & Reilly, Inc.) has provided a quote to the City for the Underground Puller (DDHXA-75) in the amount of \$203,873.00 that meets the requirements of Energy Services. Sufficient funds are budgeted for the purchase in account 5408220 424020. Staff seeks the Public Enterprise Committee's approval for the purchase of the Underground Puller. Below are the quotes received.

Quotes for DDXA-75 Underground Puller	
Vendor	Quote
Sherman & Reilly	\$ 203,873.00
Utility Service Agency	\$ 223,312.10
Utility Sales Agents	\$ 220,182.84

RECOMMENDATION

Staff requests the Public Enterprise Committee approve sending this request to City Council for approval to award the purchase of an Underground Puller to Sherman & Reilly, Inc. in the amount of \$203,873.00. Sufficient funds are budgeted for the acquisition in account number 5408220 424020.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Sarah McAllister, P.E., Engineering Director

PREPARED BY: Sarah McAllister, P.E., Engineering Director

SUBJECT: Request to Award the Purchase of a Backhoe

SUMMARY STATEMENT

The Public Enterprise Committee is requested to consider information related to the purchase of a backhoe for the Engineering Department – Street Division.

REVIEW

The Engineering Department is proposing to replace a 2007 Case backhoe. Funding in the amount of \$170,000 was included in the budget for FY 24. A 2023 Case backhoe has been identified that meets all the needs and specifications for the Street Division through the North Carolina Sheriff's Association. The North Carolina's Sheriff's Association is a purchasing cooperative that competitively bids equipment that meets the statutory requirements. The program is open to use for all sheriff's offices as well as all city and county agencies.

Hills Machinery (the vendor) and the North Carolina Sheriff's Association (NCSA) have entered into an agreement (Contract 24-08-0421) for the procurement of the backhoe. A quote was recently received from Hills Machinery in the amount of \$156,900.00 for a backhoe that meet the requirements of the NCSA Contract. Sufficient funds are budgeted to cover this cost.

RECOMMENDATION

The Public Enterprise Committee is requested to approve the following:

- 1) Award of the backhoe in the amount of \$156,900.00 to Hills Machinery through the North Carolina Sheriff's Association.
- 2) Authorization of the City Manager to execute any and all necessary documents.

Attachment:
Hills Machinery Quote

ADDITIONAL TERMS AND CONDITIONS

(Referred to on the Reverse Side Hereof)

1. When trade-in equipment is not to be delivered to the Seller until delivery of the equipment purchased by this order, the trade-in equipment may be reappraised at that time and such reappraisal value shall determine the allowance made for such trade-in equipment. When the reappraised value is less than the original trade-in allowance shown on this form the purchaser may terminate this order; however, this right of termination must be exercised prior to delivery of the equipment by Seller and surrender of the trade-in equipment to Seller.
2. The prices which Purchaser will pay for the new equipment set forth on the reverse side hereof shall be based upon the Case dealer price in effect on date of delivery of the new equipment. In the event Case dealer's price is changed prior to delivery, the purchase price shall be adjusted accordingly. If such price change results in an increase, purchaser has the option of canceling the order in writing immediately on being notified thereof.
3. The Seller shall be excused if delivery is delayed or rendered impossible by differences with workmen, strikes, work stoppages, car shortages, delays in transportation, inability to obtain labor or materials and also by any cause beyond the reasonable control of Seller, including but not restricted to acts of God, floods, fire, storms, acts of civil and military authorities, war and insurrections.
4. Purchaser shall keep the property free of all liens, taxes, encumbrances and seizure or levy, shall not use same illegally, shall not damage, abuse, misuse, abandon or lose said property, shall not part with possession thereof, whether voluntarily or involuntarily or transfer any interest therein or remove same out of the county or filing district in which Purchaser resides as indicated herein without the prior written consent of Seller, shall keep said property insured in such amounts and with such insurer as may be acceptable to Seller with any loss payable to Seller as his interest in the property may appear. The Property is held by Purchaser at his risk and expense with no abatement in his obligation on account of loss or damage.
5. Time is of the essence of this contract and if purchaser fails to comply with any of the terms and conditions hereof or defaults in the payment of any installment hereunder or under any renewal or renewals hereof, or in the payment of interest or defaults in the payment of any installment due under any other indebtedness of contract held by the Seller or Assignee, or if proceedings are instituted against Purchaser under any bankruptcy or insolvency law or Purchaser makes an assignment for the benefit of creditors or if for any reason the Seller deems himself insecure and so declares all payments heretofore made by Purchaser shall be retained by the seller and all indebtedness hereunder shall become immediately due and payable, with or without notice, together with all expenses of collection by suit or otherwise, including reasonable attorney fees and Seller may, without notice or demand, take possession of the equipment set forth on the reverse hereof, or any additions to, replacements of, or any proceeds from said equipment or may render the property unusable or Seller may require Purchaser to assemble the property and make it available at a place designated by Seller. Seller may resell the retaken property at public or private Sale in accordance with the Uniform Commercial Code or applicable state or provincial law. After deducting reasonable expenses for retaking, repairing, holding, preparing for sale, other selling expenses including attorney fees and legal expenses, the remaining proceeds of Sale shall be credited upon the amount of indebtedness remaining unpaid hereunder, and Purchaser agrees to pay any deficiency upon demand by Seller, any surplus, however, shall be paid to Purchaser. Said retaking or repossession shall not be deemed rescission of the contract. Seller may exercise any other rights and remedies provided by applicable law.
6. No waivers or modifications hereof shall be valid unless written upon or attached to this contract. Waiver or condonation of any breach or default hereunder shall not constitute a waiver of any other or subsequent breach or default. Payments received by Seller are to be applied first to delinquent interest and then to principal.
7. The remedies provided for herein are not exclusive and any action to enforce payment shall not waive or affect any of the holder's rights to have recourse to the property. The transfer of this contract shall operate to pass a security interest in the property as security for the payment hereof.
8. Any provision of this contract prohibited by the laws of any state, the United States, any province of Canada, shall be ineffective to the extent of such prohibition without invalidating the remaining portions of the contract.
9. Each maker, endorser, guarantor and surety hereon severally waives presentment, demand protest, and notice of non-payment and all defenses of want of diligence in collection and bringing suit. This contract shall be binding upon and shall insure to the benefit of the parties hereto and their respective heirs, personal representative, successors, and signs.
10. Buyer authorizes Seller to insert the Serial and/or model numbers of the goods set forth on the reverse side hereof for the purposes of identifying said goods. The seller may correct patent errors herein.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Sarah McAllister, P.E., Engineering Director

PREPARED BY: Sarah McAllister, P.E., Engineering Director

SUBJECT: Request to Award the Purchase of Street Sweepers

SUMMARY STATEMENT

The Public Enterprise Committee is requested to consider information related to the purchase of two street sweepers for the Engineering Department – Street Division.

REVIEW

The Engineering Department is proposing to replace two 2018 street sweepers. Funding in the amount of \$650,000 was included in the budget for FY 24. A Tymco 600 street sweeper has been identified that meets all the needs and specifications for the Street Division through the North Carolina Sheriff's Association. The North Carolina's Sheriff's Association is a purchasing cooperative that competitively bids equipment that meets the statutory requirements. The program is open to use for all sheriff's offices as well as all city and county agencies.

Amick (the vendor) and the North Carolina Sheriff's Association (NCSA) have entered into an agreement (Contract 22-06-0426R) for the procurement of two street sweepers. A quote was recently received from Amick Equipment in the amount of \$617,008.00 for two street sweepers that meet the requirements of the NCSA Contract. Sufficient funds are budgeted to cover this cost.

RECOMMENDATION

The Public Enterprise Committee is requested to approve the following:

- 1) Award of two Tymco 600 street sweepers in the amount of \$617,008.00 to Amick Equipment through the North Carolina Sheriff's Association.
- 2) Authorization of the City Manager to execute any and all necessary documents.

Attachment:
Amick Equipment Quote



For NCSA Contract Purchases:
Please send P.O. to Amick & NCSA including:
Contract #, Spec #, Contact Info, & Fed. Tax ID #
NCSA: kmitman@ncsheriffs.net
[LINK: NCSA Terms & Conditions](#)

END USER: MONROE, NC
JOHNNY FAULK
BODY INSTALL: TYMCO - WACO, TX
LOCATION:

CONTRACT #
22-06-0426R
SPECIFICATION #
4260

Description

Contract Price

MODEL: **TYMCO 600**
BODY SIZE: **6 YD**
BODY PAINT: **WHITE**
BODY WARRANTY: TYMCO: 1 YR SWEEPER, 2 YR SKIDS. AUX. ENGINE: SEE MFG. WARRANTY FOR DETAILS.

OPTIONAL UPGRADES AND ACCESSORIES INCLUDED

GUTTER BROOM TILT: LH
GUTTER BROOM TILT: RH
ADD'L HOPPER WATER ILO PUH WATER
ADD'L LH GUTTER BROOM WATER NOZZLE
ADD'L RH GUTTER BROOM WATER NOZZLE
HIGH OUTPUT WATER
330 GALLON WATER CAPACITY - COMDEX
WATER TANK LEVEL GAUGE
ABRASION PROTECTION PACKAGE
DUMP SWITCH IN CAB
HOPPER SUCTION INLET WEAR FLANGE
SWEEPER DELUGE SYSTEM
AUTO SWEEP INTERRUPT
PRESSURE INLET WATER INJECTION SYSTEM
LINEAR ACTUATOR - PRESSURE BLEEDER
PICK-UP HEAD CURTAIN LIFTER
SKID BUMPER EXTENSION SET
AUXILIARY HAND HOSE W/CATCH BASIN PACKAGE - AOD WATER PUMP
STAINLESS STEEL HOPPER
STAINLESS STEEL DRAIN SYSTEM (STANDARD)
STAINLESS STEEL SPLIT SCREEN UPGRADE
AMBER BEACON LIGHT - HOPPER MTD
CAMERA SYSTEM - REAR VIEW/PICK UP HEAD VIEW
AUXILIARY ENGINE REMOTE OIL SIGHT GAUGE
GPS SWEEPING STATUS KIT

2024 INTERNATIONAL MV607
BATTERY DISCONNECT SWITCH
LED ALTERNATING WARNING LIGHT SET - FRONT GRILLE
LED AMBER BEACON LIGHT: CAB MOUNTED
PARABOLIC MIRROR HEAD - 12" LH & RH
LED DIRECTIONAL STICK - ARROW BAR

DEALER SERVICES INCLUDED

FREIGHT TO AMICK EQUIPMENT
BODY PDI
AECI MOBILE ON-SITE WARRANTY PKG., 12 MO.
ON-SITE TRAINING - PROVIDED BY REQUEST

DELIVERY OPTION INCLUDED:

AECI DELIVERS TO END USER.

COMMENTS: *Pricing Volatility Disclaimer - Pricing is subject to further increases, as announced by manufacturers. In such an event, customers will be notified of increases and given the option to continue the order with updated pricing, or cancel the order without penalty. We are riding the waves of economic uncertainty alongside our customers, and sincerely appreciate any grace you're able to extend.*

Subtotal:	\$	310,580.00
Contract Discount - Options / Accessories:	\$	(2,076.00)
Subtotal:	\$	308,504.00

Tax - Motor Vehicle (SC IMF / NC HUT):	AECI will not collect	
Unit Purchase Price:	\$	308,504.00
Quantity:		2
Extended Purchase Price:	\$	617,008.00
Balance Due Upon Delivery:	\$	617,008.00

Payment Terms:	Net 30
Completion ETA:	210-270 Days after receipt of ORDER

Please Note: ETAs are based on current schedules and are subject to change.

QUOTED BY: JOE COOK
DATE: 7/14/2023
VALID UNTIL: 7/21/2023

ADDITIONAL OPTIONS: Prices shown in "additional options available" section are not included in the "Total" price and do not include taxes.

TAXES: Unless itemized above, prices do not include local, state or federal taxes.

MOTOR VEHICLE TAXES: AECI no longer collects SC "IMF" or NC "Highway Use Tax". Either the chassis dealer or the DMV will collect motor vehicle tax/fees when registering vehicle.

PAYMENT TERMS: Payment is due PRIOR to delivery. When ample credit has been extended to customer, payment is due within 30 Days of invoice.

TITLEWORK / MCO: Allow 5-10 business days after receipt of payment to process Title or Manufacturer's Certificate of Origin (MCO).

QUOTE EXPIRATION: Pricing is honored for 30 days from date quoted, barring extenuating circumstances such as, but not limited to, volatile markets, factory price increases, etc. AECI makes every effort to give as much notice as possible in such instances.

DELIVERY ESTIMATES: ETA's are based on production schedules at the time of quote and are subject to changes in truck or body production schedules as well other factors such as transportation delays, etc.

WEIGHT RESTRICTIONS: Operating overweight equipment can result in fines, damage to equipment or injury to operators. AECI makes every effort to quote equipment meeting local, state & federal weight regulations. Nevertheless, it is up to the end user to familiarize themselves with all applicable weight laws and avoid exceeding legal weight limits, regardless of truck's GVWR.

CHASSIS DEALERS: Please ensure chassis specs meet body manufacturer's minimum requirements, which are supplied upon request. Deviations may result in additional charges, for which the truck dealer will be responsible.

CHASSIS DEALER PAYMENT TERMS: Payment term begins when truck is delivered to customer or truck dealer for PDI, whichever is first. Payments received later than 15 DAYS are subject to penalty of 5% APR, calculated on a daily basis. ANY EXCEPTIONS must be agreed to writing prior to order.

COOPERATIVE PURCHASING CONTRACTS: Cooperative purchasing contract such as NCSA, Sourcewell, etc. are a tool which satisfies the competitive bidding requirements for some municipalities. Amick Equipment (or its Body Manufacturer) are approved vendors on several contracts, authorized to offer awarded equipment according to each contract's terms and conditions. If a contract award included both body and chassis, then that contract clearly satisfies the bidding requirements for both body and chassis. Some of Amick's contracts were awarded for the body portion only. Upon request, Amick may offer a compatible chassis from another qualified contract holder or may offer a non-contract option.. Unless explicitly stated, customers shall not assume that any of the equipment quoted are being offered under a purchasing contract. It is up to the purchaser to determine whether purchasing any items - both explicitly listed on the contract or not, are permitted by their organization's purchasing guidelines.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Sarah McAllister, P.E. - Engineering Director

PREPARED BY: Sarah McAllister, P.E. – Engineering Director

SUBJECT: 2023 Union County Critical Intersection Analysis

SUMMARY STATEMENT

The Public Enterprise Committee is provided information regarding the 2023 Union County Critical Intersection Analysis.

REVIEW

Staff has been working with Bjorn Hansen, Transportation Planner with Union County, along with representatives from the North Carolina Department of Transportation (NCDOT) and staff from other municipalities within Union County on the 2023 Union County Critical Intersection Analysis. The intent is to identify locations throughout the county that have experienced congestion and safety issues, provide a further evaluation based on existing data, and narrow the list to those that would be most competitive for funding through the NCDOT and/or the Charlotte Regional Transportation Planning Organization (CRTPO).

Similar processes took place in 2016 and 2019 in which several intersections within Monroe were identified. The Williams Road intersection with Old Charlotte Highway was identified in the 2016 list and later qualified for spot safety funds through NCDOT. Construction of a traffic signal with turn lanes should take place within the next year. The Poplin Road and Unionville-Indian Trail Road intersection was identified in the 2019 list, later received funding and a four-way stop was installed. Other intersections were also identified but have yet to qualify for funding.

A total of 40 intersections were identified as part of this year's process by entities within Union County and the public. These intersections were then evaluated for feasibility of necessary improvements, crash frequency and severity, traffic volumes, and growth rates. Monroe had four intersections that were included in the recommended list; US 74 and US 601, Rocky River Road and Old Charlotte Highway, Johnson Street and Franklin Street, and Bragg Street and Lancaster Avenue. The 2023 Union County Critical Intersection Analysis report is set to be finalized in September of 2023. Once the report is formally adopted by Union County, the county along with all of the supporting municipalities will apply for Planning and Research Funds (PL Funds) through CRTPO to be able to hire a firm to do further analysis of each intersection. The analysis is anticipated to cost \$40,000 per intersection with Union County and the participating municipalities providing a 20% match. Depending on the intersections selected, Monroe's portion of the match would be \$4,000 per intersection and the funds are anticipated to be needed in FY 25.

RECOMMENDATION

The Public Enterprise Committee is requested to endorse the list of intersections identified and commit to future funding of the 20% match for any future awarded planning grants to be shared with Union County. If the committee is in agreement, this item would be placed on the August 8, 2023 consent agenda.

Attachment:
Draft 2023 Critical Intersection Analysis



Union County 2023 Critical Intersection Analysis

Adopted September 18, 2023



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Executive Summary

Union County is an attractive place to live, work, and recreate. Its proximity to Charlotte combined with its rural small town character has resulted in traffic and other growth pressures that have stressed the road network. The NCDOT, along with the county and municipalities, have reacted to this growth with mixed success. Road widenings or other larger improvements needed today can still take a decade to become reality, and Union County's congestion often pales in comparison to delays seen in Mecklenburg County, meaning that a strategy of focusing on wholesale corridor improvements will often fail to materialize for a generation or more. In the meantime, growth continues and motorists must travel on increasingly unsafe and congested roads.

Intersections can be considered the choke points of the transportation network, and improvements can offer significant benefits for a limited investment. This rationale has driven NCDOT and local strategies for several years, with many improved intersections throughout Union County. Funding agencies prioritize projects that are the result of analysis and planning, so having an adopted plan and concurrent project list will help project applications. This critical intersection analysis will serve as that document for Union County, as it works with its partners in improving the transportation network throughout the county.

A total of 40 intersections were identified by the stakeholders and public. These intersections were then evaluated for feasibility of necessary improvements, crash frequency and severity, traffic volumes, multi-modal considerations, and growth rates. The result was a score for the intersections that represents a holistic assessment of need.

Implementing improvements at the 15 locations identified later in this document will take several years of commitment and decisions about designs and costs. This work will ensure thought out applications are submitted and local funding is approved to help meet match requirements. Each community with a recommended intersection within its boundaries should allocate funding each fiscal year to allow them to quickly respond to project solicitations from the Charlotte Regional Transportation Planning Organization (CRTPO) and the NCDOT. These intersections are often the focal points for development pressure, and the plans for these intersections should be incorporated into adjacent site plans as appropriate.

The NCDOT does have a spot safety program, which is focused on safety issues and a benefit to cost ratio of reducing crash impacts compared to cost for those reductions. One intersection, Unionville Brief and Unionville-Indian Trail, was included in that list due to public input and identified safety issues, despite a lack of congestion or traffic volumes. The remaining projects would be appropriate for one or more funding sources.

Union County presented the process and results to the governing boards for affected municipalities in July through September 2023. Each of the eight impacted municipalities endorsed the process, as well as the report and its recommendations. This report was subsequently approved by the Union County Board of Commissioners on September 18, 2023.

Existing Conditions

Union County continues to be a rapidly developing county, with growth pressures in the areas adjacent to Mecklenburg County as well as surrounding Monroe. The road network in this area is characterized by two-lane farm-to-market roads. The growth of the past 20+ years has resulted in several funded widening projects, but these total less than 20 miles of multi-lane improvements over the next decade. These widenings include:

- NC 16 from Rea Road south to the Waxhaw Parkway
- Rea Road Extension and NC 84 from NC 16 to Waxhaw-Indian Trail Road
- Monroe Road from I-485 to Wesley-Chapel Stouts

There are other funded widenings and corridor improvements on US 601 between US 74 and the Monroe Expressway and US 74 near the Monroe Mall. These projects will help mobility and safety in the immediate areas, but large parts of the county will continue to experience excessive delay and safety concerns at specific locations.

Due to development and traffic volumes on two-lane farm-to-market roads, congestion and safety issues have been frequent motivations to improve the transportation system, mainly at intersections. A lack of turning lanes, adequate sight distances, and appropriate intersection angles have resulted in unsafe and congested situations, with frequent calls by the community to address these issues. These concerns are justified, and the NCDOT, Union County, and multiple municipalities have responded by aggressively applying for funding grants through the Charlotte Regional Transportation Planning Organization (CRTPO) and the NCDOT for safety and congestion funds. Multiple intersections have been upgraded in the past five years, and over two dozen more intersections are scheduled for improvements in the next five years. At least a half-dozen high priority intersections, such as NC 16 and New Town Road, will be upgraded due to corridor widenings. Despite these improvements, many intersections remain unimproved, resulting in excessive congestion and safety issues for the travelling public.

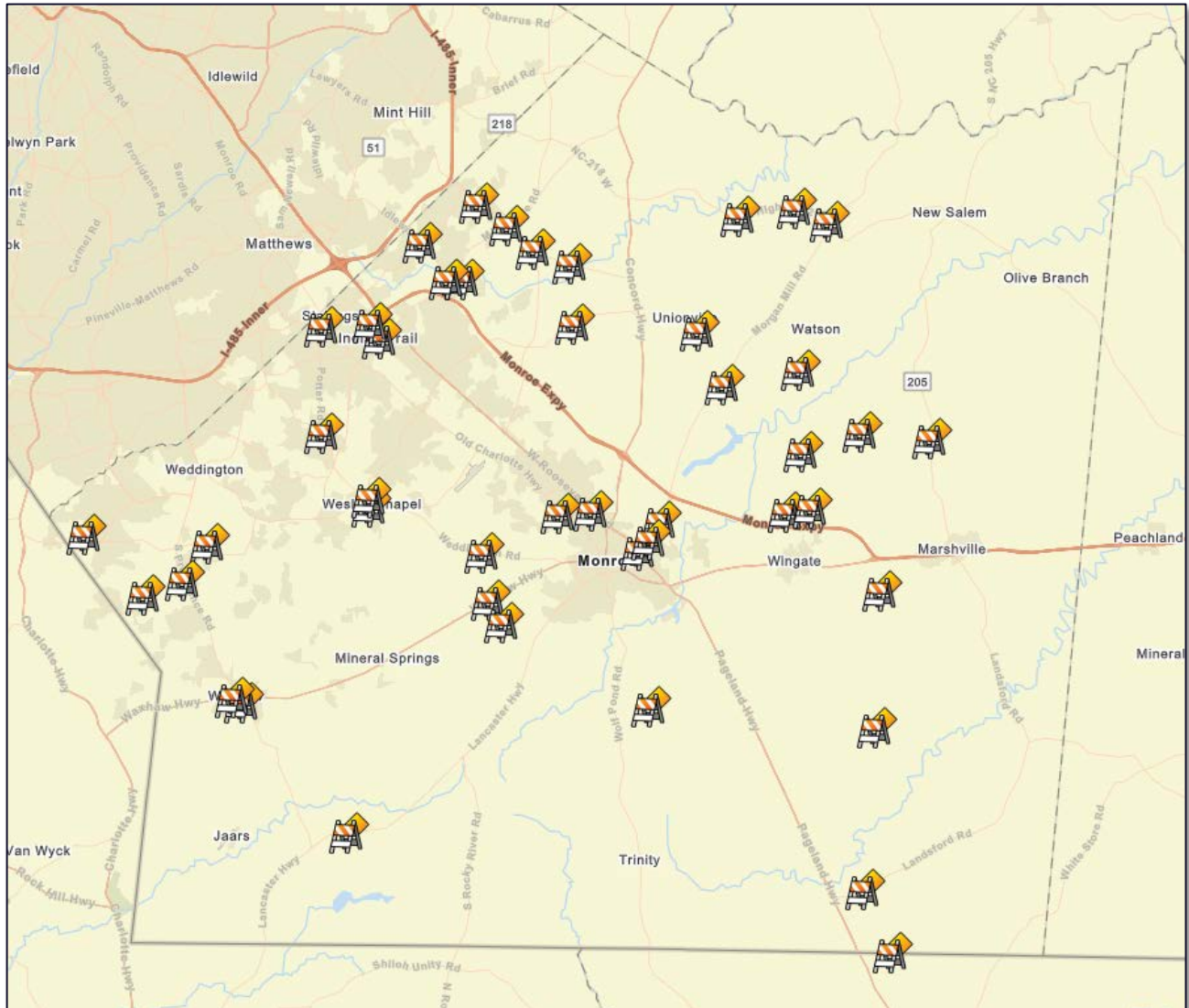
The 2016 and 2019 Critical Intersection Analyses remain useful documents for the municipalities and Union County as they identify funding opportunities to address the remaining intersections. The unfunded intersections are shown later in this report. This 2016 document established a process and list of projects to collectively focus efforts across the county. The 2019 document continued those efforts, and the 2023 report expands this program by identifying larger intersections for improvements.

Union County and several municipalities have continued to allocate local funds to help pay for local match for NCDOT or CRTPO-funded projects. The NCDOT, Union County, and numerous municipalities continue to successfully partner to receive funds for intersection projects. These commitments have increased the benefit/cost ratios for projects, and demonstrated local commitment to addressing issues. Through this 2023 process, Union County intends to support and encourage these partnerships.

After two decades of tremendous growth, Union County has multiple corridors, and dozens of intersections, in need of upgrades. The goals of this process were to identify broadly supported intersections to focus efforts for funding, as well as to raise awareness of existing funded projects. The public outreach phase included a map (Map 1) of known funded intersection projects at the start of this study and was included in materials for the month-long input period. Three of these intersections were added after receiving funding just two months

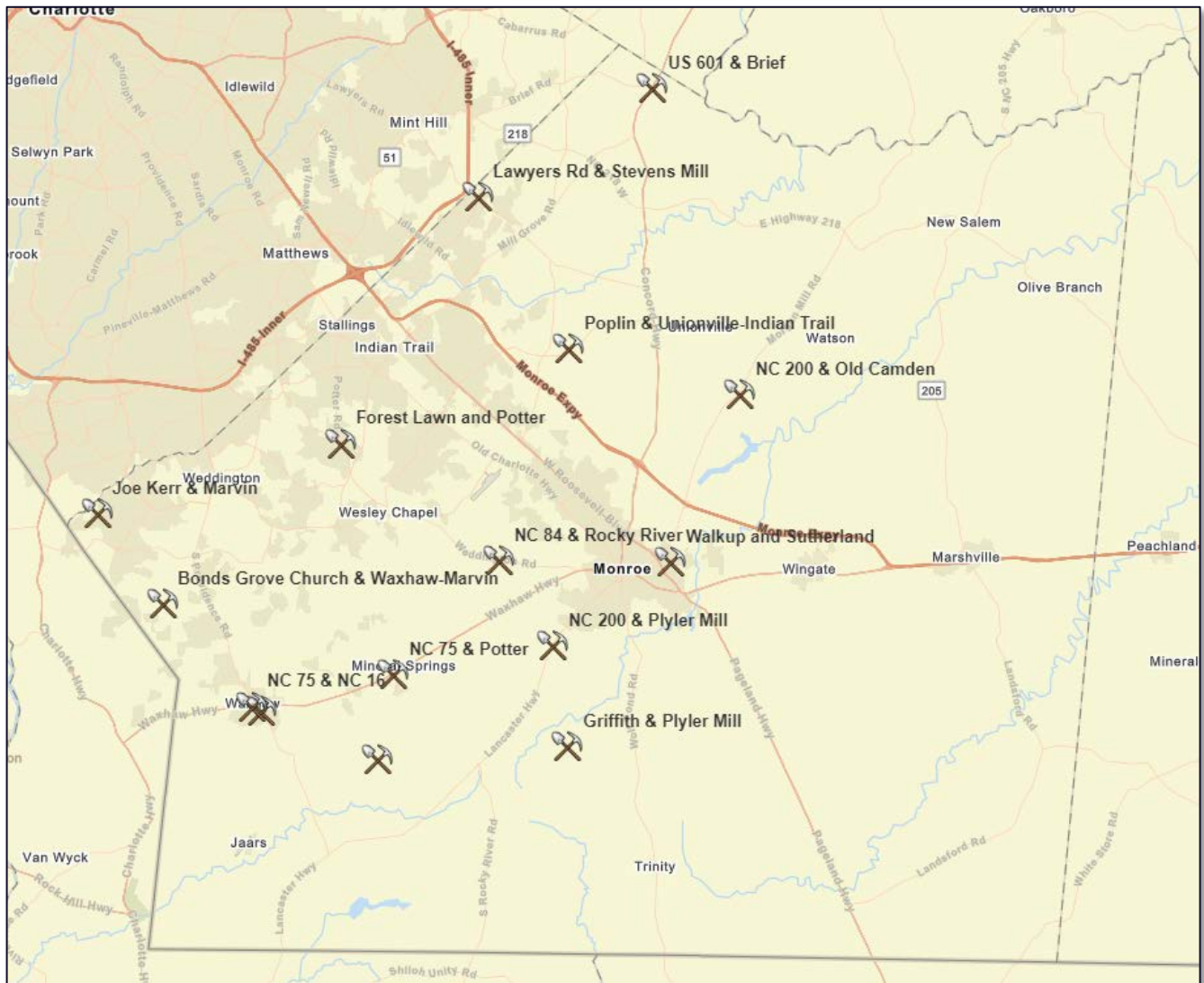
before the comment period, and three separate ones were under construction during the same period, underscoring the dynamic nature of project planning and implementation in Union County.

Map 1: May 2023 Map of Funded Intersections



The map on the following page (map 2) shows the 15 intersections identified in the 2019 Critical Intersection Analysis. Nine of the 15 locations have since been funded for improvements. The five remaining locations are still considered supported candidate projects and will be submitted for consideration in coordination with the NCDOT and any affected municipalities. Together these two maps show the status of committed and previously identified intersection projects in Union County. The NCDOT is under no obligation to limit their candidate project list to those created by local governments, although it recognizes projects are often more competitive for funding when they have the support of local governments and come from an adopted plan, such as this document.

Map 2: 2019 Critical Intersection Locations



Plan Development Process

This plan was developed over the course of nine months starting in January 2023. The Union County Planning Department served as the lead organization to guide its development. The tasks and schedule are below.

Table 1: Plan Schedule

Task	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Kickoff and Process Confirmation									
Project Identification by Stakeholders									
Develop Ranking Process									
Data Collection									
Public Outreach									
Prioritization									
Municipal and County Presentations									
Adoption									

Stakeholders Committee

The work involved in identifying, analyzing, prioritizing, and endorsing a list of critical intersections was performed by a combination of county, municipal, and NCDOT staff. The group met monthly for a total of eight times. These members provided feedback on proposed intersections, evaluation criteria, outreach strategies, and document review. Their input throughout the process was invaluable and resulted in a better product.

Table 2: Stakeholder Committee Members

Member	Representing
Bjorn Hansen	Union County
Megan Hinkle	Union County
Matthew Rea	Union County
Sarah McAllister	Monroe
Frank Deese	Marshville
Brad Sellers	Wingate
Vagn Hansen	Wesley Chapel
Justin Russell	Stallings
Todd Huntsinger	Indian Trail
Vicky Brooks	Mineral Springs
Karen Dewey	Weddington
Sonya Gaddy	Unionville
James Kelly	Waxhaw
Hunter Nestor	Marvin
Kendall Clanton	CRTPO
Lee Snuggs	RRRPO
Amelia Helms	NCDOT

Zach Gardner	NCDOT
Theo Ghitea	NCDOT

Public Outreach

The public was offered the opportunity to provide input and comments at two points in the process: intersection identification and policy input phase, and at the adoption phase. Union County made use of social media to raise awareness of the analysis, and on-line engagement tools to both educate and solicit input from the public. Union County used a Metroquest account, made available from CRTPO, to solicit candidate intersections, as well as show where more than three dozen intersections are located and already funded for improvement. The County used an ESRI GIS Online StoryMap slideshow presentation to present all evaluated and selected intersections as an outreach tool in addition to the final report.

The County did not hold any in-person input events, instead relying on virtual outreach. County staff did present at board meetings for Fairview, Hemby Bridge, Indian Trail, Stallings, Wesley Chapel, and to the Western Union Municipal Alliance (WUMA).

The primary tool for collecting citizen input was a Metroquest online and interactive engagement site (<https://demo.metroquestsurvey.com/md10d>). Metroquest is a public outreach company that helps organizations collect input through short, interactive on-line surveys. Union County has access to this service through CRTPO, which helped reduce cost for public outreach. Union County issued a press release in early April to start the input period. This press release was likewise posted on social media accounts for the County, and post cards were distributed to area businesses and government offices. Multiple municipalities, as well as CRTPO, shared this information on their web sites and social media accounts. A total of 2,889 people took the survey over the 30 days it was open from April 6 through May 5, 2023, demonstrating the effective nature of the outreach process. This input provided a wealth of policy and site specific information about transportation planning and intersection issues.

A list of the questions from the site and statistics for answers provided are below and on the following pages.

1. Where should we focus improvements? The respondents were nearly split, with 52 percent wanting the technical scores to dictate, while 48 percent felt projects should be selected from throughout the County.
2. What types of crashes should we try to reduce? Seventy-two percent said, “both the number of crashes and the most severe crashes are important to reduce.”
3. What is the most important issue we should address? The respondents were split between congestion and safety, with both being the most important issue when asked individually. Virtually no one said neither issue is important.
4. How important are truck traffic and truck corridors? Only 13 percent felt that truck traffic was unimportant to consider in intersection prioritization, while only 18 percent felt intersections on these corridors should be prioritized. The remaining 70 percent felt accommodating truck traffic was important, but should not be the most important criteria.

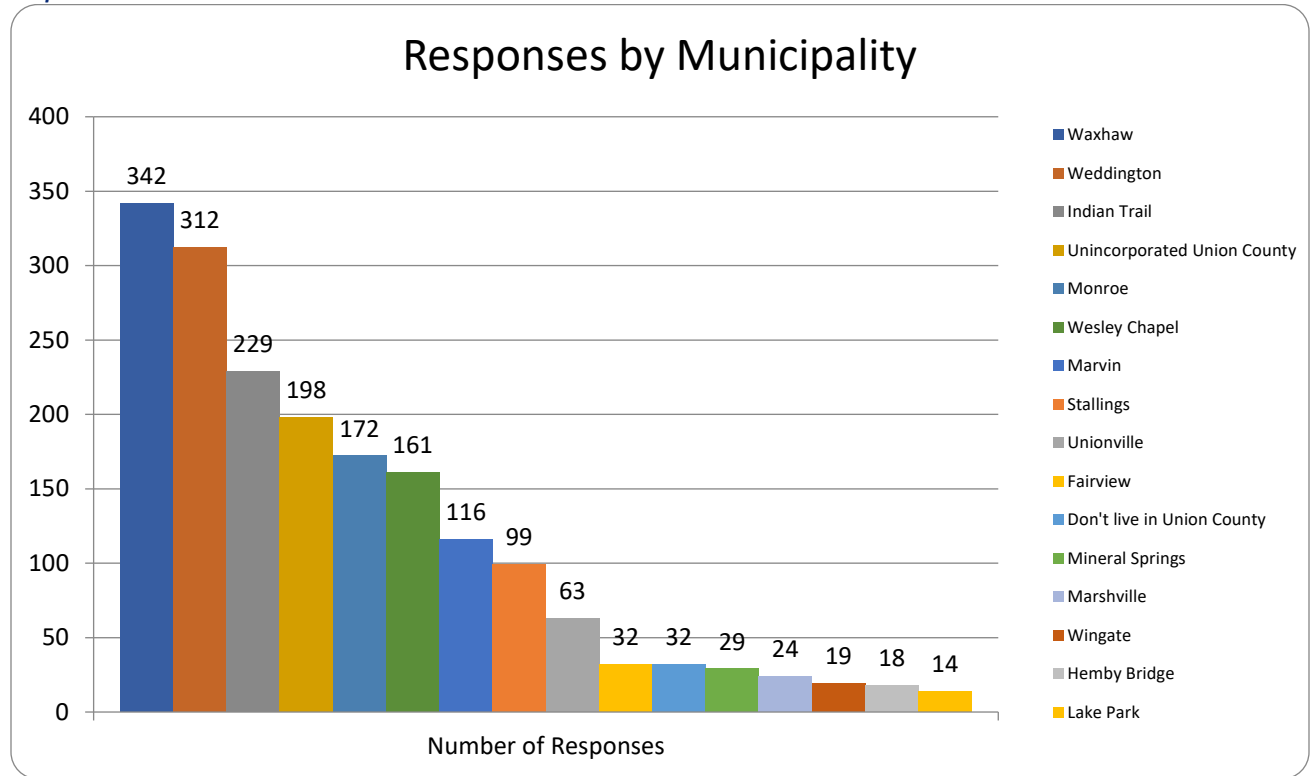
5. Should we prioritize multi-modal traffic? Respondents felt similarly to bicycle and pedestrian considerations for prioritizing an intersection. Approximately one-third felt it was unimportant to consider, while 13 percent felt such considerations alone were sufficient to prioritize as a future project. A little more than half (53 percent) felt they should be included as part of a holistic assessment of the intersection.

The composition of the people who participated in the survey represented a wide range of ages and location within the County, with all 14 municipalities represented and half of the municipalities with 99 or more responses. Although there were responses from throughout the County, respondents did skew female, older, whiter and more urbanized than the County as a whole.

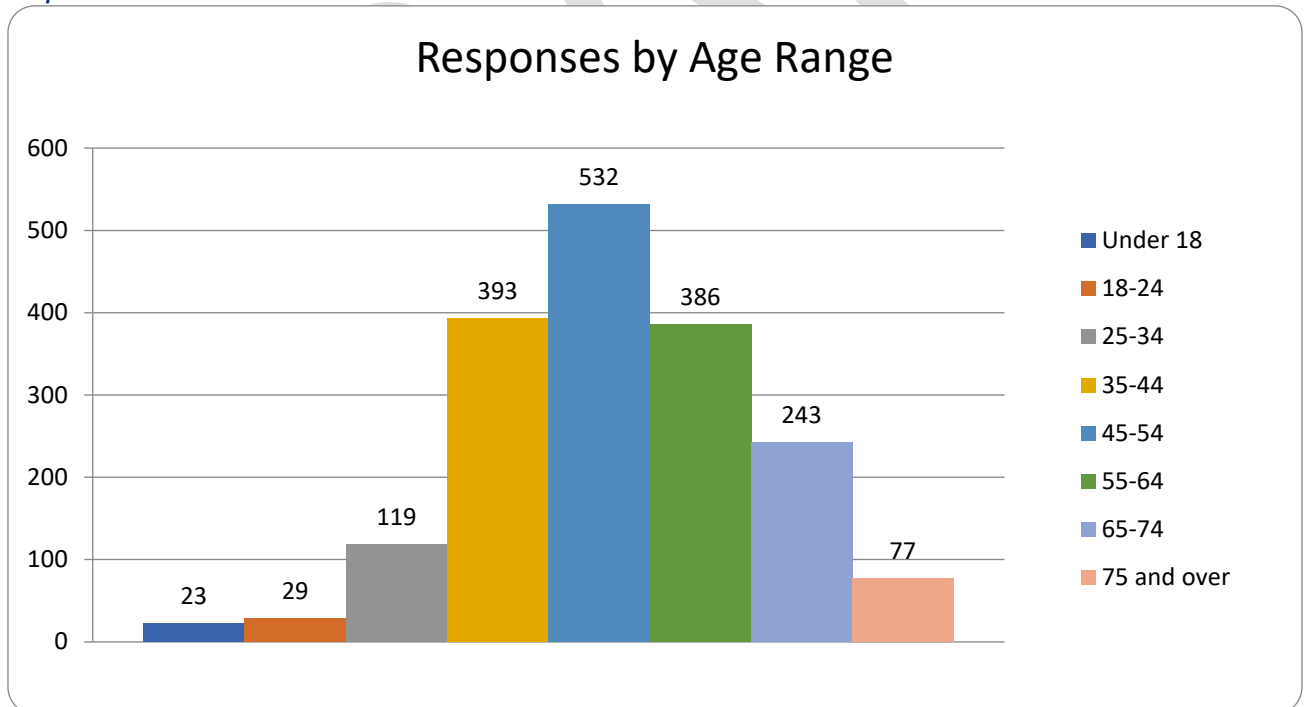
Image 1: Metroquest Welcome Screen



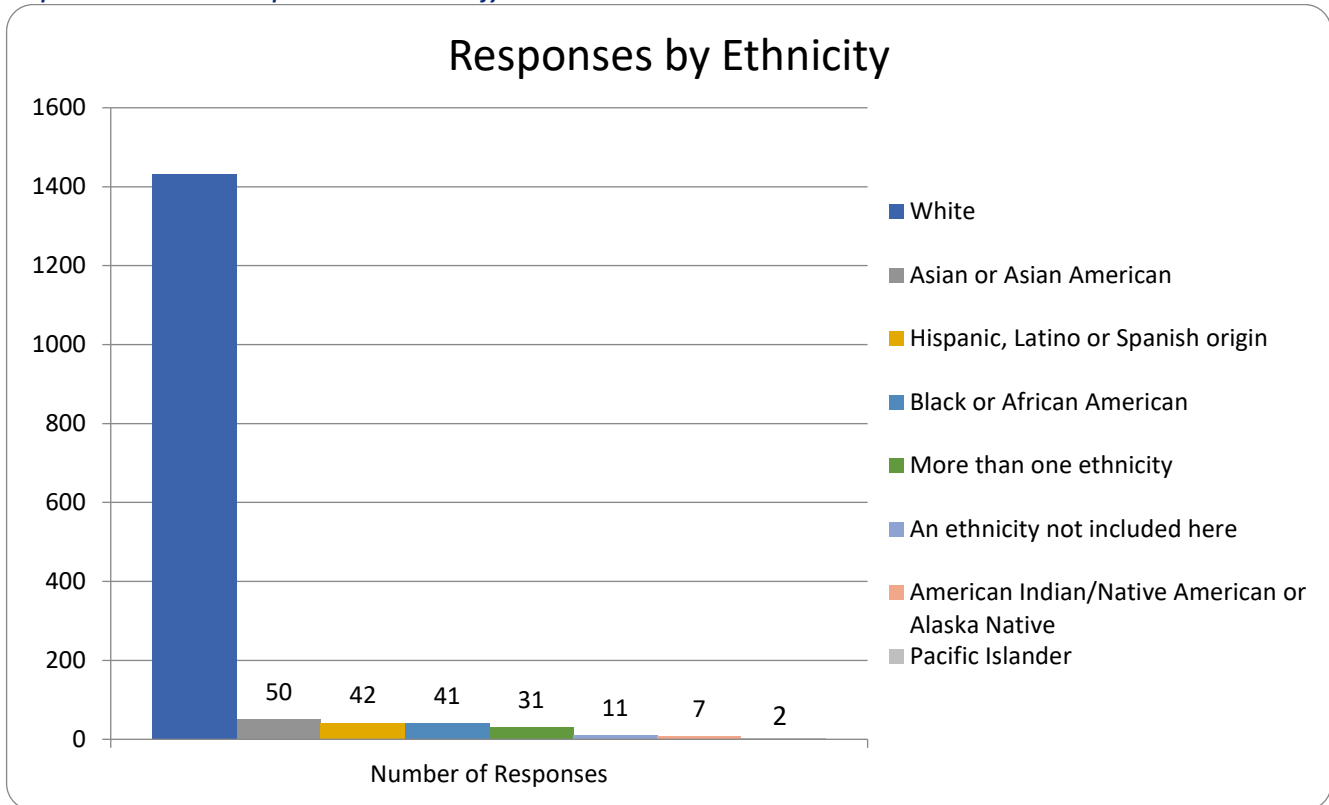
Graph 1: Where Do You Live?



Graph 2: How Old Are You?



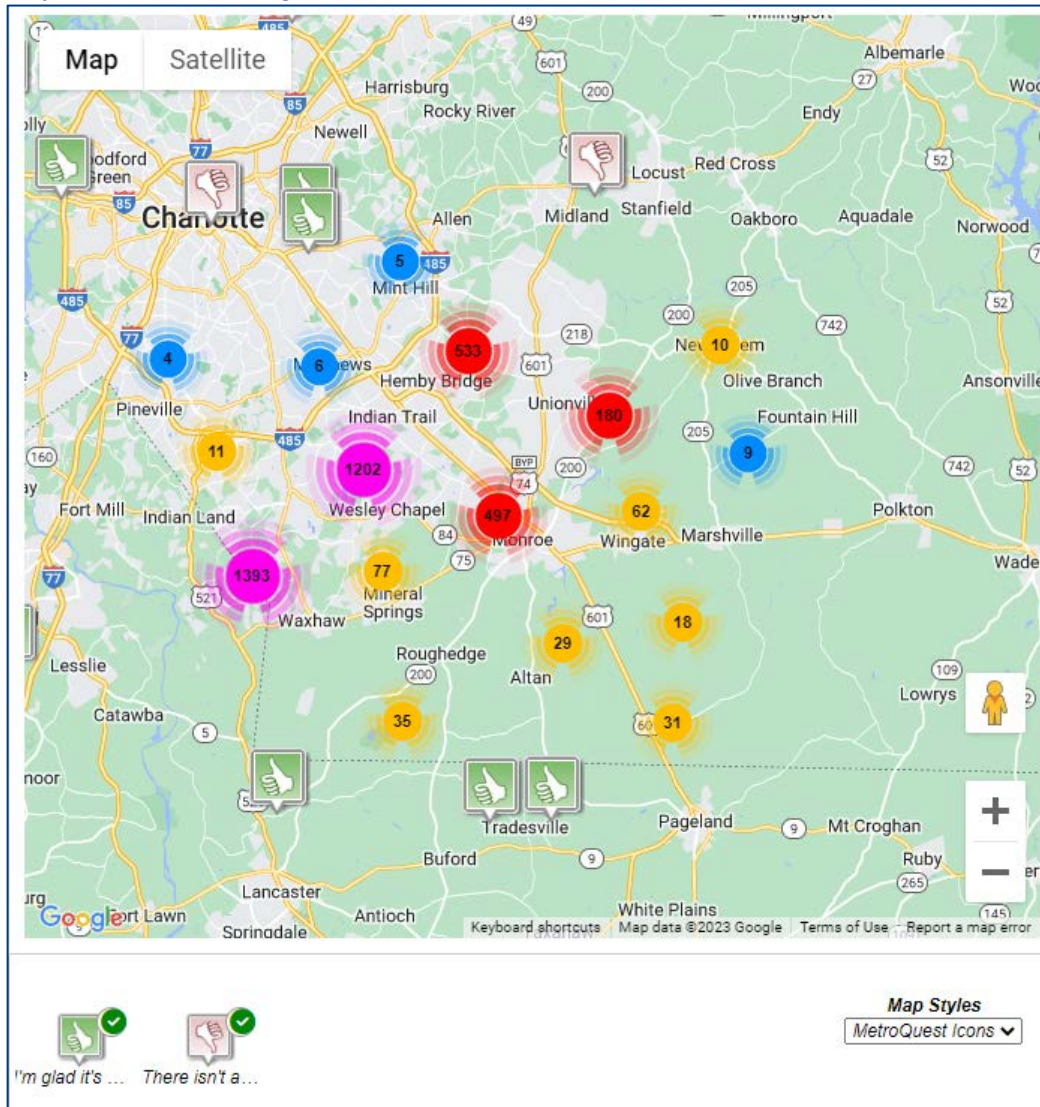
Graph 3: What Ethnic Group Do You Most Identify With?



As shown by the distribution in the preceding charts, a range of constituencies were represented in this survey, although the geographic distribution of responses skewed towards the western part of the county. This may be due to the high percentage of residents who live in neighborhoods with homeowner associations, which can help disseminate word of outreach efforts such as this one.

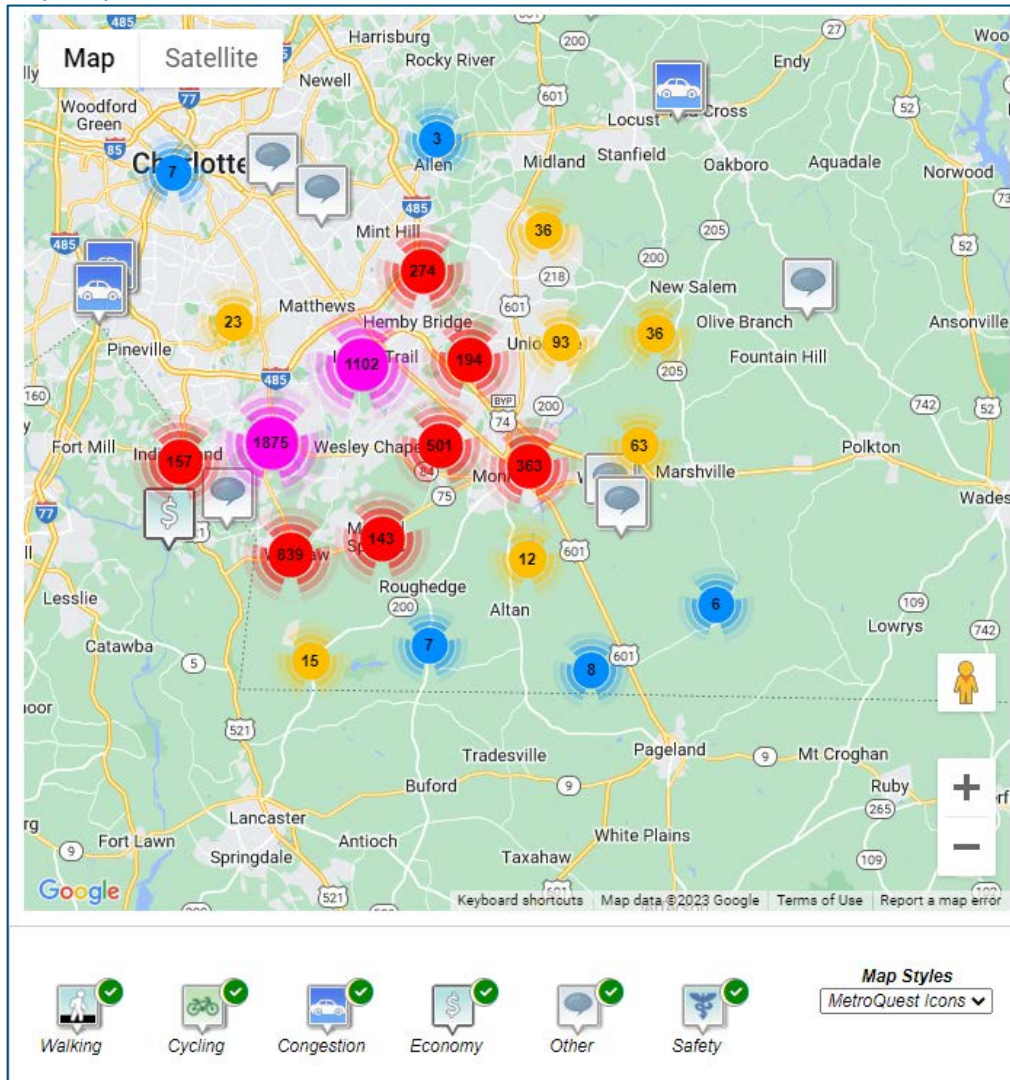
The comments and input on specific intersections were captured through two maps embedded within the Metroquest survey. Nearly 10,000 specific points of information were gathered between them. The County created a ESRI GIS Online Dashboard to present the results (<https://tinyurl.com/2p98ayuz>). The intention of the two maps was to solicit feedback and raise awareness of the existing projects, shown as construction barriers, and to separate those comments from ones for new locations. There was broad support (87 percent) for the already funded projects, and several additional intersections identified as part of the input process on additional candidate locations.

Map 3: Feedback on Existing Intersections

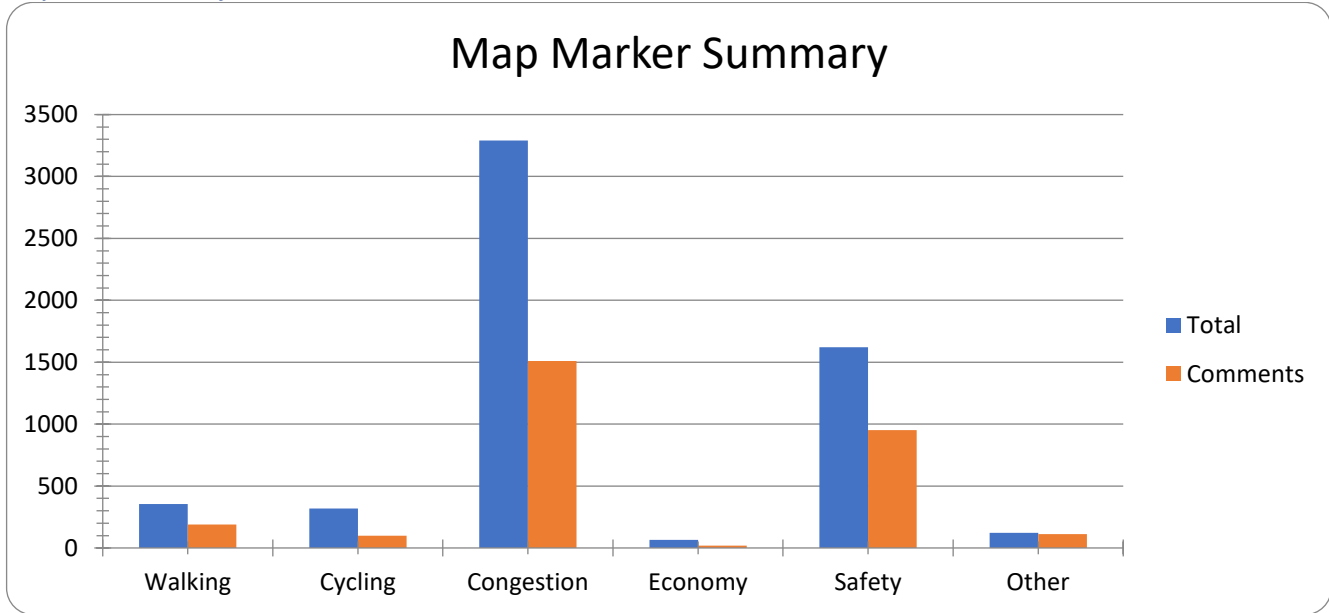


Map 4, shown on the next page, asked participants to provide feedback on proposed new intersections, as well as suggest additional intersections. The proposed new intersections are shown as red stars. Combined, these two maps provided a wealth of information about locations of needed intersections, as well as feedback on why the intersections were needed. Very few of the comments were submitted saying an intersection was not needed, although that did occur.

Map 4: Input on New Intersections



Graph 4: What Kind of Issues are at the Intersection?



As shown by the results in these charts and maps, the participants in the survey gave many useful and practical pieces of information to help the stakeholders in evaluating intersections, as well as identifying new ones. Congestion-related locations were submitted twice as frequently as locations submitted for safety-related concerns.

Evaluation Process

The stakeholder committee strove to identify intersections where improvement projects would be feasible, competitive, and effective. Each of the intersections were on the NCDOT system, so any recommended improvement would require their concurrence. In addition to support, for much of the county, the NCDOT would be the only available agency to implement the projects. Based on these realities, the stakeholder committee reviewed the intersection safety and existing design to select the final list of 15 intersections that have a high chance of becoming feasible and competitive projects for funding to address identified deficiencies.

The map displays the Charlotte, NC metropolitan area and surrounding regions. Major highways are shown in red, including I-77, I-85, and I-485. Numerous towns and cities are labeled, such as Sedgefield, Selwyn Park, Starmount, Sharonbrook, Pineville, Matthews, Mint Hill, Stallings, Indian Trail, Weddington, Wesley Chapel, Mineral Springs, Washaw, Jades, Van Wyck, Unionville, Watson, New Salem, Olive Branch, Marshville, Wingate, and Trinity. The map is overlaid with a grid of colored dots representing water quality samples. The dots are color-coded: green, yellow, orange, and red. A high density of samples is visible in the central and eastern parts of the map, particularly around the Charlotte city center and extending towards the northeast. The dots are scattered across the region, with some clusters and many empty spaces, indicating the specific locations where samples were collected.

The map, also available at <https://arcg.is/1aXqbm0>, represents the results of the crash analysis with the size of the dot reflecting score and the color indicating crash type. The map is part of the ongoing process on the following page. Based on stakeholder evaluation, 15 locations are highlighted in the final list.

The intersections were evaluated based on the scoring table shown below.

Table 3: Ranking Process

Scoring (Maximum Score of 115)						
Intersection Evaluation Variables	0 points	5 points	10 points	15 points	20 points	25 points
Five Year Crashes / Daily Traffic	Less than one crash per 1,000 AADT	1 - 2 crash per 1,000 AADT	2 - 4 crash per 1,000 AADT	4+ crash per 1,000 AADT		
Total Daily Traffic Volume	0 - 5K	5K - 10K	10K - 15K	15K - 20K	20K - 25K	25K+
Growth Pressure (both traffic growth and anticipated adjacent development)	Low	Medium	High			
Serious or Fatal Crashes in five years	0	1	2+			
Total Crashes in five years	Less than 5	5 to 10	11 to 20	21 to 30	more than 30	
Truck Traffic	Low (SR routes)	Moderate (NC routes)	Significant (US routes)			
Congestion	Low (no backups for turning movements)	Moderate (backups for peak hour turning movements but otherwise free flowing)	Significant (backups occur throughout day)			
Multi-Modal Improvements	No identified bicycle/pedestrian need or network gaps to connect/improve	Identified bicycle/pedestrian need or network gaps that would be closed by improving this intersection				
Constructability	Three or more utility or built environment issues that will add complexity and cost	One or two utility or built environment issues that will add complexity and cost	No readily apparent utility or built environment issues that will add complexity and cost			

The variables and assigned weights reflected community input. When asked what were the two most important variables to consider when identifying and prioritizing intersections, safety was the most frequently mentioned attribute, with congestion second. Economic development, bicycle and pedestrians, and aesthetics were each seldom mentioned as the most important criteria. The focus on safety was broadly shared throughout the county, and is consistent with [NCDOT analysis](#) showing Union County as having one of the highest crash rates in North Carolina.

Table 4: 2023 Candidate Intersection List

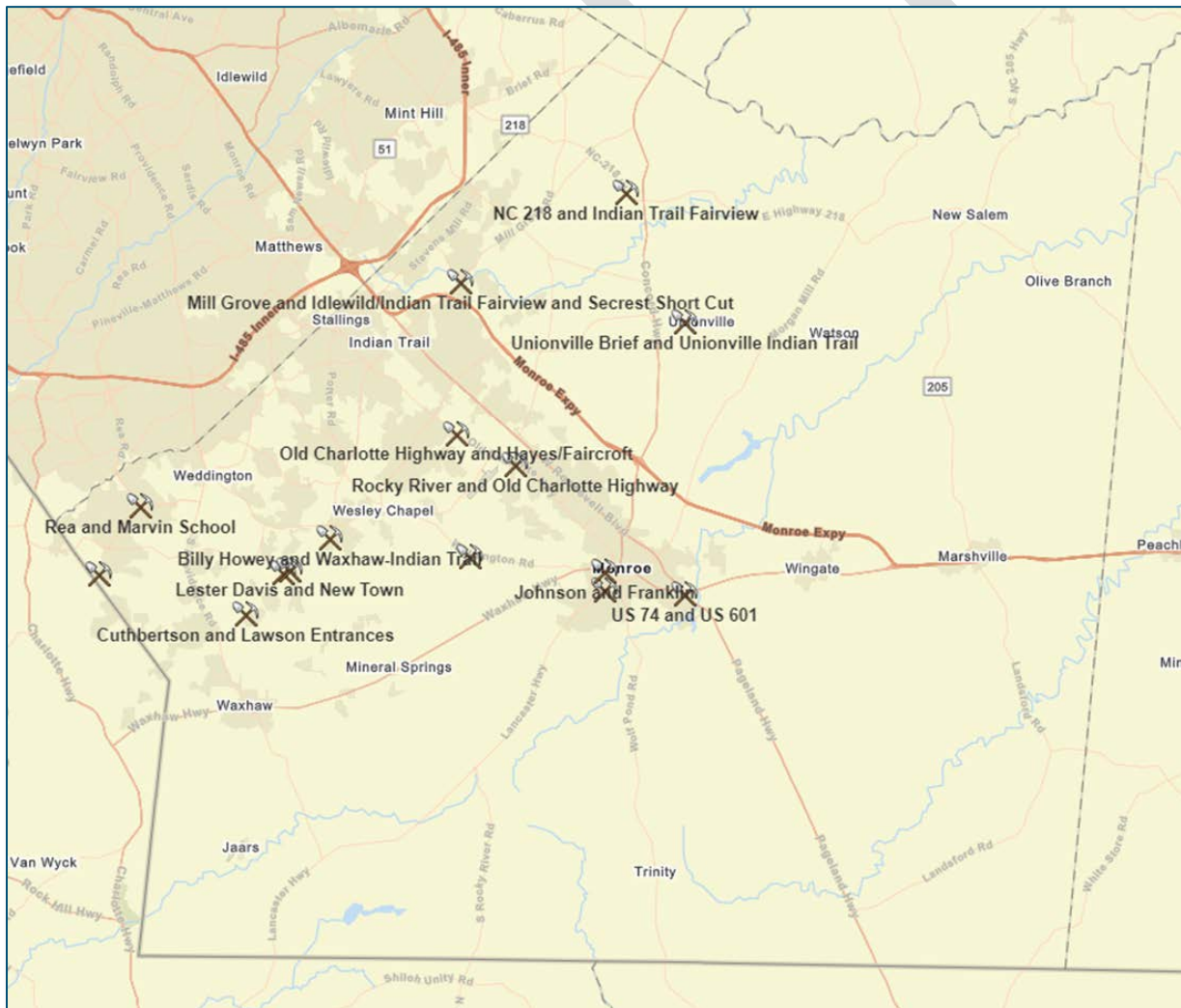
Candidate Intersection	Score	Details
US 74 and US 601 (near Hilltop)	70	Submit for CRTPO 2055 MTP
Mill Grove and Idlewild/Indian Trail Fairview and Secrest Short Cut	65	Submit as STI highway project
Rocky River and Old Charlotte Highway	65	Submit as STI rail project
Willoughby and NC 84	60	
Stinson-Hartis/Younts/Indian Trail Fairview Road	55	Already improved, plus buildings complicate project
New Town and Cuthbertson	55	
NC 218 and Indian Trail Fairview	55	
Sunset and Hayne	55	Already improved
Antioch Church and Weddington-Matthews	55	Already improved
Airport and Old Charlotte Highway	55	Already improved
Rea Road and Marvin School	55	
Old Charlotte Highway and Hayes/Faircroft	55	
Billy Howey and Waxhaw-Indian Trail	50	
US 601 and Unionville-Indian Trail	50	Already improved
Rogers and Old Charlotte Highway	50	Already improved
Lester Davis and New Town	45	
Bragg and Lancaster Avenue	45	
Johnson and Franklin	45	
Waxhaw Marvin and Gray Byrum	45	Waxhaw ok with not recommending
Cuthbertson and Lawson/Brough Hall	45	
Stacy Howie and Waxhaw Marvin	40	
Pine Oak and Waxhaw Marvin	40	Waxhaw ok with not recommending
Beulah Church and Weddington Matthews	40	Already improved
Beulah Church and Twelve Mile Creek	40	Not on Federal Aid System
Franklin and Sunset	40	Already improved
Billy Howey and New Town	40	All way stop effective for now
Weddington Road and Waxhaw Highway	40	Monroe doesn't want included due to ROW concerns
US 601 and Sikes Mill	40	
Antioch Church and Forest Lawn	40	Already Improved
Twelve Mile and New Town	35	
Old Waxhaw Monroe and South Providence	35	
Morgan Mill and New Salem	35	
Sunset and Medlin	30	
Henry Nesbit and Waxhaw Marvin	30	
Joe Kerr and Marvin School	30	
Rocky River and Price	30	
Unionville Brief and Unionville Indian Trail	30	Committee is including based on Unionville input
Old Camden and New Salem	25	Had all-way stop recently installed
Chambwood and Potter	25	
NC 218 and Unionville Brief	25	

Recommended Intersections

The stakeholder committee identified the following 15 intersections at their August 2023 meeting. These intersections were identified based on a combination of technical need, feasibility, and local support. Some intersections, such as Stinson-Hartis/Younts/Indian Trail Fairview in Indian Trail or Sunset and Hayne in Monroe, scored well in the process, but were not included in the recommended list because the needed improvement was a wholesale corridor widening, which would be beyond the scope of this set of recommendations.

While the projects shown in the map are largely recommended based on scores because of this process, this list should not be interpreted as a rank order of need or priority. There are multiple funding sources available through CRTPO and the NCDOT, and each emphasizes different aspects of the issues with an intersection. Some candidate projects are only eligible for safety funds through the NCDOT, while others would be competitive for congestion-focused programs through CRTPO. Most would be appropriate projects to consider through several programs.

Map 6: 2023 Critical Intersections



The critical intersections from this process are listed below with some background information about traffic, safety, and municipal impacts.

Table 5: 2023 Critical Intersection List

Intersection	Municipality	Traffic Growth	Safety (Total Crashes over Last Five Years)
US 74 and US 601	Monroe	Moderate	More than 50 crashes
Rocky River and Old Charlotte Highway	Monroe	Moderate	More than 60 crashes
Mill Grove and Idlewild/Indian Trail-Fairview and Secrest Short Cut (Two Intersections)	Hemby Bridge and Indian Trail	Moderate	More than 70 crashes
New Town and Cuthbertson	Wesley Chapel	High	More than 30 crashes
Rea Road and Marvin School	None	High	11 to 20 crashes
Willoughby and NC 84	None	High	21 to 30 crashes
Old Charlotte Highway and Hayes/Faircroft (Two Intersections)	Indian Trail	High	21 to 30 crashes
NC 218 and Indian Trail-Fairview	Fairview	Moderate	21 to 30 crashes
Billy Howey and Waxhaw-Indian Trail	Wesley Chapel	High	11 to 20 crashes
Johnson and Franklin	Monroe	Moderate	21 to 30 crashes
Lester Davis and New Town	Wesley Chapel	High	21 to 30 crashes
Cuthbertson and Lawson/Brough Hall (Four Intersections)	Waxhaw	High	11 to 20 crashes
Bragg and Lancaster Ave	Monroe	Low	11 to 20 crashes
Stacy Howie and Waxhaw-Marvin	Marvin	High	11 to 20 crashes
Unionville-Indian Trail and Unionville-Brief/CJ Thomas	Unionville	Low	Up to 10 crashes

Adoption Process

This overall analysis involved significant coordination and outreach with the public, municipalities, and the NCDOT. The Stakeholders Committee recommended this plan and list of intersections at its August 4, 2023, meeting. The process and recommendations were presented to the eight affected municipalities in August and September, with the opportunity for public feedback at each meeting. Each community endorsed the plan recommendations. The Union County Board of Commissioners then unanimously adopted the plan at its September 18, 2023, meeting.

Implementation

The goal of this work is to improve the road network in Union County for the traveling public. Addressing identified issues at these locations will require money to plan, design, and construct needed improvements. Fortunately, there are multiple funding programs available. As identified issues coming from an adopted plan, any of these intersections could be immediately submitted for funding through the NCDOT or CRTPO, but they would likely not score well. While this process has identified these 15 locations as critical intersections, it has not identified the appropriate solution, or the benefits and costs of the solution. This information is critical to allow them to be appropriately vetted through the evaluation processes used by CRTPO and the NCDOT. The next step for many of these locations is to develop conceptual designs and cost estimates. Armed with that information, local governments and the NCDOT can then apply for funding and work to implement the projects.

Develop Designs and Cost Estimates: The CRTPO regularly funds planning projects to help study transportation issues. They issue an annual call for projects to fund both construction and planning projects. The next call for projects will be in late 2023. Union County, ideally in coordination with the affected municipalities, is encouraged to submit eligible intersections for a grant to conduct traffic engineering analysis and develop cost estimates. The benefit of this process will be that the county, affected municipalities, and NCDOT will each have a design and cost estimate to jointly use for funding applications.

Commit Local Government Funds to Projects: All available funding sources (CMAQ, STBG-DA, spot safety, high hazard, high impact) consider local contributions in the scoring of the projects. The rationale is that increased local funding signals a commitment to the project, as well as allows the funding agency to “grow the pot” of available funding. Multiple municipalities, as well as the County itself, have successfully partnered with the NCDOT to acquire funding for specific projects. A recent example is a partnership between the NCDOT, Village of Marvin, CRTPO, and Union County to fund a roundabout at Waxhaw-Marvin and Bonds Grove Church Roads. This trend of increased local match is only expected to increase, and communities with intersections on this list should set aside funds to allow them to quickly respond to grant applications and partnering opportunities.

Apply for Funding: With the exception of a handful of municipalities, only the NCDOT has the capacity to implement intersection projects from this study. It is therefore incumbent upon all affected municipalities and Union County to regularly consult with the NCDOT Division 10 staff on upcoming grant applications and opportunities for partnership. This requires regular participation in CRTPO meetings, as well as discussion at countywide planners and CRTPO members quarterly meetings. These forums facilitate coordination and information sharing for Union County, its municipalities, and the NCDOT and should be used to advance such efforts.

Integrate Mitigations from Proposed Developments into Funded Intersection Projects: Union County is a rapidly developing community, with larger developments frequently proposed. These developments are often required to address congestion and safety issues created by their development. While not required to mitigate or improve preexisting network deficiencies, coordinating any required or requested improvements into existing funded intersection projects can result in more streamlined project delivery and even additional network improvements. For example, several years ago, Union County partnered with a rezoning applicant for approximately \$380,000 in funds to apply for an intersection project at NC 84 and Potter Road, which later received funding for a roundabout based on this local match.

DRAFT

Conclusion

Union County has one of the highest crash rates in North Carolina and continues to be one of the fastest-growing counties in the state. Based on NCDOT and CRTPO project selection processes, as well as public feedback, safety and congestion continue to remain a priority when identifying and prioritizing intersections. The residents have spoken and affirm the need to address these issues and to encourage local leaders to fund and implement projects in rapidly growing areas.

This critical intersection analysis process evaluated 40 intersections throughout Union County. Stakeholders from throughout the county evaluated the data, community input, and feasibility to identify 15 intersections for future design and funding efforts. These intersections are found in eight municipalities, creating multiple opportunities for partnerships. All these intersections are on the Federal Aid System, making them eligible for construction funding through CRTPO and NCDOT. The 2023 Critical Intersection Analysis takes advantage of recent flexibility in CRTPO's Metropolitan Transportation Plan (MTP) project solicitation, so the larger intersection projects, such as US 74 and US 601 on the east side of Monroe, should be submitted for consideration in that process. Smaller intersection projects remain appropriate to include in any future CRTPO planning grants to develop designs and cost estimates to use for future funding applications.

Beyond the technical aspects of an updated intersection list coming out of this process, the benefit of robust public outreach is the community input and awareness raised of existing projects. Over 83 percent of all comments for funded intersection improvements were positive. Residents were happy to learn about upcoming projects and shared many of the same concerns that motivated the NCDOT, municipalities, and Union County to propose and fund the projects.

The public, NCDOT, County, and municipalities are each better served when they agree about priorities and means to address issues of common concern. Any follow-on study to design intersections, as well as applications to fund intersection improvements, should be shared with the community. Their input has been helpful in identifying and evaluating intersections, and any appropriate decision point in the process to delivering improvements should likewise solicit their input and share recommendations.

Union County thanks the municipalities and the NCDOT for their participation in this process. Union County likewise thanks the nearly 2,900 Union County residents who gave their input on transportation planning.



STAFF REPORT

TO: Public Enterprise Committee

VIA: Mark Watson, City Manager

DATE: August 1, 2023

FROM: Scott Clark, Water Resources Director

PREPARED BY: Charles Derrick, Maintenance Superintendent

SUBJECT: Purchase of Jet-Vac Sanitary Sewer CCTV Equipment

SUMMARY STATEMENT

The Public Enterprise Committee is requested to consider approving the purchase of the Jet-Vac Sanitary Sewer CCTV Equipment for the Water Resources Maintenance Division.

REVIEW

During the budget process quotes were received and funds were approved for the purchase of the Jet-Vac CCTV equipment. Updated quote was received showing a cost increase from the original quotes.

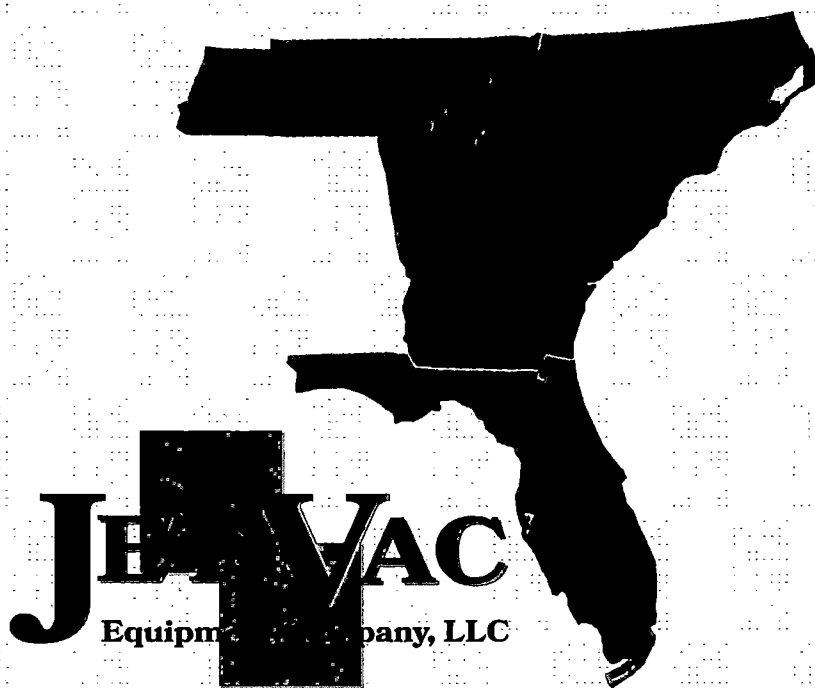
The City is a member of the North Carolina Sheriff's Association purchasing cooperative and utilizes equipment quotes that have been competitively bid by the cooperative. This practice meets state statutes for bidding requirements. The recent quote through North Carolina Sheriffs Association for the Jet-Vac CCTV equipment came in at \$284,000.00, the budgeted amount was \$278,250.00. This is an increase of \$5,750.00 from the previous quote.

Water Resources is still in the process of purchasing items needed and are working to reduce costs on other items to cover the difference. Staff seeks the Public Enterprise Committee's approval for the purchase of the CCTV equipment.

RECOMMENDATION

Staff recommends the Public Enterprise Committee approve sending this request to City Council consent agenda for approval of the purchase. Sufficient funds are budgeted for the acquisition of the equipment and Water Resources will continue to work on cost saving measures to absorb the deficiency.

Attachment(s):
Jet-Vac CCTV Quote



FLORIDA SHERIFFS
ASSOCIATION



Sourcewell 

HGACBuy
THE SMART PURCHASING SOLUTION

Date: 07/17/2023

Quoted To:

City of Monroe
Attn: Accounts Payable
PO Box 69
Monroe NC 28111

Location: SUMTER

Quote Number: Q00722

Expiry Date: 08/16/2023

Salesperson: KEITH WINDHAM

(803) 934-6349

keith@jet-vac.com

Responsible: HILARY HODGE

(803) 848-1737

hilary@jet-vac.com

Attention: Scott Clark

We propose to furnish the equipment described herein in accord with the specification, terms, and conditions outlined.

ORION Zoom PAN & TILT CAMERA	22,532.00
NANO - PAN & TILT CAMERA	22,532.00
T66.1 Camera Tractor	15,120.00
T76 TRACTOR	25,513.00
Camera Base CB 3.2S Module for T76/86 Tractor	5,862.00
Remote Elevator for T76/86	8,373.00
LISY 4.1 SD Lateral Launch Module Package w/o Cable	65,981.00
BS 3.5 EDI CONTROLLER	23,236.00
KW305.2 Synchronized Power Cable Reel	34,805.00
CAMERA CABLE TYPE 524/11 - 1000 FEET	6,409.00

Inspection Trailer Complete - PREMIUM	41,221.00
One Year Extended Warranty	4,000.00
Additional Charges	
NCSA 6% DISCOUNT	-13,821.78
NCSA 6% OPTIONS DISCOUNT	-5,487.00
JET-VAC DISCOUNT	-22,504.22

Parts	
Pressure Test S	529.00
T66.1 CAM CONT	1,802.00
Additnl weight	781.00
T66. LOWER CLAW	349.00
Treaded wheel S	936.00
Treaded wheel S	1,279.00
Tungsten Carbid	1,453.00
Tungsten Carbid	1,656.00
IBAK Pneumatic	1,439.00
Treaded wheels	1,279.00
Tungsten Carbid	1,453.00
Tungsten Carbid	1,540.00
LISY CAM	3,110.00
LAT SOFT CABLE	3,371.00
MP4 HARD CABLE	4,301.00
Lisy / Hek lift	442.00
KUV 2.7 Cable D	756.00
Cable Deflectio	1,403.00
CLEANING BRUSH	523.00
KW Reel Foot-Op	1,080.00
19" INDUS PC	6,435.00
NONHD VIDEO CAP	513.00
EQUIP SALES 17	625.00
PREM LIGHT PKG	5,370.00
POWER REAR CANO	4,041.00
KW CABINET REEL	2,354.00
Lowering Poles	909.00
FIBERGLASS BRAC	320.00
CLAW ADPT	180.00

Comments

NCSA Contract: 24-08-0421, Heavy Equipment
Group: Underground Pipeline Inspection Equipment
Item: 3144, IBAK/RapidView, Catalog Discount, All Products

Selling Price:	284,000.00
Tax:	19,170.06
Net Selling Price:	303,170.06

Accepted by: _____ Prepared by: _____