JOINT MEETING

ALBEMARLE COUNTY BOARD OF SUPERVISORS / CHARLOTTESVILLE CITY COUNCIL TUESDAY, SEPTEMBER 17, 2024 at 6:00 P.M.

County Administration Building, 401 McIntire Road, Charlottesville, VA ROOM 241

AGENDA

- 1. Call to Order.
- 2. Welcome and Introductions.
- 3. Review and Discuss:
 - a. City of Charlottesville Use of Revenue Sharing Report.
 - b. Albemarle County and City of Charlottesville Partnership List. (Sam Sanders, City Manager/ Jeff Richardson, County Executive)

6:30 p.m.

4. Land Use and Environmental Planning Committee (LUEPC) Report. (Alice Raucher, University Architect, University of Virginia)

7:00 p.m.

5. Regional Transit Authority Update. (Ann Wall, Deputy County Executive/ Ben Chambers, Transit Planning Manager, City of Charlottesville)

7:30 p.m.

6. Champaign-Urbana, Illinois Mass Transit District Site Visit. (Garland Williams, Transit Director, Charlottesville Area Transit (CAT))

7:40 p.m.

- Board to Board Discussion.
- 8. Adjournment of both bodies.

CITY OF CHARLOTTESVILLE

"To be One Community Filled with Opportunity"

Office of The City Manager

Post Office Box 911 Charlottesville, Virginia 22902 Telephone 434-970-3101 Fax 434-970-3890 www.charlottesville.gov



August 23, 2024

Mr. Jeff Richardson County Executive Albemarle County 401 McIntire Rd. Suite228 Charlottesville, VA 22902-4579

Dear County Executive Richardson:

Enclosed is the City of Charlottesville's report on the use of revenue sharing pursuant to The County of Albemarle and City of Charlottesville Annexation and Revenue Sharing Agreement in accordance with Virginia Code 15.2-1301.

As previously indicated, city staff produces this annual report in August, following the close of the prior fiscal year. Should there be any questions, feel free to reach out to me at your convenience.

Sincerely,

Samuel Sanders, Jr.

City Manager

Samuel Sanden fr.

cc: Jacob Sumner, County of Albemarle Andy Bowman, County of Albemarle

Krisy Hammill, City of Charlottesville

City of Charlottesville/Albemarle County Regional Services, Programs and Initiatives FY 2024

Revenue Sharing Amount <u>FY 2024</u>

<u>City Allocations</u> General Operating Budget Capital Projects Total

\$7,851,349 \$7,864,391 \$15,715,740

Service/Program (Operating Budgets)	Notes
Shared Park Darden Towe	Represents the City's share of the operational costs for Darden Towe Park
Regional recreation programs	Represents the costs of the Therapeutic Recreation program for which the County is a partner and contributed \$90,000 in FY 2024.
Charlottesville Area Transit System and JAUNT	Represents the City's share of the operations for Charlottesville Area Transit (CAT) and Jaunt
Regional educational programs	Represents the City's share of the operations for the Jefferson/Madison Regional Library
Regional services for children, youth and families	Represents the City's contribution to regional organizations funded by, and serving, both the City and County that provide services to children, youth and families, such as United Way, JABA, Region 10, Health Department, Free Clinic, Community Attention, etc.
Regional courts and court support services	Represents joint funding of the Juvenile and Domestic Relations Court and the City's portion of the Magistrate's budget.
Regional public safety facilities and public safety agencies	Represents the City's contribution to regional public safety facilities, the Regional Jail and Juvenile Detention Center, and the City's contribution to regional public safety organizations funded by, and serving, both the City and County, such as ECC, SPCA, Public Defender and Legal Aid.
Regional housing and employment programs	Represents the City's contribution to regional organizations funded by, and serving, both the City and County that provide housing and employment services, such as AHIP, PHA, TJPDC, Chamber of Commerce and TJPDC Workforce Center.
Ivy Landfill Remediation/McIntire Recycling Center	City share of the cost of landfill remediation and McIntire Recycling Center, when City has comprehensive curbside recycling program. Costs shown are the budget for the quarterly payments to Rivanna.

Capital Investments	Notes Notes
Parks and Recreation	Projected costs include the City's share of improvements at the City/County
	joint parks - Ivy Creek and Darden Towe Park.
Public Safety	Projects include the City's portion of the General District Court facility.
Jointly owned or regional facilities	Projects include the City's portion of the RWSA Baler and Baler Facility and
	for renovations of the Jefferson-Madison Regional Library
Other Transportation	Projects costs represent the City's match for State and Federal funding for
	the replacement of Charlottesville Area Transit buses





Albemarle County & City of Charlottesville Partnerships List

September 17, 2024

HUMAN SERVICE PROJECTS

Community Safety Working Group & Community Safety Implementation Group

These working groups were formed by City Manager Sam Sanders, County Executive Jeff Richardson and UVA President Jim Ryan to review data on regional gun violence and make recommendations to improve community safety.

Staff involved:

Misty Graves – Director of Human Services, Charlottesville Michael Kochis – Police Chief, Charlottesville Kaki Dimock – Chief Human Services Officer, Albemarle Sean Reeves – Police Chief, Albemarle

Regional Opioid Abatement Authority Grants

Albemarle County and City of Charlottesville have collaborated with regional partners to secure funding from the Virginia Opioid Abatement Authority including:

- Funding for the Crisis Intervention Training & Assessment Center (CITAC) with the county serving as fiscal agent
- Funding for the Community Outreach team with the county serving as fiscal agent
- Funding for the capacity-building for drug courts with the city serving as fiscal agent.

Staff involved;

Ashley Reynolds Marshall – Deputy City Manager for Social Equity, Charlottesville Kaki Dimock – Chief Human Services Officer, Albemarle

Field Trip to Harrisonburg Homelessness Receiving Center

City & county staff visited Harrisonburg Rockingham County's new homelessness receiving center, which features low-barrier day and overnight services in a purpose-built location, representing a public-private collaboration.

Staff involved:

Ashley Reynolds Marshall – Deputy City Manager for Social Equity, Charlottesville Misty Graves –Director of Human Services, Charlottesville Kaki Dimock – Chief Human Services Officer, Albemarle

Alternative Response Teams

Albemarle County HART team members have worked closely with the new Charlottesville ANCHOR team to share lessons learned and plan for strong ongoing communication and collaboration.

Staff involved:

Ashley Reynolds Marshall – Deputy City Manager for Social Equity, Charlottesville Misty Graves –Director of Human Services, Charlottesville Kaki Dimock – Chief Human Services Officer, Albemarle

PUBLIC SAFETY PROJECTS ACPD/CPD/UVA Regional COMPSTAT

The Albemarle County Police Department continues to collaborate with regional law enforcement partners to discuss community safety and crime trends monthly.

Staff involved:

Sean Reeves- Police Chief, Albemarle County
Michael Kochis- Police Chief, Charlottesville
Tim Longo- Police Chief, UVA
VSP, FBI, U.S. and Commonwealth's Attorney from Albemarle and Charlottesville

ACPD/CPD/UVA Mutual Aid Agreements

Assessment of existing mutual aid agreements to ensure that they are up to date with state and federal laws and reflect the current policies and practices of participating jurisdictions.

Staff involved:

Trevor Henry, Deputy County Executive, Albemarle County Sean Reeves- Police Chief, Albemarle County Michael Kochis- Police Chief, Charlottesville Tim Longo- Police Chief, UVA

ACFR/CFD Mutual Aid Agreement

A Board/Council approved cooperative effort to provide mutual emergency assistance, including firefighting and medical services. Both parties agree to offer support when requested, if resources are available, with no obligation to respond if they are otherwise engaged. The agreement protects both parties from liability and ensures each is responsible for its own personnel and expenses. Regular reviews will assess the fairness of aid distribution, with provisions for amendments as needed.

Staff involved:

Dan Eggleston –Fire Rescue Chief, Albemarle Michael Thomas – Fire Chief, Charlottesville

Regional Emergency Management Cooperation

The cooperative arrangement between Albemarle County, Charlottesville, UVA, and ECC emergency management staff focuses on developing common plans, procedures, and enhancing communication to address emergency management issues more effectively. This collaboration is designed to improve coordination during incidents, reduce response times, and enhance overall public safety across the region.

Staff involved:

John Oprandy – Emergency Manager. Albemarle Jeremy Evans – Emergency Manager, Charlottesville John DeSilva - Emergency Manager, UVA Sonny Saxton – ECC Director

LAND USE & MANAGEMENT PROJECTS

Biscuit Run Stream Restoration

Albemarle staff are managing a capital project to restore 6,674 feet of Biscuit Run and two tributaries in the new County park. The project received a grant from the Virginia Stormwater Local Assistance Fund, administered by the Department of Environmental Quality. Albemarle and Charlottesville are splitting the remaining cost of the project and sharing entitlement to the pollution reductions resulting from the project, which will be used by each locality to meet its Virginia mandate to contribute toward the cleanup of Chesapeake Bay.

Staff involved:

Greg Harper – Chief of Environmental Services, Albemarle Lauren Hildebrand – Director, Utilities, Charlottesville Dan Frisbe – Water Resources Specialist, Charlottesville

Albemarle/Charlottesville General District Court

On December 17th, 2018, Albemarle and Charlottesville entered into an agreement to construct a co-located General District Court facility, located on a Downtown Charlottesville site purchased by our agencies in 2004. Albemarle is responsible for coordinating the design and construction of the new facility and renovating the attached Levy Building, which will house the Albemarle Commonwealth's Attorney. Charlottesville's General District Court will relocate to the new building once the second phase of the County's courts improvements are complete. Albemarle will be responsible for management of the new facility.

Staff involved:

Steven Hicks, Director of Public Works, Charlottesville Michael Goddard, Deputy Director of Public Works, Charlottesville

Kristel Riddervold – Director, Office of Sustainability, Charlottesville Lance Stewart – Director of Facilities & Environmental Services, Albemarle

Resilient Together

Resilient Together is a collaborative planning and implementation process led by Albemarle County, the City of Charlottesville, and UVA, designed to ensure our community is strong, safe, and healthy – or resilient – in the face of a changing climate.

Staff involved:

Gabe Daley – Climate Protection Program Manager, Albemarle Greg Harper – Chief of Environmental Services, Albemarle Kristel Riddervold – Director, Office of Sustainability, Charlottesville Emily Irvine, Climate Protection Manager, Charlottesville

Sugar Hollow Reservoir Access Management

Sugar Hollow Reservoir (Sugar Hollow) is a 47-acre water supply reservoir serving residents of Charlottesville and residents. The reservoir, located at the confluence of the South Fork and North Fork of the Moormans River, is owned by the City of Charlottesville. The Rivanna Water & Sewer Authority manages the dam and reservoir but is not responsible for managing access to the property by the general public. With support from Charlottesville and RWSA, Albemarle applied for and received a \$1.35 million grant from the federal government's Federal Lands Access Program (FLAP) to fund improvements to the property.

Staff involved:

Lance Stewart – Director of Facilities & Environmental Services, Albemarle Riaan Anthony, Director, Parks & Recreation, Charlottesville Chris Gensic – Planner, Parks & Recreation, Charlottesville

Management of Co-Owned Properties

Charlottesville and Albemarle co-own several properties which benefit the larger community, including:

- Juvenile Court and its annexes (Albemarle Sheriff's offices, parking deck, Preston-Moris Building, Wheeler Building)
- Levy Building (directly connected to the new General District Court)
- Jessup Building (adjacent to the General District Court)
- Central Library and Gordon Avenue Library
- Health Department
- 7th Street Parking Lot

With the exception of the new General District Court/Levy properties, Charlottesville's Department of Public Works coordinates maintenance and capital improvements of all co-

owned properties, with financial and planning support from Albemarle's Facilities & Environmental Services Department.

Staff involved:

Steven Hicks, Director of Public Works, Charlottesville Lance Stewart – Director of Facilities & Environmental Services, Albemarle

Rivanna Stormwater Education Partnership (RSEP)

Since 2004, Charlottesville and Albemarle have collaborated with other local organizations that are regulated under the Virginia MS4 (municipal separate storm sewer system)

Program. The Partnership is dedicated to helping its members collectively achieve the MS4 permit requirements related to education, outreach, and public participation.

Staff involved:

Laurel Williamson – Watershed Stewardship Manager, Albemarle Lauren Hildebrand – Director, Utilities, Charlottesville Dan Frisbe – Water Resources Specialist, Charlottesville Jill Greiner – Water Efficiency Coordinator, Office of Sustainability, Charlottesville

Land Use and Environmental Planning Committee

Staff from the City, the County, and UVA participate in monthly conversations around themes of mutual interest such as land use planning and sustainability. Also at the table are representatives from the Thomas Jefferson Planning District Commission (TJPDC), the Rivanna Water and Sewer Authority, and the UVA Foundation. On a quarterly basis, the Virginia Department of Transportation (VDOT) also attends.

Staff involved:

Lance Stewart - Director, Facilities and Environmental Services
Jodie Filardo - Director, Community Development
James Freas – Deputy City Manager for Operations, Charlottesville
Lauren Hildebrand – Director, Utilities, Charlottesville
Steven Hicks – Director, Public Works, Charlottesville
Kellie Brown – Director, Neighborhood Development Services – Charlottesville

Darden Towe Park

Albemarle County and the City of Charlottesville jointly own Darden Towe Park which is a 113-acre park and share the annual operating and Capital Improvement expenditures, with the County serving as the fiscal agent. City Share 30.75%, County Share - 69.25% of FY 25 Operating Budget \$563,710.

Current Capital Projects:

CIP Towe Park Pickleball Restroom

- CIP Towe Park ADA Restroom by Pavilion
- CIP Towe Park paved path from Park Entrance to Pickleball Courts
- CIP Towe Park shelter, and concession stand restroom upgrades
- CIP Towe Park Field Rebuild is a phased rebuilding of the existing grass athletic fields over a four-year period, that consists of the installation of a new subgrade drainage system and associated stormwater management.

Staff Involved:

Bob Crickenberger – Director, Parks and Recreation
Amy Smith – Deputy - Director, Parks and Recreation
Riaan Anthony - Director, Parks and Recreation – Charlottesville
Lauren Hildebrand, Director, Utilities - Charlottesville
Steven Hicks, Director, Public Works – Charlottesville
James Freas, Deputy City Manager for Operations – Charlottesville
Kellie Brown, Director, Neighborhood Development Services – Charlottesville

Ivy Creek Natural Area and Historic River View Farm

Albemarle County and the City of Charlottesville jointly own the Ivy Creek Natural Area and Historic River View Farm sharing the annual operating and Capital Improvement expenditures, with the County serving as the fiscal agent.

City Share 50%, County Share 50% of FY 25 Operating Budget \$23,700.

Staff Involved:

Bob Crickenberger – Director, Parks and Recreation Amy Smith- Deputy Director, Parks and Recreation Riaan Anthony– Director, Parks and Recreation - Charlottesville

Partner programs/events

- Adaptive Recreation Program
- Xmas tree recycling
- Rivanna Conservation Alliance River Resilience grant for Invasive Species Removal at Darden Towe, Riverview Park, Pen Park
- Special Events: Egg Hunt

Staff Involved:

Bob Crickenberger – Director, Parks and Recreation

Amy Smith - Deputy Director, Parks and Recreation

Caitlin Marcotte – Operations Specialist/Adaptive Manager – Charlottesville

Steve Gains – Urban Forester, Parks & Recreation – Charlottesville

Jonathan Dean – Public Service Manager, Public Works – Charlottesville

Chris Gensic – Planner, Parks & Recreation - Charlottesville

Courtney Ambros – Recreation Program Manager, Parks & Recreation - Charlottesville

TRANSPORTATION PROJECTS

Transportation Planning

Albemarle County staff and Charlottesville staff participate on several transportation planning boards and committees, attending meetings with VDOT, TJPDC, the Charlottesville-Albemarle Municipal Planning Organization, and project-specific teams including the Three Notch'd Trail RAISE grant project, the Move Safely Blue Ridge project, and the Barracks Road and Ivy Road Pipeline projects.

Staff involved:

Lance Stewart - Director, Facilities and Environmental Services

Blake Abplanalp - Chief, Facilities Planning & Construction

Jodie Filardo - Director, Community Development

Ben Chambers, Transportation Planning Manager, Neighborhood Development Services,

Charlottesville

ECONOMIC DEVELOPMENT PROJECTS

Albemarle County and City of Charlottesville frequently collaborate with regional partners to support projects and activities that contribute to our quality of life and grow the local economy. On-going projects with exceptional collaboration include:

- Buy Local campaign to showcase unique City and County businesses (showlocallove.org)
- Piedmont Pitch (with the Central Virginia Small Business Development Center), an entrepreneurial training initiative and pitch competition
- Referrals between the City-County for business retention and expansion (per MOU)
- Joint meeting of the City and County Economic Development Authorities (6/11/24)
- Joint funding of regionally important studies, projects, and services including:
 - GO Virginia:
 - Wine Scale Up Planning Grant (removing barriers to wine industry)
 - Regional Entrepreneurship Initiative study (removing barriers to entrepreneurs)
 - Entrepreneurial ecosystem builders and workforce development partners:
 - Central Virginia Partnership of Economic Development (CVPED)
 - Central Virginia Small Business Development Center (CVSBDC)
 - Charlottesville Business Innovation Council (CBIC)
 - Chamber of Commerce
 - Community Investment Collaborative (CIC)
 - CvilleBioHub
 - United Way's ENVISION program
 - Venture Central and 434 Accelerator

Virginia Career Works

Staff involved:

Chris Engel, Director of Economic Development, Charlottesville
Emily Kilroy, Interim Director of Economic Development, Albemarle
Matthew Johnson, Assistant Director of Economic Development, Charlottesville,
J.T. Newberry, Deputy Director of Economic Development, Albemarle
Ashley Hernandorena, Business Development Manager, Albemarle

Real Estate Assessment Shared Resource

The Albemarle County and Charlottesville City Assessor's offices share the cost of flyovers for Pictometry, which is a very effective assessment tool consisting of aerial photographs that can be used to identify assessable real estate and make measurements where physical access is not possible. The costs are shared on a pro-rata basis.

Staff involved:

Peter Lynch – Albemarle County Assessor Jeff Davis – Charlottesville Assessor

Regional Digital Inclusion Initiative

Albemarle County and the City of Charlottesville have collaborated on a digital inclusion coalition to prepare a digital equity plan for addressing barriers to digital access for vulnerable communities. This collaboration has expanded to include Fluvanna, Greene, Louisa and Nelson counties in a planning grant application that will fund an engagement and planning effort across the region. Implementation of this plan will depend on collaboration with community organizations that work across the community and federal funding from the Digital Equity Act and Broadband Equity, Adoption, and Deployment Program.

Staff involved:

Ashley Reynolds Marshall – Deputy City Manager for Social Equity, Charlottesville
Michael Culp – Director of Broadband Accessibility and Affordability Office (BAAO), Albemarle
Jason Inofuentes – Program Manager of BAAO, Albemarle
Paul Rudacille – ADA Coordinator, Neighborhood Development Services, Charlottesville
Morgan Rakes – Deputy Chief of Grants and Agreements, Albemarle

Sponsorship of Loop De'Ville Cheer Station

County and City Communications and Public Engagement Offices are jointly sponsoring a cheer station at the upcoming bicycling event that will showcase the Rivanna Trail –

amenity that criss-crosses both jurisdictions. The cheer station will spotlight how the County and City collaborate.

Staff involved:

Serena Gruia, Public Engagement Specialist, Albemarle Afton Schneider, CAPE Director, Charlottesville

Move Safely Blue Ridge

Move Safely Blue Ridge is the region's plan to reduce roadway fatalities and serious injuries for all road users through the Safe Streets and Roads for All (SS4A) program.

City/County participation in addition to other jurisdictions, project owner is TJPDC.

Staff involved:

Serena Gruia, Public Engagement Specialist, Albemarle Ben Chambers, Transportation Planning Manager, Neighborhood Development Services, Charlottesville

Joint Information Releases

CAPE regularly coordinates on joint statements when applicable and maintains ongoing working relationships amongst Communications Departments from the County, City, and UVA. This may include public messaging and alerts for emergency conditions and public safety incidents, as well as proactive messaging for collaborative programs and initiatives by all County and City departments.

Staff involved:

Abbey Stumpf, Interim CAPE Director, Albemarle Afton Schneider, CAPE Director, Charlottesville

https://roanoke.com/news/local/government-politics/private-meeting-spurs-new-collaboration-involving-virginia-tech-and-surrounding-towns/article_d8e77b3a-19fc-11ef-84b2-e307b7bbcb61.html

TOP STORY

EDUCATION

Private meeting spurs new collaboration between Virginia Tech and surrounding towns

Announcement comes after Blacksburg mayor says Tech needs to take more accountability for the pressure its growth is putting on the town

PAYTON WILLIAMS The Roanoke Times

May 28, 2024

B LACKSBURG — Virginia Tech is signaling its intentions to take a more active role in infrastructure planning for the New River Valley.

University representatives, as well as those from Blacksburg, Montgomery County, Christiansburg and the New River Valley Regional Commission, came together in a recent private meeting, and it was then announced that a new initiative to jointly plan for the future of the region is starting. The university says it is going to pay for a consultant thorough its private foundation, and it was the university that disclosed the initial information about the initiative in a statement issued to the press.



Pedestrians walk from the Virginia Tech campus toward downtown Blacksburg and College Avenue on Friday, MATT GENTRY, THE ROANOKE TIMES

The announcement comes after Blacksburg Mayor Leslie Hager-Smith said in January that the Virginia Tech needs to take more accountability for the pressure its growth is putting on the town.

"The student population in Blacksburg already outnumbers ordinary citizens by more than 2-to-1," Hager-Smith said at the time. "Students pay less in taxes and require more in services than other demographic groups. They require more policing, more mental health services, even more hot water. The imbalance is simply unsustainable."

People are also reading...

- 1 Sources: Virginia, Tony Bennett working on long-term deal for basketball coach
- 2 Dance to honor late Monticello High School student, raise money for suicide prevention
- 3 Virginia baseball beats Kansas State to earn seventh trip to College World Series
- 4 Marjorie Taylor Greene, John McGuire shouted down by protesters, cut short Albemarle County campaign rally

Now, to help with planning as part of the new collaboration, Virginia Tech is hiring LINK Strategic Partners, a Washington-based consulting firm that will act as a facilitator. The university has used the consulting firm on other matters.

So far, there has only been the one meeting, so details as to what the partnership will entail have not been worked out, but Hager-Smith said that it will go beyond just infrastructure concerns.

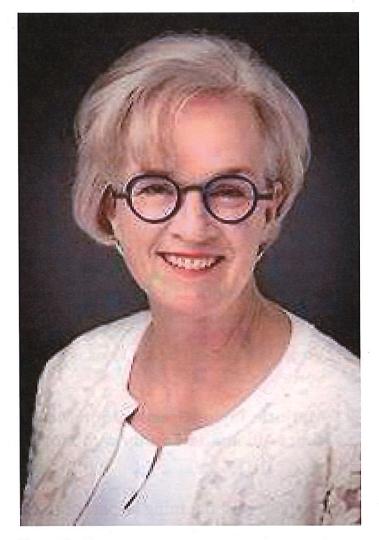
"The university collaborated with us before on Blacksburg Transit, but that was focused on a single issue," Hager-Smith said. "This is the first time to my memory that the university has worked with the region on such a wide range of concerns."

While housing has not been referred to explicitly as a major focus of the collaboration, Hager-Smith said she expects it will play a large role.

Virginia Tech administrators have indicated that lack of housing would be a major obstacle to the future growth of the university. President Tim Sands said that lack of available infrastructure and housing would "limit our growth in the short term," during his State of the University speech earlier this year.

In the same speech, Sands announced his intention to work with the region on future planning.

"We've made progress and are ready for the university, towns, county and surrounding region to join and forge a path to improve our community for all," Sands said. "I look forward to a productive dialogue that helps us



Hager-Smith

better understand our needs and develop a plan to address our shared goals."

Much of LINK Strategic Partners' work has focused specifically on universities and their surrounding communities. The company had a similar role in assisting the University of the District of Columbia in formulating a strategic plan.

Hager-Smith said that the partnership was an unprecedented sign of the university's willingness to participate in planning for the future of the New River Valley.

"It's an encouraging sign of the university's openness to work with its neighbors on major issues," Hager-Smith said. "The intention is now for us to meet regularly."

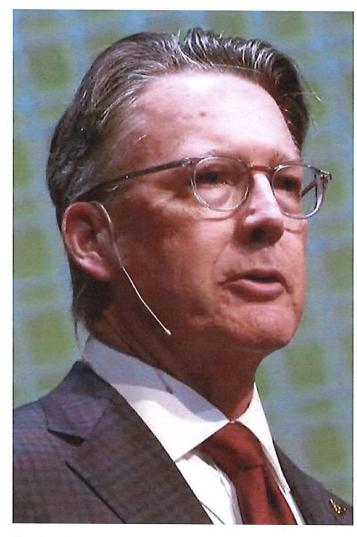
Mark Owczarski, Virginia Tech's chief spokesman, said that he agrees with the view that this collaboration is unique.

"The university has held long-standing partnerships and collaborations with all these partners for many, many years, but I do think it would be fair to say that this effort is unique in that it represents an intentional, guided and focused effort to bring these partners together to identify, discuss and move forward key issues and topics important to us all, in a focused period of time," Owczarski said.

The initiative would be funded entirely by the Virginia Tech Foundation, he said. What that will or is expected to cost was not released.

"No university or state funds are being used to engage the consultant,"

Owczarski said.



Sands

While the university has indicated that the current initiative will last one year, Hager-Smith said she believes this will be the beginning of a longer-term collaboration between Virginia Tech and the region.

PAVING THE WAY TO ZERO EMISSIONS

OUR TRIP TO CHAMPAIGN-URBANA

EXPLORING HYDROGEN FUEL CELL TECHNOLOGY
FOR A SUSTAINABLE FUTURE





TRIP OBJECTIVE

The primary objective of the trip to
Champaign-Urbana was to visit the Mass
Transit District (MTD) to observe their
groundbreaking hydrogen fuel cell
technology up close.

The aim was to showcase the benefits of this technology to our elected officials as Charlottesville looks to become emissions-free by 2050.



TRIP PARTICIPANTS

Charlottesville Area Transit

Dir. of Transit- Garland Williams Asst. Director- Barry Herring Asst. Director- Michael Newbill Mktg. Coord.- Alex Pasqualone

City of Charlottesville

Mayor- Wade Juandiego Councilor- Michael Payne Councilor- Lloyd Snook Clerk of Council- Kyna Thomas Trans. Planning Mgr- Ben Chambers Dir. of Sustainability- Kristen Riddervold

Albemarle County

Dep. County Exec- Ann Wall Vice Chair, BOS- Diantha McKeel

Consultant Team- Kimley-Horn



CITY COMPARISON:



- University town with a dynamic community
- Similar transit challenges as Charlottesville
- Innovative transit solutions in place
- University town with a vibrant community
- Facing a demand for sustainable transit
- Looking to adopt cutting-edge technology

RELEVANCE:

- Comparing similar cities provides practical insights
- Learning from MTD's experience aids our transit enhancement efforts
- Helps in making informed decisions for CAT's future

SERVICES PROVIDED:



- Fixed route service + Late night fixed routes
- Paratransit service
- SafeRides Service for students
- C-Carts Van Service
- University Routes
- University Football Game Routes
- Unit 4 and District 116 Middle and High School service + school trips/events
- Fixed route service + Downtown trolley
- Paratransit service
- MicroCAT rideshare service
- Charlottesville City Schools service + school trips/events

Key Differences:

- MTD services the local university, CAT does not
- MTD operates 7 days a week including late night, CAT operates 6 days a week until 10:30pm

SERVICE COMPARISON:



Serves Champaign, Urbana, and Savoy. Also serves Middle & High Schools, and the University of Illinois.

• Year Founded: 1970

• Service Population: 135,400

• Total # of Buses: 114

Number of Routes: 26 Transit Routes
Yearly Riders: 9,548,293 (FY '24)
Number of Employees: 377
Percentage of buses hybrid: 85%

• Cost: Free for Students, \$1 per trip for gen public

Serves Charlottesville & parts of Albemarle County. Also serves Charlottesville City Schools.

• Year Founded: 1975

• Service Population: 87,755

• Total # of Buses: 48

Number of Routes: 12 Transit Routes
Yearly Riders: 1,353,060 (FY '24)
Number of Employees: 135

• Percentage of buses hybrid: 15%

• Cost: Fare-free

MTD RIDERSHIP BREAKDOWN:



• Total Ridership FY **'24:** 9,548,293

University Total: 7,709,243
 U of I students: 7,415,016
 Staff/ Faculty: 259,572
 SafeRides: 34,655

• K-12 Students: 362,265

• ADA

o Paratransit: 133,535

• General Population Total: 1,343,250

Annual Pass: 504,673Adult Riders: 228,429

o DASH/Senior Riders: 387,492

All Day Passes: 3,055Transfers: 77,445Monthly Pass: 107,926Veterans Pass: 32,992







LUNCHEON WITH MTD LEADERSHIP

Discussion Points:

- Transition to Hydrogen Fuel Cell Buses:
 - Factors considered: environmental impact, cost, infrastructure, and community benefits.
 - Decision-making process: Evaluating different fuel technologies and selecting hydrogen for its long-term sustainability.
- Benefits of Technology:
 - Improved air quality, reduced greenhouse gas emissions, and long-term cost savings.
 - o Enhances public perception and support for innovative transit solutions.
- Funding and Partnerships:
 - Collaboration with federal programs to support the transition and discussed funding sources and financial feasibility for hydrogen fuel technology.
- Challanges and Solutions:
 - Addressed common concerns such as fuel production, storage, and safety with practical solutions implemented by MTD to overcome these challenges.

"This project fits into the city's climate goals which are 45 percent reduction by 2030 and carbon neutrality by 2050." - Kristel Riddervold



TOUR OF MTD FACILITIES

EXPLORING STATE-OF-THE-ART HYDROGEN TECHNOLOGY

During our tour of MTD's facilities, we observed their state-of-the-art transit station, on-site hydrogen production area, advanced fueling station, and the bus storage building which houses their offices and Headquarters.

The hydrogen production area, powered by solar arrays, generates 420 kilograms of hydrogen daily. The fueling station efficiently fuels buses in about ten minutes, minimizing downtime. The bus storage/operations building is designed for optimal space utilization and operational efficiency.

"Hydrogen is above you, and it is 17 times lighter than air so if there's a leak it goes at 45 miles per hour straight up away from the passengers, away from the driver." -Karl Gnadt

Transit Station

Hydrogen Production

Fueling Station

Bus Storage/HQ









POST-TOUR SITDOWN WITH MTD

Discussion Points:

- Hydrogen Start-Up Costs:
 - o Initial investment required for hydrogen infrastructure and bus integration.
- Fleet Composition:
 - o Current fleet of hydrogen buses and plans for future expansion.
- Station Expansion:
 - o Comparing hydrogen delivery versus on-site production for future needs.
- Production Station Layouts:
 - o Current and future layouts for hydrogen production stations.
- Advantages of Hydrogen:
 - Benefits of hydrogen fuel cell buses over traditional battery-electric buses, including efficiency and operational reliability.

"Battery-electric vehicles are not a one-for-one replacement for a diesel bus. Hydrogen fuel cells offer greater range and operational consistency."

- Karl Gnadt



ACTIONABLE STRATEGIES & NEXT STEPS FOR CAT

APPLYING LESSONS LEARNED FROM MTD

Actionable Strategies:

- Adopt Hydrogen Fuel Cell Buses:
 - Develop a phased plan for fleet integration.
- Infrastructure Development:
 - Invest in necessary infrastructure, including fueling stations and maintenance facilities.
- Training Programs:
 - Implement comprehensive training programs on hydrogen technology and safety.

Timeline to Zero Emissions

- 2028: No more buying fossil-fuel buses
- 2050: Completed Transition to Zero Emissions

Next Steps for Charlottesville:

- Implementation Plan:
 - Steps required to implement hydrogen fuel cell technology.
- Phased Approach:
 - **Short-term actions:** Pilot programs, initial investments, stakeholder engagement.
 - **Long-term actions**: Full-scale adoption, continuous improvement, community outreach.



MORE INFO AND INSIGHTS GAINED

Learn More:

- Trip write-up with interviews & podcast
 - o Sean Tubbs, Town Crier Productions
 - https://tinyurl.com/mrm4z4p5
- Our Webpage for Zero Emissions
 - https://www.charlottesville.gov/1789/Ride-Green-Campaign
- MTD Webpage for Zero Emissions:
 - https://mtd.org/inside/projects/zeroemission-technology/

Impact of Trip:

- **Strategic Planning:** Influences CAT's transition to hydrogen fuel cell buses.
- **Operational Improvements**: Help CAT optimize transit services with MTD's best practices.
- Community and Environmental Benefits: Enhances contributions to Charlottesville's environmental goals.









CONCLUSION & ACKNOWLEDGMENTS

Conclusions:

- Trip Highlights: Visual and practical insights gained into hydrogen technology.
- Impact on CAT: Significant influence on CAT's plans and zero-emissions goals.

Acknowledgments:

- Thank you
 - o To Champaign-Urbana Mass Transit District for their hospitality and expertise.
 - o For the participation and support of all team members and elected officials.





THANK YOU!

STAY TUNED FOR OUR SECOND VISIT
LATER THIS SUMMER



