

**Link Transit System  
Public Transit Advisory Commission (PTAC)  
Tuesday, November 12, 2024 @ 5:00 P.M.**

**Meeting to be Held in Person or Virtually on Zoom Platform**

**425 S. Lexington Ave, Burlington, NC 27215 @ Municipal Conference Room (Lower Level)**

**OR <https://us02web.zoom.us/j/87499407855> OR (309) 205-3325**

**Meeting ID: 874 9940 7855**

**Passcode: 760393**

## **AGENDA**

- 1) **Call to Order & Quorum** **Vice Chairman**
  - Changes to Agenda / Add On Items
  - Speakers from the Floor – three (3) minutes per speaker
  
- 2) **Introduction of New Members from Burlington and Mebane** **John Andoh**
  
- 3) **Election of a New Chair** **John Andoh**
  
- 4) **Presentation of a Plaque to Mike Mills** **John Andoh**
  
- 5) **Approval of the July 2024 Meeting Minutes** **Pages 2-3** **Chairman**
  
- 6) **Link Transit System Update** **John Andoh**
  - Update on Transit Development Plan & Transit Facility Study
  - Update on Status of Transit System Activities
    - Mebane Extension Pages 4-5
    - Passenger Amenities Update Pages 6-21
    - Medicaid Transportation
    - Free Rides on Election Day Page 22
    - NCDOT Unified Grant Program Page 23
    - Elon University Page 24
    - PTAC Member Directory Sent under separate cover
    - Umo Pages 25-33
  - Update on Transit Operations from Transdev Pages 34-25
  
- 8) **Link Transit Operations Report** **John Andoh**
  - Fixed Route & Paratransit Ridership Update through October 2024 = Page 36
  
- 9) **Other Business** **Chairman**
  - Other Items of Interest and Upcoming Events
  - Reports & Questions from PTAC Members
  - Agenda Topics for Next Meeting

**Next Meeting Scheduled for: Tuesday, January 14, 2025.**

**ACCESS TO INFORMATION: ALL DOCUMENTS AND DATA CAN BE PROVIDED IN  
ALTERNATIVE FORMAT UPON REQUEST**

MINUTES

LINK TRANSIT  
PUBLIC TRANSIT ADVISORY COMMISSION

Tuesday, July 9, 2024

5:00 P.M.

Meeting held via Zoom and at 425 S. Lexington Avenue, Burlington, NC 27215 in the  
Municipal Conference Room (Lower Level)

MEMBERS PRESENT

Mike Mills, Burlington (Chair)  
Moses Corbett, Burlington (Secretary)  
Ralph Harwood, Elon  
Roger Meisenbach, Burlington  
Brian Doward, ACC  
Steve Carter, Alamance County  
Bonita Brown, Burlington (Vice Chair)  
John Mathewson, Burlington

OTHERS PRESENT

John Andoh, Transit Manager  
Dana Bullock, Transdev  
Richard Ticehurst, Transdev  
Wannetta Mallette, BGMPO  
Jacob Campbell, Transdev  
Peter Murphy, ACTA

MEMBERS ABSENT

Joyce Harris, Gibsonville  
Melissa McBane, Elon  
Blake Slaughter, Burlington  
Chief Armstrong, ACC

- 2) Link Transit System Update \_\_\_\_\_ John Andoh
- Review Link Transit Annual Report – (provided at meeting)
  - Update on Regional Transit Study – visit <https://bgmpo.org/Projects-Plans/MPO-Plans/BGMPO-Regional-Transit-Feasibility-Study>
  - Update on Transit Development Plan
  - Conflict of Interest Statements for NCDOT grant
  - Adopted Budget for FY 2024-2025
  - Update on Status of Transit System Activities
  - o Bus Replacements – Gillig and Promaster Bus on Display
  - o Service Planning – Mebane Extension and ACTA’s Southern Alamance Route
  - o DBE Consultation Meeting and DBE Goal
  - o Link’s 8th Anniversary
  - o Elon Farmers Market
  - o Elon University
  - Update on Transit Operations from Transdev

### **Call to Order**

Chair Mills called the meeting to order at 5:05 PM and welcomed all members and guests.

Chair Mills solicited public comments from the floor and requested comments to be limited to three (3) minutes per speaker. No public comments. The meeting agenda was reviewed. No changes were made to the agenda.

### **Approval of the May 2024 Meeting Minutes**

The May 2024 meeting minutes were reviewed. Mr. Corbett made a motion to approve the meeting minutes. Mr. Carter seconded the motion. All PTAC members voted in approval of the May 2024 meeting minutes.

### **Link Transit/System Update**

Mr. Andoh provided the following updates and explanations regarding Link Transit on the topics below:

- Link Transit Annual Report. Mr. Andoh provided the Commissioners a copy of the annual report and explained Link's progress since 2021.
- Update on Regional Transit Study
- Update on Transit Development Plan
- Conflict of Interest Statements for NCDOT Grant
- Adopted Budget for FY 2024-2025
- Bus Replacements - Gillig and Promaster Bus on Display. The Commissioners went outside to view the new buses and Mr. Andoh gave an explanation on these new vehicles. Those on the phone were able to see the buses as well.
- Service Planning - Mebane Extension and ACTA's Southern Alamance Route
- DBE Consultation Meeting and DBE Goal
- Link's 8th Anniversary
- Elon Farmers Market; and
- Elon University.

The Commissioners had a discussion and asked questions about the topics discussed.

Mr. Ticehurst gave an update on Transdev activities. Mr. Andoh introduced Mr. Campbell, the new maintenance manager for Transdev.

### **Link Transit Operations Report**

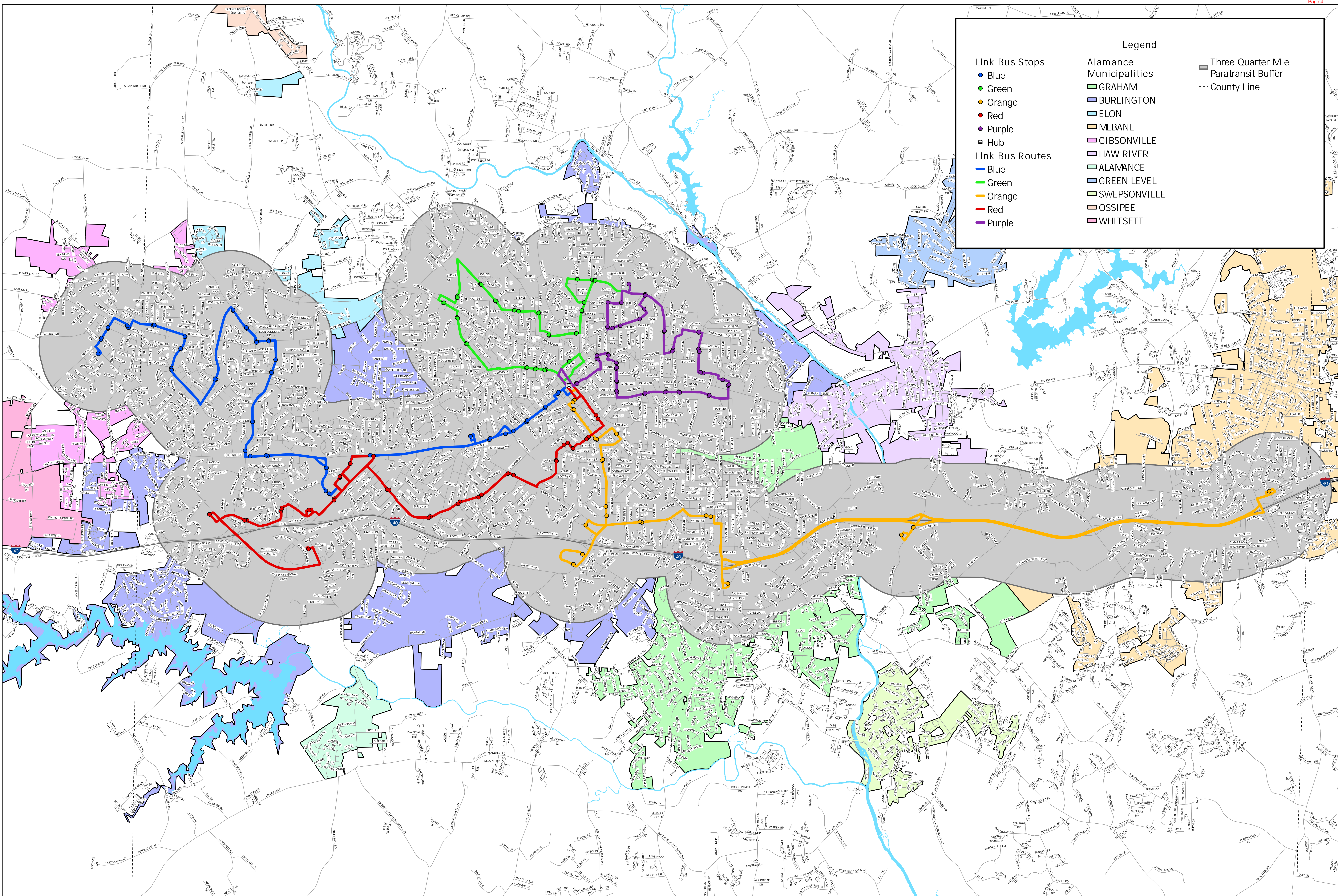
Mr. Andoh presented the ridership update through June 2024 and discussed the performance of each route.

### **Other Business**

There was none.

### **Adjournment**

Chairman Mills asked for a motion for adjournment. Mr. Mathewson made a motion to adjourn the meeting and Mr. Meisenbach seconded the motion. All PTAC members voted in approval. Chairman Mills adjourned the PTAC meeting at 5:50 P.M.



**Legend**

<b>Link Bus Stops</b>	<b>Alamance Municipalities</b>	<b>Three Quarter Mile Paratransit Buffer</b>
● Blue	■ GRAHAM	■ Three Quarter Mile Paratransit Buffer
● Green	■ BURLINGTON	--- County Line
● Orange	■ ELON	
● Red	■ MEBANE	
● Purple	■ GIBSONVILLE	
● Hub	■ HAW RIVER	
<b>Link Bus Routes</b>	■ ALAMANCE	
— Blue	■ GREEN LEVEL	
— Green	■ SWEPSONVILLE	
— Orange	■ OSSIPEE	
— Red	■ WHITSETT	
— Purple		

Disclaimer:  
 This map was compiled from the GIS resources of the Burlington Regional GIS Partnership for public planning and agency support purposes. These resources include public information sources of different scale, time, origin, definition and accuracy, which aspects produce inconsistencies among features represented together on this map. Neither the City of Burlington nor the Partnership shall be held liable for any errors in this map or supporting data. Primary public information sources from which this map was compiled, in conjunction with field surveys where required, must be consulted for the verification of the information contained within this map.

1 inch = 2,000 feet



Date: 10/16/2024

ROUTE DESTINATIONS:

- Red Route 1:** Tucker Street Apartments, Holly Hill Mall, Alamance Crossing, Alamance Regional Medical Center (ARMC)
- Orange Route 2:** Salvation Army, ACC – Dillingham Center, Alamance County Offices, Park & Ride Lot, Alamance Community College (ACC), Mebane
- Blue Route 3:** ALDI Grocery, Holly Hill Mall, Westbrook Food Lion, Elon, Gibsonville/Harper Senior Center
- Green Route 4:** Glen Raven, Lakeside Apartments, Pate Homes, Rauhut Street & Westmoreland Drive, North Park Library
- Purple Route 5:** N Mebane Street & Queen Ann Street, Walmart, Health Dept/Social Services, Crump Village, North Park Library

**MAP KEY:**

- Transfer Point
- Bus Stop identified on schedule
- Bus Stop
- Connects with PART Route 4
- PART Connections
- Connects with GoTriangle ODX Route
- Connects with Orange County Public Transit

**BUS HOURS OF OPERATION**

**MONDAY - FRIDAY**  
5:30 AM - 9:30 PM

**SATURDAY**  
9:25 AM - 6:30 PM

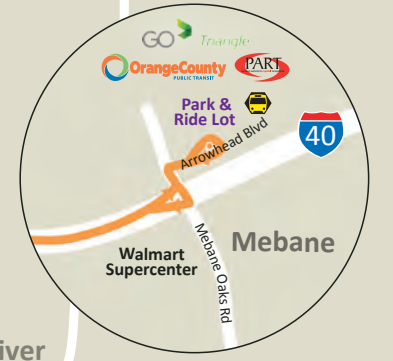
No bus service on holidays.

RED 1										ORANGE 2										BLUE 3										GREEN 4										PURPLE 5														
OUTBOUND					INBOUND					OUTBOUND					INBOUND					OUTBOUND					INBOUND					OUTBOUND					INBOUND																			
Downtown Burlington Worth @ Webb Sts.	Tucker Street Apartments	Holly Hill Mall	Alamance Crossing	ARRIVE: Alamance Regional Medical Center	DEPART: Alamance Regional Medical Center	Alamance Crossing	Holly Hill Mall	Tucker Street Apartments	Downtown Burlington Worth @ Webb Sts.	Downtown Burlington Worth @ Webb Sts.	ACC – Dillingham Center	Alamance County Offices	Graham Park & Ride Lot	Alamance Community College	ARRIVE: Mebane Cone Health Park & Ride Lot	DEPART: Mebane Cone Health Park & Ride Lot	Alamance Community College	Graham Park & Ride Lot	Alamance County Offices	ACC – Dillingham Center	Downtown Burlington Worth @ Webb Sts.	ALDI Grocery	Holly Hill Mall	Church @ S. Williamson (Walgreens)	W. Haggard @ N. Holt	ARRIVE: Gibsonville/Harper Senior Center	DEPART: Gibsonville/Harper Senior Center	W. Haggard @ N. Holt	S. Williamson @ Church (Food Lion)	Holly Hill Mall	ALDI Grocery	Downtown Burlington Worth @ Webb Sts.	Glen Raven	Lakeside Apartments (Elm St/Tillman St)	Pate Homes (Lundsford Dr/Sharpe Rd)	Rauhut St / Westmoreland Dr	ARRIVE: North Park Library	DEPART: North Park Library	Lakeside Apartments (Elm St/Tillman St)	Glen Raven	Downtown Burlington Worth @ Webb Sts.	Downtown Burlington Worth @ Webb Sts.	James St/Harris St	Walmart	Health Dept/Social Services	Crump Village	ARRIVE: North Park Library	DEPART: North Park Library	Health Dept/Social Services	Across from Walmart	James St/Harris St	Downtown Burlington Worth @ Webb Sts.		
6:30	6:38	6:50	7:02	7:14	7:15	7:27	7:35	7:45	7:53	6:30	6:43	6:48	6:53	6:58	7:10	7:15	7:27	7:32	7:37	7:42	7:57	6:30	6:40	6:48	6:55	7:02	7:15	7:15	7:26	7:34	7:40	7:48	7:56	6:30	6:48	6:55	7:05	7:08	7:11	7:15	7:22	7:29	7:49	6:30	6:45	6:49	6:56	7:04	7:08	7:15	7:26	7:33	7:36	7:51
8:00	8:08	8:20	8:32	8:44	8:45	8:57	9:05	9:15	9:23	8:00	8:13	8:18	8:23	8:28	8:40	8:45	8:57	9:02	9:07	9:12	9:27	8:00	8:10	8:18	8:25	8:32	8:45	8:45	8:56	9:04	9:10	9:18	9:26	8:00	8:18	8:25	8:35	8:38	8:41	8:45	8:52	8:59	9:19	8:00	8:15	8:19	8:26	8:34	8:38	8:45	8:56	9:03	9:06	9:21
9:30	9:38	9:50	10:02	10:14	10:15	10:27	10:35	10:45	10:53	9:30	9:43	9:48	9:53	9:58	10:10	10:15	10:27	10:32	10:37	10:42	10:57	9:30	9:40	9:48	9:55	10:02	10:15	10:15	10:26	10:34	10:40	10:48	10:56	9:30	9:48	9:55	10:05	10:08	10:11	10:15	10:22	10:29	10:49	9:30	9:45	9:49	9:56	10:04	10:08	10:15	10:26	10:33	10:36	10:51
12:30	12:38	12:50	1:02	1:14	1:15	1:27	1:35	1:45	1:53	12:30	12:43	12:48	12:53	12:58	1:10	1:15	1:27	1:32	1:37	1:42	1:57	11:00	11:10	11:18	11:25	11:32	11:45	11:45	11:56	12:04	12:10	12:18	12:26	11:00	11:18	11:25	11:35	11:38	11:41	11:45	11:52	11:59	12:19	11:00	11:15	11:19	11:26	11:34	11:38	11:45	11:56	12:03	12:06	12:21
2:00	2:08	2:20	2:32	2:44	2:45	2:57	3:05	3:15	3:23	2:00	2:13	2:18	2:23	2:28	2:40	2:45	2:57	3:02	3:07	3:12	3:27	12:30	12:40	12:48	12:55	1:02	1:15	1:15	1:26	1:34	1:40	1:48	1:56	12:30	12:48	12:55	1:05	1:08	1:11	1:15	1:22	1:29	1:49	12:30	12:45	12:49	12:56	1:04	1:08	1:15	1:26	1:33	1:36	1:51
3:30	3:38	3:50	4:02	4:14	4:15	4:27	4:35	4:45	4:53	3:30	3:43	3:48	3:53	3:58	4:10	4:15	4:27	4:32	4:37	4:42	4:57	2:00	2:10	2:18	2:25	2:32	2:45	2:45	2:56	3:04	3:10	3:18	3:26	2:00	2:18	2:25	2:35	2:38	2:41	2:45	2:52	2:59	3:19	2:00	2:15	2:19	2:26	2:34	2:38	2:45	2:56	3:03	3:06	3:21
5:05	5:13	5:25	5:37	5:49	5:50	6:02	6:10	6:20	6:28	5:05	5:18	5:23	5:28	5:33	5:45	5:50	6:02	6:07	6:12	6:17	6:32	5:05	5:15	5:23	5:30	5:37	5:50	5:50	6:01	6:09	6:15	6:23	6:31	5:05	5:23	5:30	5:40	5:43	5:46	5:50	5:57	6:04	6:24	5:05	5:20	5:24	5:31	5:39	5:43	5:50	6:01	6:08	6:11	6:26
6:35	6:43	6:55	7:07	7:19	7:20	7:32	7:40	7:50	7:58	6:35	6:48	6:53	6:58	7:03	7:15	7:20	7:32	7:37	7:42	7:47	8:02	6:35	6:45	6:53	7:00	7:07	7:20	7:20	7:31	7:39	7:45	7:53	8:01	6:35	6:53	7:00	7:10	7:13	7:16	7:20	7:27	7:34	7:54	6:35	6:50	6:54	7:01	7:09	7:13	7:20	7:31	7:38	7:41	7:56
8:05	8:13	8:25	8:37	8:49	8:50	9:02	9:10	9:20	9:28	8:05	8:18	8:23	8:28	8:33	8:45	8:50	9:02	9:07	9:12	9:17	9:32	8:05	8:15	8:23	8:30	8:37	8:50	9:01	9:09	9:15	9:23	9:31	9:36	8:05	8:23	8:30	8:40	8:43	8:46	8:50	8:57	9:04	9:24	8:05	8:20	8:24	8:31	8:39	8:43	8:50	9:01	9:08	9:11	9:26

Red 1 and Orange 2 connect with PART Route 4 at timepoints shown in RED. Visit [partnc.org](http://partnc.org) or call 336.883.7278 for details. Orange 2 connects with GoTriangle ODX route and Orange County Public Transit at Mebane Cone Health Park and Ride Lot. Visit [gotriangle.org](http://gotriangle.org) or call 919.485.RIDE or visit [orangecountync.gov/3117/Public-Transit](http://orangecountync.gov/3117/Public-Transit) or call 919.245.2008 for more details.



Bold times indicate PM. Outlined times indicate Saturday hours.



336.222.LINK linktransit.org

# Link • TRANSIT

Passenger Amenities  
August 2024



#127 Lunsford Dr /  
Sharpe Rd



#112 Worth St/  
Downtown Burlington



#138 N Mebane St/  
Walmart



#220 S Main St /  
YMCA





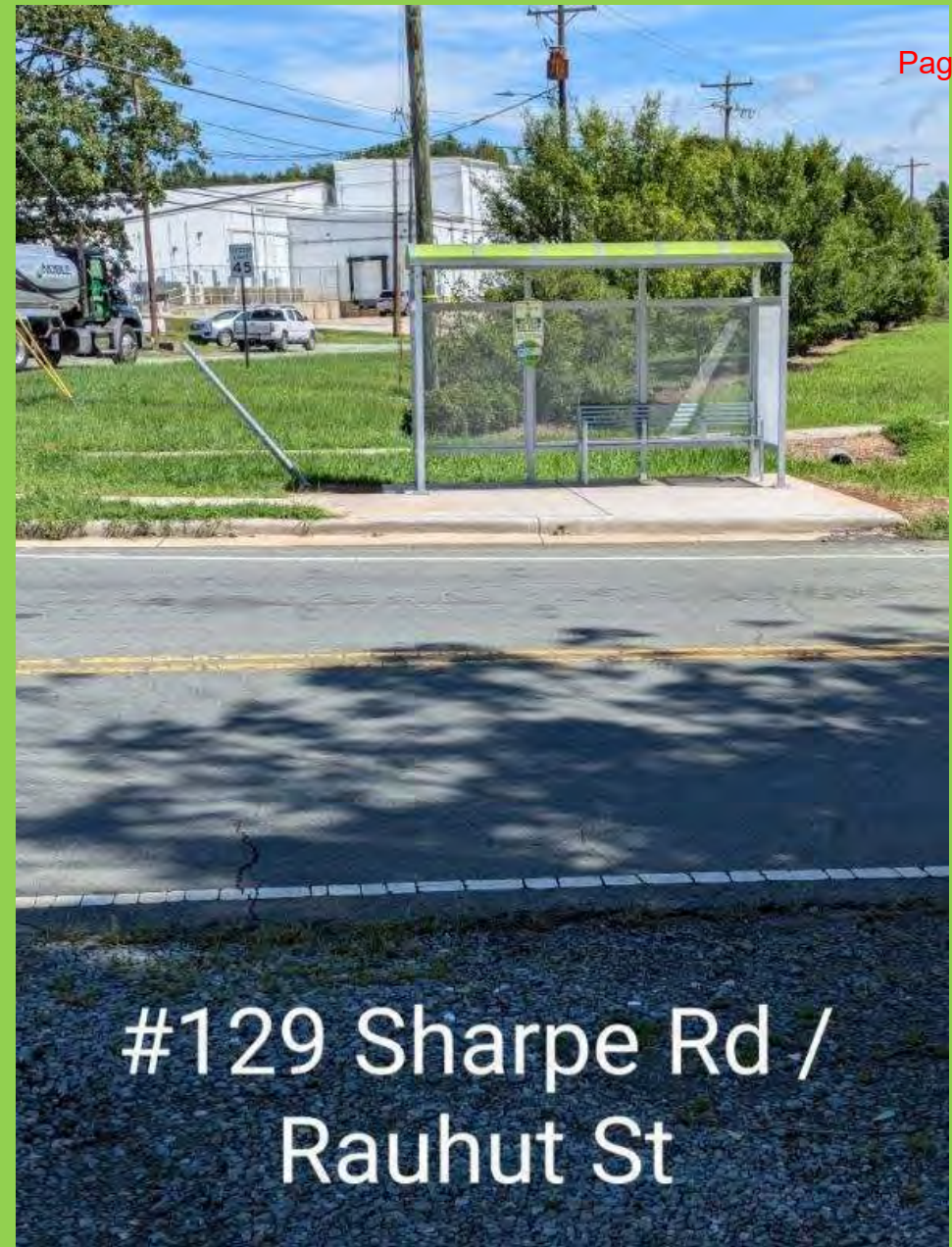
#150 N Main St /  
Amtrak Station



#163 N GraHopedale  
Rd / Health Dept-DSS



#132/#168 Sharpe Rd / N Park Library



#129 Sharpe Rd / Rauhut St



#108 W Davis St /  
Food Lion



#117 W Davis St /  
Food Lion



#211 Burke St /  
Downtown Gibsonville



#194 Garden Rd /  
Walmart



#100 Westmoreland Drive / Rauhut St



#129 Sharpe Rd / Rauhut St



#193 Boone Station  
Dr / Alamance  
Crossing



#224 International St /  
Ann Elizabeth Dr



#302 Hanford Rd / E  
Maple Ave



#172 Chandler Ave /  
Chandler Ct



#395 – Williamson Dr @ Church St



#121 – Elm St @ Spence St



104 Elm St @ Chestnut St





#250 Lily Pads at Elm and Graham Courthouse



#377 Alamance Community College

XXXXXX

**Coming Soon:**

- #255 Lily Pad at Elm and across from Graham Courthouse
- #160/#137: Sellers Mill Road at Church Street
- Tucker Street @ Center Court

# Passenger Amenities Not Owned By City of Burlington

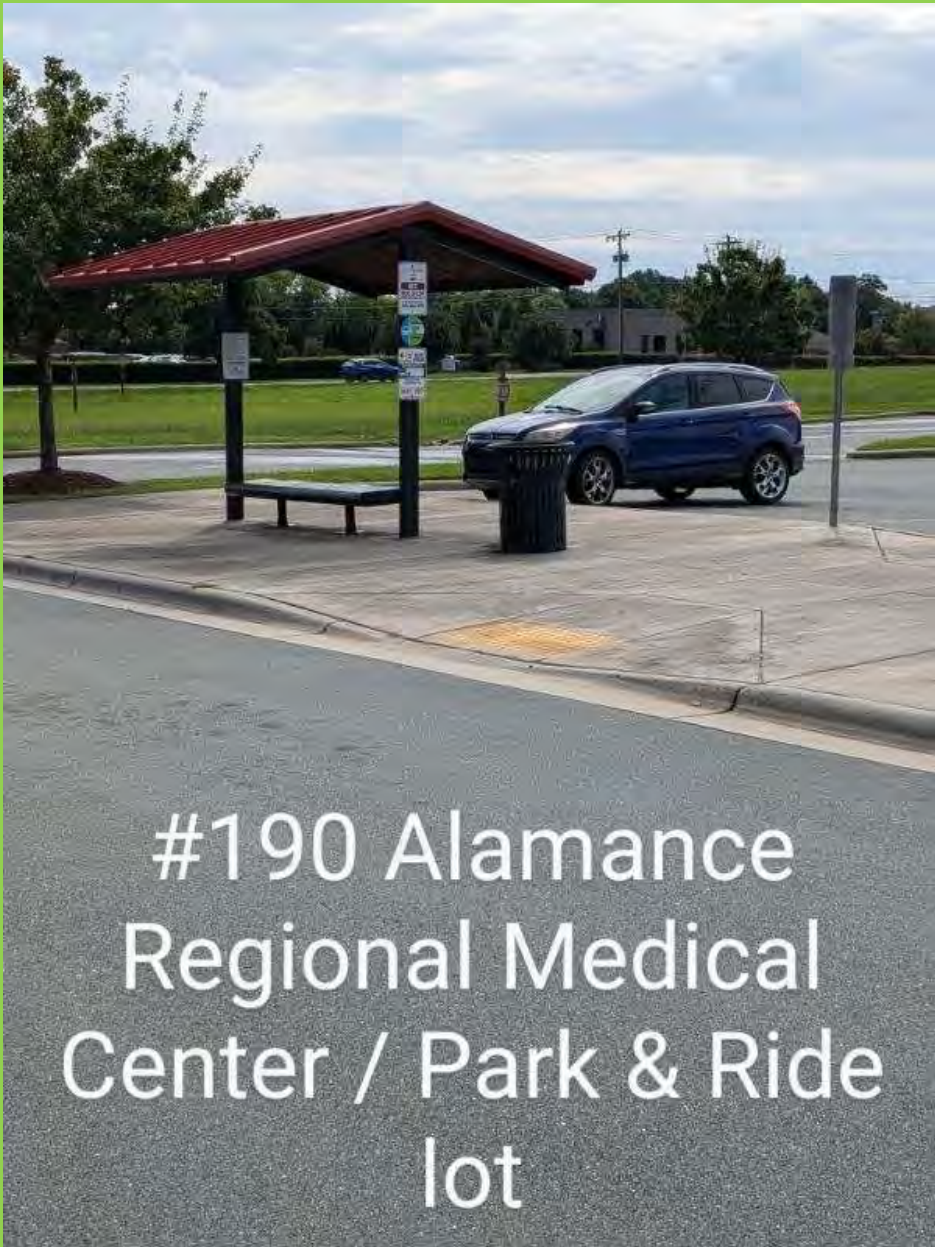
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#248 ACC – Dillingham Campus



#141 Graham Park and Ride





# Free Rides ON Link Transit FOR Election Day

— TUESDAY —  
November 5



**Link** TRANSIT  
ride • enjoy • connect

REVISED

**PUBLIC HEARING NOTICE – Burlington, NC**

**Section 5311 (ADTAP), 5310, ~~Page 23~~ and applicable State funding, or combination thereof.**

This is to inform the public that a public hearing will be held on the proposed FY 2026 Program Application to be submitted to the North Carolina Department of Transportation no later than October 4, 2024. The public hearing will be held during the Tuesday, September 17, 2024, Burlington City Council Meeting beginning at 7:00 p.m.

Those interested in attending the public hearing and needing either auxiliary aids and services under the Americans with Disabilities Act (ADA) or a language translator should contact John Andoh on or before Friday, September 13, 2024 at 5:00 p.m. Eastern Daylight Time, at telephone number (336) 222-7351 or via email at jandoh@burlingtonnc.gov

The requested funding provides assistance to coordinate existing transportation programs operating in **the City limits of Burlington which is a part of the Burlington-Graham Urbanized Area** as well as provides transportation options and services for the communities within this service area. These services are currently provided using light transit vehicles (LTV). Services are rendered by a contracted transit service provider.

The total estimated amount requested for the period **July 1, 2025 to June 30, 2026**.

Project	Total Amount	Local Share
Administrative	\$0.00	\$0.00 (0%)
Operating (5311)	\$0.00	\$0.00 (0%)
Capital (Vehicles & Other)	\$596,888	\$59,689 (10%)
5310 Operating	\$485,256	\$242,648 (20%)
Other Urban Advanced Technology	\$100,000	\$20,000 (20%)
<b>TOTAL PROJECT</b>	<b>\$1,182,144</b>	<b>\$319,337</b>

**Total Funding Request** **\$1,182,144**

**Total Local Share** **\$319,337**

**NOTE: Local share amount is subject to State funding availability.**

This application may be inspected at www.linktransit.org 24 hours a day. Written comments should be directed to John Andoh, Transit Manager @ jandoh@burlingtonnc.gov or by calling (336) 222-7351 before Friday, September 13, 2024 at 5:00 p.m., Eastern Daylight Time.

Beverly D. Smith, NCCMC  
City Clerk

Publication Date: October 31, 2024



Are You  
A Student,  
Employee Or  
Faculty Member  
Of Elon  
University?



If so, your  
ride on Link  
Transit is now FREE  
by showing your ID  
card to the bus  
driver!





# 1. Corporate Overview

Headquartered in San Diego, California, Cubic is proud to be recognized as the world's leading turn-key solution provider of AFC systems for public transportation, including bus, bus rapid transit, light rail, commuter rail, heavy rail, ferry, and parking.

Since 1951, transportation agencies and municipal partners worldwide have relied on Cubic to deploy transportation technologies that enhance the quality of life in cities and towns. Now a global technology and services company, Cubic operates with a local focus, employing over 3,000 dedicated people across North America and in international offices in Canada, Australia, New Zealand, India, the United Kingdom, and Germany.

Cubic delivers integrated payment and transaction processing systems that lead to the creation of safe, reliable, and convenient transportation services. Our payment systems also play a vital role in our customers' marketing strategies because they provide the most visible interface between the rider and the transportation system. Building a dense traveller base is the goal of every transportation agency to help make operations more profitable and to maintain public support for continued expansion and accessibility.



**Figure 1: With over 50 years of demonstrated innovation, Cubic will enable your transit agency to be a next-generation technology leader among peers.**

With a focus on innovation and Research and development (R&D), Cubic strives to ensure its agency partners remain at the forefront of transit management. Every year, through over 400 delivered projects in 40 major markets on five continents:

- Customers make over 8 billion rides worldwide using Cubic payment systems.
- CubicPay processes over 24 billion transactions.
- Cubic collects over \$20 billion in fare revenue on behalf of our agencies.

Cubic’s mission is to improve quality of life by optimizing mobility through the intelligent application of technology. Our team of over 3,000 employees has implemented and supports North America's most extensive full-featured account-based fare programs. You may recognize some of Cubic’s larger implementations, such as Chicago Transit Authority (CTA) Ventra, Bay Area Rapid Transit (BART) Clipper, Transportation for London (TfL) Oyster, and New York MTA OMNY, to name a few. We have successfully partnered with agencies of various sizes to understand their fare collection challenges and to help them overcome these difficulties.



*Figure 2: You can rely on Cubic to deliver services in cohort with the world’s largest transit agencies*

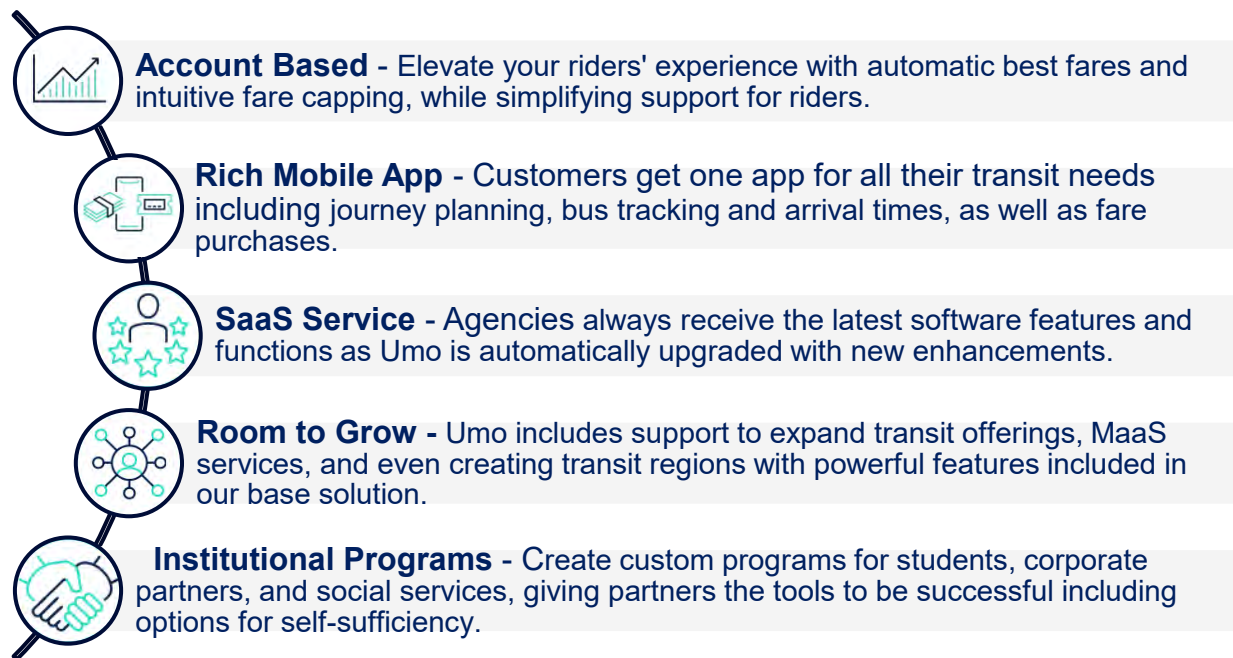
## 1.1. Umo Overview

Leveraging our global experience designing and implementing fare collection solutions for some of the world's largest and most complex transit systems, Cubic designed and developed Umo, a flexible and configurable fare engine.

Since 2016, Umo has been selected by over seventy agencies, making it an industry-leading solution and one of North America's most popular and most implemented account-based fare payment solutions. The Umo solution allows transit agencies to continuously evolve their fare collection systems to meet their communities' fast-changing mobility needs. Umo makes traveling convenient for riders by providing the convenience of contactless transit payments with smart cards, credit/debit cards, and an intuitive mobile application that includes multi-ride tickets and pass products that are securely validated using still and dynamic QR code technology.

Cubic is investing significantly in Umo's continuous evolution by leveraging the company's breadth of technical solutions, industry relationships, and long-term financial stability.

By creating a multi-tenant, cloud-based platform, Cubic makes account-based fare collection available to all agencies, not just those with tens (or even hundreds) of millions of dollars. That means that agencies—can now afford an actual, account-based fare collection employing all popular forms of electronic fare media (contactless smart cards, barcode single-ride tickets, and mobile) and supporting all fare policies (including passes, transfers, and fare capping).



*Figure 3: From Day 1, Umo gives agencies immediate improvements to both agency and rider user experience while giving agencies the tools they need to be successful now and in the future.*

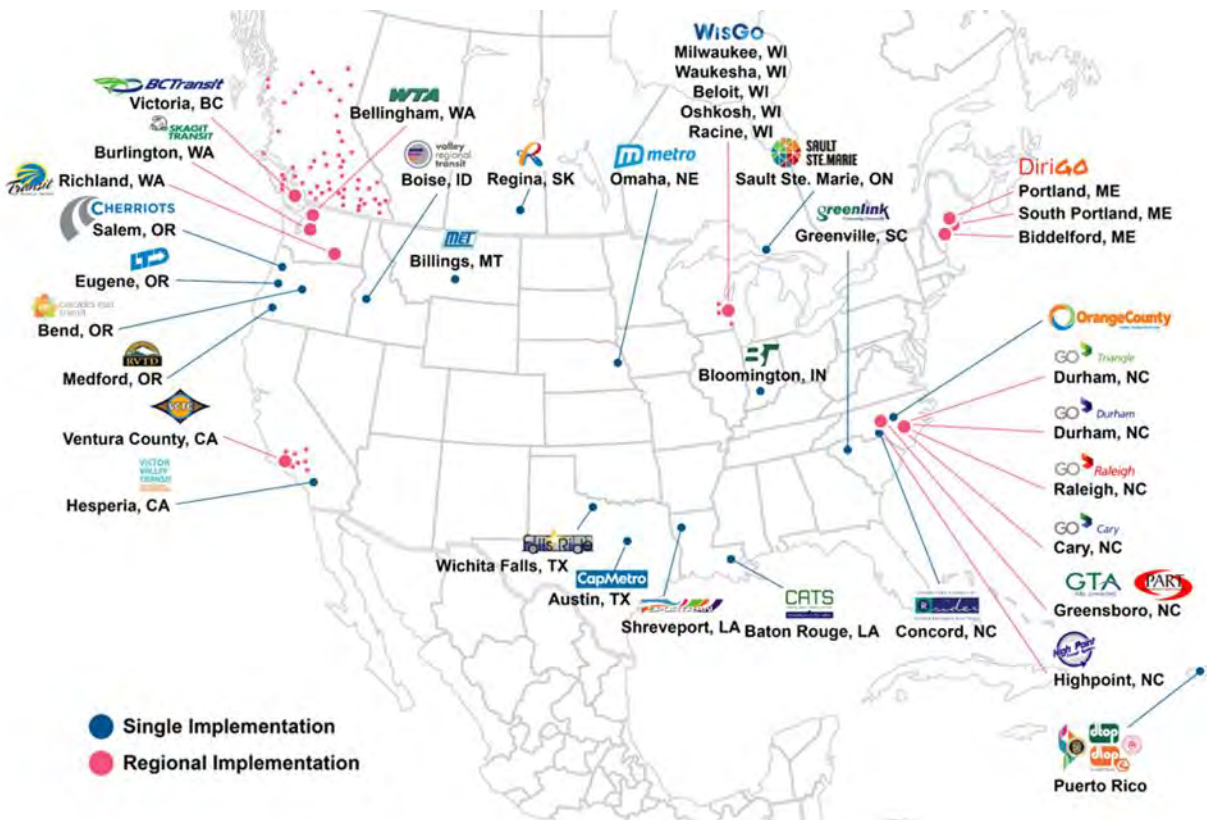


Figure 4: Umo provides transit agencies with a reliable solution: field-proven by over 70 agencies across North America, it is turnkey and can be deployed in as little as ten days.

Across the 70+ North American agencies that use Umo as their automated fare payment solution, all have enhanced their fare collection programs through a wide range of benefits, including:

- ✓ **Reducing Cash Collection.** Cash slows boarding times, requires significant overhead to protect and process, and utilizes expensive equipment to deploy and maintain. Reducing cash improves almost every aspect of an agency’s transit system. Umo’s 60-80% adoption rates have proven to significantly reduce onboard cash payments while preserving equity with offboard cash digitization solutions. The powerful combination of adoption and offboard cash acceptance has allowed a few Umo agencies to go completely cashless on their fleets.
- ✓ **Driving Engagement.** Engaging transit often comes with tiny bits of friction – “Can I get there?” “Where’s the bus?” and “How will I pay?” are questions that can give users pause. Umo offers riders a modern mobile app to answer all those questions, supported by expanded payment options, including credit and debit cards, transit cards, and temporary paper passes. It also rewards account holders with automatic benefits like fare capping. In sum, Umo grows ridership with a proven combination that improves transit for existing riders and entices new riders to try transit.
- ✓ **Receiving Rich Analytical Data.** Making informed policy decisions requires rich data. Umo’s data includes real-time sales and boarding data correlated by route and stop. The data is

accessible to agency users via at-a-glance Key Performance Indicators (KPIs) on the dashboard, standard report templates for frequently requested data, and a fully customizable drag-and-drop report builder to get deep, precise insights into transit operations. Our boarding data by route and stop is fully automated, combining our GPS coordinates with the GTFS data feeds from the CAD/AVL solution to create route and stop-level metrics.

- ✓ **Making Instant Changes.** Agencies can easily update fare policies or business rules using Umo. Ongoing support by Umo Implementation & Customer Solutions Partners (Partners) is included with the subscription, meaning your Partner will update policies at no charge. Agencies will have access to our complete back office, including a robust fare policy and fare product catalog. Any changes needed can be made in real time and become effective immediately across the system or scheduled in advance.

## 2. Umo Solution

### 2.1. ScanRide: “Bring Your Own Validator” for Your Riders

Umo’s ScanRide feature provides agencies with all the benefits of automated validation without hardware validators. A disruptive concept, ScanRide turns validation on its head - the customer’s phone becomes the validator, requiring the agency to deploy only a unique QR code decal on each bus for customers to scan. The result is an innovative electronic validation solution that allows agencies to collect valuable real-time data, such as boardings and their correlation to routes and stops, without the added cost and complexity associated with hardware validators.

As Umo’s newest account-based automatic fare collection (AFC) feature, ScanRide requires no onboard hardware while preserving the benefits of AFC for all participants. Agencies can offer their riders stored value, fare capping, automatic best fares, remote and real-time support – everything associated with modern account-based solutions – without validation hardware or any limitations associated with typical visual validation solutions.

Umo’s ScanRide feature leverages the rider’s phone as the validation device using an industry-proven QR code payment schema widely deployed in South American, Asian, and European markets. With ScanRide, every vehicle receives a unique Umo-supplied QR code that identifies it in the back office. Customers use the Umo App to scan the QR code and validate their fare when boarding. It’s simple, effective, and field-proven. Most importantly, it preserves the benefits of an account-based automated fare collection solution for every stakeholder. As a unique benefit, agencies have the same real-time data-rich dashboards as conventional validator-equipped Umo cities. Additionally, the environmental impacts of leveraging paper tickets as the primary form of validation would be significantly reduced.

Through ScanRide, fare payments are made by the rider and enforced by the back office. Operators keep their distance – never handling a customer’s phone or squinting to read the details of a pass. Operators do not need to verify credentials for special fare classes; they can trust the system to enforce all fare classes automatically. As riders board the bus, the only responsibility of operators is to either visually recognize the approved boarding screen or the unique tone emitted by the phone to determine whether a rider is authorized to board.

Most importantly, agencies will attain all the benefits of a complete account-based AFC solution without the capital costs associated with hardware or installation. Riders benefit from a rich transit experience, while agencies benefit from real-time sales and ridership data and the ability to execute changes in real-time – create passes, change fares, support customers, and issue ridership credits, etc. – and know Umo’s centrally managed solution implements them immediately.

**How it Works: Umo App with Visual Validation:** The agency will place a QR code near the bus entrance. The QR code is unique to the bus and acts as an identifier to the back office. Riders boarding the bus would open the mobile app, select “Scan,” and use the app to scan the QR code. The system automatically calculates the correct fare or valid pass types based on the bus, checks the rider’s account for stored value or passes, applies the best fare (fare capping, passes, and finally stored value), and returns the result as a validation message (approved, denied, etc.) both shown on the screen and played via an audible tone for the operator. The rider is then cleared to board. In the back office, Umo automatically combines the rider’s location (GPS coordinates required by the Umo App) and the agency’s GTFS feed to record the boarding and fare payment by route and stop. The result is that even with visual validation, riders enjoy benefits like fare capping and best fares while equipping agencies with rich real-time informative data on transit utilization, revenue, and ridership.

A video further outlining ScanRide’s capabilities and customer experience can be found [here: Click Here.](#)



Figure 5: Riders use the Umo App to scan a QR code on the bus or station platform.

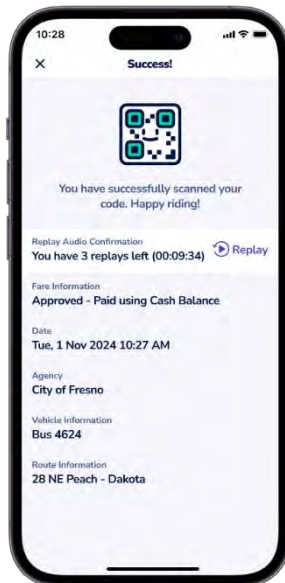


Figure 6: A rider can show “proof of purchase” for operators to visually/audibly validate that a rider has paid their fare.

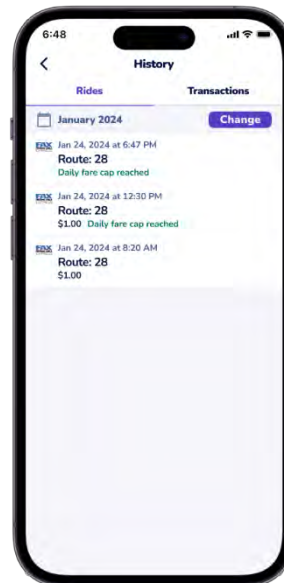


Figure 7: Riders get access to the full benefits of the Umo Mobility Platform – including fare capping.

## 2.2. Hardware (Optional)

### 2.2.1. Handheld Units

A cost-effective alternative to conventional validators, Umo’s compatible handheld units (HHU) pair seamlessly with Umo’s ScanRide solution while eliminating any associated installation fees. The HHU can be used for both inspection or validation allowing for riders to leverage Link Transit branded transit cards. The HHU is self-contained, using cellular networks for data connectivity, built-in GPS for location data, and battery power for wireless operation. It is perfect for smaller fleet vehicles and paratransit where flexibility is key. As a self-contained solution, it can also be used as a handheld fare inspection solution. The validator features a full-color, high-visibility touch screen and supports optical scanning for the rider’s mobile app or paper ticket, as well as RFID support to directly scan transit cards.



Figure 8: HHU

### 2.2.2. Transit Cards

Umo can supply Link Transit with contactless smart cards that allow passengers to board simply by tapping the card on the HHU. It uses RFID for secure and nearly instant read capability to expedite passenger boarding. Cards are encoded with a secure identification number that links it to the passenger account. This card is ISO/IEC 14443 compliant and uses the Advanced Encryption Standard to enable secure and reliable authentication of cards and readers.

In collaboration with Link Transit, the Umo program and marketing teams will work to customize the design of card during the implementation process. This process ensures that the card design adheres to the preferred branding guidelines sample Transit Cards that have been designed to adhere to specific guidelines are outlined below.

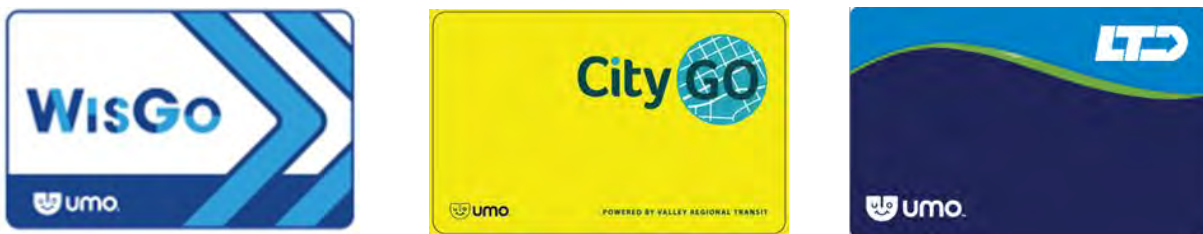


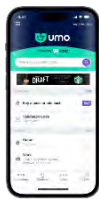
Figure 9: Example Umo Smartcards

### 3. What's Included in Your Umo Subscription

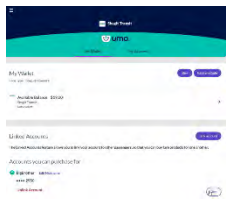
Cubic understands that riders, agency personnel, and retailers/partners play different roles in the transit equation. The success of public transit requires each participant to execute their role quickly and efficiently. Umo has created unique experiences for each. These are all included in the subscription to Umo, which forms the basis of our offering.

The Umo solution proposed is comprised of four components:

1. The mobile app (**Umo App**) provides riders with convenient access from their phones.
2. **Passenger Portal** for passengers who prefer a web-based experience.
3. The **Administration Portal** for agencies to supervise the system.
4. The **Merchant Portal** for retailers and partners to sell fares and support customers.



With the **Umo App**, riders can quickly board the bus using their purchased fares. Within the app, riders tap their “wallet” button to generate a QR code, which they scan at the validator. The QR code is a dynamic rolling code that protects the agency from fare evasion potential when users can screen-shot and share static images or QR codes.



The **Passenger Portal** is a web-accessible interface that riders can use to purchase fares and passes, check their account history, and maintain their transit accounts. Cubic strives to improve accessibility, and we created this portal to provide service for users who may not have smartphones or may be uncomfortable using them. Riders using the Passenger Portal can perform common account functions.



The **Administrative Portal** is an interface for Umo's detailed reporting and configuration management. This browser-based back-office solution enables authorized agency personnel to create, view, and manage records and reports for passenger accounts, vehicles, operators, and hardware devices. The portal also provides a dashboard with real-time performance metrics and enables common customer service and account management functions.



The **Merchant Portal** allows customer service team members to easily manage Umo accounts on behalf of riders. Additionally, agencies can use the Merchant Portal to appoint their retail partners. For example, some customers utilize the Merchant Portal to extend rider services into other local government locations, such as libraries or senior centers.

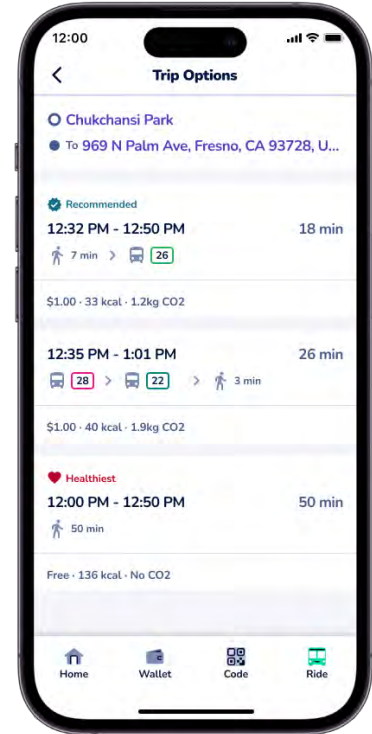


## 4. Trip Planning (Optional)

As an optional addition, the Umo App can provide door-to-door trip planning akin to a web mapping platform experience for the novice user. It will geolocate the user (or they can enter a starting address) and ask for the destination, which can be an address or, simpler yet, a landmark. The app will generate an end-to-end trip plan, including locating the nearest public transit locations. It guides the user at every trip step - how to get to the correct bus stop, which bus to catch, how far to ride, and how to complete the journey when walking, biking, or ride sharing is required. It becomes a trusted solution for anyone navigating the community and incorporates multiple forms of transit to achieve the best outcome for the rider.

Veteran riders commonly use the app in an entirely different way. They often already know where they are going and how they intend to get there; they want insights into vehicle location and timing, hoping they don't miss their bus or wait unnecessarily. The Umo App is perfect for these users, too. Veteran riders can create favorite routes and stops, receive real-time data on bus arrivals, and check schedules. Seamlessly integrated with provided GTFS data, the app includes detailed information invaluable to riders seeking both a practical and expeditious solution.

The app can also highlight and simplify engaging local alternative transit options like bike and scooter share services. Agencies can add custom links from the home page to those services to increase awareness and engagement. To deliver riders with tailored results, the Umo App allows riders to customize their experience through defaulted selections such as preferred modes of transit, turn walking or biking on/off, and schedule future trips.



*Figure 11: The Trip Options screen makes it easy for the rider to make healthier and eco-friendly choices.*

## **List of Activities for July and August and September**

Check list of call outs for Operators, Supervisors, Maintenance.

Check emails for quick items to respond to.

Count and prepare Money to be taken to bank and make sure deposits are correct.

Safety Messages are going over every week with Operators, Supervisors.

Speaking with current staff, operators, supervisors, maintenance on daily activities for them.

Also trying to improve positive attitude with certain staff.

When short on phone coverage for office answer phones to help passengers with route schedules and help scheduling paratransit passengers.

Going down to hub to speak with operators and passengers on any issues.

Checking on routing issues when needed.

Going out to buses when passengers and operators have disagreements. Speaking with both and sometimes moving client myself.

Working with FSCMA, and DOT of NC to become 3<sup>rd</sup> party testers. Slow moving results.

Classroom training for new hires. This includes the Human Traffic training.

Prepare daily, weekly and monthly reports for Client.

Prepare monthly reports for Transdev.

By weekly payroll audits.

Weekly calls with Client and Transdev.

Working with GMV, Safe Fleet on tech issues that come up.

Customer Complaints and outcomes.

Riding routes to check on time performance.

Riding routes to check tablet connection for Comms.

Coming in to work on Saturdays to catch up and speak with weekend operators and supervisors.

Help in maintenance when needed drive the bus to location or extra set of hands in shop.

Working with newer Maintenance Manager on issues he needs help with in and out of the shop.

Both spent time cleaning vehicles until we could come up with a plan to find the right cleaners for our system.

Working with Supervisors to ensure coverage of all routes for fixed and Paratransit.

Working with new supervisor on how to be a road transit supervisor.

Paratransit has grown a lot this summer we have added 29 new riders to the system.

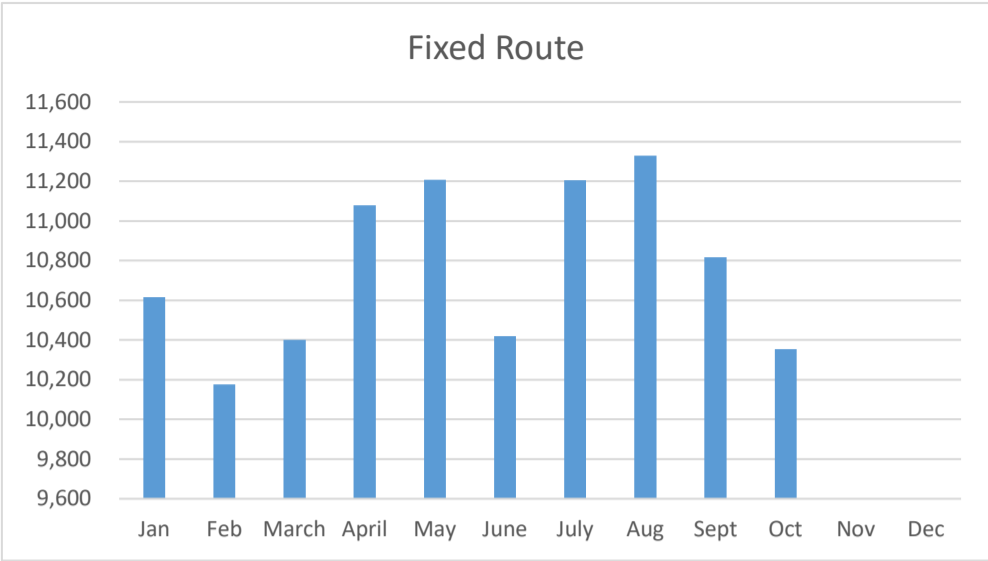
We have also added Medicaid MTM riders to our system. These riders are put in manually for the time being.

We have added more service in Mebane going out to the Cone Health care system.

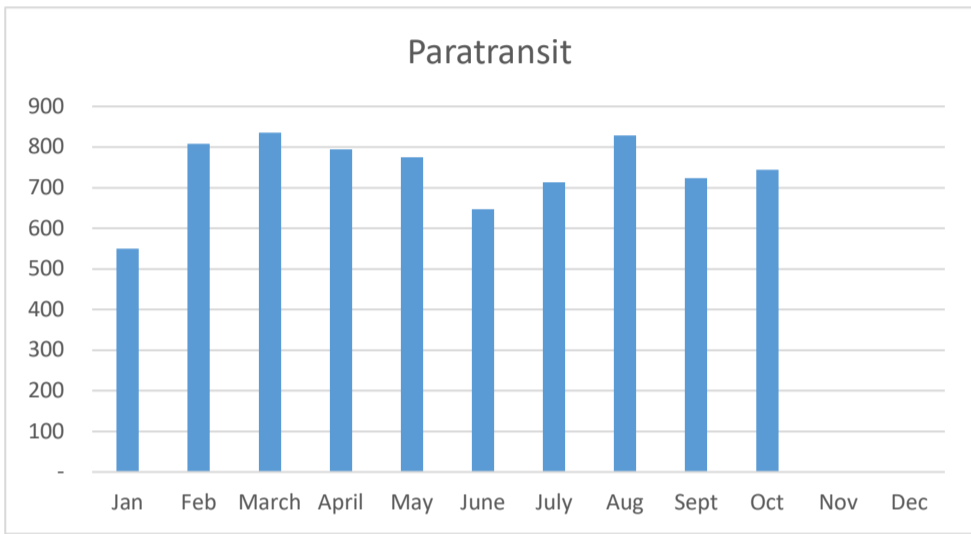
We have also added a new operations Manager to our transit family, please welcome Roger Renfrow.

Roger is from Arizona. He has worked for Transdev for 3 years. He will be a great addition to the staff.

FR 2024	TOTAL
Jan	10,616
Feb	10,177
March	10,400
April	11,080
May	11,208
June	10,420
July	11,206
Aug	11,329
Sept	10,817
Oct	10,354
Nov	
Dec	
<b>TOTAL</b>	<b>107,607</b>



PARA 2024	TOTAL
Jan	550
Feb	808
March	835
April	794
May	775
June	647
July	713
Aug	828
Sept	723
Oct	744
Nov	
Dec	
<b>TOTAL</b>	<b>7,417</b>



FY 16		LINK TRANSIT FIXED ROUTE	2016	2017	2018	2019	2020	2021	2022	2023	2024
FY 16	9,377										
FY 17	79,498	January		6,643	5,992	8,285	7,027	4,243	6,807	14,896	10,616
FY 18	85,703	February		6,410	7,067	8,011	6,609	3,449	7,761	13,499	10,177
FY 19	104,551	March		6,528	6,343	7,809	6,315	4,605	9,792	13,641	10,400
FY 20	88,052	April		6,065	6,440	10,223	3,273	3,880	9,615	12,268	11,080
FY 21	50,093	May		6,734	7,105	12,476	5,150	4,669	10,153	13,334	11,208
FY 22	125,437	June	9,377	8,461	7,790	9,964	3,967	3,818	11,924	12,450	10,420
FY 23	164,846	July	5,145	6,833	7,869	9,484	3,958	4,660	12,587	12,290	11,206
FY 24	148,600	August	7,779	7,746	8,122	10,831	3,957	7,394	14,439	13,943	11,329
FY 25	43,706	September	5,961	7,854	7,352	7,678	5,033	7,294	14,269	13,651	10,817
		October	6,743	8,107	9,809	10,178	4,071	8,983	14,868	16,283	10,354
		November	6,479	7,661	8,523	8,891	4,021	8,563	14,394	15,579	
		December	6,550	6,765	6,108	8,649	4,389	8,455	14,201	12,953	
		<b>TOTAL</b>	<b>48,034</b>	<b>85,807</b>	<b>88,520</b>	<b>112,479</b>	<b>57,770</b>	<b>70,013</b>	<b>140,810</b>	<b>164,787</b>	<b>107,607</b>

FY 16		LINK PARATRANSIT	2016	2017	2018	2019	2020	2021	2022	2023	2024
FY 16	66										
FY 17	2,403	January		200	285	485	498	368	400	596	550
FY 18	4,366	February		185	393	382	521	384	459	431	808
FY 19	4,649	March		246	414	425	439	492	528	692	835
FY 20	4,443	April		209	385	423	239	453	471	578	794
FY 21	4,741	May		235	464	438	237	414	534	619	775
FY 22	5,935	June	66	228	428	394	329	505	547	606	647
FY 23	7,077	July	110	255	379	422	277	440	460	584	713
FY 24	8,782	August	147	281	432	461	328	467	501	853	828
FY 25	3,008	September	183	410	381	440	480	497	625	746	723
		October	204	483	497	546	461	498	593	745	744
		November	229	407	519	496	366	513	640	747	
		December	172	322	336	458	418	450	612	698	
		<b>TOTAL</b>	<b>1,111</b>	<b>3,461</b>	<b>4,913</b>	<b>5,370</b>	<b>4,593</b>	<b>5,481</b>	<b>6,370</b>	<b>7,895</b>	<b>7,417</b>

Systemwide Total	49,145	89,268	93,433	117,849	62,363	75,494	147,180	172,682	115,024
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