

## ARE Transportation Chapter – DRAFT – June 11, 2023

### **Board of Supervisors Environmental Vision:**

“A dependable, safe, efficient, accessible, and multi-modal transportation network is necessary to support the travel needs of Fairfax County residents now and into the future. The county will continue to develop policies and strategies that reduce the dependence on single-occupancy vehicle trips through smart development, efficient use of the transportation system, and by expanding the county’s bicycle, pedestrian and transit infrastructure. The county will pursue transportation strategies in support of regional attainment of air quality standards.”

### **INTRODUCTION**

Transportation is a key element impacting the quality of life for Fairfax County residents, and transportation planning choices must be made which balance a myriad of concerns, including but not limited to convenience, cost, efficiency, health, equity, and environmental impact. Fairfax County residents and visitors are overwhelmingly dependent on automobile transportation due to the long distances that often must be traveled, neighborhoods designed for cars, as well as the lack of convenient or safe (actual or perceived) alternative options such as mass transit, bicycling, or walking. Yet it is this heavy dependence on automobiles that has resulted in some of the worst traffic congestion in the United States, and with that congestion large amounts of wasted time and productivity, as well as added pollution from vehicle emissions that degrades our air quality and contributes to climate change.

There is a lack of reliable data currently available to fully understand the relative use of different modes for transportation in Fairfax County. The main data source used to inform the understanding is the American Community Survey (ACS), which collects data for the means used by workers for transportation to work. The most recent time complete data was collected was in 2020 (i.e., 3 years ago, at the height of the COVID-19 pandemic <https://data.census.gov/table?q=Fairfax+County,+Virginia&t=Commuting&y=2020&tid=ACSDT5Y2020.B08301>). In 2020, ACS showed that there were approximately 613,000 trips in Fairfax County for workers to get to work. Of those, about 76% were by car, truck, or van; 9% by public transportation; 12% worked from home; and less than 4% other (including taxicab, motorcycle, bicycle, or walking). Approximately 88% of those trips made by car, truck, or van were by a person driving alone (i.e., a single-occupancy vehicle [SOV]). What are not included in this data are the many non-work trips taken in Fairfax County, especially on weekends.

Fairfax County has significant transit and non-motorized infrastructure in place to build from. Fairfax County contributions to WMATA (Metrorail and Metrobus), Virginia Railway Express (VRE), and Fairfax Connector total nearly \$220 million, and range from about 2.5% to 24% of operating budgets (see Table T-1; note at end of file). Fairfax County’s main planning effort related to non-motorized infrastructure is the Active Fairfax Transportation Plan, including the Safe Streets for All Program which the Board of Supervisors (BOS) unanimously endorsed on May 10, 2022. The Fairfax County Department of Transportation (FCDOT) is currently targeting late 2024 for finishing this plan which will include network map recommendations. They are currently conducting coordination with internal stakeholders. FCDOT estimated that it added approximately 4.5 centerline miles of bicycle lanes, 0.6 miles of trails, 2.3 miles of sidewalks, and enhanced 39 crosswalks during 2022 in coordination with the Virginia Department of

Transportation (VDOT). Much of the work to construct non-motorized infrastructure is performed by VDOT. However, the estimates provided by FCDOT do not include any infrastructure constructed by VDOT or private developers; such data were not made available to EQAC. Recently, portions of the east-west trail being constructed parallel to I-66 that will connect Gallows Road to Centreville were opened to the public.

In 2021, Fairfax County published its Community-wide Energy and Climate Action Plan (CECAP) which lays out multi-sector greenhouse gas reduction strategies and identifies roles and responsibilities for federal, state and local stakeholders. CECAP focuses on actions that can be taken by the community (residents, business, and others) toward achieving a set of pre-defined emissions reductions goals. A review of Fairfax County's Climate Action Dashboard (Dashboard) (<https://www.fairfaxcounty.gov/environment-energy-coordination/climate-action>; downloaded May 2023) shows that transportation is the second-largest source of greenhouse gas emissions in Fairfax County (after buildings) (Figure T-1; note at end of file). However, unlike buildings, the Dashboard does not show much in the way of decreases in greenhouse gas emissions for transportation.

Specific goals for transportation include increased use of electric vehicles (EVs, to at least 15% of all light-duty vehicle registrations by 2030) and increased use of transit and non-motorized commuting (to at least 30% (including teleworking) by 2030). The Dashboard shows that, as of 2020, EV registrations in Fairfax County were 1.1% of total light-duty vehicle registrations (Figure T-2; note at end of file). Battery electric vehicles (BEVs) accounted for 0.8% of this total, with plug-in hybrid EVs (PHEVs) accounting for the rest. The Dashboard also shows that the transit and non-motorized commuting goal of 30% had been met in 2020 for the D.C. metro area (a total of about 57%, comprising transit – 7.8%; bike/walk/scooter – 1.7%; and telework – 47.6%). Other modes were carpool/vanpool – 1.7%; and drive alone/taxi – 41.2%. Given that the telework numbers (which account for 83% (calculated based on 47.6/57) of the transit and non-motorized commuting) are likely to drop as the pandemic recedes, a conclusion to say that this goal has been achieved may be premature.

## **CURRENT CONCERNS**

An evaluation of traffic congestion for 2022 ranked Washington, D.C. as 20<sup>th</sup> worst in the world and 8<sup>th</sup> worst in the United States, with each driver losing an average of 83 hours to congestion, corresponding to a cost of \$1,398 for wasted fuel per driver (<https://inrix.com/scorecard/>). There is no doubt that the COVID-19 pandemic has significantly impacted commuting patterns in Fairfax County and elsewhere throughout the U.S. In addition, it is likely that the situation in 2023 as this report is being written is very different from that which is reflected in the 2020 ACS data, since those data were collected at the height of the pandemic when many offices and other business were closed. Since that time, there has been somewhat of a return to pre-pandemic norms, though transit ridership remains depressed and work-from-home numbers remain elevated. Data was not available to inform a current understanding of the relative use of different transportation modes in Fairfax County.

Anecdotal information suggests that, as of mid-2023, traffic congestion has substantially returned to Fairfax County with SOV use still the predominant mode used in the county. Such

information suggests that traffic congestion is also no longer limited to traditional rush hour times but occurs throughout the day. In addition, safety issues such as aggressive driving (e.g., speeding well in-excess of the speed limit) and distracted driving (e.g., driving while looking at a cell phone or other mobile device) are considerable problems. Anecdotal information also indicates that many more people were walking and biking during the pandemic. For example, bike shops were not able to keep enough inventory to meet demand and customers had long waits for purchasing a new bicycle. Further, that information indicates that county residents are beginning to adopt one or more of the many micro-mobility options such as bike share and scooters and that E-bike sales also expanded. EQAC appreciates the county's efforts to support public transit and micro-mobility options but is concerned about the impacts of traffic congestion and the predominant use of SOVs in Fairfax County.

Taking actions to achieve the transportation-related goals in the CECAP report is critical given that transportation is the second-largest source of greenhouse gas emissions in Fairfax County, and, unlike buildings, transportation does not show much in the way of decreases in greenhouse gas emissions on the Fairfax County Dashboard. Efforts to have at least 15% of all light-duty vehicle registrations in Fairfax County be EVs by 2030 will be helpful for decreasing greenhouse gas emissions. Such efforts will also need coordination with activities described in the Climate and Energy Chapter such as increased availability of charging stations. Further, efforts to maintain the use of transit and non-motorized commuting of at least 30% will require diligence as teleworking is likely to drop as the pandemic recedes (the Dashboard shows this mainly being achieved through COVID-related teleworking).

Ongoing efforts are needed to complete the Active Fairfax Transportation Plan in a timely manner, including the Safe Streets for All Program, and to provide the resources and funding needed for implementation. For example, while the Board of Supervisors has endorsed the Safe Streets for All concept, it has not budgeted any staff to implement it as a program. Rather, other FCDOT staff continue to work on safety through their regular work. Further, there is insufficient maintenance of the non-motorized facilities and a need for the county to provide dedicated funding to support such maintenance; also, there is a lack of the use of Transportation Demand Management (TDM) funds to support micro-mobility encouragement and education efforts. EQAC also is concerned that equity concerns, as articulated through One Fairfax, be included in actions taken to achieve the transportation-related goals in the CECAP report. FCDOT staff did not have input about the ways that One Fairfax was being used in county efforts to increase light-duty EV registrations. However, staff reported that Phase One of Active Fairfax included actions related to One Fairfax such as the development of a countywide map of socio-economic need to inform future active transportation project priority decisions as well as holding meetings and providing translations in languages other than English to improve outreach to communities that are often underrepresented in stakeholder engagement.

## RECOMMENDATIONS

1. *Recommendation: 2TRANS-2023.1. Develop a formal plan to increase light-duty electric vehicle (EV) registrations to at least 15% of total registrations by 2030.*

**Summary of Action Taken by Agency or Department:** Efforts to address this recommendation are being implemented by the Office of Environmental and Energy Coordination (OEEC). For

example, OEEC's Carbon-Free Fairfax program provides resources and campaigns promoting EV adoption including information on incentives. OEEC is working with the Fairfax County tax authority to help evaluate the number of EV registrations. Further, OEEC has made a Fairfax County Dashboard available to the public showing progress toward achieving the CECAP goal to have at least 15% of all light-duty vehicle registrations in Fairfax County be EVs.

**Status/EQAC Comment:** Ongoing 3 years; Making Progress. Achieving the 15% goal will require further efforts than are currently in place.

2. *Recommendation: 2TRANS-2023.2. Provide the resources and funding needed to complete and implement the Active Fairfax Transportation Plan in a timely manner, including the Safe Streets for All Program.*

**Summary of Action Taken by Agency or Department:** Efforts to address this recommendation are being implemented by the Fairfax County Department of Transportation (FCDOT). That agency is leading the development of the Active Fairfax Transportation Plan which is focused on improving and expanding the pedestrian and bicycle networks throughout the county including public outreach for the planning effort. In May 2022, FCDOT completed Phase One which included the development of a vision statement with supporting goals and objectives. FCDOT is in the process of conducting Phase Two which includes the development of active transportation network recommendations and facility and an implementation approach that includes policy, program, and project prioritization strategies.

**Status/EQAC Comment:** Ongoing 3 years; Making Progress. FCDOT has had delays in completing Phase Two of the Active Fairfax Transportation Plan. Staff and resources should be budgeted to implement a Safe Streets for All program as well as for maintenance of bicycle and pedestrian infrastructure.

TABLES AND FIGURES

**Table T-1. Summary of Fairfax County’s Contribution to Public Transit Organizations.**

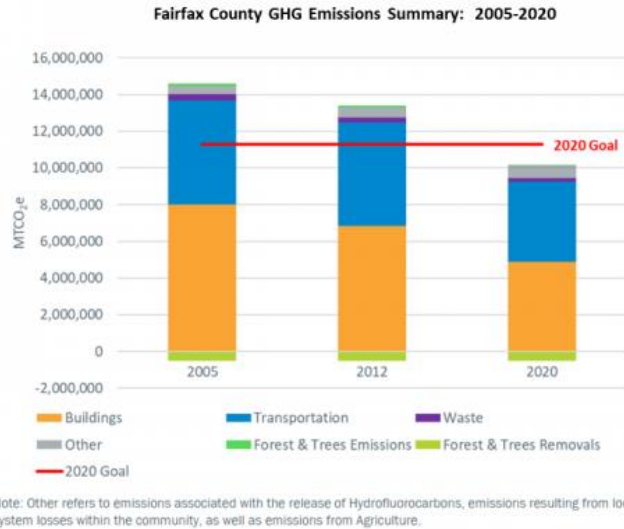
<b>Operating Budget</b>	<b>Fairfax County Contribution</b>	<b>Total Operating Budget</b>	<b>Fairfax Percentage of Operating Budget</b>
<b>WMATA</b>	\$168,723,585	\$2,261,652,000	~7.5%
<b>VRE</b>	\$4,721,011	\$185,477,588	~2.5%
<b>Fairfax Connector</b>	\$42,965,059	\$180,189,749	~24%

Source: FCDOT, e-mail from Zachary Krohmal; April 14, 2023.

Alternate text for Table T-1: *to be added*

**Figure T-1. Fairfax County Greenhouse Gas Emissions Summary (2005 – 2020) Including Transportation Sector.**

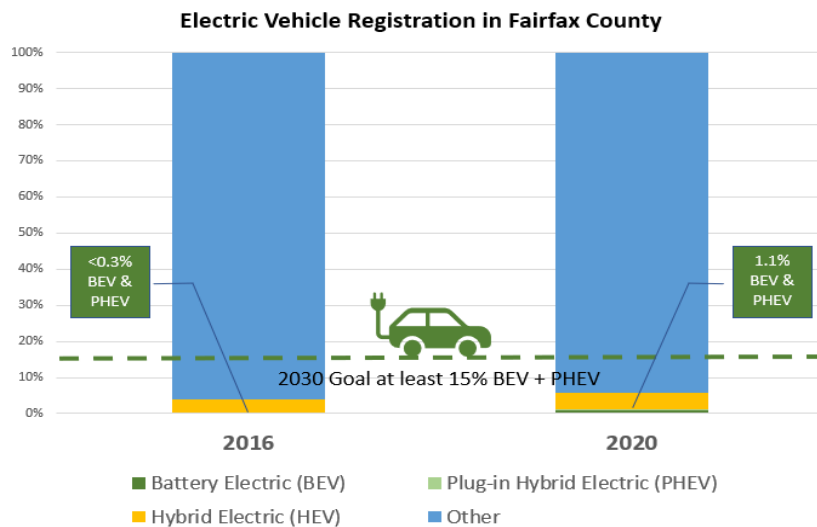
**Source:** <https://www.fairfaxcounty.gov/environment-energy-coordination/climate-action/overall-metrics>; downloaded June 11, 2023.



Alternate text for Figure T-1: *to Fairfax County GHG Emissions Summary 2005-2020*

**Figure T-2. Electric Vehicle Registration in Fairfax County.**

**Source:** Fairfax County Dashboard; <https://www.fairfaxcounty.gov/environment-energy-coordination/climate-action/transportation>; downloaded May 18, 2023.



Alternate text for Figure T-2: *Electric Vehicle Registration in Fairfax County*