

Technical Memorandum #2

Existing Structure and Services



February 2021

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INTRODUCTION

The Baltimore Regional Transit Governance and Funding study will develop alternatives for the structure, organization, and funding of public transit in the Baltimore region. The study is being developed through an iterative process, that involves collaboration between the Baltimore Regional Transit Board (BRTB), regional stakeholders and research and analysis. The goal of the study is to develop four governance options that are based on an understanding of transit's historical development in the region, realistic about constraints, but creative in providing opportunities for change.

This technical memorandum, the second in a series, inventories the existing structures and transit services in the Baltimore region. It describes the organizational and decision-making structure of the agencies responsible for delivering transit services as well as the services operated. The memo is organized around four sections:

- Transit Governance and Structures in the Baltimore Region
- Available Transit Services
- Existing Funding Models

Each section describes the existing structure and services together with implications for regional transit funding and governance. Additional detail on each of the individual systems, summarized into a “service profile” is included as an appendix. A more detailed discussion of regional transit funding will be included in **Technical Memo 4**, available in March 2021.



Image from Kimley Horn

OVERVIEW OF TRANSIT GOVERNANCE / CURRENT STRUCTURE IN BALTIMORE REGION

There are effectively three elements to be considered in describing transit organization in the Baltimore Region, the Maryland Department of Transportation (MDOT), the MDOT Maryland Transit Administration (MDOT MTA) which is functionally part of MDOT and the Locally Operated Transit Systems (LOTS) which are separate but receive funding from MDOT MTA.

MDOT MTA Governance

Maryland Department of Transportation (MDOT)

Transit program governance in the Baltimore region has three elements, MDOT, MDOT MTA, and the LOTS. Each of these organization are defined in the state statutes, whose Transportation Article encompasses some 1500 pages. As chronicled in the first technical memo created for this study, MDOT was created in 1970, and it included what is now known as the MDOT Maryland Transit Administration (MDOT MTA) as one its modal administrations.

MDOT, as the umbrella organization, includes six transportation administrations, which are largely organized by mode. MDOT has a Secretary, appointed by the Governor, and a Transportation Commission. The Transportation Commission is composed of seventeen members: ten members appointed by the Governor, and seven ex-officio members who are the regional members of the State Roads Commission (§2-202). The Transportation Commission per State Law (Chapter 526, Acts of 1970) is intended to study the State Transportation System and advise The Secretary of Transportation and Department Administrators on policy and programs. It is not clear that the Commission exercises all their powers--in recent years, the Commission has played a largely ceremonial role of considering requests for the dedication of transportation facilities in memory or honor of individuals or groups of significance to the state of Maryland.

MDOT is funded by a consolidated Transportation Trust Fund (TTF), which is separate from the state's General Fund. The TTF is funded by a combination of transportation user fees, such as fuel taxes, titling taxes, registration fees, operating revenues (such as fares) and corporate income taxes. MDOT is also funded by Federal funds, bond proceeds, and other financial instruments available to the agency. Toll revenues are separate and are dedicated to financing of toll facilities which are under the Maryland Transportation Authority (MDTA). The MDTA Board is chaired by the MDOT Secretary. MDTA funds and bonding are separate from MDOT. MDOT's transportation program is constrained by revenues raised by the TTF, unless an exception is made to utilize General Fund to address a specific project or need.



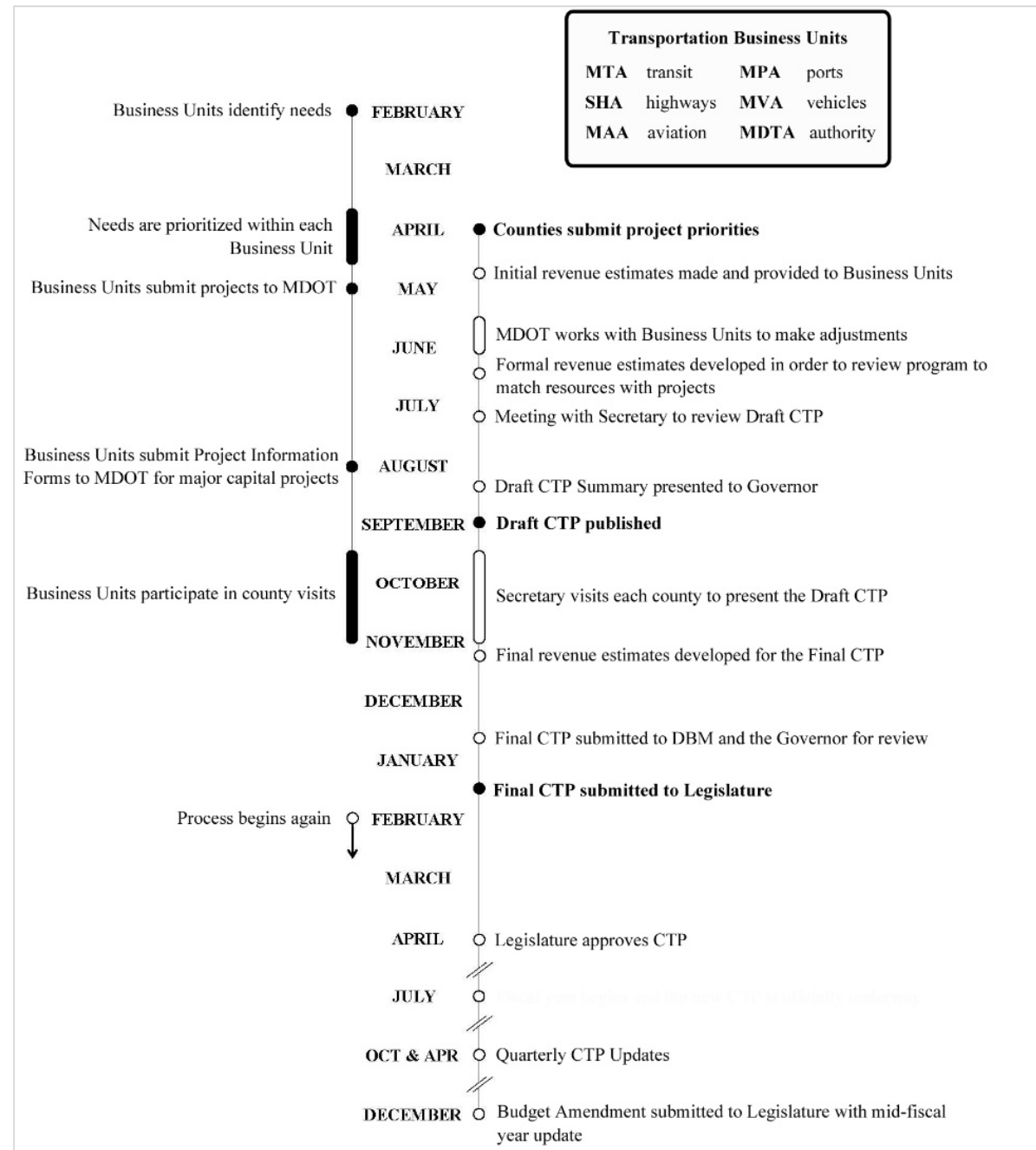
MDOT allocates TTF funding among the modal agencies. Funding decisions are guided by the Secretary of Transportation and Governor and balance the needs across MDOT's six modal agencies, including the Maryland Transit Administration together with the Maryland Aviation Administration, State Highway Administration, Maryland Port Commission, Motor Vehicle Administration, and the Maryland Transportation Authority.

As required by state statute (Annotated Code of Maryland, Transportation Article, §2-103), MDOT develops annually the State Report on Transportation consisting of the annual Consolidated Transportation Program (CTP), an annual report on the attainment of State transportation goals and benchmarks (Attainment Report) and the Maryland Transportation Plan (MTP). This same statute requires that the MTP be updated every five years, establishes an Advisory Committee to advise the Department on State transportation goals, benchmarks, and indicators to be used in the MTP and the Attainment Report. This advisory committee is a statewide body, and not dedicated to any mode, and its role is limited. There is no other advisory or policy body provided for in state statute for MDOT on the State Report or its components. The CTP is a six-year projection of project funding needs for all modes, including transit. The CTP statute requires that MDOT annually seek input (each fall) from all the one the departments CTP and hear from the jurisdictions regarding their needs and priorities, provided through a formal priorities letter.

A Draft CTP is published by September 1 of each year and the final CTP is published by the third Wednesday in January as part of the Governor's Budget to the Legislature. Figure 1 illustrates the CTP development process.

Figure 1 CTP Development Process

Maryland Department of Transportation
December 2015



As can be seen by in Figure 1, the budgeting process is a cyclical process where each Transportation Business Unit (TBU) of MDOT identifies and prioritizes needs and then submits them to MDOT who develops a Draft CTP that is presented to the Governor prior to publishing on September 1st of every year. The Secretary and TBU Administrators conduct the annual CTP tour where they visit every County each fall. Following these “tour meetings” the final CTP is developed using updated revenue estimates and submitted to the Department of Management and Budget along with the Governor before being submitted to the General Assembly in January. These documents rely on the financial forecasts from the MDOT Office of Finance and the Board of Revenue Estimates for updates to the Transportation Trust Fund Forecasts.

The MDOT MTA budget is part of this process, and this description shows how intertwined the MDOT MTA budgeting process is with the rest of the Transportation Trust Fund. Any alteration to the governance and/or funding of the Maryland Transit Administration will need to address its integration with or changes to the current Statewide Transportation Budgeting and Decision-making process.

In 2017, the Maryland General Assembly passed Chapter 30, Acts of 2017 (Senate Bill 307), which mandated the Maryland Department of Transportation (MDOT) to develop a project-based scoring system for major transportation projects using the set of defined goals and measures for projects being considered for inclusion in the Consolidated Transportation Program (CTP). The transportation scoring law, as amended in 2017, defines a “major transportation project” as a highway or transit capacity project that exceeds \$5,000,000, and excludes any “projects that are solely for system preservation.” Each major transportation capacity project being considered for funding and inclusion in the CTP is evaluated through the Chapter 30 scoring model and ranked based on the score. The project rank is then one of many factors that contribute to the decision of what projects to select for funding and inclusion in the CTP.

One other organizational aspect of MDOT relative to transit is its role in overseeing Maryland’s transit programs in the Washington DC metro area. Significantly, MDOT’s Secretary serves as one member on the Board of Directors of the Washington Metropolitan Area Transit Authority (WMATA) that determines agency policy and provides for oversight for the funding, operation, and expansion of transit facilities within the Washington region’s Transit Zone. The WMATA Board of Directors is composed of eight voting and eight alternate directors. Maryland, the District of Columbia, Virginia, and the federal government each appoint two voting and two alternate directors each. The MDOT Secretary’s Office (MDOT-TSO) staff support the Secretary in this role, as well as providing support to Maryland’s two voting and two alternate members who also serve on the WMATA Board. MDOT’s role in the transit in the Washington area is defined in state statute in the Annotated Code of Maryland, Transportation Article, (§10-201 through 204). Title 10-204 addresses MDOT’s participation in the Washington Metropolitan Area Transit Authority and the Compact that establishes that body. This is very unlike the Baltimore region, where MDOT has control over transit operations and budgeting.

MDOT MTA

According to the MDOT MTA website, the agency's mission is to provide "safe, reliable, customer-focused, affordable, accessible and efficient public transportation throughout Maryland, enhancing quality of life, supporting the environment". The Annotated Code of Maryland, Title 7, Subtitle 2 creates the MDOT MTA as an administration within MDOT, defines the role and powers of the Administrator who is appointed by the Secretary. This Title also states that the exercise of the powers and duties of the Administration is subject to the authority of the Secretary and, where applicable, the Maryland Transportation Authority. It also enumerates the powers of the agency.



The MDOT MTA manages three distinct transit programs and plays a slightly different role in each:

- Local and regional transit service in the Baltimore Region – MDOT MTA funds, operates and manages local bus, light rail, subway, and paratransit services provided in accordance with the Americans with Disability Act (ADA).
- Regional commuter bus and train service – MDOT MTA funds and manages contracts for both regional commuter bus and the Maryland Rail Commuter (MARC) service.
- Statewide management and funding of the Locally Operated Transit Systems (LOTS) – MDOT MTA provides funding, oversight and planning support.
- Federal funds for public transportation provided by the Federal Transit Administration (FTA) under its formula programs are provided to the MDOT MTA. For urbanized areas with 200,000 in population and over, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive Federal funds. For urbanized areas under 200,000 in population and rural areas under 50,000, the funds are apportioned to the governor of each state for distribution. MDOT MTA is the Direct Recipient of FTA transit funds for the Baltimore Urbanized Area. In addition, MDOT MTA is the Governor's Designated Recipient of formula funding for the entire state (except WMATA, which is the Direct Recipient of funds for the Washington, D.C. Urbanized Area)¹. As the Designated Recipient, MDOT MTA administers federal formula funds for the small urbanized area, rural and specialized programs statewide including the LOTS in the Baltimore region. At MDOT MTA the Office of Local Transit Support (OLTS) is responsible for overseeing the statewide program including the administration of funds to subrecipients and ensuring their compliance with all federal and state requirements.

Within in the funds allocated annually by MDOT to MDOT MTA, MDOT determines the levels of capital and operating funding, and MDOT MTA makes decisions about the allocation of funds within each of those categories (capital and operating) of projects as well as the allocation across modes. Many investment decisions are determined based on existing commitments associated with operating contracts or other agreements. MDOT MTA also has internal priorities for capital planning, which reflect a combination of federal and state legislative mandates. Many of these priorities are laid out in MDOT MTA's Capital Needs Inventory (CNI) required by the Maryland/Metro Transit Funding Act

(Chapters 351 and 352 of 2018). Under state law the CNI must be updated every three years. The CNI tracks transit assets statewide, focusing on achieving a State of Good Repair. MDOT MTA also has a Transit Asset Management (TAM) plan as required by the Federal Transit Administration, and information from the TAM analyses is included in the CNI. The CNI identifies individual projects and initiatives, and it in turn is coordinated with MDOT's CTP, which includes all state transportation projects. Consistent within this approach, allocations to the LOTS program are not based on a formula and instead are driven largely by history. LOTS capital needs (primarily vehicles) are addressed in a statewide TAM plan, and Montgomery County and Prince George's County each have their own TAM plan. MDOT MTA's investment in local and regional bus service, as measured by annual operating costs, is by far the largest, representing roughly 41% of the MDOT MTA's annual operating budget. Baltimore region rail services (Light RailLink and SubwayLink) account for another 15%, and the associated paratransit services required by the Americans with Disabilities Act (ADA) represent another 17%, for a Baltimore regional total of 73%. Regional commuter bus and train services account for 28%.

Figure 2 Overview of MDOT MTA

Mode	Directly Operated or Purchased	Number of Vehicles*	Ridership	FY 2019 Operating Expenditure
BaltimoreLink Bus	Directly Operated	615	63,988,571	\$339,883,861
Light RailLink	Directly Operated	38	6,966,072	\$47,917,891
Metro SubwayLink	Directly Operated	54	7,275,335	\$77,925,584
MobilityLink	Mostly Purchased	473	2,152,642	\$113,352,686
Taxi	Purchased	36	839,857	26,489,120
MARC Commuter Rail	Purchased	149	9,190,885	\$165,458,115
Commuter Bus	Purchased	280	3,623,587	\$64,999,296
Total		1,647	94,036,949	\$836,206,553

Source: National Transit Database FY 2019

*Includes both Directly Operated service and vehicles used by contractors in Purchased Transportation

There is no regional or local representation that is part of MDOT MTA's funding or service allocation decisions in terms of how funds are allocated across programs or spent within programs. MDOT MTA does have a Citizens Advisory Committee (CAC), a Citizens Advisory Committee on Accessible Transportation (CACAT), and the MARC Riders Advisory Council. These bodies are not formal policy boards. The one exception to this rule is found in the LOTS program. As noted, OLTS administers operating and capital grants to the LOTS, meaning LOTS are individual subrecipients of MDOT MTA and operate as part of local government. Except for the Statewide Special Transportation Assistance Program (SSTAP) OLTS does not have a formula for allocating state and federal operating funds to the LOTS—in general it seeks to maintain funding levels within the amount allocated to the statewide program by MDOT MTA. Operating grants are generally based on historic funding levels. OLTS funding for capital grants to the LOTS is substantially driven by a needs- and condition-based prioritization tool. Decisions about how allocate their funds and invest in services, are made at a local level (see also LOTS section).

At the regional level, the Baltimore Regional Transportation Board (BRTB) is the Metropolitan Planning Organization (MPO) for the region. The BRTB is responsible for programming federal transportation funds. The Baltimore Metropolitan Council (BMC) staffs the BRTB.

Another regional transportation planning entity is the Central Maryland Transportation Planning Commission was recently created by the General Assembly to oversee the development of the Central Maryland Regional Transportation Plan (RTP), which includes MDOT MTA and LOTS services. It includes representatives of the Baltimore region, not including Carroll or Queen Anne's counties. The RTP is to be updated every five years.

Locally Operated Transit Systems (LOTS)

LOTS are part of a MDOT MTA's statewide transit program. Within the Baltimore region, there are eight LOTS programs, all of which are all managed and operated within local governments and administered as either a county or city department (see



Figure 3). Within their local governments, LOTS tend to be organized within other transportation programs that address multiple modes, either as a transportation office in the County executive's department of administration, or as part of a department of public works.

LOTS are responsible for their own operational planning, submission of their Annual Transportation Plan (ATP) to MDOT MTA, as well as ensuring compliance with federal and state requirements. As required by MDOT MTA as part of its role administering FTA funding, MDOT MTA provides program guidance to the LOTS regarding federal and state requirements and policies. As part of its management of the statewide program, MDOT MTA requires the LOTS to conduct periodic five-year transportation development plans (TDPs) with funding and consultant assistance through MDOT MTA. Input for service changes include the TDP, other local plans, input from advisory groups and additional public input, all of which is considered in the development of annual budget plans.

Budgets are developed with anticipated MDOT MTA grants and the associated local match requirements (20% for capital, 25% for operating), which may be augmented with additional local funding (overmatch), working with the executive of the jurisdiction. Any additional funds used to support the LOTS are identified locally and allocated from local general revenue funds. In all cases, these decisions are made by the local elected legislative body. Some but not all LOTS also have transit advisory groups.

Linkage Between MDOT MTA and LOTS

As noted above MDOT MTA's OLTS administers federal and state grants to the LOTS. This includes management of the Annual Transportation Plan (ATP) grant application process, monitoring quarterly reporting and performance assessment; compliance monitoring (federal and state program), assistance in vehicle procurement (state contract), funding and participation in local Transit Development Plans (TDPs), other technical assistance (including program guidance, support for the Rural Technical Assistance Program (RTAP) including newsletter and conference support. However, the LOTS are independent in terms of determining services offered, fares, technology, branding, etc. The LOTS have generally provided significant local funding beyond the amounts required to match MDOT MTA grants (overmatching) to address their local-developed needs. MDOT MTA makes no commitments that inclusion of a service, program, or capital need in a TDP will be supported by state or federal funding, though TDP plans are considered by MDOT MTA. There is no organized on-going coordination program or effort linking MDOT MTA operations and those of the LOTS: there may be coordination or consultation on an as-needed basis.

Figure 3 Locally Operated Transit Systems (LOTS) Organizational Structures

County/City	System Name	Service Types	Responsible Transit Organization	Policy Board	Advisory Groups	Operation	Union/ Non-Union
City of Annapolis	Annapolis Transit	Fixed route and demand response ADA	City Department of Transportation	City Council	Transportation Board; Transportation Committee of City Council	Directly operated	AFSCME
Anne Arundel County	Office of Transportation	Fixed route and demand response ADA and persons with Disabilities and over age 60	Office of Transportation under the County Administration	County Council	Transportation Commission	All contracted	Non-union, except for portion of RTA services that are funded
Baltimore City	Charm City Circulator and Harbor Connector	Fixed route bus and Ferry	City Department of Transportation	City Council		All contracted	
Baltimore County	CountyRide	Demand response, persons with disabilities and seniors, general public in rural area	County Department of Public Works, Transportation Bureau	County Council	TDP Advisory Committee only	Directly operated (except for Uber contract)	Non-Union
Carroll County	Carroll Transit System	Fixed route and demand response ADA and countywide for seniors and dialysis	County Department of Public Works	Board of County Commissioners	Transit Advisory Board	All contracted	Non-union

County/City	System Name	Service Types	Responsible Transit Organization	Policy Board	Advisory Groups	Operation	Union/ Non-Union
Harford County	Transit LINK	Fixed route and demand response ADA and for persons with disabilities and seniors	Harford Transit LINK office in County Department of Economic Development	County Council	None currently	Directly operated	Non-union
Howard County	Regional Transit Agency (RTA)	Fixed route and demand response ADA and for persons with disabilities and seniors	Office of Transportation in the County Department of Administration	County Council	Multimodal Transportation Advisory Board, Transit and Pedestrian Advisory Group, Central Maryland Transportation and Mobility Commission	Contracted	Teamsters
Queen Anne's County	County Ride	Fixed route and demand response ADA and for persons with disabilities and seniors, veterans	Office on Aging	Board of County Commissioners	N.A.	Directly operated	Non-Union

REGIONAL TRANSIT SERVICES

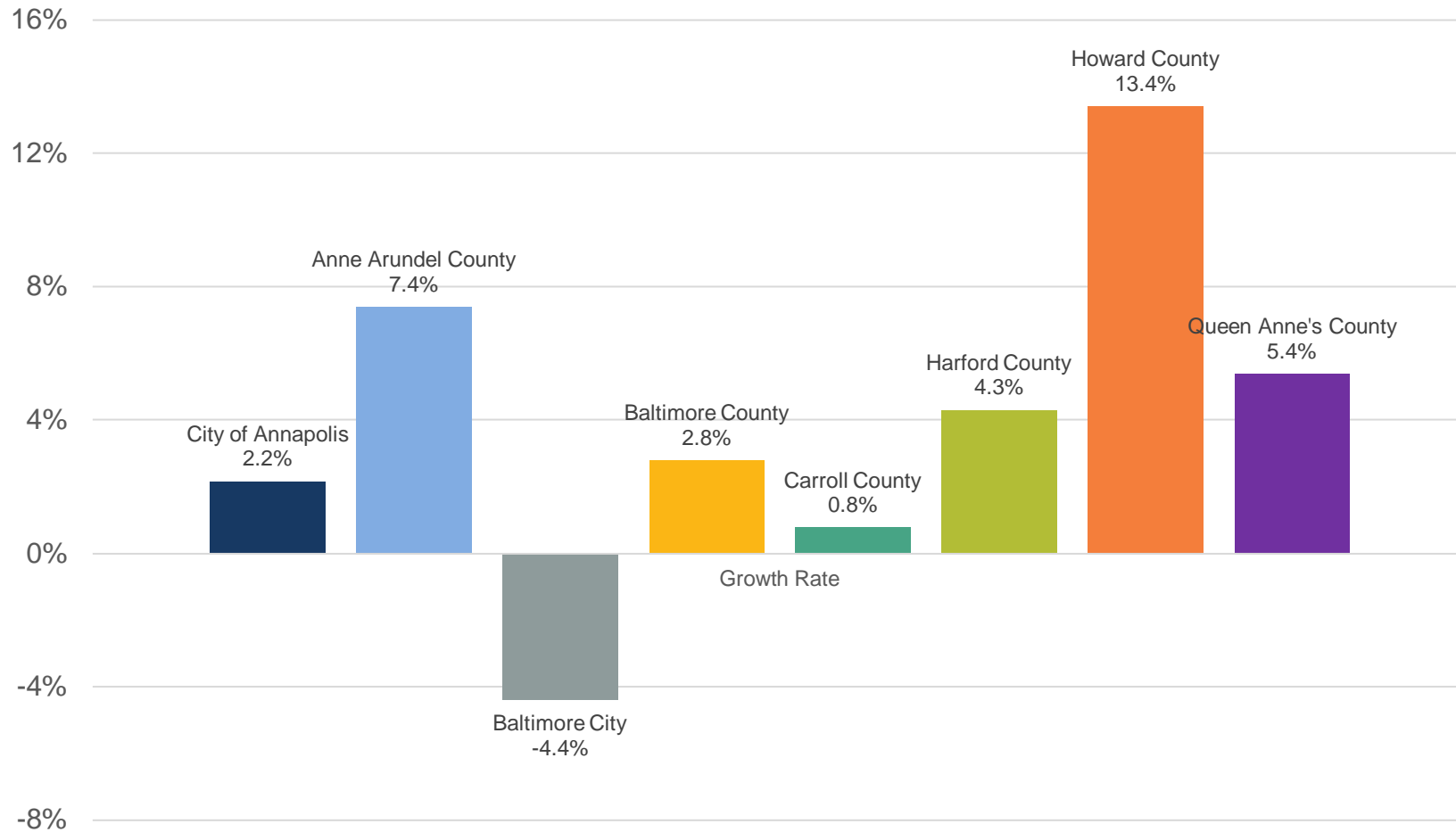
Demographic Context

The Baltimore Region refers to eight jurisdictions, each of which has its own operating environment and demographic context (see Figure 4 through Figure 6). Differences across the region are relevant because they not only determine the need for transit service, but also opportunities and challenges for future governance models. Key considerations include:

- **The region has nearly 3 million people overall (2019), about 2.3 million of whom live in the core urban area** of Baltimore City, Baltimore County, Anne Arundel County and Howard County.
- **Baltimore City** stands out with the youngest, most diverse, and lowest income population. Residents are more likely to use transit than other parts of the Baltimore region--18% of commuters use transit to go to work. **Baltimore City has other characteristics associated with transit demand**, including higher population density that is much more supportive of transit use, and low auto ownership. Nearly 30% of residents living in “zero vehicle” households.
- **In terms of growth, however, suburban jurisdictions are adding people and jobs at a rate faster than Baltimore City, which is losing population.** The larger suburban counties (Anne Arundel and particularly Howard counties) are growing fastest.
- **While Baltimore City has the highest percentage of minorities, the inner suburbs also have significant minority populations**, especially Howard County. The region’s two more rural counties—Carroll and Queen Anne’s - are much less diverse.
- **The population 65 and older** is growing in all jurisdictions. While the highest percentage of persons over 65 is found in Queen Anne’s and Baltimore Counties, the fastest growth in this population segment is in Howard and the and the slowest growth is in Baltimore City.

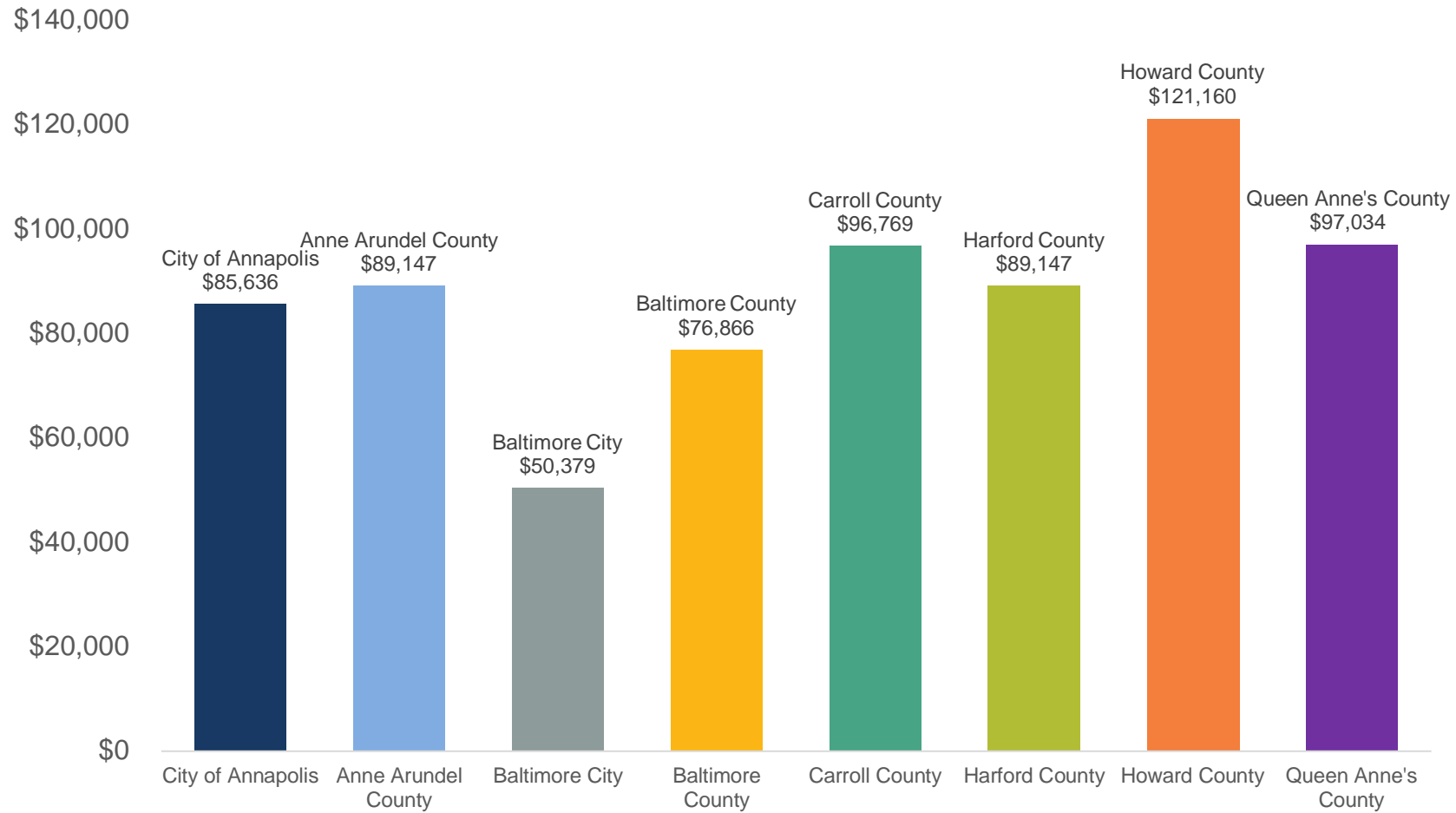


Figure 4 Baltimore Region Population Growth Rates (2010-2019)



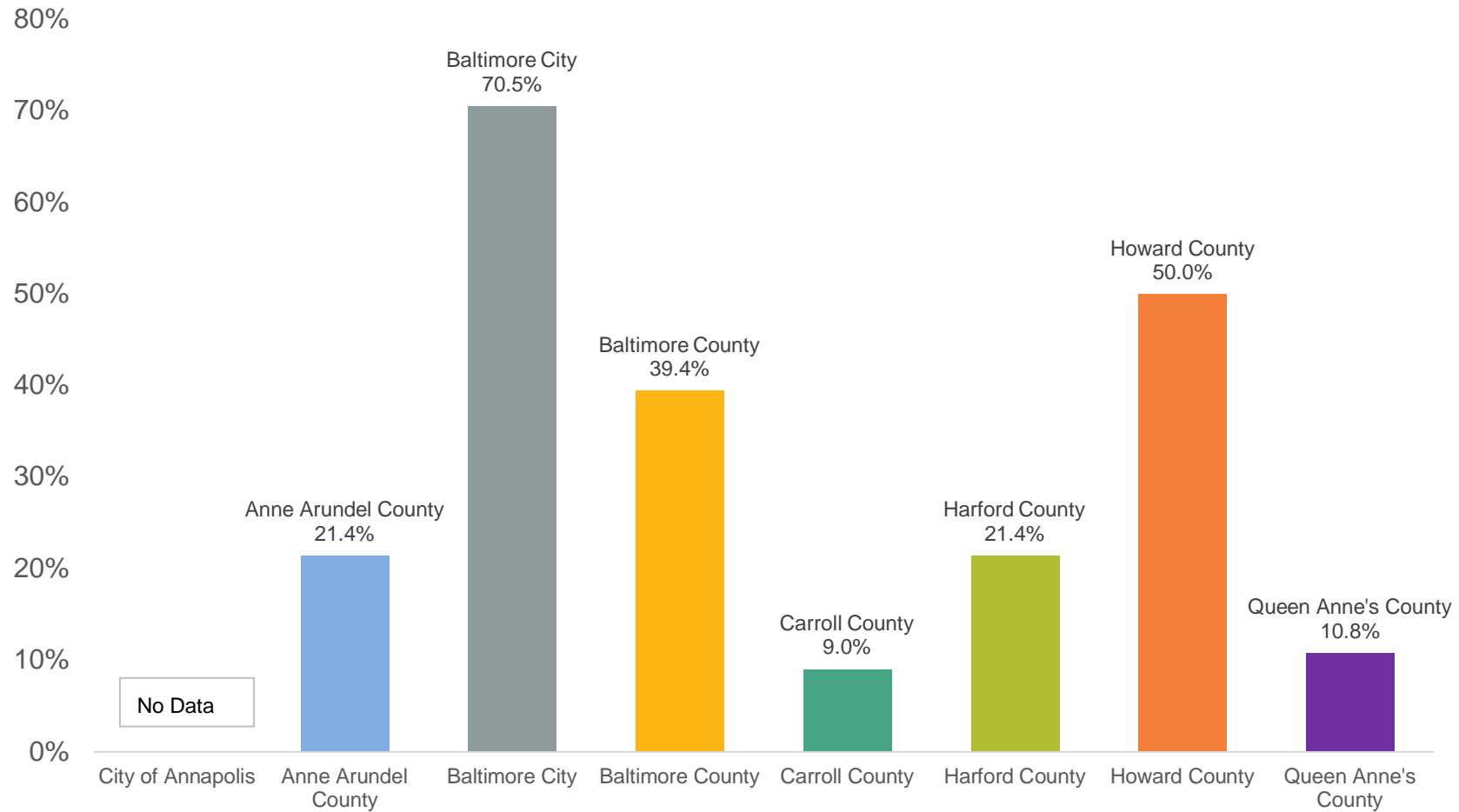
Source: U.S. Census, American Community Survey 2019 Population, U.S. Census 2010 Population

Figure 5 Baltimore Region Median Household Income by County (2019)



Source: U.S. Census, American Community Survey Five Year Estimates, 2015-2019

Figure 6 Baltimore Region Minority Population by County (2019)



Source: U.S. Census, American Community Survey Five Year Estimates, 2015-2019

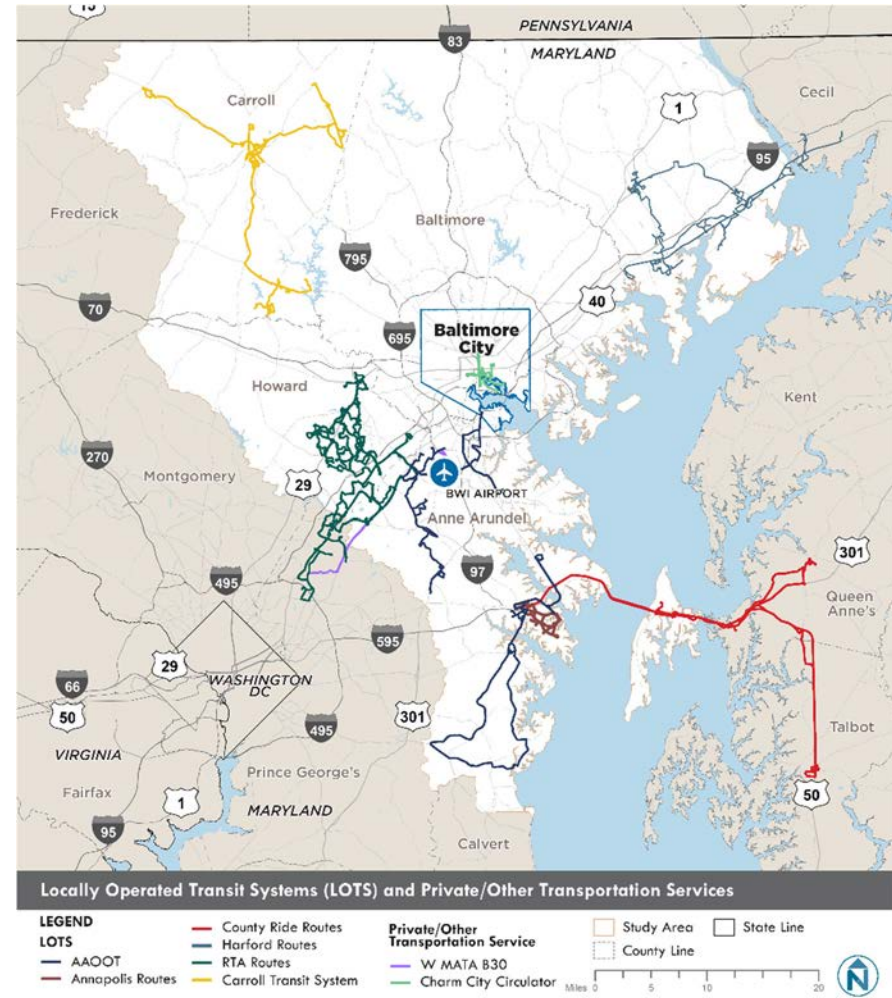
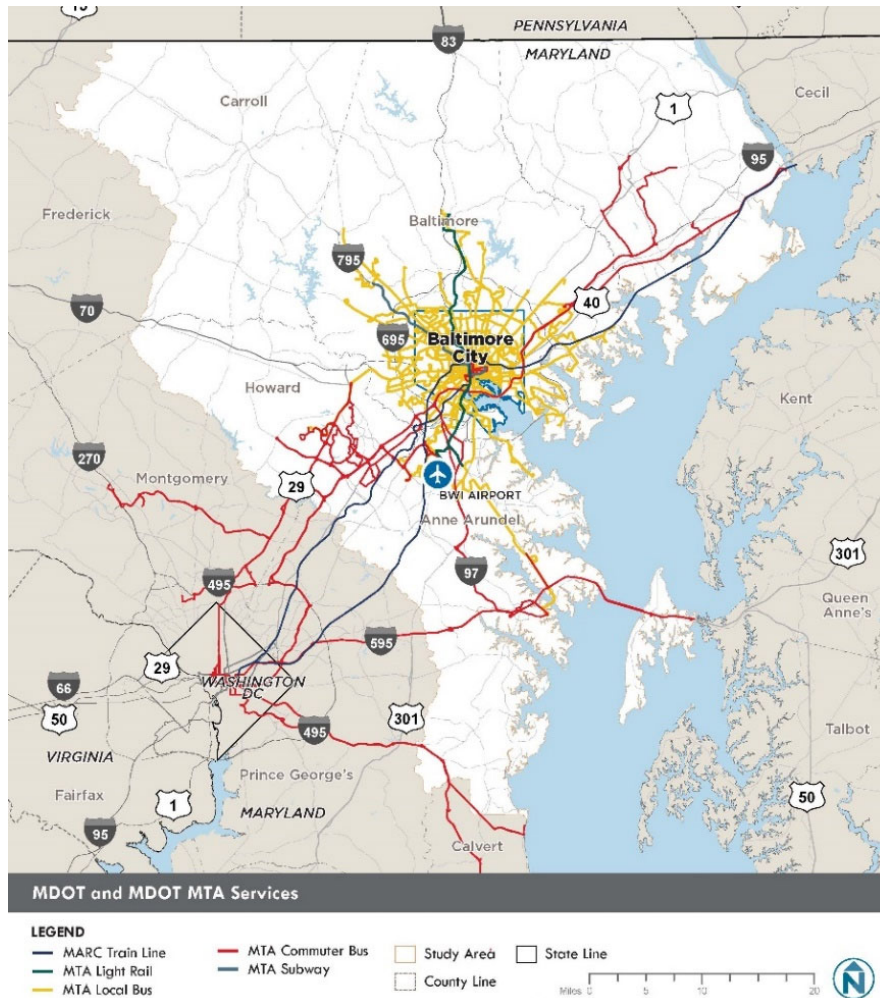


Existing Transit Services

Transit services² are available across the Baltimore Region³ (see Figure 7). Services operated by the MDOT MTA focused around Baltimore City and surrounding area account for most of the network. These services also carry the most riders. While the services operated by the LOTS cover a large geographic area, the financial investment, density of service (as measured by service hours or miles) and productivity of the service is significantly less than the service provided by the MDOT MTA.

Within the Baltimore Region LOTS counties, however, there are significant differences. Carroll and Queen Anne's are most like rural systems, Howard and Harford have developed their own suburban local systems (comparable to the small city system in Annapolis), while the two largest population counties, Baltimore, and Anne Arundel, have the least developed local systems. These two counties historically relied on MDOT MTA to provide transit services and only recently began developing services in response to local transit needs.

Figure 7 Existing Transit Services – MDOT/MDOT MTA and Locally Operating Transit Systems (LOTS)

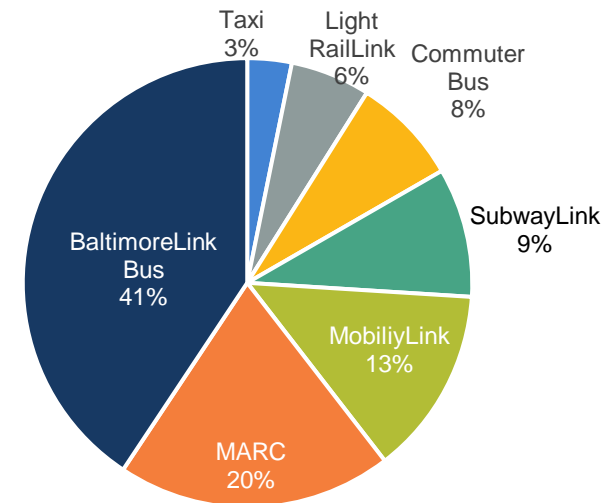


Funding

In 2019, MDOT MTA invested \$875.7 million in transit operations and provided 95 million trips (about 263,000 daily riders), including all modes and services⁴. Within this investment, MDOT MTA core bus and rail services account for most funding and ridership. Approximately 72% of the funding is allocated to bus, light rail, subway, and paratransit services in the Baltimore Region and 26% is spent on regional services (Commuter Bus and MARC) (Figure 8). This compares with the LOTS, which received just over 4% of the total regional transit operating budget, and 3.86% of the regional ridership.

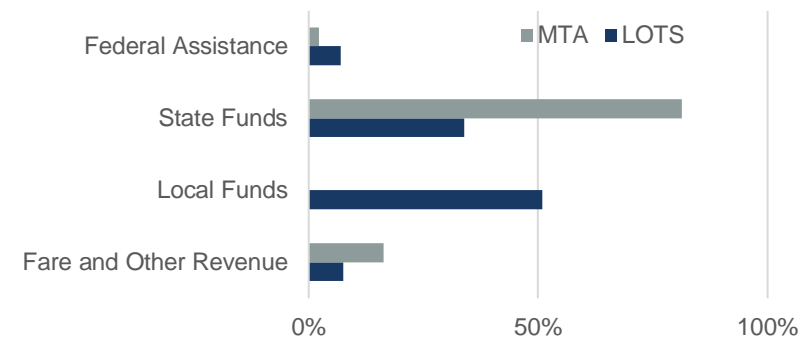
In addition to the scale of funding, there are also key differences in the way MDOT MTA and LOTS agencies fund transit. Just over 80% of MDOT MTA's transit operating revenues are funded with state resources; the remainder is generated through federal grants and fares. This compares with the LOTS which count on state funds for 34% and about 50% from local funds (Figure 9). This level of local funding represents a significant overmatch beyond the local share required to match MDOT MTA capital and operating grants. The LOTS also receive a small portion of their funding from federal assistance and fare revenue.

Figure 8 MDOT MTA Transit Operating Funds (2019)



Source: MDOT MTA

Figure 9 MDOT MTA and LOTS Operating Funding by Source (2019)



Regional Transit Characteristics



Source: FY 2019 National Transit Database (NTD)



Service Performance

Service performance reflects differences in both the local operating environment and type of service available. Evaluating performance metrics across MDOT MTA and LOTS is challenging because of the multi-jurisdictional nature of MDOT MTA services. Efforts to address equity in terms of service provided per capita might be successful for the LOTS, but equivalence with MDOT MTA is more of an issue because of the regional nature and scale of services.

There are significant differences in productivity and performance of the individual services in the Baltimore region.

- As measured in terms of service effectiveness, or a measure of how intensely services are used, the MDOT MTA scores high with 22.0 riders per hour of service provided. Taken by themselves, MDOT MTA bus services produce 33.6 riders per hour, higher than even the Baltimore City LOTS program with 28.79 trips per hour. Note that MDOT MTA operates night services that are less productive but are important as part of its broader mission.
- The MDOT MTA also scores high as measured by cost effectiveness, as measured by cost per trip. The MDOT MTA spends \$8.89 per trip, across a large network with multiple modes. Figure 11 presents performance by mode for MDOT MTA. Comparing MDOT MTA core bus services to the LOTS, MDOT MTA's cost per trip is even lower at \$5.31 per trip. This is lower than any other system except the Baltimore City LOTS program, which is a single, highly targeted service.
- In terms of cost efficiency (or the cost of providing service), overall MDOT MTA performs poorly given it costs \$195.23 for MDOT MTA (all modes) to operate a single hour of service. For core bus services its cost per hour of \$178.36 is still significantly higher than LOTS agencies that spend between \$40 and \$90 per hour of service.

Differences in service performance will be important considerations of any future governance and funding models. While MDOT MTA has significantly more expensive operating costs, it often performs well in terms of cost and service effectiveness because services operate in transit rich environments and ridership is high. While MDOT MTA already operates many lower ridership services in less dense suburban communities, if MDOT MTA services expanded to serve the areas addressed by many of the LOTS programs, high operating costs would make these services unsustainable. Likewise, the scale of operations among the LOTS programs would make their ability to manage a complex multimodal program like the MDOT MTA challenging.



Figure 10 Transit Performance Measures by Agency

	City of Annapolis	Anne Arundel County	Baltimore City	Baltimore County	Carroll County	Harford County	Howard County	Queen Anne's County	MDOT MTA
Operating Cost per Trip	\$10.96	\$ 20.44	\$2.61	\$25.98	\$16.25	\$13.75	\$18.83	\$39.57	\$8.62
Operating Cost per Hour	\$83.89	\$79.68	\$75.28	\$39.35	\$37.07	\$84.91	\$96.41	\$40.93	\$195.23
Trips per Revenue Hour	7.66	3.90	28.79	1.51	2.28	6.17	5.12	1.03	22.65
Trips per Capita	3.17	0.51	2.36	0.05	0.96	1.40	2.26	0.53	44.03

Source: NTD adapted by NelsonNygaard Consulting

Note: The population based used in the calculations for the MDOT MTA is the Baltimore Urbanized Area, so costs and funding associated with commuter bus and MARC are included, while the populations served are not. This comparison is also complicated by the fact that MDOT MTA provides service in several of the LOTS counties, so the actual overall transit ridership and service provided is higher than that provided by LOTS.

Figure 11 MDOT MTA Performance Measures by Mode

	BaltimoreLink Bus	Light RailLink	Metro SubwayLink	MobilityLink	Demand-Response Taxi	MARC Commuter Rail	Commuter Bus	MDOT MTA Total
Operating Cost per Trip	\$5.31	\$6.88	\$10.71	\$52.74	\$31.54	\$18.00	\$17.94	\$8.89
Operating Cost per Hour	\$178.36	\$309.31	\$455.22	\$79.25	\$133.95	\$947.23	\$263.79	\$195.23
Operating Cost per Mile	\$16.03	\$15.87	\$17.79	\$5.86	\$8.01	\$24.87	\$9.79	\$12.95
Trips per Revenue Hour	33.6	45	42.5	1.5	4.2	52.6	14.7	22
Trips per Revenue Mile	3	2.3	1.7	0.1	0.3	1.4	0.5	1.5

Source: FY 2019 NTD

Transit Funding-Regional Equity

The LOTS each provide a substantial portion of the operating budget from local funds, which also provides for more local input in decision-making (see Figure 12). MDOT MTA receives no local government contribution⁵, relying on TTF revenues—a function of the organizational structure that has developed. By extension, communities within MDOT MTA's service area have less of a role in decision-making.

Two clear trends from the data include 1) there is a wide variation in the amount of state and federal funding per capita and 2) there is no clear formula allocation. The reasons for these differences arise from a combination of historical experience of participation (including the expectation that the state will continue to fund transit at historic levels) in local transit and differences in identified service needs. These trends offer both advantages and disadvantages for future governance models. The advantages are that even though there are differences in the amount of local jurisdictions contribution to transit, the overall amounts are low. Disadvantages include the significant variations in the amount of funding per capita across the region.



Figure 12 Baltimore Region Transit Revenue by Funding Source and Agency

	City of Annapolis	Anne Arundel County	Baltimore City	Baltimore County	Carroll County	Harford County	Howard County	Queen Anne's County	MDOT MTA (1)
Percent Fares	13.6%	3.7%	0.25%	6.4%	21.7%	6.2%	7.8%	3.6%	16.40%
Percent Local	48.5%	46.9%	36.4%	37.8%	40.2%	40.2%	64.7%	49.3%	0.00%
Percent State	35.3%	49.4%	63.3%	42.1%	14.5%	13.4%	27.5%	35.5%	81.4%
Percent Federal	0.00%	0.00%	0.00%	13.8%	21.6%	40.1%	0.00%	11.6%	2.2%
Percent Federal and State	35.3%	49.4%	63.3%	55.9%	36.1%	53.6%	27.5%	47.1%	83.6%
Federal and State per Capita	\$40.76	\$5.14	\$5.05	\$0.68	\$5.64	\$10.34	\$12.47	\$9.86	\$362.51
Federal and State per Passenger Trip	\$3.87	\$10.09	\$1.73	\$14.52	\$5.87	\$7.37	\$5.41	\$18.63	\$7.71

(1) Total MDOT MTA expenses divided by Baltimore Urbanized Area Population—Federal, State, Local breakdown is unavailable separately for core services.)

Source: FY 2019 National Transit Database (NTD)

IMPLICATIONS FOR DEVELOPING TRANSIT GOVERNANCE AND FUNDING ALTERNATIVES

All information presented above and in the Appendices is relevant to the development of alternatives for transit governance and funding in the Baltimore region, focused on these key themes:

- Enhanced Planning Coordination (including Improved Services and Regional Connections)
- Improved Services Locally and Across the Region
- Increased Transit Investment, and
- Ensure Equity in Funding and Service Decisions.

Figure 13 Goals for Future Regional Governance and Funding Structure



HOW DOES THE CURRENT STRUCTURE MEET THESE GOALS?



The Baltimore Region's current transit governance structure created **individual transit planning agencies that largely plan, design, and operate service independently**. MDOT MTA provides funding to each of the LOTS for TDPs, and MDOT MTA develops its own plans with a modal focus (i.e., the MARC Growth and Investment Plan, BaltimoreLink, etc.). While MDOTMTA may internally coordinate its plans, there has been minimal coordination between the LOTS and MDOT MTA, although there are recent efforts such as the to improve coordination such as the legislatively required Central Maryland Regional Transit Plan (CMRTP).

The advantage for the LOTS is that their plans represent their local vision and needs, without necessarily being constrained by MDOT MTA. The disadvantage is the plans do not directly engage the largest transit service operator in the region, the MDOT MTA. Other planning coordination takes place at the MPO level with BRTB and BMC oversight. Organizational alternatives should build on these resources to further coordinate planning.



While BaltimoreLink improvements to core area services have improved service levels and reliability in measurable ways, the LOTS programs have been constrained by limited funding. Each of the LOTS has a TDP that identifies substantial needs and expansion plans. In some cases where coverage is already relatively high these plans call for frequency and span improvements (Howard and Harford for example), in others for new linkages or new coverage (Anne Arundel and Baltimore County). The CMRTP has taken these plans and combined them into a phased regional vision calling for modest service increases across modes, new regional connections and microtransit solutions. Organizational and funding alternatives need to address the level of funding available to improve services.



The review of services finds that regional connectivity is hampered by the fact that each of the systems has its own information systems, fare structures and payments and service levels. The LOTS typically have a shorter-span than MDOT MTA services, have limited evening and weekend services, and have few high-frequency services, as noted in the CMRTP. There are few fare transfer mechanisms, and shared stops are an issue. The BRTB has recently completed a plan for developing shared stops to improve regional connectivity, and the CMRTP has presented a regional improvement plan—with early action planned on developing regional fare structures and payment mechanisms. These initiatives are a basis for developing organizational and funding alternatives to improve regional connections, with options focusing on supporting implementation and additional developments in the near future most possible.

HOW DOES THE CURRENT STRUCTURE MEET THESE GOALS?



Under the current structure, the key decisions on overall transit funding levels for the Baltimore region are **ultimately with the state's executive**. The TTF revenues provide an ultimate constraint, but decisions on funding of modes and projects are not made by local elected officials in the region. MDOT MTA's decision-making process includes significant local input through the Priorities Letter and Tours, and the legislature can direct changes in decision-making such as its call for project scoring for projects of significance (over \$5,000,000)—but until recent changes the General Assembly cannot add funding or move funding within the Governor's budget. The State Transportation Plan and Consolidated Transportation Plan process are based to some degree on this input and the needs identified in modal condition assessments such as MDOT MTA's TAMP plan. Within the allocations provided for the LOTS, local decision-makers are able implement transparent processes with local policy board oversight. The questions surrounding decision-making are key aspects to be addressed in developing options for change in regional transit governance.



In this technical memorandum the funding needs for capital investment in the region have not been addressed, except in the sense that it is apparent that the difference in scale between the MDOT MTA system and the LOTS means that this issue is to a large degree one that is an MTA MDOT issue. LOTS capital needs are addressed with a combination of state/federal and local funding through the MDOT MTA OLTS program, which utilizes the TAMP and its own prioritization process. Given available funding not all needs can be met, and LOTS have had to provide local funding to meet their identified needs.

At the MDOT MTA level the CNL and other assessments present a significant need to increase investment at a much larger scale. Unlike the LOTS, there is no additional local funding source to address the gap between needs and available state/federal funding. This need must be considered in developing organizational and funding alternatives. A similar situation exists regarding operating funding, with LOTS needs and plans calling for additional investment—but the LOTS do not have a voice in determining the overall level of state funding or its allocation.



Equitable investment across the region is not apparent from the available data, and this is a cause for concern due to the lack of understanding for the reasons, and the difficulty in valuing the contributions to mobility made by MDOT MTA services in each of the jurisdictions. There are major differences in local needs, with the Baltimore City and inner suburbs supporting a much higher level of transit service than more outlying areas. Historic funding levels combined with flat state/federal funding create a situation where expansion of services is difficult or impossible without cutting funding in other areas. This is an important goal for consideration—and is linked to questions of investment and funding.

ENDNOTES

¹ Within the Baltimore region, the Aberdeen-Bel Air South-Bel Air North Urbanized Area also could be a Direct Recipient, as it has a population over 200,000, but MDOT MTA is the Designated Recipient for that Urbanized Area.

² Maryland State Code defines transit and railroad services specifically in MD Transp Code § 7-101 (2019):

- (n) (1) Transit service” means the transportation of persons and their packages and baggage and of newspapers, express, and mail in regular route, special, or charter service by means of transit facilities between points within the District.
- (2) *Transit service” does not include any:*
 - (i) *Vanpool operation; or*
 - (ii) *Railroad service.*
- (k) *Railroad service” means any service utilizing rail or railroad facilities performed by any common carrier operating under the jurisdiction of the State or federal government as a common carrier and includes any such service performed by the National Railroad Passenger Corporation.*

In this document the term “transit service” is intended to include fixed-route (bus, heavy rail, light rail, commuter rail and commuter bus) and demand-response services open to the general public, and to the elderly (age defined locally) and persons over the age of 18 with disabilities.

³ In this report the term “Baltimore Region” refers to the region as represented by the members of the BRTB. Maryland State Code [MD Transp Code § 7-101 \(2019\)](#) also further defines a District to which certain provisions may be applicable:

- (d) “District” means:
 - (1) The Metropolitan Transit District, consisting of Baltimore City, Baltimore County, Anne Arundel County, and other areas as designated by the Secretary after consultation and coordination with the affected jurisdiction and subject to the provisions of the Washington Metropolitan Transit Authority Compact; and
 - (2) Any area in which railroad service is performed under contract with the Administration or in which railroad facilities are owned by the Administration.

⁴ U.S.Department of Transportation, Federal Transit Administration, National Transit Database (NTD) FY 2019 System Profiles.

⁵ WMATA does not receive local government funding from Maryland jurisdictions.



Technical Memorandum #2

Existing Structure and Services

APPENDIX A



February 2021



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Appendix A System Profiles

Technical Memo #2: Existing Structures and Services provides a summary of the transit services in the Baltimore Region, including services provided by the MDOT MTA and individual LOTS systems. Appendix A provides additional, more detailed information on each of the regional transit services. Each section includes an overview of existing services, governance structures and systems, costs and funding sources, and community statistics.

Appendix A is organized by transit service:

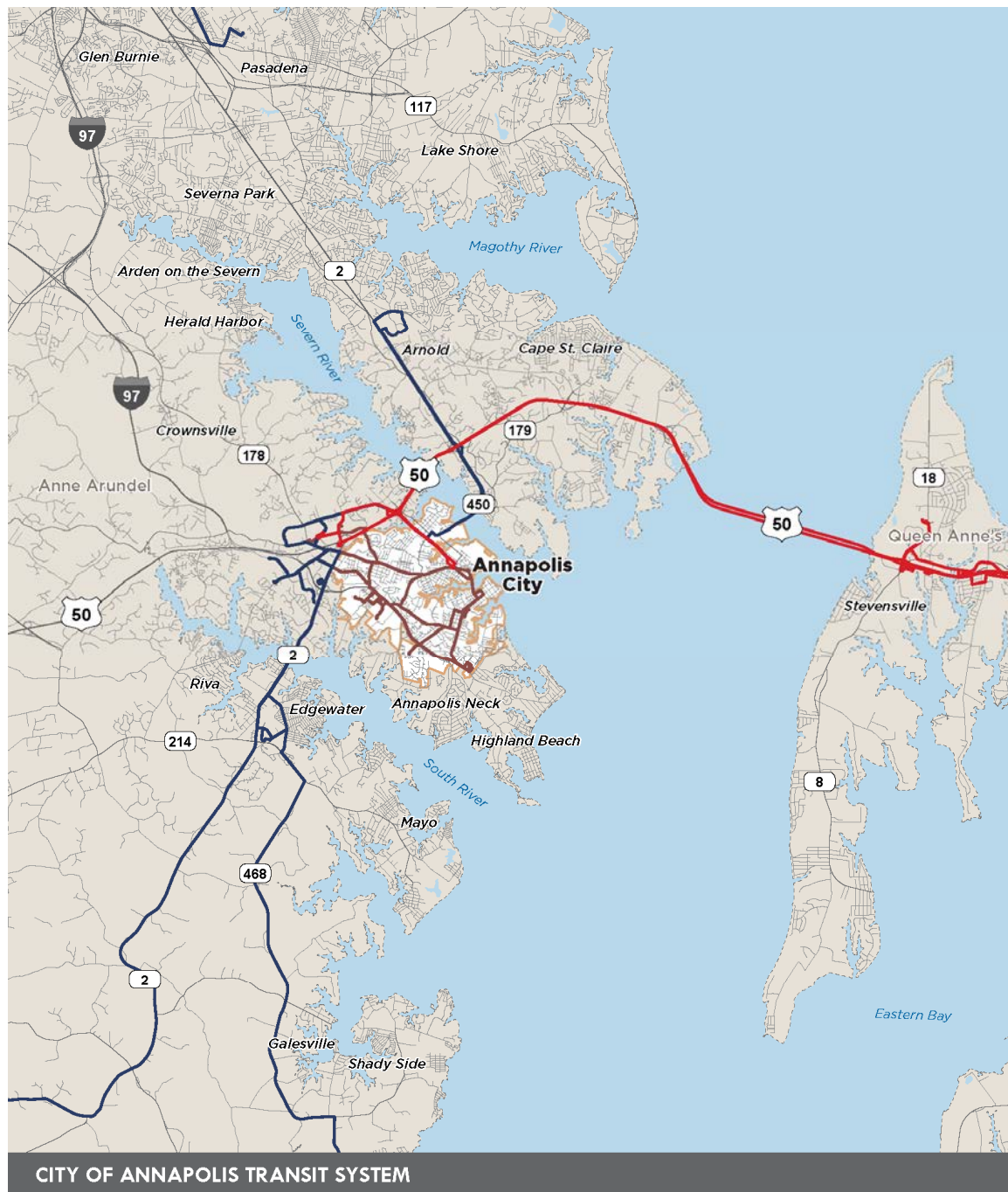
1. City of Annapolis
2. Anne Arundel County
3. Baltimore City
4. Baltimore County
5. Carroll County
6. Harford County
7. Howard County
8. Queen Anne's County
9. MDOT MTA Transit Services

CITY OF ANNAPOLIS TRANSIT SYSTEM PROFILE

Overview

The City of Annapolis is located within eastern Anne Arundel County, where the Severn River meets the Chesapeake Bay, just south of U.S. 50 (see Figure 1)

Figure 1 City of Annapolis Transit Service



LEGEND

- Annapolis Transit
- AAOT
- Queen Anne's County Ride
- Study Area
- County Line

Miles 0 5 10 20



Annapolis Transit

City of Annapolis Department of Transportation

Annapolis Transit is operated by City of Annapolis through its Department of Transportation. The City of Annapolis has operated public transit service since 1978, when the City purchased assets of the formal Arundel Bus Company and took over the provision of the service. The City of Annapolis directly operates Annapolis Transit. All full-time drivers, maintenance staff, and clerical staff belong to the American Federation of State, County, & Municipal Employees (AFSCME).

The mission of the Transportation Department is to provide the highest possible level of reliable, safe, interconnected, customer-focused, affordable, accessible, and efficient public transportation throughout the Annapolis area to enhance quality of life, support the environment and economic development.

Annapolis Transit's service area includes the City of Annapolis and surrounding areas in Anne Arundel County, about 20 square miles. The Annapolis Transit system consists of seven fixed routes plus ADA complementary paratransit services.

Annapolis Transit operates services from 5:30 a.m. to 11:00 p.m. Monday through Friday, and from 7:00 a.m. to 8:00 p.m. on Saturday and Sunday. During peak times, 10 vehicles are in operation.

In FY2 019, Annapolis Transit provided 411,661 fixed route trips and 1,796 paratransit trips, totaling 413,457. A total of 464,454 trips were provided in FY 2018. It should be noted that through July 31, 2018, Annapolis Transit operated two additional routes (Gold and Yellow) for which Anne Arundel County assumed operations beginning Aug. 1, 2018.

On Annapolis Transit fixed routes, the one-way cash fare is \$2, with \$1.00 half-fare for seniors (60+), people with disabilities, students, and Medicare Card Holders with valid photo ID. Children under age 6 ride for free with a paying adult ride. Students K-12 who live with the city limits also ride free on regular school days. Annapolis Transit also offers numerous multi-ride pass options, including a \$4.00 all-day pass on fixed route. The ADA paratransit cash fare is \$4.00 per trip, with several multi-ride passes available.

In terms of technology, Annapolis Transit uses a real-time, GPS-based video surveillance system on all buses with live feed to the dispatch office. Annapolis Transit also uses a GPS-based electronic farebox system with a passenger counting feature.

Transit Governance

Annapolis Transit is a program within the City of Annapolis Department of Transportation. The Department of Transportation is also responsible for Parking, Transportation Planning, and Taxi licensing and oversight. Additionally, The Department participates in regional transportation planning activities at the metropolitan planning organization level. The Department also shares responsibilities with the City Department of Planning & Zoning on matters related to non-auto transportation. Annapolis Transit's organizational chart within the Department is shown in Figure 4.

Decisions about policy changes and plan adoption are made by the full City Council. The City Council Transportation Committee and Annapolis Transportation Board discussed under "Agency Responsibilities, Public Engagement, and Planning," make recommendations to City Council.

Following a public hearing conducted by the City Council, the Council will consider comments made by the public and then vote.

Transit Funding

Funding for Annapolis Transit includes directly generated revenues (e.g., fares and advertising revenues), Federal and State operating and capital grants from MDOT MTA, City match for operating and capital grants, Anne Arundel County operating subsidy from Anne Arundel County, and additional City funds to pay for the net operating deficit (transit operating expenses that are not covered by other sources).

The City of Annapolis applies for MDOT MTA State funding under Large Urban (LU), ADA, and LU Preventive Maintenance programs (and, in FY2020, CARES Act funds) to support Annapolis Transit operations. Although the Large Urban funds are from the State, the Department of Transportation notes that MDOT MTA uses the Large Urban program to match Federal Transit Administration (FTA) funds awarded to MDOT MTA under the Section 5307 program. Also, it should be noted that, LU Preventive Maintenance grants are funded as capital grants for matching purposes, but support an operations function, and thus the City of Annapolis considers them as operating support for budgeting purposes.

State grant amounts have been stable in previous years (not increasing with increased operating expenses such as driver wage raises). However, State funding was reduced in 2020 and further reduced in 2021 due to the State's financial situation.

Local match support for operating grants comes from the City of Annapolis and Anne Arundel County. The County contribution varies from year to year. When the County took over operations of two former Annapolis Transit routes in FY 2019, funding was reduced to reflect the transfer of the two routes.

The City's General Fund Revenues make up the largest operating funding source for Annapolis Transit, covering the net operating deficit. At the end of the fiscal year, the Department of Transportation calculates the total amount of fares, advertising revenue, grant funding, and other non-City funds received during the year, compares with total transit operating expenses, and determines the total amount of City funds needed (including grant overmatch) to be transferred to the Department. Administrative expenses are largely borne by the City.

Capital funding is primarily through Federal and State grants from MDOT MTA, with City funds providing the local match. Whenever grant awards with 10 percent match do not fully cover capital costs, the City covers the difference.

Agency Responsibilities, Public Engagement, and Planning

The City of Annapolis Department of Transportation is responsible for ensuring compliance with Federal requirements. The Department follows Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) requirements for public engagement.

Public hearings are held by the City's Transportation Board and the Transportation Committee of the City Council. The standing Transportation Committee comprised of three City Council members, meets monthly to consider matters affecting parking, public transportation, and vehicular traffic. The Transportation Board is an advisory board comprised of citizens representing each of the eight City of Annapolis wards, two ad hoc members representing the Naval Academy, St. John's College, and Mayor-appointed at-large members. The board is

charged with providing informed analysis of the facts relating to transportation matters affecting the City and all transportation matters pending before the City Council or before any City agency, board, or commission; recommending a comprehensive transportation master plan for the City; and providing oversight, guidance, and expertise in the planning of comprehensive traffic, transit, and parking policies.

The Department of Transportation is responsible for transit service planning and development. The most recent Transit Development Plan (TDP) was conducted in 2019 by a consultant under contract to MDOT MTA, which provides 80% of the funding for TDPs, matched by the City.

Services are planned to connect with other providers, including MTA Commuter Bus, BaltimoreLink, Anne Arundel County, and Queen Anne's County Ride.

Service Available through MDOT MTA

Four MDOT MTA Commuter Bus routes connect Annapolis to Baltimore or Washington, DC on weekdays:

- **Route 210** operates between Kent Island and Baltimore, with five west/northbound trips in the morning and five south/eastbound trips in the p.m. peak. Two route variations are operated: one route serves Kent Island and two stops near Annapolis, and the other route originates in downtown Annapolis stopping at five locations in or near Annapolis. Two trips each a.m. and p.m. peak stop at Church Circle & School St. (Downtown Annapolis), Rowe Blvd. & Taylor Ave. (at the Army-Navy stadium park & ride, within the city), and Medical Pkwy (Anne Arundel Medical Center, outside of the city). All five trips stop at the Westfield Mall (Ring Road bus stop near J.C. Penney) and Harry S. Truman Park & Ride (Riva Rd. & Truman Pkwy), both outside of the city limits. Except for the Harry S. Truman Park & Ride, these commuter stops are also served by Annapolis Transit (although schedules may not be coordinated to allow for convenient connections).
- **Route 215** operates between Annapolis and Baltimore, with three northbound trips in the morning and three southbound trips in the p.m. peak. All trips stop at Church Circle & School St., Rowe Blvd. & Taylor Ave., Medical Pkwy, and Westfield Mall.
- **Route 220** operates from Annapolis to Washington, DC, with 12 westbound trips in the morning and 13 eastbound trips in the afternoon/evening. All trips stop at the Harry S. Truman Park & Ride. Six westbound and seven eastbound trips also stop at Rowe Blvd. & Taylor Ave., 10 other locations along West Street (SR 450, all within the city limits), and Riva Road at Forrest Drive (just outside of the city).
- **Route 230** operates from Severna Park and Annapolis to Washington, DC, with 10 westbound trips in the morning and 12 eastbound trips in the afternoon and evening. All trips stop at the Harry S. Truman Park & Ride. Five westbound trips and seven eastbound trips also serve Rowe Blvd. & Taylor Ave., 10 locations along West Street, and plus Riva Road at Forrest Drive.

Financial Data

The 2019 financial data for Annapolis, as reported in the National Transit Database (NTD), is provided in Figure 2.

In FY 2019, Annapolis Transit's operating expenses totaled \$4,530,423, balanced by the same amount of revenues. A breakdown of funding sources and amounts for FY 2019 is detailed in Figure 3.

In FY 2019, Annapolis Transit was awarded \$156,604 in State Large Urban capital funds, matched by \$17,400 from the City, totaling \$174,004, to replace two small buses.

Figure 2 FY2019 Financial Data – Annapolis Transit

FY 2019 Operating Expenses	
Fare Revenues	\$615,144
Local Funds	\$2,197,908
State Funds	\$1,598,625
Federal Assistance	\$0
Other Funds	\$118,746
Total Operating Funds Expended	\$4,530,423

Figure 3 FY 2019 Operating Funding for Annapolis Transit

Revenue Source	Amount
Passenger-paid fares	\$329,624
Organization-paid fares	285,520
Advertising	118,747
State Grant - Large Urban	1,040,243
State Grant – ADA	198,382
State Grant – Preventive Maintenance	360,000
Anne Arundel County-Office of Transportation	350,000
Anne Arundel County-Dept. of Social Services	42,568
City of Annapolis	1,805,340
Total	\$4,530,424

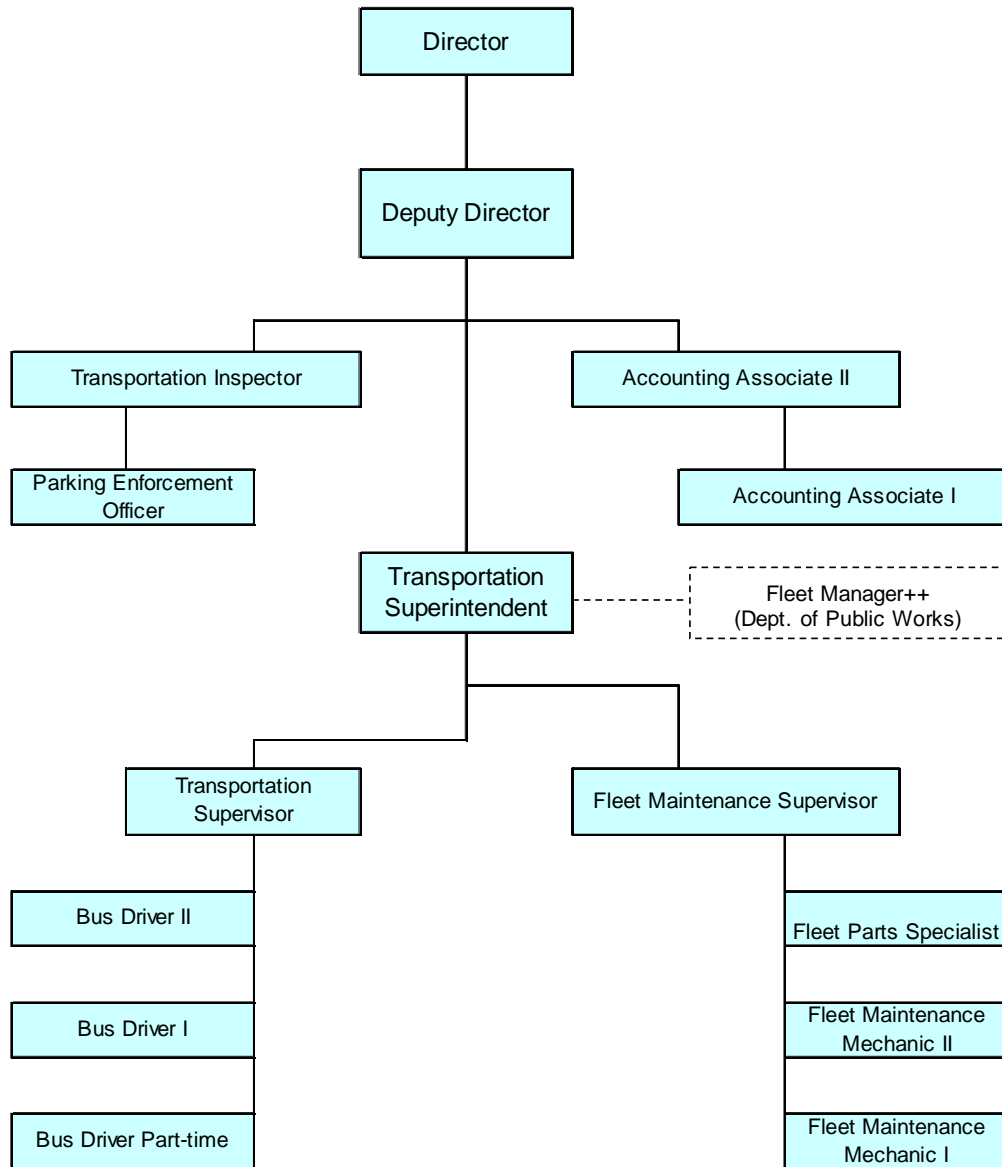
Source: National Transit Database

FY 2019 Capital Expenses	
Local Funds	\$109,840
State Funds	\$156,553
Federal Assistance	\$0
Other Funds	\$0
Total Capital Funds Expended	\$266,393

Source: National Transit Database

Figure 4 Annapolis Transit: Organization Chart

CITY OF ANNAPOLIS DEPARTMENT OF TRANSPORTATION



** Coordinates with ADOT on vehicle maintenance

Community Statistics (2019)**Population:** 39,223**Population density:** 5,462.8 people per square mile**Top five employers:**

- State of Maryland government (12,132 employees)
- Anne Arundel County government (5,190)
- U.S. Naval Academy (2,340)
- City of Annapolis government (550)
- ARC of the Central Chesapeake Region (450 employees).¹

Average household income: \$85,636**Residents below federal poverty level:** 11.0%**Population aged 65+:** 16%**Residents living in zero vehicle households:** 8.6%**Percent minority:** 36.9%**Journey to Work Data**

Journey to work data were not compiled for the City of Annapolis, but Annapolis is included within these data for Anne Arundel County. The mode split and mean travel time to work for Annapolis residents are shown in Figure 5.

Figure 5 City of Annapolis Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	21,124	
Car, truck, or van -- drove alone	15,075	71.4%
Car, truck, or van -- carpooled	1,779	8.4%
Public transportation (excluding taxicab)	979	4.6%
Walked	1,277	6.0%
Other means	847	4.0%
Worked from home	1,167	5.5%
Mean travel time to work (minutes)	27.7	

Source: ACS five-year estimates, 2015-2019

¹ City of Annapolis Office of Economic Development web page, <https://www.annapolis.gov/1276/Top-Employers> accessed 2/5/21

ANNE ARUNDEL COUNTY TRANSIT PROFILE

Overview

Anne Arundel County is in central Maryland in the southeast corner of the Baltimore region, bordered by the Anne Arundel, Baltimore, Prince George's, and Calvert counties as well as Baltimore City. The Chesapeake Bay forms its eastern boundary (see Figure 6). Annapolis is the county seat.

Figure 6 Anne Arundel County and LOTS Bus Service



Transit Service Overview

Anne Arundel Office of Transportation

Local public transportation in Anne Arundel County is managed by the Anne Arundel County Office of Transportation (OOT). OOT contracts with a private service provider for service and helps funds service operated by the Regional Transportation Agency of Central Maryland (RTA) and Annapolis Transit.

Anne Arundel County contracts for nine fixed routes that include routes formerly operated by the City of Annapolis and the RTA, along with new services providing linkage and coverage to employment centers:

- **Route 1:** Shopper Shuttle (Quarterfield Crossing, Meade Village)
- **Route 2:** Brooklyn Park Connector (Cromwell Light Rail Station, Ferndale Light Rail Station)
- **Route 3:** AA-201 (Arundel Mills Mall, Cromwell Light Rail Station, Freetown Village)
- **Route 4:** AA-202 (Arundel Mills Mall, Meade Village, Odenton MARC Station, Odenton Health Campus)
- **Route 5:** AA-Gold College Parkway (Westfield Mall, AACC Loop Road)
- **Route 6:** AA-Gold Edgewater (K-Mart Edgewater, Harbour Center, Westfield Mall)
- **Route 7:** AA-Yellow Bus (Westfield Mall, Annapolis Corporate Center, Harbour Center, Clairborne)
- **Route 8:** County Connector Shuttle (Arundel Mills, MARC, and West County)
- **Route 8:** Crofton Connector (Odenton MARC Station, Crofton Village)
- **Route 9:** South County Call N'Ride (Southern Anne Arundel County)

Anne Arundel also operates three categories of demand response service within Anne Arundel:

- ADA complementary paratransit
- General paratransit (GPT)
- South County Call N'Ride (pickup anywhere south of MD 214, destination anywhere south of MD 214 or AA Gold bus stop at Edgewater Library)

In addition to directly providing these transit services, OOT supports the County's commuter assistance program.

Figure 7 Anne Arundel County Fare Structure

Fixed Route Service	
General Public	\$2.00
Reduced Fare for students, seniors, or persons with disabilities	\$1.00
Transfers	Free
Children Age 5 and Under	Free

Transit services are currently operating Monday through Friday from about 5:00 a.m. to 12:00 p.m., depending on the route.

OOT does not have a large vehicle fleet, instead includes vehicle requirements as part of its contracts with private providers. There are 38 vehicles in service during peak periods, with a total fleet of 47 vehicles (per NTD).

Anne Arundel County OOT services charge \$2.00 for an adult one-way fare. Some demand response services are free with Call 'nRide fares set at \$2.00 (see Figure 7).

MTA Service in Anne Arundel County

Historically MTA was the major provider of transit service for Anne Arundel County, and it continues to provide local bus, commuter bus, light rail, and commuter rail service to the County, providing some local service and linkages to both Baltimore and Washington D.C. These routes are listed below:

MDOT MTA Operated LocalLink and Express BusLink

- **LocalLink 67: Marley Neck (Energy Parkway)-Downtown Baltimore**, local service operated daily with eight roundtrips. Anne Arundel County stops include Brooklyn Park and Baltimore.
- **LocalLink 69/70 Patapsco Light Rail Station-Jumpers Hole** local service operated daily with one southbound trip in the evening and one northbound late-night trip. Anne Arundel County stops include Glen Burie, Severn Park and Pasadena.
- **LocalLink 75 Patapsco Light Rail Station-Parkway Center**, local service operated daily with one southbound trip and one northbound trip at night. Anne Arundel County stops include Lansdowne and BWI Airport.
- **ExpressBusLink 164 Riviera Beach-Downtown**, express weekday only. Six northbound and southbound trips. Anne Arundel County stops include Pasadena and Baltimore.

Light Rail: LightrailLink

- **Hunt Valley-Cromwell/Glen Burnie**: There are eight northbound and southbound trips during the day. Anne Arundel County stops at Cromwell/Glen Burnie.
- **Hunt Valley-BWI Marshall Airport**: There are eight northbound and southbound trips during the day. Anne Arundel County stops at BWI Business District and BWI Marshall Airport Main Terminal.

Commuter and Express Bus Routes:

- **Commuter Route 201** operates between Gaithersburg Park & Ride and BWI Marshall Airport, with five southbound trips and three northbound trips. Anne Arundel stops in Arundel Mills Shopping Center and BWI Marshall Airport.

Demand Response & ADA Paratransit Service	
Demand Response Service Fares	Free

South County Call N'Ride	
Regular One Way	\$2.00
Reduced One Way (for seniors, persons with disabilities, and students)	\$1.00
Students (w/ ID)	\$1.00
Children under 5	Free

- **Commuter Route 210** operates between Kent Island and Baltimore, with five west/northbound trips in the morning and five south/eastbound trips in the p.m. peak. Two route variations are operated: one route serves Kent Island and two stops near Annapolis, and the other route originates in downtown Annapolis stopping at five locations in or near Annapolis. Anne Arundel County stops in Anne Arundel Medical Center, Harry S. Truman Park and Ride, and Westfield Mall.
- **Commuter Route 215** operates between Annapolis and Baltimore, with three northbound trips in the morning and three southbound trips in the p.m. peak. Anne Arundel County stops at Anne Arundel Medical Center, Westfield Mall, and Cromwell Light Rail Station.
- **Commuter Route 220** operates between Annapolis and Washington, D.C. Six peak hour trips serve downtown Annapolis, an additional six operate directly from Harry S. Truman Park and Ride. Anne Arundel County stops include Harry S. Truman Park and Ride.
- **Commuter Route 230** operates between Severna Park, Parole/Annapolis, Washington, D.C. Five peak hour trips service Severna Park and Harry S. Truman Park and Ride, an additional five operate directly from Harry S. Truman Park and Ride. Anne Arundel County stops include Severna Park and Ride, Harry S. Truman Park and Ride.
- **Commuter Route 240** operates between Kent Narrows and Washington, D.C., with three westbound trips in the morning and four eastbound trips in the p.m. peak. The route does not have a stop in the county but passes through it.
- **Commuter Route 250** operates between Kent Narrows and Washington, D.C., with three westbound trips in the morning and three eastbound trips in the p.m. peak. The only Anne Arundel County stop is Davidsonville Park & Ride Lots.
- **Commuter Route 260** operates between Severna Park and Washington, D.C., with three westbound trips in the morning and four eastbound trips in the p.m. peak. Anne Arundel County stops are Severna Park and Davidsonville Park & Ride Lots.

Commuter Rail Service: MARC Penn Line and MARC Camden Line

- **MARC Penn Line:** Baltimore Penn Station to Washington Union Station: Fifteen southbound trips and sixteen northbound trips. Anne Arundel County stops include the BWI Marshall Rail Station, and Odenton
- **MARC Camden Line:** Baltimore Camden Station to Washington Union Station: Four southbound trips including three morning trips, and three northbound trips including three trips in the p.m. Anne Arundel County stops include Jessup and Savage—the line forms the County border, and there are additional stops in adjacent Howard (Dorsey) and Prince George's County (Laurel)

Vehicles operated on behalf of the Office of Transportation in demand-response services are equipped with Automatic Vehicle Locators (AVL), and Mobile Digital Terminals (MDTs). Routematch software is used for scheduling and dispatch of demand-response services. The County is working on a cashless fare payment system.

Anne Arundel County vehicles can potentially operate from the Central Maryland Transit Operations Facility, developed jointly with Howard County. It is located on the eastern edge of Howard County, near the Anne Arundel line. The facility was built in 2014-15 and is a LEED Silver Certified Facility with a capacity of 104 buses. It was recently modified to support electric buses, as the RTA has three fully electric vehicles in service.

Transit Governance

The Office of Transportation is under the Chief Administrative Officer, who reports to the Executive. The Office of Transportation's role is "to promote and establish multi modal transportation networks throughout Anne Arundel County, which will provide the necessary infrastructure to make Anne Arundel County an economically vibrant community enhancing the quality of life for the citizens by advising the County Executive and the County Council on the coordination and development of government policies, programs, services, and allocations of resources for citizens regarding transportation."

The Office of Transportation staffs one board—the Transportation Commission, whose mission is to provide recommendations to the County Executive regarding the County's current and future transportation plans and programs.

The Office of Transportation staffing includes five FTE positions, though they are responsible for several modes (see Figure 8):

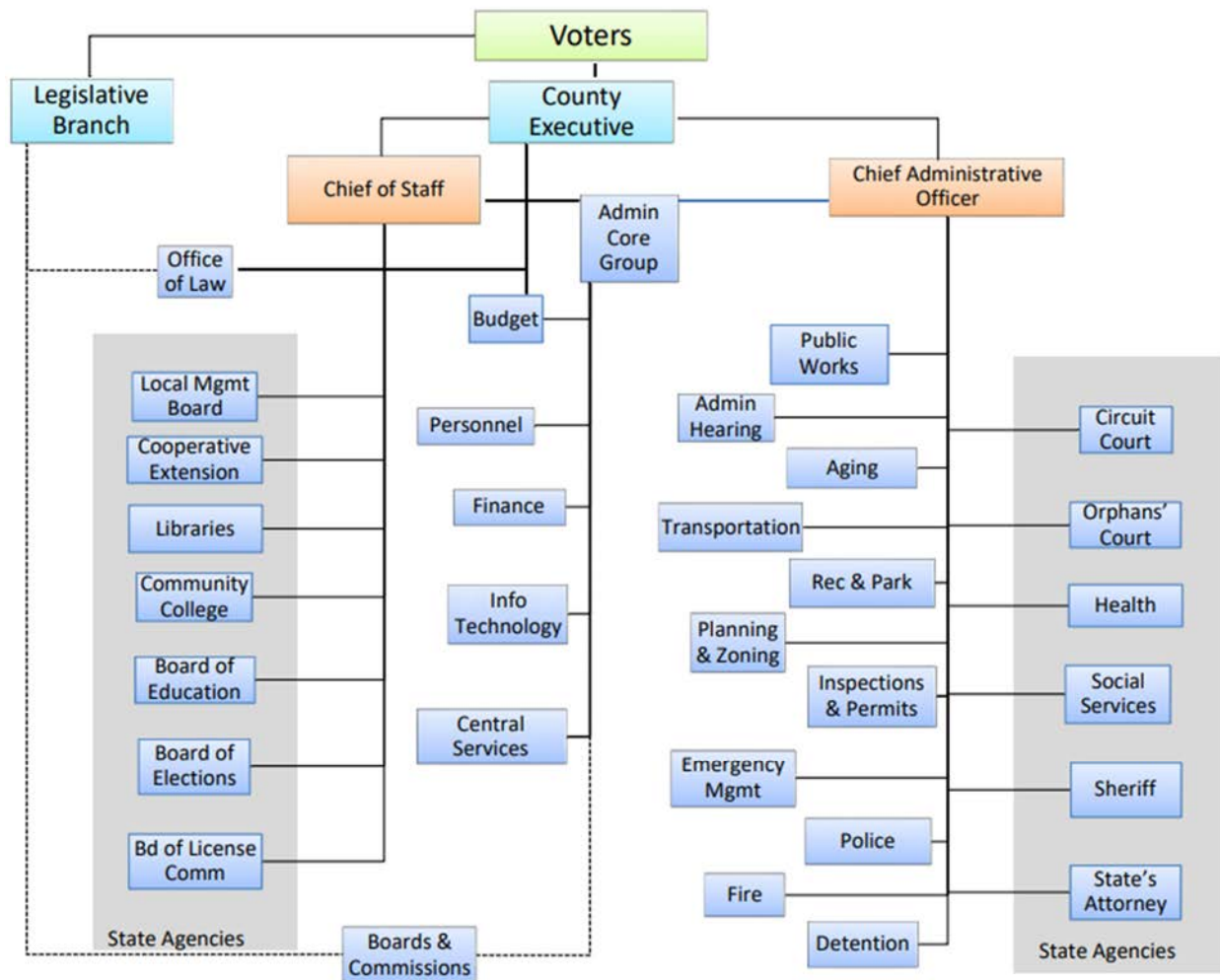
- Director
- Transportation Planner
- Program Manager
- Administrators (1)
- Office Support (3)

The contractor staffing includes:

- General Manager
- Dispatcher/Supervisors (4)
- Operators (54)

The budget is developed by the Anne Arundel County Office of Transportation with input from the Anne Arundel County Transportation Commission. It is reviewed and with changes as needed is included in the overall budget submission from the County Executive to the County Council. The ultimate policy board is the Anne Arundel County Council.

Figure 8 Anne Arundel County Transit Organizational Chart



Agency Responsibilities, Public Engagement, and Planning

The Anne Arundel County Office of Transportation is responsible for compliance with federal and state regulations. This includes overseeing the different contractors to ensure compliance, developing, and maintaining required policies, reporting, and responding to periodic MTA compliance reviews. The contractors are primarily responsible for bus and paratransit operations, including operations, supervision, vehicle, and facility maintenance. The operators are employees of the contractors, who has drug and alcohol compliance responsibility.

The Office of Transportation also staffs the Transportation Commission, an advisory board appointed by the County Executive, and it also participates in the Central Maryland Transportation and Mobility Commission, the joint board providing guidance for transit in the region. Other initiatives include planning for all modes, including transit, bike, pedestrian, and highway transportation project, and it includes a role in the development of Anne Arundel

County's MDOT Priorities Letter, expressing County priorities for transportation projects of all modes.

Anne Arundel County routes connect with those of other transit systems at several locations. Key transfer points include the Arundel Mills Mall and Westfield Anne Arundel Mall. There are connections to a WMATA Metrobus service at Arundel Mills, to MTA Commuter Buses at Westfield Anne Arundel Mall and to MTA LocaLink and Commuter Bus service at Arundel Mills and BWI Marshall Airport. There are also connections to MTA Light Rail at Cromwell/Glen Burnie.

There are free transfers to/from RTA routes and Anne Arundel County routes, but none with MTA or WMATA services. There is no ongoing process for service coordination development with MTA, though the CMTMC is a forum for coordination policies with Prince George's and Howard Counties and staff do meet to address service changes.

A Transit Development Plan (TDP) is conducted every five years with MTA support, the last in 2018. That plan, the Central Maryland Regional Transit Development Plan, was a joint plan with Howard County. The Anne Arundel County aspect of the plan called for a major expansion of transit service in the County, spread over a five-phase implementation. In Phase I frequencies on existing routes would be improved to 30-minute headways. In subsequent phases microtransit Call n'Ride service areas would be developed to service lower-density previously unserved communities, and final phases would add new trunk routes to link the microtransit service areas on east-west and north-south routes. The entire implementation would have added approximately \$10.5 million in annual operating costs and required \$10 million in expansion capital.

The Central Maryland TDP was an input to Move Anne Arundel, the County's multimodal transportation functional master plan. Adopted by the County Council, this plan adds high-capacity transit corridors in some areas.

Transit Funding and Financial Data

In FY 2019, according to the National Transit Database (NTD), Anne Arundel County spent just over \$6 million in transit operations and \$0 on capital (see Figure 9). County budget figures show different expenditures, with expected capital expenditures (see Figure 10). County data also include expenditures for contracted service, raising the local County contribution significantly. Based on the County budget documents, the total program budget is somewhat higher, suggesting Anne Arundel County spends approximately \$3 million annually in local funds to support transit, including planned capital investments.

Anne Arundel County obtains funding from the MTA OLTS program for both operations and capital, but most funding for the services are raised through general funds. The RTA structure means Anne Arundel County funds a portion of shared routes and a share of the RTA management fee. In addition, there is funding from MDOT under the Washington transit program, provided to support service in Laurel, which is in the Washington region, and Anne Arundel is credited with a portion of that funding. In addition, the County Department of Social Services receives state Job Access and Reverse Commute Funding (JARC), which is then provided to the Office of Transit to support service related to employment needs. Anne Arundel County also receives MTA Rideshare program funding to support Transit Demand Management initiatives, including its rideshare program.

Figure 9 FY 2019 Financial Data –
Anne Arundel County

FY 2019 Operating Expenses	
Fare Revenues	\$224,045
Local Funds	\$2,828,835
State Funds	\$2,979,324
Federal Assistance	\$0
Total Operating Funds Expended	\$6,032,204

FY 2019 Capital Expenses	
Local Funds	\$0
State Funds	\$0
Federal Assistance	\$0
Other Funds	\$0
Total Capital Funds Expended	\$0

Source: National Transit Database FY 2019

Figure 10 Anne Arundel County Transit Budget FY 2019 Actuals from Office of Transportation

	Total Expense	Fare and Other Program Revenues	MTA Grants	Local General Revenue Funding
Operating Budget				
Operating	\$4,951,434	\$224,045	\$1,347,469	\$3,406,568
Rideshare/TDM	\$197,397		\$197,397	\$0
Total Operating	\$5,148,831		\$1,544,866	\$3,406,568
Capital Budget				
Vehicles, Stops, Equip.	\$395,000		\$355,500	\$39,500
Total Capital	\$395,000		\$355,500	\$39,500
Total FY 2019 Totals	\$5,543,831	\$224,045	\$1,900,366	\$3,446,068

Community Statistics (2019)

Population: 579,234

Population density: 1,395.7 people per square mile

Top five employers:

- Fort George G. Meade (54,000 employees)
- Northrup Grumman (8,465)
- Southwest Airlines (4,835)
- Anne Arundel Health System (4,000)
- Live! Casino & Hotel (3,000)

Mean household income: \$124,685

Residents below federal poverty level: 5.8%

Population aged 65+: 14%

Residents living in zero vehicle households: 3.6%

Percent minority: 34%

The mean travel time to work for Anne Arundel residents is 31.4 minutes (see Figure 11). More than half (58.3%) of Anne Arundel County's workers over the age of 16 stay work in Anne Arundel County.

Figure 11 Means of Transportation to Work and Mean Travel Time—Anne Arundel County

Commuting to Work	Number	Percent
Workers 16 years and over	301,362	
Car, truck, or van - - drove alone	240,534	79.8%
Car, truck, or van - - carpooled	22,455	7.5%
Public transportation (excluding taxicab)	10,606	3.5%
Walked	7,151	2.4%
Other means	3,927	1.3%
Worked from home	16,689	5.5%
Mean travel time to work (minutes)	31.4	

Source: ACS five-year estimates, 2015-2019

Figure 12 Commuting Patterns-Anne Arundel County

Work Location	Number	Percent
Anne Arundel County	168,876	58.3%
Prince George's County	27,927	9.6%
Baltimore city	21,670	7.5%
Howard County	18,565	6.4%
District of Columbia	18,474	6.4%
Baltimore County	12,095	4.2%
Montgomery County	8,142	2.8%

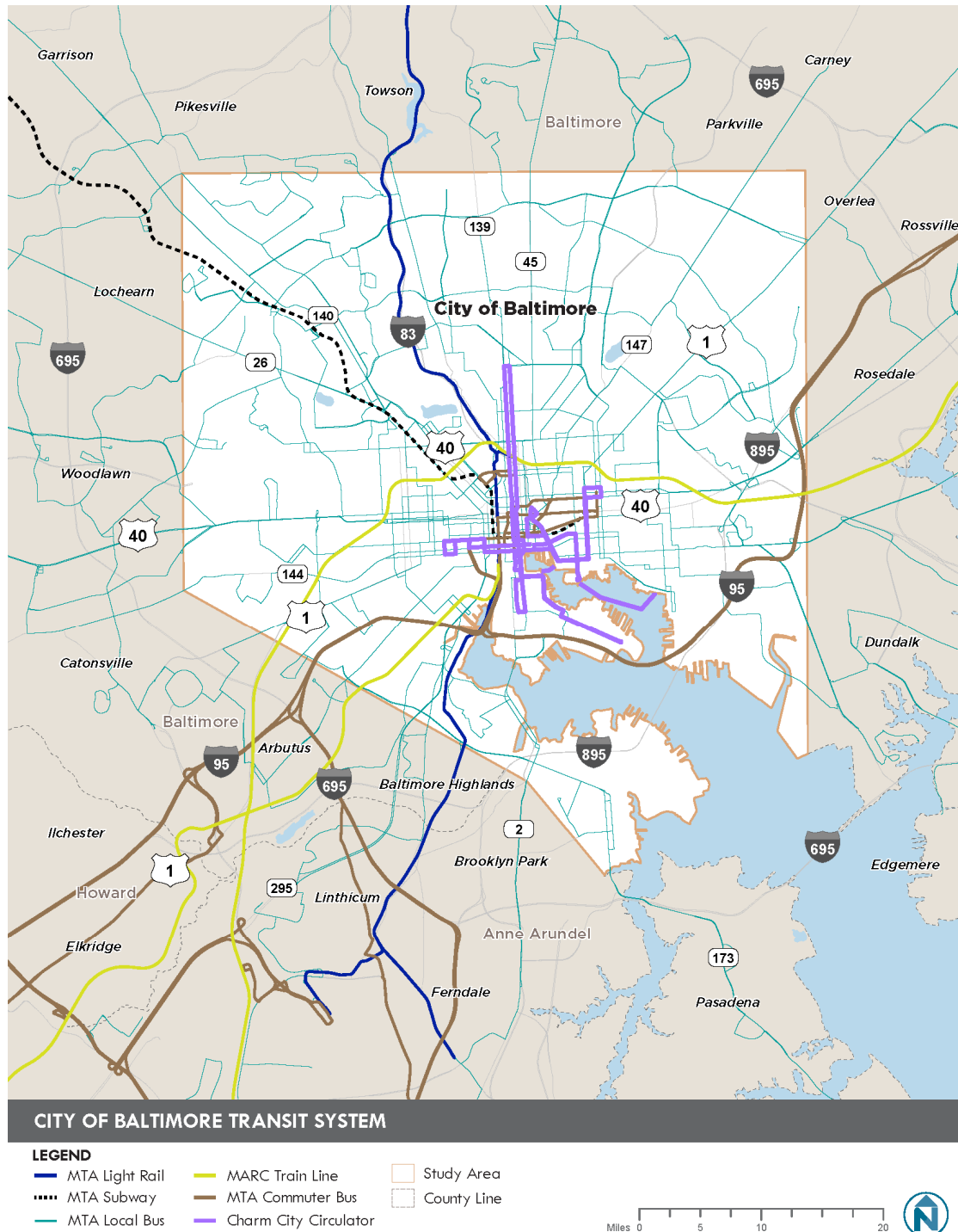
Source: U.S. Census Bureau, ACS, 2011-2015

CITY OF BALTIMORE TRANSIT PROFILE

Overview

The City of Baltimore is an independent city; it is the most populous city in the State of Maryland (see Figure 13).

Figure 13 City of Baltimore and LOTS Bus Routes



Transit Service Overview

Charm City Circulator

Public transit service provided by the MDOT-MTA is highlighted in a separate profile. This profile focuses on the additional public transportation programs managed by the City of Baltimore:

- **Charm City Circulator** (fixed route buses and ferryboats) administered by the Baltimore City Department of Transportation
- **TaxiCard program**, which provides taxi subsidies for seniors and people with disabilities and is administered by the Baltimore City Health Department Division of CARE Services.

Initiated in 2010, the Charm City Circulator (CCC) was initially funded through parking revenue but has since broadened its service and funding streams. Service is provided by a contractor, currently RMA Worldwide Chauffeured Transportation. The three-year contract period began in July 2019. The goals of the CCC are to:

- Limit air pollution
- Limit congestion growth
- Tie together growing communities
- Spread the use of the existing parking supply²

The CCC operates four routes in the central business district using a fleet of 24 vehicles. The four routes are:

- **Green Route** – City Hall - Fells Point - Johns Hopkins
- **Purple Route** – 33rd Street to Federal Hill
- **Orange Route** – Hollins Market to Harbor East
- **Banner Route** – Inner Harbor to Fort McHenry

The Harbor Connector is a maritime extension of the CCC, and provides the following ferry routes:

- **HC1** – Maritime Park (Landing 8) - Tide Point (Landing 10)
- **HC2** – Canton Waterfront Park (Landing 16) - Tide Point (Landing 10) – This route is currently suspended.
- **HC3** – Pier Five (Landing 5) – Federal Hill (Landing 4)

The CCC operates during the following hours:

- **Monday-Thursday:** 7:00 a.m. - 8:00 p.m.
- **Friday:** 7:00 a.m.- midnight
- **Saturday:** 9:00 a.m.- midnight
- **Sunday:** 9:00 a.m. - 8:00 p.m.

The Harbor Connector operates during the following hours:

- **Monday-Friday:** 6:00 a.m. - 11:00 a.m. & 2:30 p.m. - 8:00 p.m.

² Charm City Circulator web page, viewed 2/5/2021

There are 24 vehicles in the CCC fleet and three ferry boats.

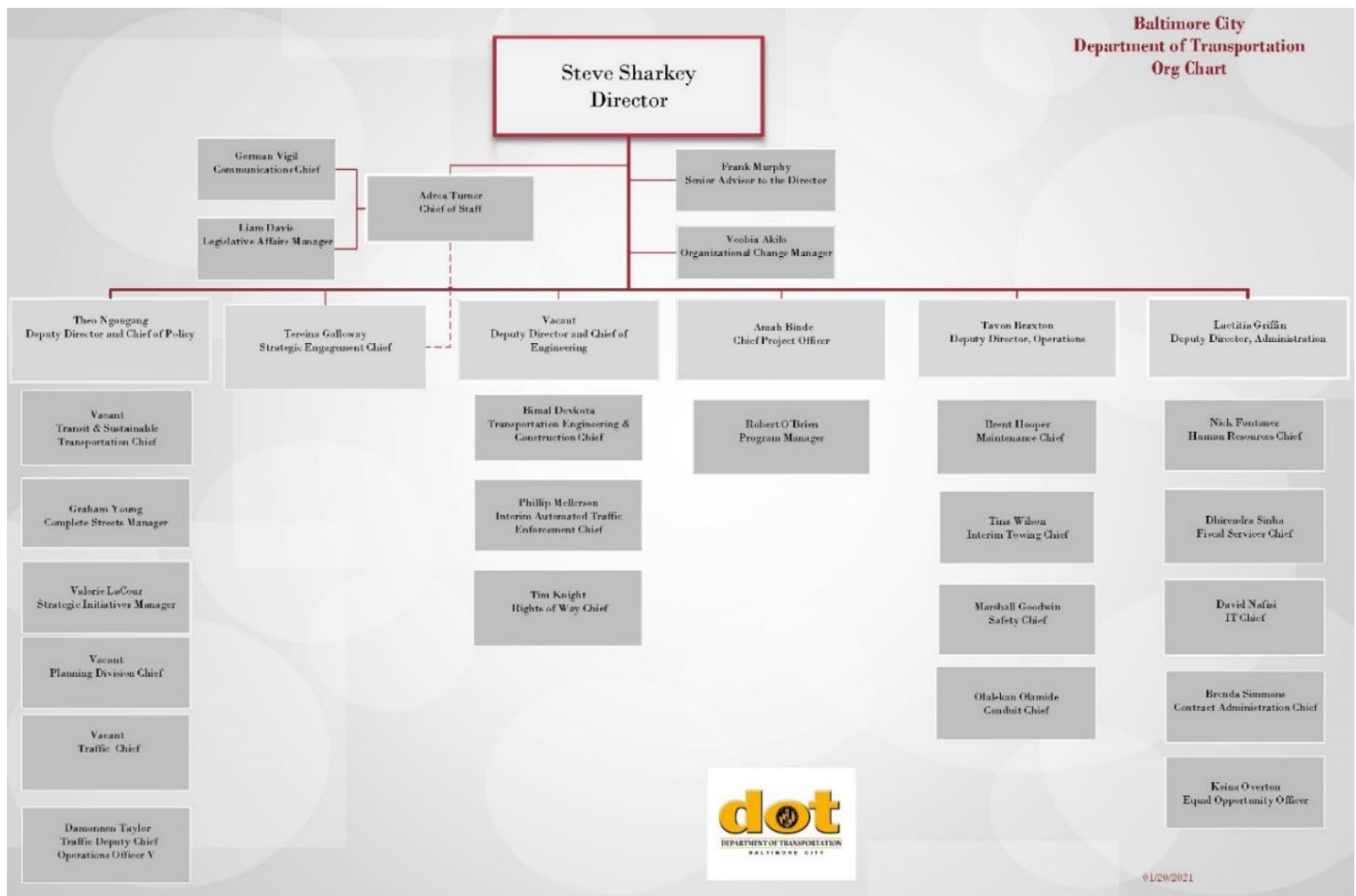
The CCC and Harbor Connector are fare-free. The fare revenue that is reported to the NTD is actually advertising revenue.

Real-time transit information is provided for the CCC through a program called "Ride Systems." The CCC vehicles are equipped with automatic vehicle locators (AVL) and automatic passenger counters (APC). The City owns the technology systems that are used for the program.

Transit Governance

Within the Baltimore City Department of Transportation, the Transit Services Administrator position is within the Transit and Sustainable Transportation unit, under the direction of the Deputy Director and Chief of Policy (see Figure 14). The shared mobility and bicycle programs are also with in this unit.

Figure 14 Baltimore City Department of Transportation Organizational Chart



Agency Responsibilities, Public Engagement, and Planning

The Transit Services Administrator is tasked with all facets of running the program, including federal and state compliance and contractor oversight. The administrator is currently working on the development of public engagement process that will be compliant with federal and state guidelines. There is not currently an advisory committee, though the development of one will be part of the new public engagement process.

The service connects to Amtrak, as well as to MDOT MTA services, including: LocalLink bus services; MARC; Light Rail; and Metro Subway. The Administrator is also included in bi-weekly coordinating calls with MDOT MTA.

The Baltimore City DOT will complete a Transit Development Plan (TDP) in FY 2022, including a service equity study. Until the TDP is completed, the program will continue with its current system with minor route adjustments as needed to improve on-time performance.

The CCC is funded through a combination of parking revenues, a small amount of advertising revenue, the general fund, and state grant funding.

Program budgets are based on previous year expenses and revenues, plus information about state and/or federal grants (see Figure 15). COVID-19 has impacted parking revenues and the Circulator's revenue stream. The state portion of the budget has also been reduced from \$3 million to \$2 million. The City will make up for these losses through Federal Cares Act funding and local revenue funds.

Figure 15 FY 2019 Financial Data –
Charm City Circulator

FY 2019 Operating Expenses	
Fare Revenues	\$11,998
Local Funds	\$1,725,407
State Funds	\$3,000,000
Federal Assistance	\$0
Total Operating Funds Expended	\$4,737,405

FY 2019 Capital Expenses	
Local Funds	\$0
State Funds	\$0
Federal Assistance	\$0
Other Funds	\$0
Total Capital Funds Expended	\$0

Source: National Transit Database

TaxiCard Program

The Baltimore City Health Department Division of CARE Services administers the TaxiCard program that provides a monthly subsidy to eligible Baltimore City residents who are ages 60 and older or who have a disability. The Baltimore City Health Department is the City's designated Area Agency on Aging.

Eligible participants are required to complete an application to enroll in the program. Once enrolled, they receive a TaxiCard. To use the service, participants make a payment toward the card and the card is also credited with the subsidy amount. The subsidy amount is added once per month when the participant makes their required monthly payment.

There are two subsidy categories: low income (less than \$900 per month) and moderate income (more than \$900 per month). For participants in the low-income category, their monthly payment of \$6.00 is match with CARE funds of \$23.00. For participants in the moderate-income category, their monthly payment of \$12.00 is matched with CARE funds of \$15.00. Program participants

can choose from eight participating cab companies, two of which offer wheelchair accessibility. Participants call the companies directly and can also hail them, as needed.

Program Management and Operation

MJM Innovations has been the City's contractor for the program since 2003 and handles most aspects of the program for the City. While the City does periodically conduct procurement processes for the management and operation of the program, MJM Innovations has thus far been the most qualified vendor. MJM has worked with the City over the years to develop the program. The City conducts the annual grant application process for the SSTAP funds and oversees the contractor.

Technology

MJM Innovations uses its proprietary EZ Transport software and hardware package to run the program. The program can be integrated into most taxi company software systems. Data from the TaxiCards are transmitted through a private gateway for security purposes and function as debit cards. EZ Transport provides full electronic tracking for each trip provided.

This technology also includes an online platform where participants can make their payments and see how much money is available on their cards.

Taxicab Participation

Cab companies that have Maryland Public Service Commission approval are permitted to participate in the program. They are required to purchase the required hardware and software. The cab companies' invoice MJM for the trips, which can be verified through the EZ Transport program.

Public Engagement

Prior to the pandemic, MJM Innovations would hold public forums about the program, as well as conducting outreach at senior centers and senior residential buildings. MJM Innovations also works with local hospitals, dialysis centers, community organizations, and social service agencies to get the word out about the availability of the program.

Decision-Making and Budget Development

The City's Health Department and MJM Innovations work together on decision making for the program. Budget development is defined by the amount available to the City through SSTAP. The program funding is 75% SSTAP and 25% City. Once the City learns what the SSTAP funding will be for the following year, the budget is prepared for the program goes through the City budget process. While MJM indicated that the program could be a lot larger, the City is not likely to be in a financial position to increase its portion of the funding in the near-term.

Funding

The TaxiCard program is funded through MDOT-MTA's SSTAP with a match from the City of Baltimore. The FY2021 funding is as follows: SSTAP - \$379,335; City - \$126,445. These amounts have been stable for several years.

Trips Provided

In FY 2019 the program provided 41,763 taxi trips.

Community Statistics (2019)

Population: 593,490

Population density: 7,336 people per square mile

Top five employers:

- John's Hopkins Hospital and Health System (20,485 employees)
- Johns Hopkins University (18,600)
- University of Maryland Medical System (11,450)
- University System of Maryland (8,965)
- Medstar Health (6,175)

Mean household income: \$74,246

Residents below federal poverty level: 6.7%

Population aged 65+: 13.6%

Residents living in zero vehicle households: 28.9%

Percent minority: 70.5%

Baltimore residents spent an average of 31.4 minutes traveling to work (see Figure 16). Over sixty percent of city residents work in the City (see Figure 17). The primary out-of-county work destination is Baltimore County.

Figure 16 City of Baltimore Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	275,900	
Car, truck, or van -- drove alone	165,994	60.2%
Car, truck, or van -- carpooled	24,425	8.9%
Public transportation (excluding taxicab)	48,244	17.5%
Walked	17,762	6.4%
Other means	7,104	2.6%
Worked from home	12,371	4.5%
Mean travel time to work (minutes)	31.4	

Source: ACS five-year estimates, 2015-2019

Figure 17 Commuting Patterns—Baltimore City

	Baltimore City Workers 16 and over	
Work Location	#	%
Baltimore city	163,042	61.4%
Baltimore County	55,895	21.0%
Anne Arundel County	17,180	6.5%
Howard County	10,804	4.1%
District of Columbia	4,765	1.8%

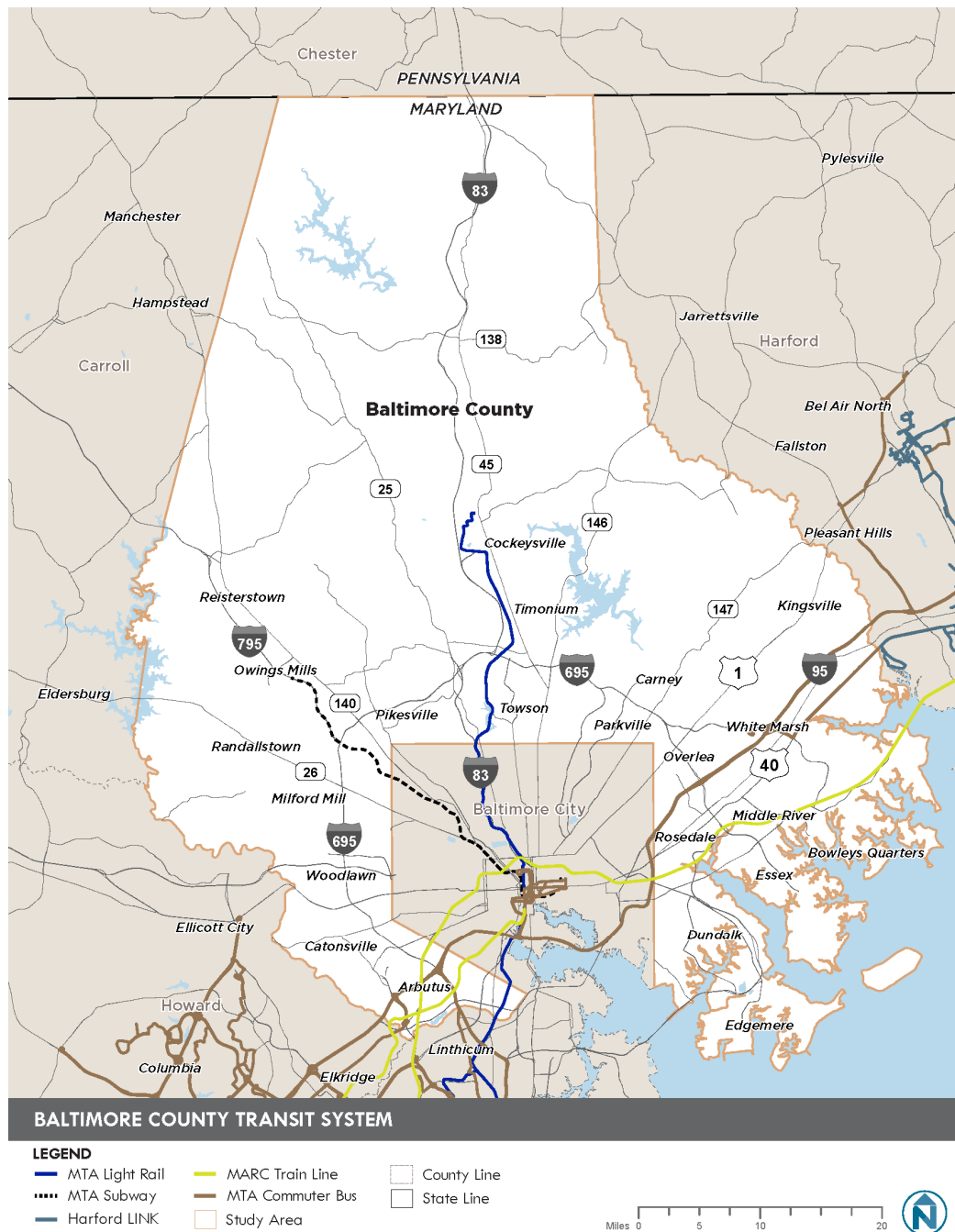
Source: ACS five-year estimates, 2015-2019

BALTIMORE COUNTY TRANSIT PROFILE

Overview

Baltimore County surrounds Baltimore City to the southwest, west, north, east, and southeast, with most of the county's land area (598 square miles) stretching from north of Baltimore City to the Pennsylvania border. The county seat is Towson, which is just north of the City of Baltimore. Baltimore County's shape is such that traveling from the southwest or south part of the county to the eastern part of the county involves crossing through Baltimore City (see Figure 18).

Figure 18 Baltimore County and MDOT MTA Regional Transit Services



Transit Service Overview

CountyRide

Baltimore County's Locally Operated Transit System (LOTS) is known as CountyRide, which is administered by the Baltimore County Department of Public Works (DPW) Transportation Bureau. CountyRide transitioned from the Baltimore County Department of Aging to the DPW in July 2020. Services described in this profile reflect the previous focus of services provided by the Department of Aging. Services planned for future implementation reflect a greater emphasis on public transit in Baltimore County.

County Ride provides demand response service to County residents who are age 60+ or who have a disability and are unable to use public transit services. As part of the CountyRide system, within the rural areas of Baltimore County also provides general public service to rural residents. Eligible residents must register for CountyRide before using CountyRide services.

The CountyRide demand-response system is organized around four geographic service hubs: Chesterwood, Glen Keith, Inwood, and Jacksonville. With the exception of a small amount of service purchased through Uber, the CountyRide system is directly operated. Drivers are unionized through the American Federation of State, County and Municipal Employees (AFSCME). The Uber-provided service is provided under a May 2020 agreement with Baltimore County to assist with capacity issues as needed.

Baltimore County is preparing to launch a new fixed route Towson Circulator in FY 2022. This service will be operated under contract to the County.

CountyRide services operate Monday through Friday from 7:00 a.m. to 5:00 p.m. To schedule a trip, customers call CountyRide during office hours (weekdays from 8:00 a.m. to 4:00 p.m.). Reservations can be made up to two weeks in advance for rides to medical appointments and up to one week in advance for other trip purposes. Standing order rides can be scheduled to partner hospital locations to receive repeat medical treatments such as chemotherapy. Same-day service can be scheduled on a space-available basis. If schedule capacity is full, customers may choose to be placed on stand-by in the event of cancellations.

CountyRide also operates a Shopping Shuttle program which serves each area of the county at least once a month, providing group trips to various shopping destinations in the county.

CountyRide operates a total of 25 vehicles: 24 small buses and one sedan, with 20 vehicles in operation during peak times. Baltimore County's Vehicle Operations and Maintenance (VOM) division maintains the CountyRide fleet. Under the current arrangement, CountyRide leases the vehicles from the County and is charged \$1.10 per mile for maintenance and insurance, and future vehicle replacement, a cost typically borne entirely by the County (which has purchased all but two of the current vehicle fleet with County funds).

Baltimore County was awarded Federal Transit Administration (FTA) funding to purchase an additional 12 vehicles to be operated in the Towson Circulator service; procurement of these vehicles is under way.

CountyRide currently uses Trapeze PASS reservations, scheduling, and dispatching software. Baltimore County has issued a request for proposals for new software to update or replace the current system.

Adult one-way cash fares purchased in advance are \$2.50 for travel within Baltimore County and \$5.00 for trips that cross county lines. Prices increase for fares purchased on day of travel (see Figure 19).

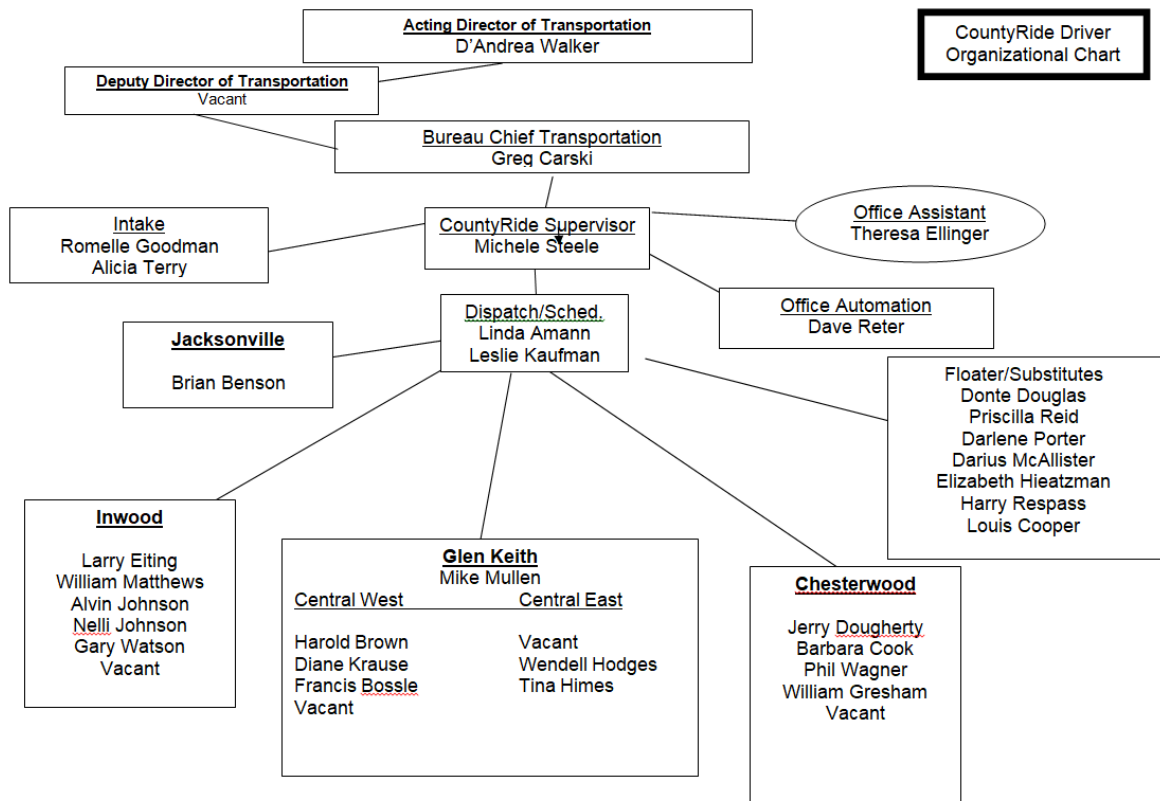
Figure 19 CountyRide Fare Structure

Payment method	Trips within the County	Trips that Cross the City/County line
Fare paid with tickets purchased in advance	\$2.50 (1 ticket)	\$5.00 (2 tickets)
Fares without tickets	\$3.00	\$6.00

Transit Governance

CountyRide is a program within the Baltimore County Department of Public Works (DPW) Transportation Bureau (see Figure 20). The Deputy Director of DPW is the Acting Director of Transportation. Policy decisions and major service planning decisions for CountyRide are made by the County Executive. Decisions about funding are made by the County Council. DPW is considering setting up a transportation advisory committee.

Figure 20 CountyRide Organizational Chart



Agency Responsibilities, Public Engagement, and Planning

DPW is responsible for ensuring compliance with all federal requirements that come with grants from the Federal Transit Administration (FTA).

DPW follows MDOT MTA guidelines for public notice for CountyRide fare changes. The 2021 TDP, nearing adopting, included public engagement efforts to identify transit needs and inform alternatives for service improvements and expansions. In-person outreach activities were not feasible during the COVID-19 pandemic; however, surveys of current CountyRide customers as well as the community at large were conducted.

Seniors and riders with disabilities can use CountyRide service to connect with MTA-operated services in the county. Upon request, CountyRide will drop off at nearest bus stop or light rail station.

DPW is responsible for transportation service planning and development. Baltimore County has been engaged in planning the Towson Circulator service since 2015. An update to the Towson Circulator Feasibility Study, prepared by a consultant under contract to Baltimore County, was completed in September 2020. The new circulator is anticipated to launch in the Fall of 2021.

DPW led the development of the Baltimore County TDP; the Draft Final Plan will be presented to the County Council on February 2021. Near-term service expansions proposed in the TDP include evening CountyRide services and microtransit service in Owings Mills, with longer-range expansion of microtransit to other areas, Saturday CountyRide service, crosstown services, and a circulator in Owings Mills. DPW staff meet monthly with MDOT MTA service planners to discuss service planning issues for MDOT MTA services operated in Baltimore County.

MDOT MTA

MDOT MTA serves Baltimore County with all of the MDOT MTA services: BaltimoreLink, Light RailLink, Metro SubwayLink, Commuter Bus, MARC Train, and MobilityLink.

- **BaltimoreLink** – A total of 47 BaltimoreLink routes serve Baltimore County: 9 CityLink, 31 LocalLink and 7 Express BusLink routes.
- **Light RailLink** – A total of 10 stations are located within Baltimore County, mostly north of Baltimore City. Five stations are in Hunt Valley, three are in Lutherville, and two are in Halethorpe. The Light Rail system operates from 5:00 a.m. to 12:00 a.m. on weekdays, 6:00 a.m. to 12:00 a.m. Saturdays, and 11:00 a.m. to 7:00 p.m. Sundays.
- **Metro SubwayLink** – Three stations are located in Baltimore County: Owings Mills, Old Court Station in Pikesville, and Millford Mill Station in Locheam. Metro SubwayLink operates from 5:00 a.m. to 12:00 a.m. on weekdays and 6:00 a.m. to 12:00 a.m. on weekends.
- **Commuter Bus** – Two commuter bus routes stop in Baltimore County:
 - Route 411 stops at the White Marsh Park & Ride lot at 6:00 a.m. on its way into downtown Baltimore on weekday mornings. (No outbound stops are made in Baltimore County on this route.)
 - Route 420 stops at U.S. 40 and Ebenezer Rd en route to downtown Baltimore on all five of its weekend morning trips. On the return trips, this route stops at U.S. 40 and Ebenezer Rd and White Marsh Park & Ride in the mid-day and only at U.S. 40 and Ebenezer Rd on the five trips during the P.M. peak.

- **MARC Train** – A total of three stations are in Baltimore County: Halethorpe (Arbutus) and Martin Airport (Middle River) on the Penn Line and St. Denis (Arbutus) on the Camden Line. In response to the COVID-19 pandemic and its impact on ridership, MDOT MTA reduced MARC service beginning in November 2020. Currently, on weekdays Halethorpe is served by 18 northbound trains and 13 southbound trains (spanning 4:58 a.m. to 11:35 p.m., Martin Airport is served by eight northbound trains and five southbound trains (6:15 a.m.-7:36 p.m.), and St. Denis is served by three morning westbound trains and three evening eastbound trains (5:11 a.m.-7:51 p.m.). On weekends, only the Penn Line operates, and on a more limited schedule than on weekdays.
- **MobilityLink** – MDOT MTA's ADA complementary paratransit service, operates within $\frac{3}{4}$ mile of MDOT MTA bus routes (excluding commuter bus) as well as $\frac{3}{4}$ of a mile radius of an MDOT MTA Light Rail or Metro Subway station, during the same days and hours as the fixed route services. MobilityLink eligibility is limited to people with disabilities who are unable to use the fixed route service due to their disability. MobilityLink customers are also eligible to ride MDOT MTA's Call-a-Ride service, a demand-response service provided under contract by participating area taxicab and sedan companies within the same service area as MobilityLink.

Funding and Financial Data

The operating expenditure amounts reported in the 2019 NTD estimate operating expenses at \$1 million and capital expenses at \$112,000 (see Figure 21). Baltimore County data, however, shows an additional nearly \$800,000 spent in FY 2019. These expenses were covered by partnerships with area hospitals, ticket sales, and local County funds (see Figure 22). Together with the \$1,000,897 in grant-related expenses, CountyRide operating expenses totaled \$1,793,329 in FY 2019, with Baltimore County funds covering \$1,105,676—about 62% of the total.

Figure 22 Additional General Fund FY2019 Financial Data Not Reported in the NTD

Additional General Fund FY2019 Operating Expenses	
Ticket Revenues	\$36,089
Hospital Revenues	\$28,463
Local Funds	\$727,880
Total Additional Operating Funds Expended	\$792,432

Figure 21 FY2019 Financial Data Reported in the NTD – CountyRide

FY 2019 Operating Expenses	
Fare Revenues	\$63,649
Local Funds	\$377,796
State Funds	\$421,551
Federal Assistance	\$137,901
Total Operating Funds Expended	\$1,000,897

FY 2019 Capital Expenses	
Local Funds	\$112,008
State Funds	\$0
Federal Assistance	\$0
Other Funds	\$0
Total Capital Funds Expended	\$112,008

Source: National Transit Database

Community Statistics (2019)

Population: 827,370

Population density: 1,383.6 people per square mile

Top five employers:

- U.S. Social Security Administration (10,820 employees)
- University System of Maryland (6,525)
- Centers for Medicare & Medicaid Services (4,525)
- T. Rowe Price Group (4,200)
- Community College of Baltimore County (4,185)

Mean household income: \$102,337

Residents below federal poverty level: 8.9%

Population aged 65+: 16.8%

Residents living in zero vehicle households: 7.7%

Percent minority: 39.4%

Travel to Work

Just over half (50.2%) of Baltimore County's workers over the age of 16 are employed within the county. Out-of-county work destinations include Baltimore City (28.6%), Anne Arundel County (6.0%), Howard County (5.8%), and Harford County (2.1%). The remaining 6% commute to other counties in Maryland, Pennsylvania, and Virginia, as well as the District of Columbia.³ The mean travel time to work is 29.8 minutes (see Figure 23). Notably, 5% of Baltimore County residents commute to work using public transportation.

Figure 23 Baltimore County Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	415,113	
Car, truck, or van -- drove alone	328,409	79%
Car, truck, or van -- carpooled	36,339	9%
Public transportation (excluding taxicab)	19,150	5%
Walked	6,841	2%
Other means	6,320	2%
Worked from home	18,054	4%
Mean travel time to work (minutes)	29.8	

Source: ACS five-year estimates, 2015-2019

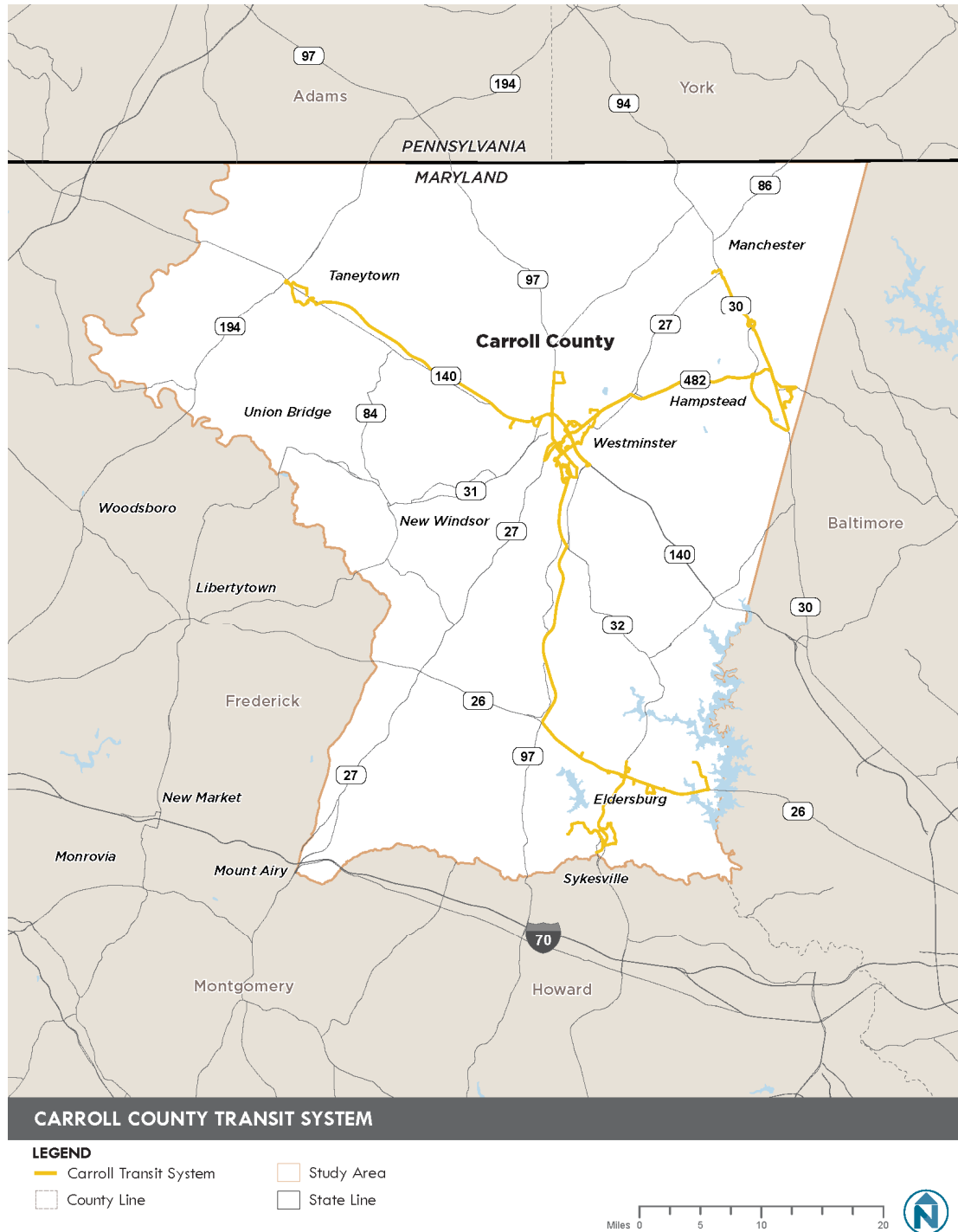
³ U.S. Census, American Community Survey (ACS) five-year estimates, 2011-2015.

CARROLL COUNTY TRANSIT PROFILE

County Overview

Carroll County is in the north-central portion of Maryland and is bordered by Baltimore, Frederick and Howard counties and the State of Pennsylvania (see Figure 24). Carroll County encompasses a land area of 447.6 square miles. The county seat is Westminster.

Figure 24 Carroll County and LOTS Bus Routes



Transit Service Overview

Carroll Transit System

Public transportation in Carroll County is provided by the Carroll Transit System. The service began in 1974 as the Carroll Senior Overland Service (SOS) and was originally provided by the Carroll County Bureau of Aging and Disabilities. In 1984 SOS transitioned from the Bureau of Aging to form a non-profit, which was re-named the Carroll Area Transit System (CATS) in 1987. Carroll County contracted with CATS to provide public transportation services.

County oversight was provided by the Carroll County Department of Planning and then the Department of Citizen Services. CATS lost the contract through a competitive procurement in 2014 and in 2015 County oversight of the service was transitioned to the Department of Public Works.

The mission statement for the Carroll Transit System is:

“Carroll Transit System is committed to providing safe, timely, service-oriented transportation for the residents of Carroll County. We strive to improve the quality and efficiency of the transportation system while providing excellent customer service. This includes our CTS Demand Response (reservation) service, Carroll Transit Shuttles and agency transportation”⁴

Oversight and administration Carroll Transit is provided by the Carroll County Department of Public Works. One full-time staff person, the Transportation Grants Coordinator, administers the program, with support from other county staff as needed.

The operation of transit services is contracted to a private firm, Ride With Us, which is responsible for the day-to-day operation of the transit program. Ride With Us is the non-profit subsidiary of Butler Medical Transportation, which has a contract to provide transportation for the Medical Assistance Transportation Program run by the Carroll County Health Department.

The drivers are not represented by a Union.

The Carroll Transit System (CTS) operates three types of services for Carroll County:

- **Five deviated fixed routes (Trailblazers)** that focus on providing service from outlying communities to Westminster. These routes are:
 - **Westminster** – Purple
 - **Westminster** – Black
 - **Taneytown** – Green
 - **South Carroll** - Red
 - **North Carroll** – Orange
- **Demand response services** that provide door-to-door service throughout the county.
- **Veteran’s Shuttle**, which provides service to the Veteran’s Administration health facilities in Baltimore, Frederick (Fort Detrick), and Martinsburg, West Virginia.

⁴ Carroll Transit System, Public Transit Riders Guide, 9/4/18, page 2.

Transit services are currently operating Monday through Friday from about 7:00 a.m. to 5:00 p.m.

Prior to the COVID-19 pandemic, the peak vehicle requirement was 29 vehicles. While the Trailblazer routes have recently added service, the demand-response program has been significantly reduced due to the pandemic and the current peak vehicle requirement is lower.

The transit program uses the Trapeze software program for reservations, scheduling, and dispatch. The program is also used for recordkeeping and reporting purposes. Drivers use tablets that are connected to Trapeze to record their trip information.

MDOT MTA

There are no MDOT-MTA public transportation services operated in Carroll County.

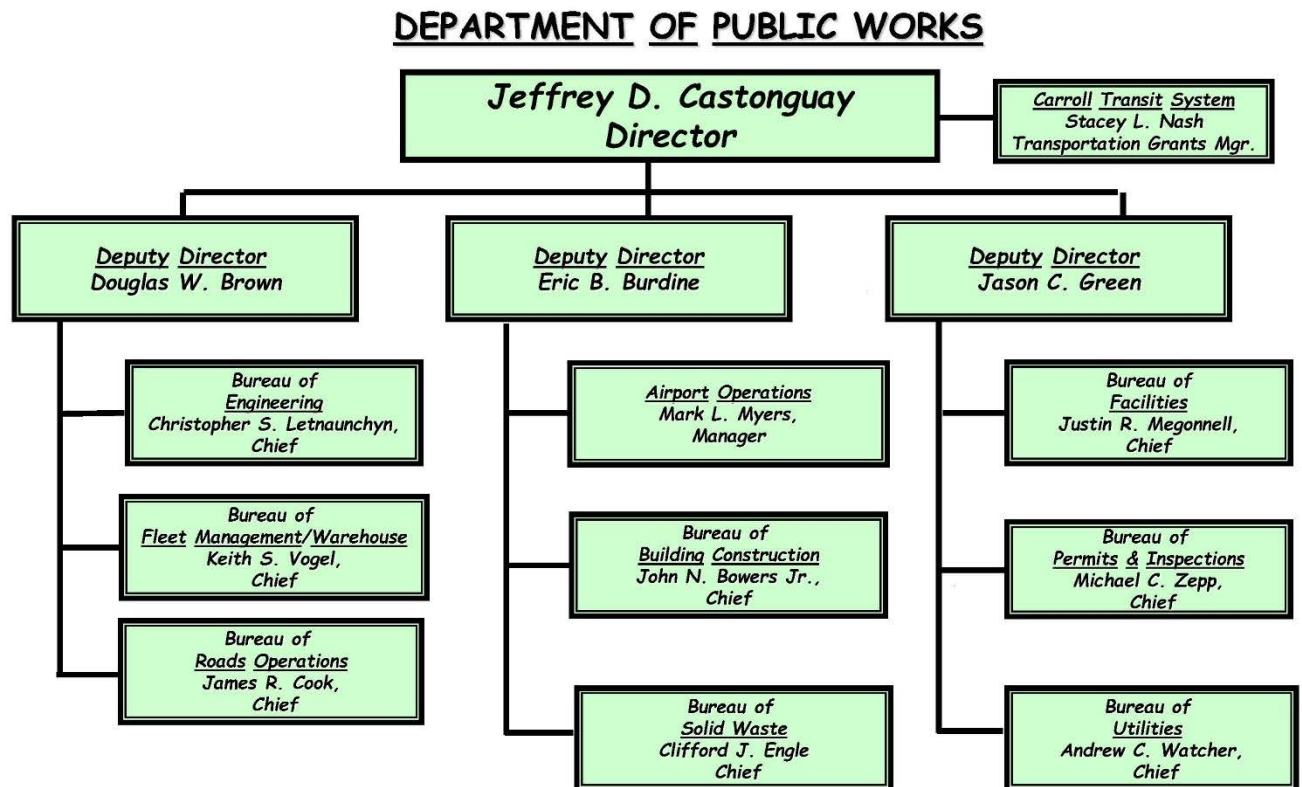
Transit Governance

Carroll Transit is a service of the Carroll County Department of Public Works. As a county service, the ultimate decision-making body for Carroll Transit Services is the Carroll County Commissioners (see Figure 26).

Figure 25 Carroll Transit System Fare Structure

Trailblazer Fares	One-Way Fare
Base Fare	\$2.00
Senior Citizens, People with Disabilities, and Medicare Card Holders	\$1.00
Deviations	\$1.00
Demand Response Fares	One-Way Fare
Senior Citizens attending nearest Senior Center	\$2.00
Dialysis outside of Westminster	\$5.00
0-5 miles	\$4.00
6-10 miles	\$6.00
11-15 miles	\$7.00
16-20 miles	\$8.00
21-25 miles	\$9.00
College Bus Pass	Per Semester
Option 1 - Trailblazer Routes	\$80.00
Option 1 - Demand-Response	
Zones 1 & 2	\$150.00
Zones 3 & 4	\$175.00
Zone 5	\$200.00

Figure 26 Carroll Transit System Organizational Chart



Agency Responsibilities, Public Engagement, and Planning

The Transportation Grants Manager handles most grant-related compliance activities, including NTD reporting and serving as the primary point of contact for FTA triennial reviews and state oversight reviews. The contractor handles drug-testing responsibilities for the transit operating staff.

Carroll County has a Carroll County Transit Advisory Council (TAC) to provide input and guidance for transit services in the county. Members of the TAC are appointed by the Carroll County Commissioners and represent a variety of community transportation stakeholders. The TAC meets quarterly and holds periodic Transportation Summits.

CTS does not currently connect with any other transit programs.

As a result of significantly reduced demand for transportation during the pandemic from the group sites that CTS typically serves, CTS has been able to re-direct resources during to add two vehicles to the Westminster Trailblazer routes to reduce the headways. CTS also re-configured the North Carroll and South Carroll Trailblazer routes to improve service.

Funding and Financial Data

Transit budgets are developed by Transportation Grants Coordinator; this budget is adjusted based on expected federal and state grants. The Board of Commissioners have the final budgetary authority for the program. In FY 2019, Carroll County spent \$2.6 million on operations and just under \$200,000 on capital investments (see Figure 27).

Figure 27 FY 2019 Financial Data – Carroll Transit System

FY2019 Operating Expenses	
Fare Revenues	\$571,746
Local Funds	\$1,057,936
State Funds	\$381,845
Federal Assistance	\$568,348
Other Funds	\$49,900
Total Operating Funds Expended	\$2,629,775

FY 2019 Capital Expenses	
Local Funds	\$27,417
State Funds	\$19,168
Federal Assistance	\$153,355
Other Funds	\$0
Total Capital Funds Expended	\$199,940

Source: National Transit Database

Community Statistics (2019)

Population: 168,447

Population density: 376.3 people per square mile

Top five employers:

- Carroll Hospital Center in Westminster (1,995 employees)
- McDaniel College (Westminster – 800)
- Penguin Random House (Westminster – 755)
- Integrace (now ACTS) (700)

Mean household income: \$114,528

Residents below federal poverty level: 5.1%

Population aged 65+: 16.4%

Residents living in zero vehicle households: 4.6%

Percent minority: 9%

Figure 28 Carroll County Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	86,353	
Car, truck, or van - - drove alone	73,211	85%
Car, truck, or van - - carpooled	5,578	6%
Public transportation (excluding taxicab)	683	1%
Walked	1,091	1%
Other means	489	1%
Worked from home	5,301	6%
Mean travel time to work (minutes)	36.2	

Source: ACS five-year estimates, 2015-2019

Figure 29 Commuting Patterns—Carroll County

Work Location	Carroll County Workers 16 and Over	
	#	%
Carroll County	39,419	45.5%
Baltimore County	14,929	17.2%
Howard County	8,617	9.9%
Baltimore city	6,129	7.1%
Anne Arundel County	5,049	5.8%
Montgomery County	3,998	4.6%
Frederick County	3,102	3.6%

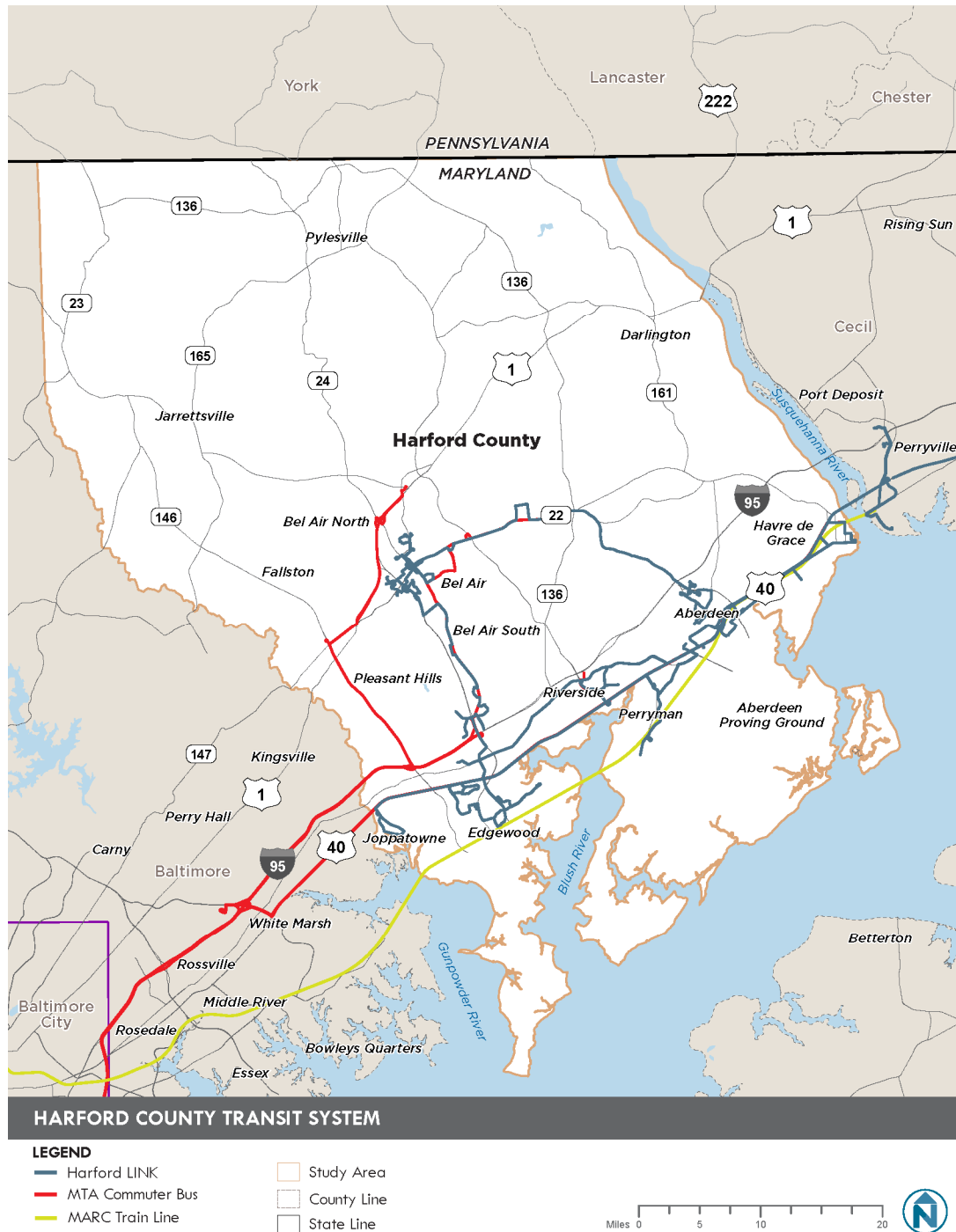
Source: ACS five-year estimates, 2015-2019

HARFORD COUNTY TRANSIT PROFILE

Overview

Harford County is located in northeastern Maryland on the western shore of the Chesapeake Bay. It is bordered by the Susquehanna River to the east, the State of Pennsylvania to the north, Baltimore County to the west, and the Chesapeake Bay to the south. Harford County encompasses a land area of 437 square miles. The county seat is Bel Air (see Figure 30).

Figure 30 Harford County and LOTS Bus Routes



Transit Service Overview

Hartford Transit LINK

Harford Transit LINK provides public transportation in Harford County. The system began in 1973 as a service of the Harford County Office on Aging. As the program grew it transitioned from the Office on Aging to a separate agency within the Department of Community Services (2005). In 2014 the agency was moved to the Office of Economic Development. In 2018, the County merged the Department of Community Services and the Office of Economic Development and Harford Transit LINK became a department under the new merged agency. Service is directly operated by County employees.

Harford Transit LINK's mission is to provide *"the public with a safe and efficient transportation system that increases access and mobility, reduces congestion, improves the environment and supports economic development, thereby enhancing the quality of life throughout Harford County."*

Harford Transit Link operates seven fixed routes that focus on providing service for the more populated corridors and municipalities in the County. These routes are:

- **Route 1:** Green Line (Havre de Grace, Aberdeen, Bel Air)
- **Route 2:** Blue Line (Bel Air, Abingdon, Edgewood)
- **Route 3:** Silver Line (Aberdeen, Edgewood, Joppatowne)
- **Route 4:** Yellow Line (Aberdeen Circulator)
- **Route 5:** Teal Line (Aberdeen, Perryville, Havre de Grace, Perryman)
- **Route 6:** Orange Line (Bel Air Circulator)
- **Route 7:** Red Line (Aberdeen, Riverside, Edgewood)

Two of the routes (Routes 4 and 6) have been suspended during the pandemic and service frequency has been reduced on the remaining five routes. Harford Transit LINK expects to resume full service once all of the vehicle operators have been fully vaccinated against COVID-19.

Harford Transit also operates two categories of demand response service, including:

- ADA complementary paratransit to support the fixed routes.
- Broader demand response service for seniors and people with disabilities. Services are primarily provided south of U.S.1 for this service.

In addition to directly providing these transit services, Harford Transit Link also operates a commuter assistance program.

Transit services are currently operating Monday through Friday from about 5:00 a.m. to 6:30 p.m. Prior to the pandemic service was provided until 10:00 p.m. on five of the seven routes.

Harford Transit LINK requires 28 vehicles to provide peak service.

Harford Transit LINK uses RouteMatch software to coordinate services. The software uses real-time vehicle locations to measure on-time performance. Each vehicle's automated passenger counters (APCs) feed into RouteMatch to measure system productivity. For customers, LINK provides the RouteShout app, which can display real-time arrival information for any Harford Transit LINK stop. Adult one-way fares are set at \$1.00 (see Figure 31). The agency also uses Token Transit, which allows fares to be pre-paid via a smart phone application.

MDOT MTA

There are three MDOT MTA commuter bus routes that serve Harford County. These are:

- **Route 410** - originates in Churchville at the Campus Hills Shopping Center near Harford Community College and serves stops in Bel Air and along MD 924 before traveling to downtown Baltimore. There are five morning trips into Baltimore and four afternoon trips back to Harford County.
- **Route 411** - links park and ride lots along US 1 and MD 152 with downtown Baltimore and Johns Hopkins University. There are five morning trips into Baltimore and five afternoon trips back to Harford County.
- **Route 420** - links Havre de Grace, Aberdeen, Belcamp, Edgewood, and Joppa with downtown Baltimore. There are five morning trips into Baltimore and five afternoon trips back to Harford County. There is also an early afternoon northbound trip on Fridays and on the day before holidays.

The Maryland Area Regional Commuter (MARC) train system serves Harford County, with stops in Edgewood and Aberdeen. Trains travel south through Baltimore to Washington, D.C. and north to Perryville, in Cecil County across the Susquehanna River from Havre de Grace. There are currently a total of seven northbound trains and six southbound trains that serve Harford County stations (M-F).

Transit Governance

Harford Transit LINK is a department within the Harford County Office of Community and Economic Development (see Figure 33) for an organizational chart). Prior to the pandemic, the agency was in the process of forming a coordinating council/transit advisory committee. It is

Figure 31 Harford Transit LINK Fare Structure

Fixed Route Service	
General Public	\$1.00
Persons Ages 60 and Over (with a Medicare card or other ID indicating age)	\$0.50
Persons with Disabilities (who have a Harford Transit reduced-fare card or ADA certification)	\$0.50
Children under 46 inches in height	Free

Demand Response & ADA Paratransit Service	
Demand Response Service Fares	\$2.00
Seniors Traveling Only To or From Harford County Senior Activity Centers	\$1.00

Token Transit Passes	
All-Day General Public Pass	\$3.00
All-Day Senior/Disabled Pass	\$1.50
5-Day General Public Pass	\$15.00
5-Day Senior/Disabled Pass	\$7.50

anticipated that this effort will resume post-pandemic. Harford County does not currently have a transit advisory committee.

Agency Responsibilities, Public Engagement, and Planning

The Administrative Supervisor handles most federal and state compliance tasks. Harford County's Human Resources department handles drug testing responsibilities.

The formal engagement process for Harford Transit LINK is the publication of the annual notices each year as part of the grant application process. Less formal public engagement occurs through a variety of civic meetings that are attended by Harford Transit LINK staff.

While the Harford County LINK schedules are not coordinated with the MDOT-MTA Commuter Bus schedules, the two agencies are jointly working to combine bus stops where applicable.

Harford Transit LINK has bus stops at the two MARC stations in the County (Aberdeen and Edgewood), as well as the Perryville station in Cecil County. Local transit services are not specifically timed with the MARC train schedule. The Aberdeen Train Station serves as a service hub for four of the Harford Transit LINK routes (Routes 1,3,5 and 7).

Direct connections are made between Harford Transit LINK and Cecil Transit, and the Harford service extends into Cecil County as far as the Amazon warehouse, which is located along U.S. Route 40, about 4 miles east of Perryville.

In 2018 Harford County LINK completed a five-year Transit Development Plan (TDP) with funding and consultant assistance through MDOT-MTA. The plan included a major overhaul of the fixed routes that resulted in the development of a timed-transfer hub at the Aberdeen Train Station. These changes significantly reduced headways and increased ridership by about 20% pre-pandemic.

In addition to the route changes, the hours of service were also extended on five of the routes until 10:00 p.m. This change has been curtailed during the pandemic but will likely be reinstated post-pandemic. The next service improvement is slated to be Saturday service, though there will not likely be funding for to implement this improvement until the economy has recovered from the pandemic.

Harford Transit LINK does not have a funding model but does prepare five-year budget plans to help forecast financial needs. The annual budget is prepared and follows the County's budget process.

Funding and Financial Data

In FY 2019 the operating expenses for Harford Transit LINK was \$4.9 million (see Figure 32). Capital expenditures amounted to just over \$1 million.

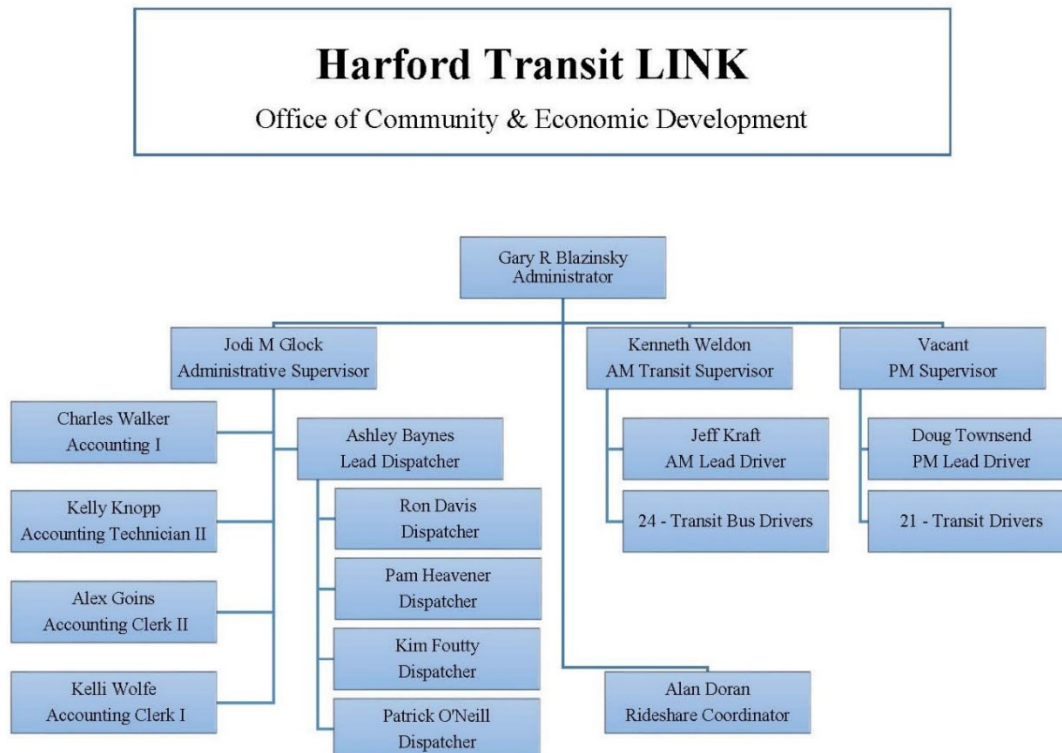
Figure 32 FY 2019 Financial Data – Harford Transit LINK

FY 2019 Operating Expenses	
Fare Revenues	\$306,097
Local Funds	\$1,983,802
State Funds	\$662,760
Federal Assistance	\$1,977,664
Total Operating Funds Expended	\$4,930,323

FY 2019 Capital Expenses	
Local Funds	\$105,261
State Funds	\$105,261
Federal Assistance	\$842,079
Other Funds	\$8,868
Total Capital Funds Expended	\$1,061,469

Source: National Transit Database

Figure 33 Harford County LINK Organizational Chart



Community Statistics (2019)

Population: 255,441

Population density: 584.5 people per square mile

Top five employers:

- U.S. Army's Aberdeen Proving Ground (APG) (21,000 employees)
- University of Maryland's Upper Chesapeake Health (Bel Air - 3,300)
- Kohl's E-Fulfillment Center (Edgewood - 1,200)
- Rite Aid Mid-Atlantic Customer Support (Perryman - 1,030)
- Harford Community College (Bel Air - 1,000)

Mean household income: \$108,305

Residents below federal poverty level: 6.7%

Population aged 65+: 15.8%

Residents living in zero vehicle households: 4.9%

Percent minority: 21.4%

The mean travel time to work for Harford County residents was 32 minutes (see Figure 34). Just over half (55.4%) of Harford County's workers over the age of 16 stay within Harford County for employment (see Figure 35). Most Harford County residents leaving the county for work travel to Baltimore County and Baltimore City.

Figure 34 Harford County Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	129,751	
Car, truck, or van -- drove alone	108,706	83.8%
Car, truck, or van -- carpooled	10,373	8.0%
Public transportation (excluding taxicab)	1,716	1.3%
Walked	1,451	1.1%
Other means	1,042	0.8%
Worked from home	6,463	5.0%
Mean travel time to work (minutes)	32	

Source: ACS five-year estimates, 2015-2019

Figure 35 Harford County Commuting Patterns

Work Location	Harford County Workers 16 and over	
	Number	Percent
Harford County	69,927	55.4%
Baltimore County	25,929	20.5%
Baltimore city	17,386	13.8%
Anne Arundel County	3,420	2.7%
Howard County	1,980	1.6%
Cecil County	1,831	1.4%

Source: ACS five-year estimates, 2015-2019

Overview

Figure 36 Howard County and LOTS Bus Routes



Transit Service Overview

Regional Transportation Agency of Central Maryland

Local public transportation in Howard County is provided by the Regional Transportation Agency of Central Maryland (RTA). Howard County contracts with the RTA for local bus service (with oversight provided by the Howard County Office of Transportation). Howard County has been providing public transportation since 1967, but the County role in overseeing the provision of public transportation dates from 1996.

The Office of Transportation manages and oversees the contract under which the Regional Transportation Agency (RTA) provides fixed route bus and paratransit services in Howard County, Anne Arundel County, Prince George's County, and the City of Laurel. Funding is shared by the partner jurisdictions with support from federal and state sources to offset the gap between farebox and other revenues and capital and operating costs.

Fifteen fixed routes are provided, along with ADA complementary paratransit. General paratransit services (GPT) are also provided for Howard County residents who are unable to use the fixed routes due to a disability or age.

The fifteen RTA fixed routes that focus on providing service for the more populated corridors and neighborhoods of Howard County, serving the more densely populated eastern half of the County. The routes also service to connect key activity centers in the region, linking Columbia with Ellicott City, Laurel, and Arundel Mills. These routes are:

- **Route 301:** Towne Centre Laurel and South Laurel.
- **Route 302:** Town Centre Laurel, Greenbelt Metro Station, and Laurel Main Street.
- **Route 401:** Clary's Forest, Harper's Choice, Mall in Columbia
- **Route 402:** Mall in Columbia, Columbia Medical Campus, Shalom Square, Dobbin Center
- **Route 403:** Mall in Columbia, Dorsey Hall, Columbia 100 Parkway
- **Route 404:** Mall in Columbia, Hickory Ridge Place, Atholton High School, Hickory Ridge Village Center
- **Route 405:** Mall in Columbia, Government Center, Ellicott City Walmart, EC Senior Center
- **Route 406** (not operating as of February 2021): Mall in Columbia, Broken Land Parkway, Snowden Square, Columbia Gateway
- **Route 407:** Mall in Columbia, Oakland Mills Village Center, Owen Brown Village Center, Snowden Square, Kings Contrivance Village Center
- **Route 408:** Mall in Columbia, Dobbin Center, Snowden Square, Waterloo Park
- **Route 409:** Towne Centre Laurel, Savage MARC Station, MD Food Center, Elkridge Corners Shopping Center
- **Route 414:** (not operating as of February 2021): Mall in Columbia, Howard Community College, Old Columbia Road Circle, Kings Contrivance Village Center
- **Route 501:** Mall in Columbia, Dobbin Center, Snowden Square, MD Food Center, Dorsey MARC Station, Arundel Mills
- **Route 502:** Town Centre Laurel, Savage MARC, Arundel Mills Mall

- **Route 503:** Mall in Columbia, Owen Brown Village Center, North Laurel Community Center, Towne Centre Laurel

Three of the routes (Routes 402B, 406 and 414) have been suspended during the pandemic.

RTA Transit also operates two categories of demand response service (RTA Mobility) for those unable to ride RTA fixed route transit system due to a disability or age, including:

- ADA complementary paratransit where required, and
- General paratransit (GPT) for persons with disabilities over age 18, and persons 60 years of age and over. Riders must pre-register to schedule trips.

The GPT services are not restricted to within ¾ mile of the fixed routes, but each rider is only permitted to use the service for one round-trip per day for a limited number of trip purposes.

RTA Transit services are currently operating Monday through Friday, with limited service on Saturday and Sunday on some routes, from about 6:00 a.m. to 9:00 p.m. Adult one-way fares are \$2.00 (see Figure 37).

For fixed route peak service, Howard County required 27 vehicles before COVID and currently require 23 vehicles (during COVID). For paratransit service, Howard County required 21 vehicles before COVID and currently require 17 vehicles.

The RTA uses a variety of technologies:

- **Fareboxes** - RTA buses have manual drop fareboxes, but the agency is transitioning to mobile ticketing scheduled to be launched in March 2021. Mobile ticketing will be integrated with Transit App to provide real-time arrival information, trip planning, and mobile ticketing on a single platform.
- **Real-Time Information** – Fixed routes buses uses Swiftly to provide real-time bus and trip planning. In addition to being available on Transit App, it is also on other platforms such as Google transit. Riders without a smartphone can also use SMS texting at bus stops for bus arrival times.
- **Automatic Passenger Counters (APC)** - RTA has APCs on all vehicles and is testing integration with Swiftly's data management systems to provide crowding data.
- **Scheduling Software** – RTA uses Routematch to schedule and dispatch demand response services.
- **Bus stop annunciators** – Scheduled for FY 2022.

Figure 37 RTA Fare Structure (Effective January 2, 2021)

Fixed Route Service	
General Public	\$2.00
Children Age 5 and Under	Free
Seniors 60+ years of age or Persons with a Disability (with ID)	Free

RTA Mobility Demand Response Service	
ADA Fares	\$4.00
General Paratransit (GPT)	\$5.00
10-Ride Ticket Book	\$35.00
GPT 10-Ride Ticket Book	\$50.00

Transit Passes	
All-Day General Public Pass	\$5.00
Monthly Pass	\$40.00
10-Ride Ticket Booklet	\$15.00
Monthly Student Pass (with student ID)	\$20.00

RTA vehicles operate from the Central Maryland Transit Operations Facility; a facility developed jointly with Anne Arundel County. The facility was built in 2014-15 and is a LEED Silver Certified Facility with a capacity of 104 buses. It was recently modified to support electric buses, as the RTA has three fully electric vehicles in service.

MDOT MTA Services

MTA operates nine fixed routes that operate on populated corridors and in larger municipalities in Howard County with destinations including Baltimore (two routes) and Washington, D.C., or the Maryland suburbs of Washington (seven routes):

- **ExpressLink 150** operates between Baltimore and Mall in Columbia, with five westbound and eastbound trips.
- **Route 203** operates between Snowden River Park & Ride, Mall in Columbia, and Rockville Pike & North Wood Rd. There are three southbound trips and one northbound trip in the p.m.
- **Route 305** operates between Mall in Columbia, Silver Spring, and Washington D.C. There are six southbound trips and one northbound trip in the p.m.
- **Route 310** operates between Mall in Columbia and Baltimore, with four southbound trips and one northbound trip in the p.m.
- **Route 315** operates between Mall in Columbia and Washington, D.C., with three southbound trips and northbound trips.
- **Route 320** operates between Laurel and Snowden River Park & Ride, with three northbound and southbound trips.
- **Route 325** operates between Harpers Farm Road & Cedar Lane, Mall in Columbia, and Washington, D.C., with two southbound trips and northbound trips.
- **Route 335** operates between Clarksville Park & Ride, Broken Land Park & Ride, and 18th St. & M St. NW. There are four southbound trips and northbound trips.
- **Route 345:** Long Gate Park & Ride, Snowden River Park & Ride and Washington, D.C. There are four southbound trips and five northbound trips.

Route 201 traverses Howard County but has no stops in it. These commuter routes all operate in peak hours on weekdays, with limited opportunities for mid-day return trips. The fare levels are higher—MTA Commuter Bus fares are zoned, and many of the Howard County stops are in Zone 2, with a base cash fare of \$4.00, and a variety of multi-ride tickets and passes, and reduced fares for seniors and persons with disabilities. In addition to key transfer points, many of the MTA commuter bus routes deviate into residential areas and serve stops shared with or near RTA stops, though there is not any coordination of schedules.

MARC's Camden Line also serves Howard County with stops in Dorsey, Jessup, Savage and Laurel Racetrack (the Jessup and Laurel Racetrack stops have only a single train a day each way), providing peak hour commuter rail service with three morning trips and one evening trip to Washington's Union Station, and one to Baltimore's Camden Yards station—and the reverse in the evening.

Transit Governance

The Office of Transportation is part of the County's Department of Administration, reporting to the Executive. The Office of Transportation's primary focus is to increase the efficiency and

effectiveness of public transportation services, walking, and bicycling in and around Howard County and ensure that connectivity is front and center in land use planning and site development.

The Office oversees the following programs:

- Public Transportation
- Bicycle and Pedestrian Planning and Implementation: BikeHoward and WalkHoward
- Transportation Demand Management
- Transportation Plans and Projects
- Howard County Multimodal Transportation Board
- Transit and Pedestrian Advisory Group
- Bicycle Advisory Group
- Complete Streets Policy Implementation
- Boards and Advisory Groups

The Office of Transportation staffs one board—the Multimodal Transportation Board—and two advisory groups: Bicycle Advisory Group and Transit and Pedestrian Advisory Group.

The Office of Transportation assigns 2.0 FTE to transit services, comprised of four part-time staff:

- Director responsible for operations management and planning,
- Planner responsible for bus stop improvements
- Planner for transit planning projects
- Administrative staff member and another planner assisting with initiatives, marketing, and community outreach.

The Office of Transportation oversees Howard County's contract with the RTA, the operator of the transit services. The RTA staff includes:

- Management – 3 (FT)
- Administration - 16 (FT) and 6 (PT)
- Dispatchers – 2 (FT)
- Street Supervisors – 7(FT)
- Mechanics – 18 (FT)

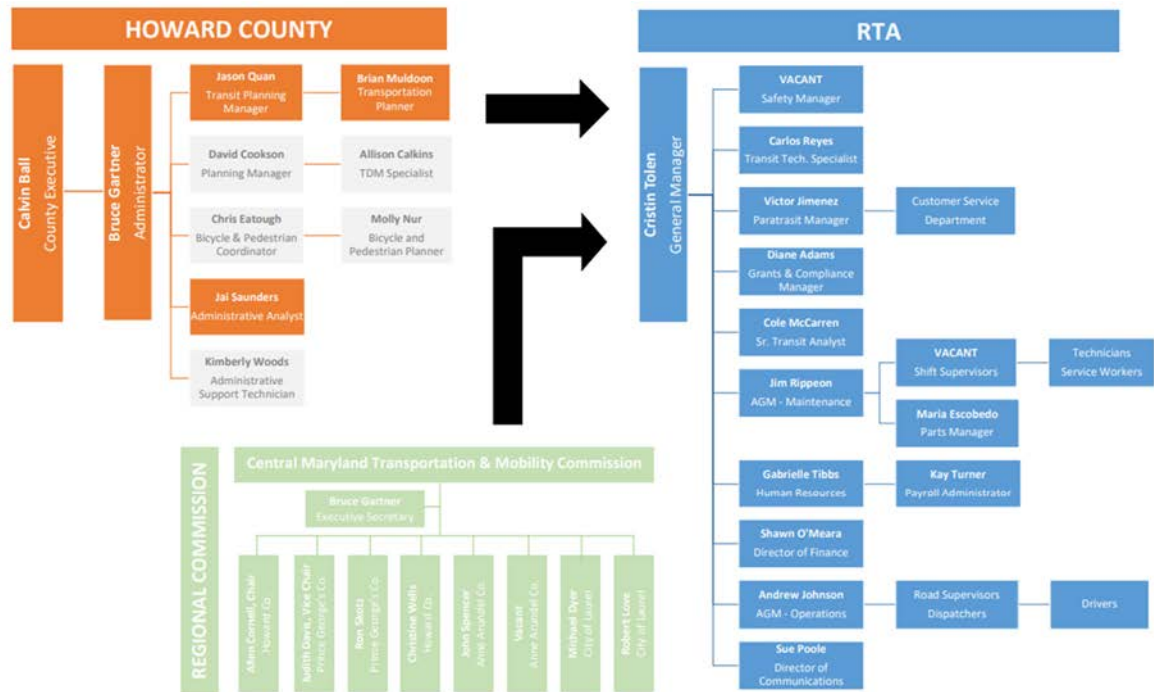
The structure of the RTA is somewhat unique in Maryland because it is designed as a regional response to the multi-jurisdictional travel patterns (see Figure 2). Both Howard County and the Central Maryland Transportation and Mobility Commission (CMTMC) support the RTA and the Transit Management of Central Maryland, Inc. (TMCM). The RTA contracts with a private provider for service.

The CMTMC is a regional group comprised of two representatives from participating entities (Howard County, Anne Arundel County, the City of Laurel and Prince George's County). The CMTMC is responsible for promoting the interests of the parties in providing transit services by the RTA and has its own by-laws. The CMTMC functions to coordinate service policies among the jurisdictions.

Funding for the RTA comes through the Howard County Office of Transportation, which oversees the contract with the RTA. The RTA management fee is shared between Howard County and the CMTMC. The RTA is unionized, with employees represented by the Teamsters.

Howard County's budget is developed by the Office of Transportation with input from the Howard County Multimodal Transportation Board (MMTB) and Transit and Pedestrian Advisory Group, along with the CMTMC. It is reviewed and with changes as needed is included in the overall budget submission from the County Executive to the County Council. The ultimate policy board is the Howard County Council.

Figure 38 Howard County Transit Organizational Chart



Transit Funding and Financial Data

Expenditure data, as published in the National Transit Database, show that the Howard County RTA spent \$14.7m in operating funds and \$59,000 on capital (see Figure 39). County budgets, however, show different numbers (see Figure 40). Differences reflect that bus purchases and leases by the County are funded as operating expenses in the County budgets.

Howard County obtains funding from MDOT MTA for both operations and capital, but most funding comes from general funds. However, local funding includes support from Anne Arundel County to support shared services and a portion of the RTA management fee. Howard County is also funded from MDOT under the Washington transit program, to support services in the City Laurel, which is in the Washington region. Howard County also received MTA Rideshare program funding to support Transit Demand Management initiatives, including the rideshare program.

Figure 39 FY2019 Financial Data – Howard County RTA

FY 2019 Operating Expenses	
Fare Revenues	\$1,154,506
Local Funds	\$9,546,869
State Funds	\$4,061,751
Federal Assistance	\$0
Total Operating Funds Expended	\$14,763,148

FY 2019 Capital Expenses	
Local Funds	\$58,916
State Funds	\$0
Federal Assistance	\$0
Other Funds	\$0
Total Capital Funds Expended	\$58,916

Source: National Transit Database FY 2019

Figure 40 Howard County Transit Budget FY 2019 Actuals from FY 2021 Approved Budget

	Total Expense	Fare and Other Program Revenue	MTA Grants	Local Funding
Operating Budget				
Operating Contract	\$15,355,658	\$2,453,309	\$4,268,698	\$8,633,651
Bus Lease	\$514,346			\$514,346
Personnel	\$1,021,642		\$ 187,028	
Total Operating	\$16,891,646	\$2,453,309	\$4,455,726	\$9,147,997
Capital Budget				
Bus and Shelters	\$1,467,646		\$657,000	\$810,646
Total Capital	\$1,467,646		\$657,000	\$810,646
FY 2019 Totals	\$18,359,292	\$2,453,309	\$5,112,726	\$9,958,643

Agency Responsibilities, Public Engagement, and Planning

The County Office of Transportation is responsible for compliance with federal and state regulations. This includes overseeing the contractor to ensure compliance, developing, and maintaining required policies, reporting, and responding to periodic MTA compliance reviews. The contractor is primarily responsible for bus and paratransit operations, including operations, supervision, vehicle, and facility maintenance. The operators are employees of the contractor, who has drug and alcohol compliance responsibility.

The Office of Transportation also staffs the County's Multimodal Transportation Board, the Transit and Pedestrian Advisory Group, and a Bicycle Advisory Group. It also provides staff support for the Central Maryland Transportation and Mobility Commission, the joint board providing guidance for transit in the region.

Other initiatives besides oversight of all non-highway transportation projects include a role in the development of Howard County's MDOT Priorities Letter, expressing County priorities for transportation projects of all modes.

RTA routes connect with those of other transit systems at several locations. Key transfer points include the Mall in Columbia, Snowden River Park and Ride, Town Centre Laurel, Arundel Mills Mall, and Lotte Plaza. There are connections to WMATA Metrobus services at Town Centre Laurel, to MTA Commuter Buses at Snowden River Parkway and the Mall in Colombia, and to MTA Localink and Commuter Bus service at Arundel Mills.

There are free transfers to/from other RTA routes and Anne Arundel County routes, but none with MTA or WMATA services. There is no ongoing process for service coordination development with MTA, though the CMTMC is a forum for coordination policies with Prince George's and Anne Arundel Counties and staff do meet to address service changes.

Howard County prepares a Transit Development Plan (TDP) every five years with MTA support. The last plan, completed in 2018, was done jointly with the Central Maryland Regional Transit Development Plan and Anne Arundel County. It called for a two-phase implementation.

- **Phase I:** increase service by 22,900 service hours to improve frequencies, add evening and weekend service, plus a realignment of routes. Actual FY 2019 service hours are below the FY 2017 base, though many of the realignments have taken place. Other initiatives include Bus Rapid Transit planning and a new central transfer point.
- **Phase II:** add five new routes (39,388 revenue hours). This has not yet been implemented.

Community Statistics (2019)

Population: 325,690

Population density: 1,297.6 people per square mile

Top five employers:

- Johns Hopkins University's Applied Physics Laboratory (6,400 employees)
- Howard County General Hospital (1,765)
- Verizon (1,700)
- Howard Community College (1,410)
- Lorien Health Systems (1,190)

Mean household income: \$150,203

Residents below federal poverty level: 5.0%

Population aged 65+: 13.4%

Residents living in zero vehicle households: 3.8%

Percent minority: 50%

Howard County residents spend an average of 31.2 minutes commuting (see Figure 41). Roughly 40.7% of Howard County's workers over the age of 16 stay within Howard County for employment (see Figure 42). County residents travel to several other jurisdictions for work in roughly equal numbers, including Anne Arundel County.

Figure 41 Means of Transportation to Work and Mean Travel Time—Howard County

Commuting to Work	Number	Percent
Workers 16 years and over	169,339	
Car, truck, or van -- drove alone	136,567	80.6%
Car, truck, or van -- carpooled	12,429	7.3%
Public transportation (excluding taxicab)	6,050	3.6%
Walked	1,688	1.0%
Other means	2,046	1.2%
Worked from home	10,559	6.2%
Mean travel time to work (minutes)	31.2	

Source: ACS five-year estimates, 2015-2019

Figure 42 Commuting Patterns-Howard County

County	State	Work Location	Number	Percent
Howard County	Maryland	Howard County	65,811	40.7%
Howard County	Maryland	Anne Arundel County	17,598	10.9%
Howard County	Maryland	Baltimore City	17,104	10.6%
Howard County	Maryland	Montgomery County	16,240	10.0%
Howard County	Maryland	Prince George's County	14,783	9.1%
Howard County	Maryland	Baltimore County	12,784	7.9%
Howard County	District of Columbia	District of Columbia	9,226	5.7%
Howard County	Virginia	Fairfax County, VA	1,858	1.1%
Howard County	Maryland	Carroll County	1,465	0.9%

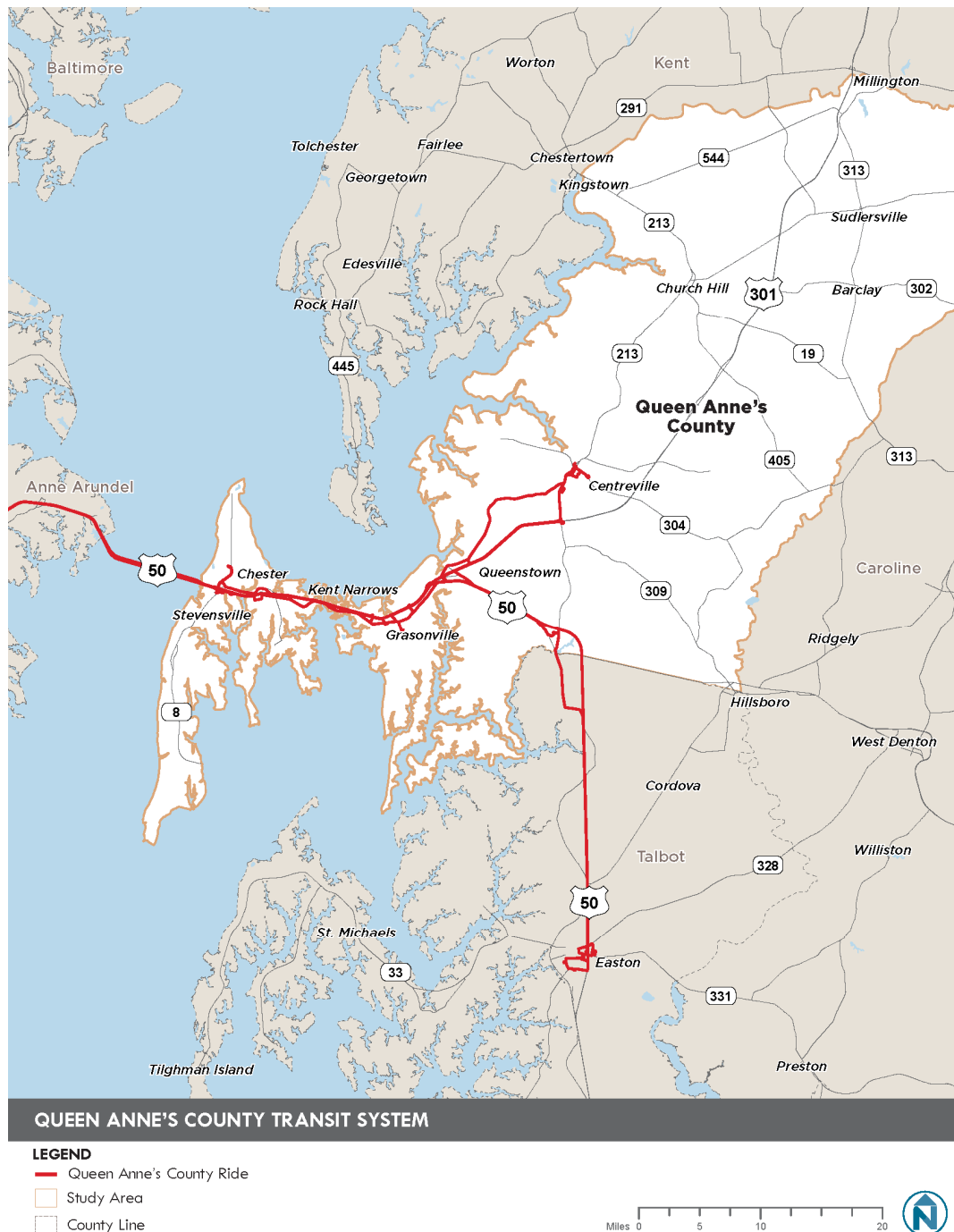
Source: U.S. Census Bureau, ACS, 2011-2015

QUEEN ANNE'S COUNTY TRANSIT PROFILE

Overview

Queen Anne's County is located on Maryland's Eastern Shore and is bordered by the Chesapeake Bay to the west; Kent County to the north; the State of Delaware and Caroline County to the East and Talbot County to the south (see Figure 43). Queen Anne's County covers 372 square miles; the county seat is Centreville, though the major population base is located on Kent Island.

Figure 43 Queen Anne's County and LOTS Bus Routes



Transit Services

Queen Anne's County Ride

Public transportation in Queen Anne's County is provided by Queen Anne's County Ride, which is administered and operated by the Queen Anne's County Department of Aging. The County Ride program was initiated in 1981 when Queen Anne's County pulled out of the senior and transportation programs operated by the regional entity, Upper Shore Aging, Inc.

County Ride currently operates three public transit routes. These deviated fixed routes operate Monday through Friday from 6:45 a.m. to 4:30 p.m., though times vary slightly between routes. Routes can deviate up to $\frac{3}{4}$ mile and there is a \$2 deviation fee. Deviations must be requested two hours ahead of time. The three routes are:

- **Route 1:** Kent Island and Grasonville to Easton
- **Route 2:** Centreville to Stevensville
- **Route 3:** Centreville to Annapolis

In addition to the three deviated-fixed routes, County Ride also operates specialized transportation services under a variety of programs for older adults and individuals with disabilities who are unable to access the fixed public routes. County Ride Specialized Services provide door-to-door transportation to seniors and people with disabilities. These services are:

- **An escort demand response service** that is open to the general public.
- **Door-to-door service** for people ages 60 and older and people with disabilities unable to use existing public transit routes. This service is funded through Maryland's Statewide Specialized Transportation Assistance Program (SSTAP).
- **Special services to military veterans** who need a ride to mental, medical, or behavioral health appointments. Veterans can ride at no cost to/ from those facilities. Funding is provided through donations.

Specialized services generally operate Monday through Friday, 6 a.m. through 4:30 p.m. The fare structure sets different fares based on service type with discounts for bulk purchases (see Figure 44).

Figure 44 Queen Anne's County Ride
Fare Structure

Fixed Public Routes	
General Public	
One-Way Trip	\$3.00
Day Pass	\$5.00
10-Ticket Booklet	\$30.00
Monthly Pass	\$80.00
Student Monthly Pass	\$40.00
Seniors, Disabled and Medicare Cardholders	
1 Way	\$1.50
10-Ticket Booklet	\$15.00
Monthly Pass	\$35.00
Independence Card	
Presentation of picture ID and Independence Card	\$1.00
Easton Shuttle	
One-Way Trips	
General Public	\$3.00
Senior/Disabled	\$1.50
Ride All Day	\$5.00
Monthly Passes	
General Public	\$80.00
Senior/Disabled	\$35.00
Student	\$40.00
Escort	
Up to 25 Miles	
General Public	\$5.00
Senior/Disabled	\$2.50
25-50 Miles	
General Public	\$10.00
Senior/Disabled	\$5.00
Over 50 Miles	
General Public	\$20.00
Senior/Disabled	\$10.00

Beyond typical administrative tools and technologies, Queen Anne's County Ride employs a range of advanced technology including the use of TripMaster by CTS hardware and software. TripMaster provides many of the core support functions including trip scheduling, vehicle tracking, and data analysis. Each bus has a tablet that details the driver's daily itinerary based on TripMaster scheduling. The County Ride website has a Trip Planner powered by Google Transit that helps find transit routes between locations within the county.

According to the 2019 NTD data, County Ride uses fourteen vehicles for demand response service and five vehicles for the three deviated fixed routes.

MDOT MTA

MDOT MTA operates commuter bus service from Queen Anne's County to Baltimore and Washington, D.C. Figure 43 shows the three MDOT MTA Commuter Bus Routes that serve Queen Anne's County including:

- **Route 210** – Kent Island to Baltimore. Three morning northbound trips and three afternoon southbound trips.
- **Route 240** – Kent Narrows to Washington, D.C. Five morning westbound trips and six afternoon eastbound trips.
- **Route 250** – Kent Island to Washington, D.C. Six morning westbound trips and six afternoon eastbound trips.

Transit Governance

Queen Anne's County Ride is a service of the Queen Anne's County Office of Aging. The ultimate decision-making body is the County Board of County Commissioners.

Agency Responsibilities, Public Engagement, and Planning

The formal engagement process for Queen Anne's County Ride is the publication of the annual notices each year as part of the grant application process. County Ride is also a member of the of Maryland Upper Shore Transit (MUST), a regional coordinating agency, that includes Delmarva Community Transit (DCT) and County Ride in Dorchester, Kent, Caroline, Talbot, and Queen Anne's Counties.

Coordinating service includes DCT's Route 4, which operates from Rock Hall to Easton. County Ride also connects with Annapolis Transit and Anne Arundel County Transportation via its Route 3. While it is possible to connect from County Ride to both Annapolis Transit and Anne Arundel County Transportation, schedules are not timed.

In 2019 Queen Anne's County completed a five-year Transit Development Plan (TDP). The plan recommended expanded fixed route bus service, improved marketing and over time, improved frequencies, and hours.

Financial Data

Queen Anne's County Ride spent \$1.1 million in FY 2019 on operating expenses plus another \$142,000 on capital expenses (see Figure 45).

Community Statistics (2019)

Population: 50,381

Population density: 135.4 people per square mile.

Top five employers:

- Chesapeake College (Wye Mills) (455 employees)
- Paul Reed Smith Guitars (Stevensville) (250)
- Federal Resources Supply (Stevensville) (255)
- S.E.W. Friel Cannery (200)

Mean household income: \$117,490

Residents below federal poverty level: 6.0%

Population aged 65+: 18.4%

Residents living in zero vehicle households: 3.4%

Percent minority: 10.8%

Residents of Queen Anne's County spent an average of 37.3 minutes commuting (see in Figure 46).

Figure 46 Queen Anne's County Commuting Characteristics

Commuting to Work	Number	Percent
Workers 16 years and over	25,089	
Car, truck, or van -- drove alone	19,873	79.2%
Car, truck, or van -- carpooled	2,269	9.0%
Public transportation (excluding taxicab)	494	2.0%
Walked	377	1.5%
Other means	244	1.0%
Worked from home	1,832	7.3%
Mean travel time to work (minutes)	37.3	

Source: ACS five-year estimates, 2015-2019

Figure 45 FY2019 Financial Data – Queen Anne's County Ride

FY 2019 Operating Expenses	
Fare Revenues	\$37,755
Local Funds	\$520,551
State Funds	\$374,396
Federal Assistance	\$122,230
Total Operating Funds Expended	\$1,054,932

FY 2019 Capital Expenses	
Local Funds	\$14,224
State Funds	\$14,224
Federal Assistance	\$113,795
Other Funds	\$0
Total Capital Funds Expended	\$142,243

Source: National Transit Database

MDOT MTA TRANSIT PROFILE

Transit Service Overview

Introduction

The Maryland Department of Transportation (MDOT) Maryland Transit Administration (MTA) is a provider of public transit services in the Baltimore region and beyond. MDOT MTA is also a State agency that receives grants from the Federal Transit Administration (FTA) as well as Sources and administers FTA and State grants to the locally operated transit systems (LOTS) as well as other local and regional organizations across Maryland. This profile describes the functions of MDOT MTA that provide public transit services.

MDOT MTA's mission and visions statement is "To provide safe, efficient and reliable transit across Maryland with world-class customer service." The system consists of six modal components:

- **BaltimoreLink** – local bus service
- **MetroSubwayLink** – subway service
- **Light RailLink** – light rail service
- **MARC Train** – commuter rail service
- **Commuter Bus** – commuter bus service
- **MobilityLink** – ADA paratransit service

In 2019, the combined services managed by MDOT MTA provided 94 million passenger trips (see Figure 47 and Figure 48). Services include a combination of directly operated services (BaltimoreLink, Metro SubwayLink, Light RailLink, and a small portion of MobilityLink services) and contracted services (MARC Train, Commuter Bus, and most of the MobilityLink service). MDOT MTA directly operated services are unionized; portions of the contracted services are also unionized.

Figure 48 2019 Peak Vehicles and Ridership for Each MDOT MTA Mode

MDOT MTA Service	Mode in NTD Report	Vehicles Operated in Maximum Service - 2019			Ridership - 2019
		Directly Operated	Contracted	Total	
BaltimoreLink	Bus	615	-	615	63,988,571
Metro SubwayLink	Heavy Rail	54	-	54	7,275,335
Light RailLink	Light Rail	38	-	38	6,966,072
MARC Train*	Commuter Rail	-	149	149	9,190,885
Commuter Bus*	Commuter Bus	-	280	280	3,623,587
MobilityLink	Demand Response	12	461	473	2,152,642
MobilityLink – Call-a-Ride	Demand Response - Taxi	-	38	38	839,857
Total		719	928	1,647	94,036,949

* Includes service operated outside of the Baltimore region

Source: National Transit Database (NTD), 2019

BaltimoreLink

BaltimoreLink is the local bus system operated by MDOT MTA in the Baltimore Region; it includes CityLink, LocalLink, and Express BusLink:

- **CityLink** – High-frequency service available 24 hours a day. CityLink routes form a downtown grid and radiate out from the city on major streets. There are 12 CityLink routes, named as colors.
- **LocalLink** – lower frequency daily service that operates on neighborhood streets and provide crosstown service. There are 44 LocalLink routes. Operating hours vary by route.
- **Express BusLink** – limited-stop weekday peak service connecting suburbs to downtown as well as to other suburbs. As of May 2020, there were 8 Express BusLink routes; numbers are slightly reduced due to COVID-19.

Metro SubwayLink

Metro SubwayLink is a 15.5 heavy rail mile line that runs from Owings Mills in the northwest to Johns Hopkins Hospital in Baltimore City in the southeast. The Metro SubwayLink system serves 14 stations: 11 in Baltimore City and 3 in Baltimore County. Service operates from 5:00 a.m. to 12:00 a.m. on weekdays and 6:00 a.m. to 12:00 a.m. on weekends.

Light RailLink

Light RailLink is a 58-mile light rail system that operates between Hunt Valley to the north to BWI Thurgood Marshall Airport and Glen Burnie/Cromwell to the south (two different termini at the south end). Light RailLink serves 33 stations, including 10 in Baltimore City, 20 in Baltimore County, and 3 in Anne Arundel County. Service operates from 5:00 a.m. to 12:00 a.m. on weekdays, 6:00 a.m. to 12:00 a.m. Saturdays, and 11:00 a.m. to 7:00 p.m. Sundays.

MARC Train

MDOT MTA's MARC (Maryland Area Regional Commuter) Train system is a regional commuter rail system that spans much of the state as well as stations in West Virginia and the District of Columbia. The MARC Train system is made of three lines, two of which serve the Baltimore region and connect Baltimore to Washington, DC.

The two MARC Train lines that serve the Baltimore region are the Penn Line and the Camden Line.

- **The 77-mile Penn Line** spans Perryville to Baltimore to Washington, DC (serving Baltimore City and Anne Arundel, Baltimore, Cecil, Harford, and Prince George's Counties). Nine Penn Line stations are within the Baltimore region: Perryville, Aberdeen, Edgewood, Martin State, Penn, West Baltimore, Halethorpe, BWI, and Odenton. Prior to the COVID-19 pandemic, 57 trains per day served this corridor from 4:00 a.m. to 12:00 a.m. In response to the COVID-19 pandemic and its impact on ridership, MDOT MTA reduced MARC service beginning in November 2020. As of February 2021, 31 trains serve the Penn Line corridor on weekdays with reduced services on weekends.
- **The 39-mile Camden Line** spans Baltimore to Howard County to Washington, DC (serving Baltimore City and Baltimore, Howard, and Prince George's Counties). Five Camden Line stations are within the Baltimore region: Camden, St. Denis, Dorsey, Jessup, and Savage. Prior to the COVID-19 pandemic, 21 trains per day served this corridor from 5:00-9:30 a.m. and 3:30-9:00 p.m. As of February 2021, 8 trains per day serve the Camden Line corridor on weekdays.

Commuter Bus

The MDOT MTA's Commuter Bus network consists of 38 routes making 642 daily vehicle trips (Figure 49):

- 9 routes focused on Baltimore, operating daily 95 trips
- 6 routes focused on Central Maryland, operating daily 102 trips
- 23 routes focused on Washington, D.C. operating 445 daily trips

Figure 49 Commuter Bus Routes that Serve Part of the Baltimore Region

Route No.	Annapolis	Anne Arundel County	Baltimore City	Baltimore County	Harford County	Howard County	Queen Anne's County
201		■					
203						■	
210	■	■	■				■
215	■	■	■				
220	■	■					
230	■	■					

Route No.	Annapolis	Anne Arundel County	Baltimore City	Baltimore County	Harford County	Howard County	Queen Anne's County
240							■
250		■					■
260		■					
305						■	
310						■	
315						■	
325						■	
335						■	
345						■	
410			■		■		
411			■	■	■		
420			■	■	■		

MobilityLink

MobilityLink is MDOT MTA's ADA complementary paratransit service for people with disabilities who are unable to use the fixed route service due to their disability. MobilityLink operates within $\frac{3}{4}$ mile of MDOT MTA bus routes (excluding commuter bus) as well as $\frac{3}{4}$ of a mile radius of an MDOT MTA Light Rail or Metro Subway station, during the same days and hours as the fixed route services.

MobilityLink customers are also eligible to ride MDOT MTA's Call-a-Ride service, a demand-response service provided under contract by participating area taxicab and sedan companies within the same service area as MobilityLink. This service is also referred to as the Taxi Access program. Although it is only available to individuals who are eligible for MobilityLink, Call-a-Ride is considered a separate, premium service.

Technology

MDOT MTA has a sophisticated set of transit technologies:

- Fare collection technology includes the CharmCard and the CharmPass mobile transit fare app.
- Vehicle Fuel Technology: Over 400 diesel electric hybrid buses are equipped with hybrid rooftop batteries.
- Vehicle Tracking Technology: GPS tracking are on all MDOT MTA buses. Swiftly and Transit App to use the GPS data to provide real-time arrival information, simple trip

planning, and step-by-step navigation. Real-time bus arrival information is also displayed at select bus shelters and transfer stations

- Transit Signal Priority (TSP) - installed on the entire bus fleet and at intersections along two major corridors. Smaller deployments are planned on additional corridors.

The MDOT MTA Bus Cornerstone Plan also calls for investing in additional technologies in the near- or medium term:

- Bus-Unified System Architecture – to provide a proven, integrated, state-of-the-art suite of on-board bus systems that are standardized throughout the fleet as well as information to support daily fleet management and control. The planned Bus-USA project, which was expected to be completed in 2020, includes new radio and cellular data communications, a new camera system, a fixed end subsystem (CAD/AVL, CCTV server), and onboard vehicle subsystems (automatic vehicle location, automated voice annunciation, automatic passenger counting, vehicle health monitoring, supervisor mobile data terminal).
- Transit Signal Priority (TSP) on additional corridors.
- New fare collection technology
- Replacement of radio equipment, radio towers, and two-way handheld radios and relevant base stations

MobilityLink uses the following technologies: Global Positioning System (GPS), Automated Vehicle Locator (AVL), mobile data terminal (MDT) hardware, PassWeb online reservations, and Mobility Direct, an automated system accessible by phone. The MDOT MTA MobilityLink Cornerstone Plan calls for transitioning to electronic fare collection (CharmPass and CharmCard integration).

Fare Structure

The fare structure for MDOT MTA's non-commuter fixed routes (BaltimoreLink, Metro SubwayLink and Light RailLink) are shown in Figure 50.

Figure 50 Fares for BaltimoreLink, Metro SubwayLink and Light RailLink

Fare or Pass	Full Fare	Senior/Disability Fare	Student Fare
One-way	1.90	.90	1.40
1-Day Pass	4.40	2.20	--
7-Day Pass	21.00	--	--
31-Day Pass	74.00	22.00	--
Express BusLink Upcharge	.60	.60	.60
Express BusLink 31-Day Pass	93.00	--	--

The fare for MobilityLink is \$2.10 for a one-way trip (or \$42 for a monthly 20-trip book). For MobilityLink Call-a-Ride/Taxi Access service, the fare is \$3 (\$2 for dialysis trips) for the first \$20 of the taxi meter (with the customer responsible for the taxi meter above \$20).

Fares for Commuter Bus and MARC Train services are distance-based. One-way fares on Commuter Bus are determined by zone, ranging from \$3.00 to \$6.00 for a one-way trip on routes serving the Baltimore region. One-way trips on the MARC Penn Line range from \$5.00 to \$12.00 and on the Camden Line from \$5.00 to \$8.00. Reduced senior/disability fares and Multi-ride tickets and passes are also available.

In addition to cash, fares, tickets, and passes may be loaded onto a CharmCard or paid using the CharmPass mobile transit fare app.

Transit Governance

MDOT MTA is directed by an Administrator, appointed by the Secretary. The MDOT MTA manages three distinct transit programs and plays a slightly different role in each:

- Local and regional bus service in the Baltimore Region – MTA funds, operates and manages local bus, light rail, subway, and paratransit services provided in accordance with the Americans with Disabilities Act (ADA).
- Regional commuter bus and train service – MTA funds and manages contracts for both regional commuter bus and the Maryland Rail Commuter (MARC) service.
- Statewide management and funding of the Locally Operate Transit Systems (LOTS) – MTA provides funding, oversight and planning support.

The MTA makes decisions about the allocation of funds to capital and operating projects as well as the allocation across modes. Investment decisions are determined based on existing commitments made through operating contracts with service operators, railroads, and unions. MTA also has internal priorities for capital planning, based on both federal and state legislative mandates. Many of these priorities are laid out in MTA's Transit Asset Management Plan (TAMP), which is a federally mandated program that tracks assets, focusing on achieving a State of Good Repair. The TAMP feeds into a Ten-Year Capital Plan that identifies individual projects and initiatives, and it in turn is coordinated with MDOT's CTP, which includes all state transportation projects. Consistent within this approach, allocations to the LOTS program are not based on a formula but is driven largely by history. LOTS capital needs (primarily vehicles) are addressed in the TAMP plan.

There are no regional or local representation into MTA's funding or service allocation decisions, in terms of how funds are allocated across programs or spent within programs. MTA does have an advisory Citizens Advisory Committee, which meets monthly, but is not legislatively created or an empowered policy board. The one exception to this rule is the LOTS program. As noted, LOTS administers operating and capital grants to the LOTS, meaning LOTS are individual subrecipients of MTA and operate as part of local government. Decisions about how LOTS allocate funds and invest in services, therefore, are made at a local level (see also LOTS section).

Agency Responsibilities, Public Engagement, and Planning

Transit program governance in the Baltimore region has three elements, all of which are defined in the state statutes, whose Transportation Article encompasses some 1500 pages. As chronicled

in Technical Memorandum No. 1, the overall state Maryland Department of Transportation (MDOT) was created in 1970, and it included what is now known as the Maryland Transit Administration (MTA) as one its modal administrations.

MDOT includes all the modal transportation administrations. It has a Secretary, appointed by the Governor, and a Transportation Commission. The Transportation Commission is composed of seventeen members: ten members appointed by the Governor, and seven ex-officio members who are the regional members of the State Roads Commission (§2-202). The Transportation Commission advises and makes recommendations to the Secretary.

MDOT is funded by a consolidated Transportation Trust Fund (TTF), which is separate from the state's General Fund. The TTF is funded by all transportation user fees, such as fuel taxes, titling taxes, registration fees, operating revenues (such as fares) and corporate income taxes. Toll revenues are separate and are dedicated to financing of toll facilities which are under the Maryland Transportation Authority (MDTA) which is also part of MDOT. The state's transportation program is constrained by revenues raised by the TTF, unless an exception is made to utilize General Fund to address a specific project or need.

MDOT, including its modal administrations, allocates TTF funding among the modes. Funding decisions are made annually and guided by the Secretary of Transportation and Governor and balance the needs across MDOT's six modal agencies, including the Maryland Transit Authority together with the Maryland Aviation Administration, State Highway Administration, Maryland Port Commission, Motor Vehicle Administration, and the Maryland Transportation Authority.

MDOT develops an annual State Transportation Report and the Consolidated Transportation Plan (CTP), which is a six-year projection of project funding needs for all modes, including transit. There is an appointed Advisory Committee to provide input to these plans. It is statewide, and not dedicated to any mode. The CTP process includes annual input from all the jurisdictions regarding their needs and priorities, provided through a formal priorities letter and in person during the annual tours in which the Secretary and modal administrators visit each jurisdiction.

One other significant organizational aspect of MDOT regarding transit is its role in overseeing Maryland's transit programs as they relate to the Washington area. The Washington Area Transit Office reports to the Assistant Secretary for Transportation Policy and Freight in the Secretary's office. This office manages and provides oversight in the budgeting and implementation of Maryland's annual contributions to the Washington Metropolitan Area Transit Authority (WMATA) capital and operating budgets, and it coordinates grants to local transit providers in the region. The staff of this office also provides support to the Maryland members (two voting and two alternates) of the WMATA Board of Directors. The MDOT Secretary is one of the voting members.

Financial Data

In FY 2019, MDOT MTA spent \$867.3 million operating service and invested another \$242.9 m in capital projects (see Figure 51).

Figure 51 FY2019 Financial Data Reported in the NTD – MDOT MTA

FY 2019 Operating Expenses	
Fare and Other Revenues	\$142,207,862
Local Funds	\$0
State Funds	\$705,730,195
Federal Assistance	\$19,329,835
Total Operating Funds Expended	\$867,267,892

FY 2019 Capital Expenses	
Local Funds	\$0
State Funds	\$67,983,903
Federal Assistance	\$174,888,372
Other Funds	\$0
Total Capital Funds Expended	\$242,872,275

Source: National Transit Database

Service Area Statistics (2019)

Population: 2,270,027

Population density: 3,166.4 persons per square mile

Top five employers:

- Fort George G. Meade (54,000 employees)
- U.S. Army's Aberdeen Proving Ground (21,000)
- John's Hopkins Hospital and Health System (20,485)
- Johns Hopkins University (18,600)
- State of Maryland government (12,132)

Median household income: \$78,589

Residents below federal poverty level: 10.4%

Population aged 65+: 15.5%

Residents living in zero vehicle households: 12.3%

Percent minority: 52%