REGIONAL E-BUS DATA OVERVIEW

draft

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Regional Public Transportation Subcommittee
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National Capital Region
Transportation Planning Board

CONTEXT growth of e-buses in the US

PRESS RELEASES | OCTOBER 17, 2019

US Zero-Emission Bus Fleet Grows Nearly 37 Percent Over Previous Year

California, Washington, Florida, Colorado, Illinois, North Carolina Lead Adoption

Source: Mixed: Clean Transit Innovation Network referencing CALSTART'S Zeroing in on ZEBs: The Advanced Technology Transit Bus Index (2019)

Clean Energy

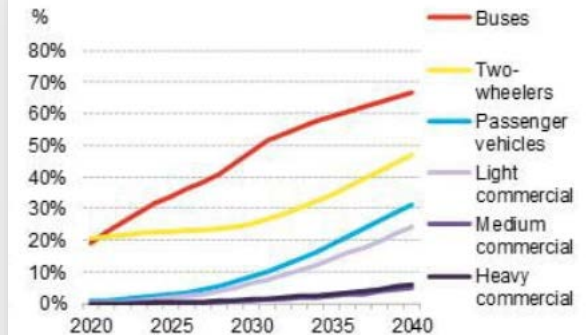## U.S. Electric Bus Demand Outpaces Production as Cities Add to Their Fleets

Source: Inside Climate News

E-buses to surge even faster than EVs as conventional vehicles fade

Bloomberg NEF July 12, 2018
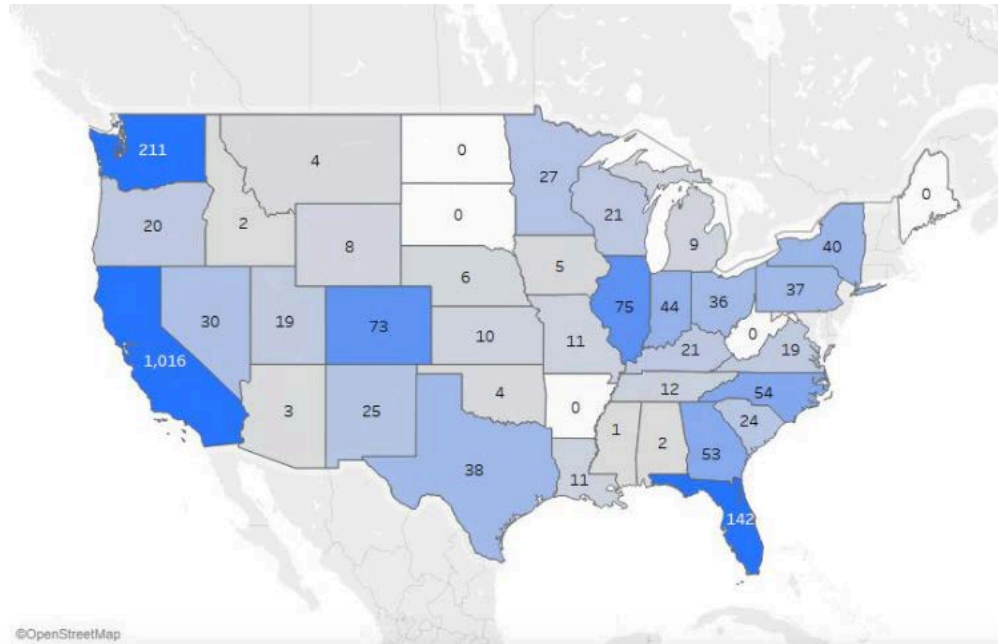

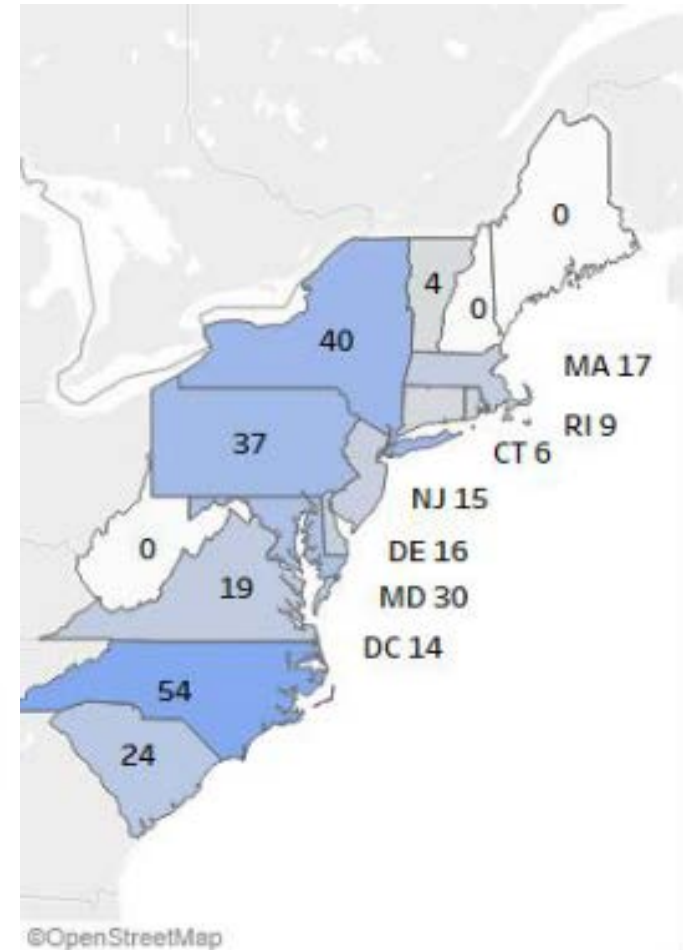Figure 16: EV share of global vehicle fleet by segment

Source: BNEF.

CONTEXT growth of e-buses in the US

Battery and Fuel Cell Electric Transit Buses Currently Deployed, On Order, or Soon To Be On Order Within the United States of America

Last Updated: September 27, 2019

Source: CalStart - Zeroing in on ZEBS, 2019

CONTEXT GHG emissions and climate goals

NEWS RELEASE

Officials approve new 2030 regional greenhouse gas emissions reduction goal

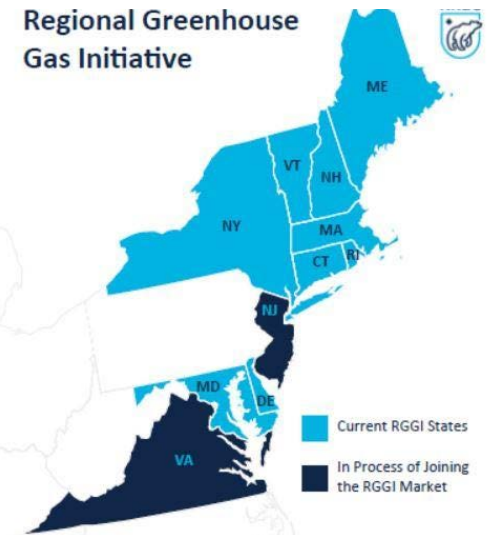Oct 14, 2020

Carbon Free DC

Help shape our path to an equitable, healthy, and resilient city by 2050

Climate Solutions

Virginia becomes the first Southern state with a goal of carbon-free energy

Maryland Politics

Maryland sets bolder target for cutting greenhouse gas emissions

Pete Buttigieg
@PeteButtigieg

To meet the climate crisis, we must put millions of new electric vehicles on America's roads. It's time to build public charging infrastructure powered by clean energy and make it available in all parts of this country.

5:06 PM · Dec 21, 2020

83.4K   18.3K people are Tweeting about this

TRANSPORTATION & CLIMATE INITIATIVE
Of the Northeast and Mid-Atlantic States

Regional Greenhouse Gas Initiative

ME
VT NH
NY MA
CT RI
NJ
MD DE
VA

Current RGGI States
In Process of Joining the RGGI Market

METHODOLOGY e-bus data

- NTD Data: Agency Profiles; Revenue Vehicle Inventory (Years 2016-2019)

- Review of presentations and reports from service providers and non-profits (for 2020/21 data)

- Review of regional news articles mentioning e-bus procurement (for 2020/21 data)

Source: Proterra

METHODOLOGY regional e-buses in the news

DASH Adds Electric Buses to Fleet

Three electric buses are in road testing now, and three more will arrive in January.

OCT. 06, 2020   7:48 A.M.

Montgomery County Rolls Out First Four Electric Buses on Ride On; Accelerates Efforts to Reduce Transportation Emissions

For Immediate Release: Thursday, September 3, 2020

LOCAL **NEWS**

After a $2.2 million government grant, electric buses will soon come to PG County

Rina Torchinsky   ·   September 20, 2019

Maryland County Shows Off Electric Bus Fleet to Congress

Frederick County, Md., local government officials had the opportunity to show off their electric bus fleet and solar array at the county landfill to Congressmen from both coasts late last week.

BY STEVE BOHNEL, THE FREDERICK NEWS-POST / MARCH 3, 2020

14 electric vehicles will join D.C. Circulator fleet on May 1
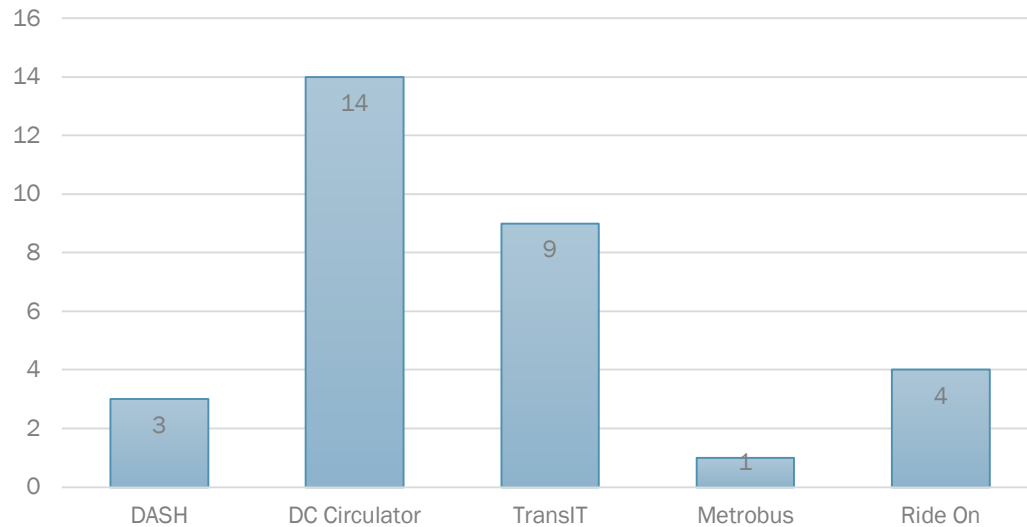
D.C. is getting greener

By **Michelle Goldchain** | **@goldchainam** | Apr 20, 2018, 9:45am EDT

Sources (L>R): Alexandria Living Magazine, Montgomery County MD – press detail, DBK News, Govtech, DC Curbed
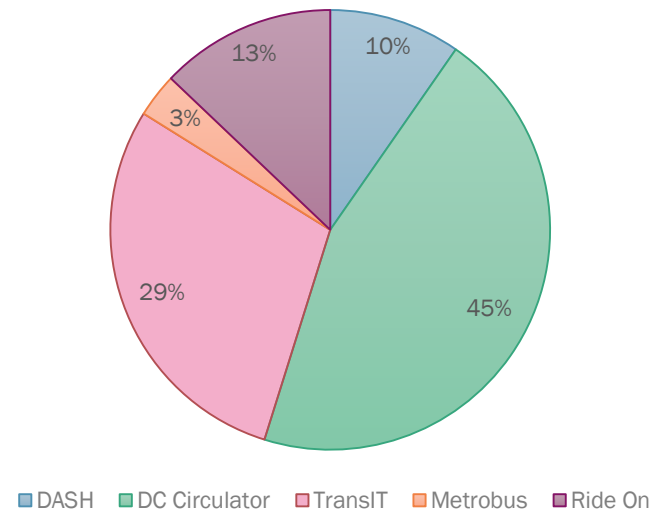
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FINDINGS regional e-bus fleet by count & percent

2020 Total Count of E Buses by Agency

Agency	Count
DASH	3
DC Circulator	14
TransIT	9
Metrobus	1
Ride On	4

Source: Mixed: NTD RVI & review of local reports / articles

2020 Regional E Bus fleet (by agency)

Agency	Percent
DASH	10%
DC Circulator	45%
TransIT	29%
Metrobus	3%
Ride On	13%

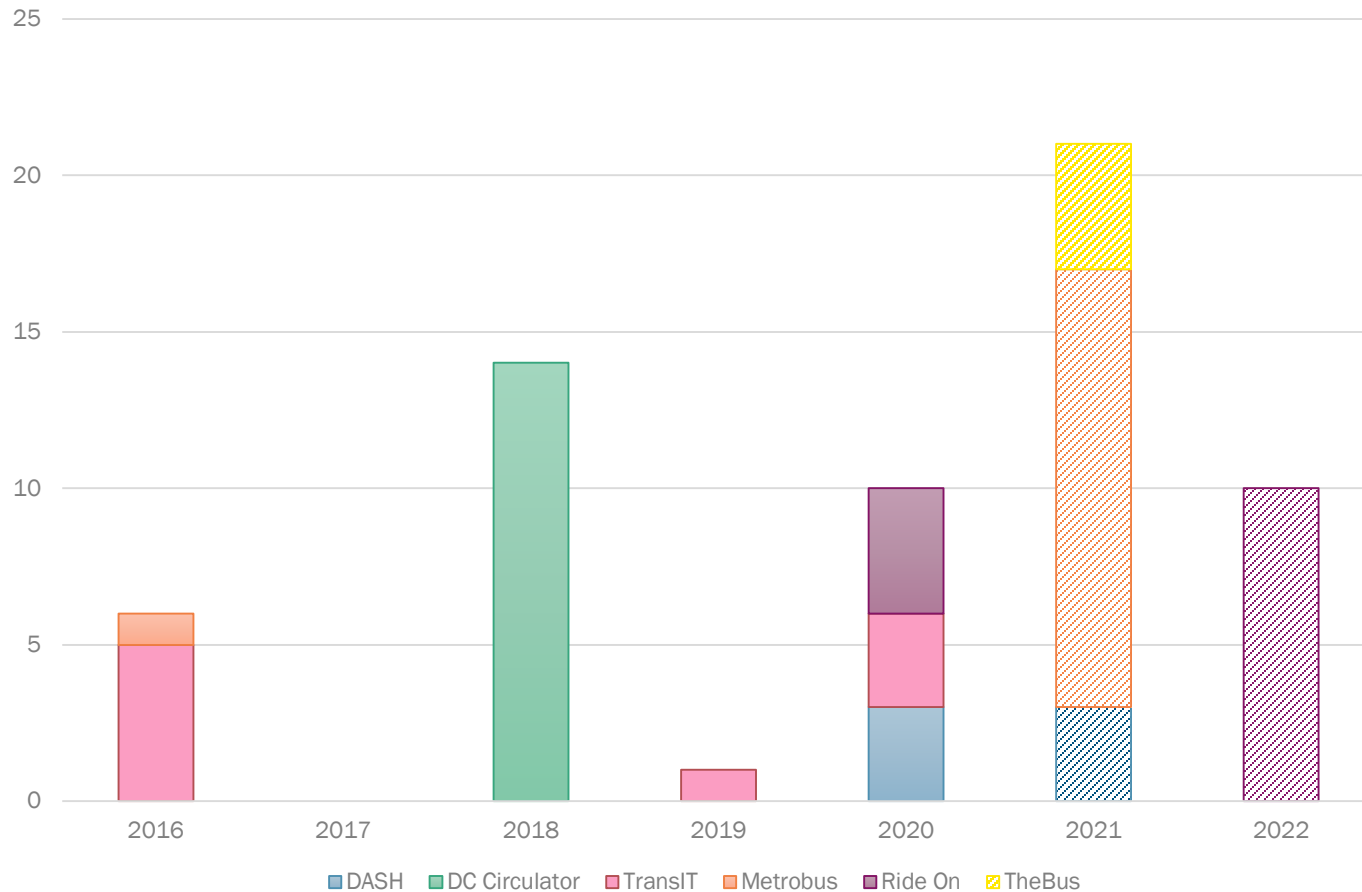# FINDINGS e-buses as % of agency fleet (2020)
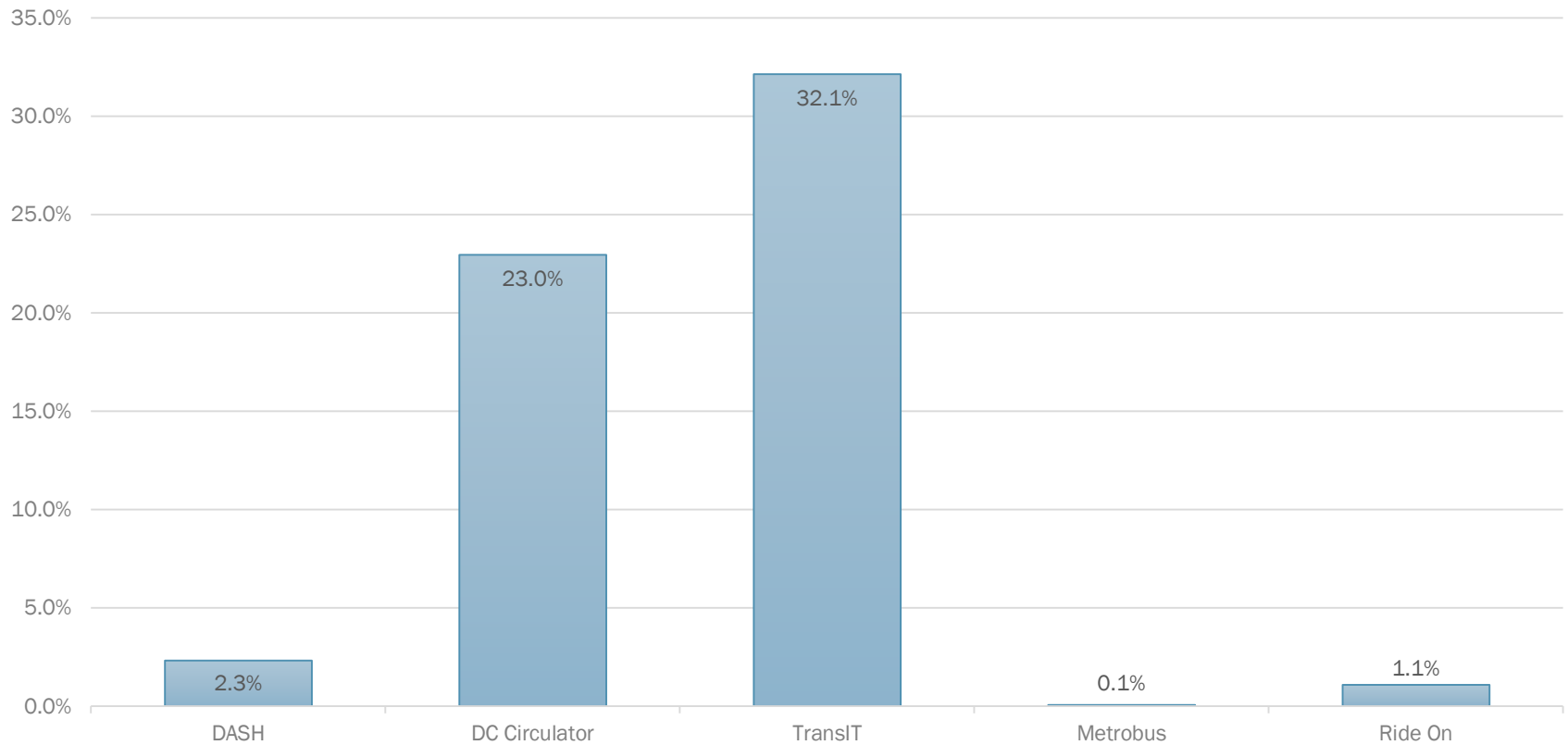
Source: Mixed: NTD RVI & review of local reports / articles

FINDINGS regional e-bus procurement by year

Source: Mixed: NTD RVI & review of local reports / articles

NEXT STEPS discussion

Regional Coordination:

- Energy Infrastructure Investments

- Training programs / workforce development

- Harmonized policies and utility rate structures

- Additional Funding for e-bus and Facility Conversion

- Fleet lifecycles / replacement timelines

Source: Transportation and Climate Initiative

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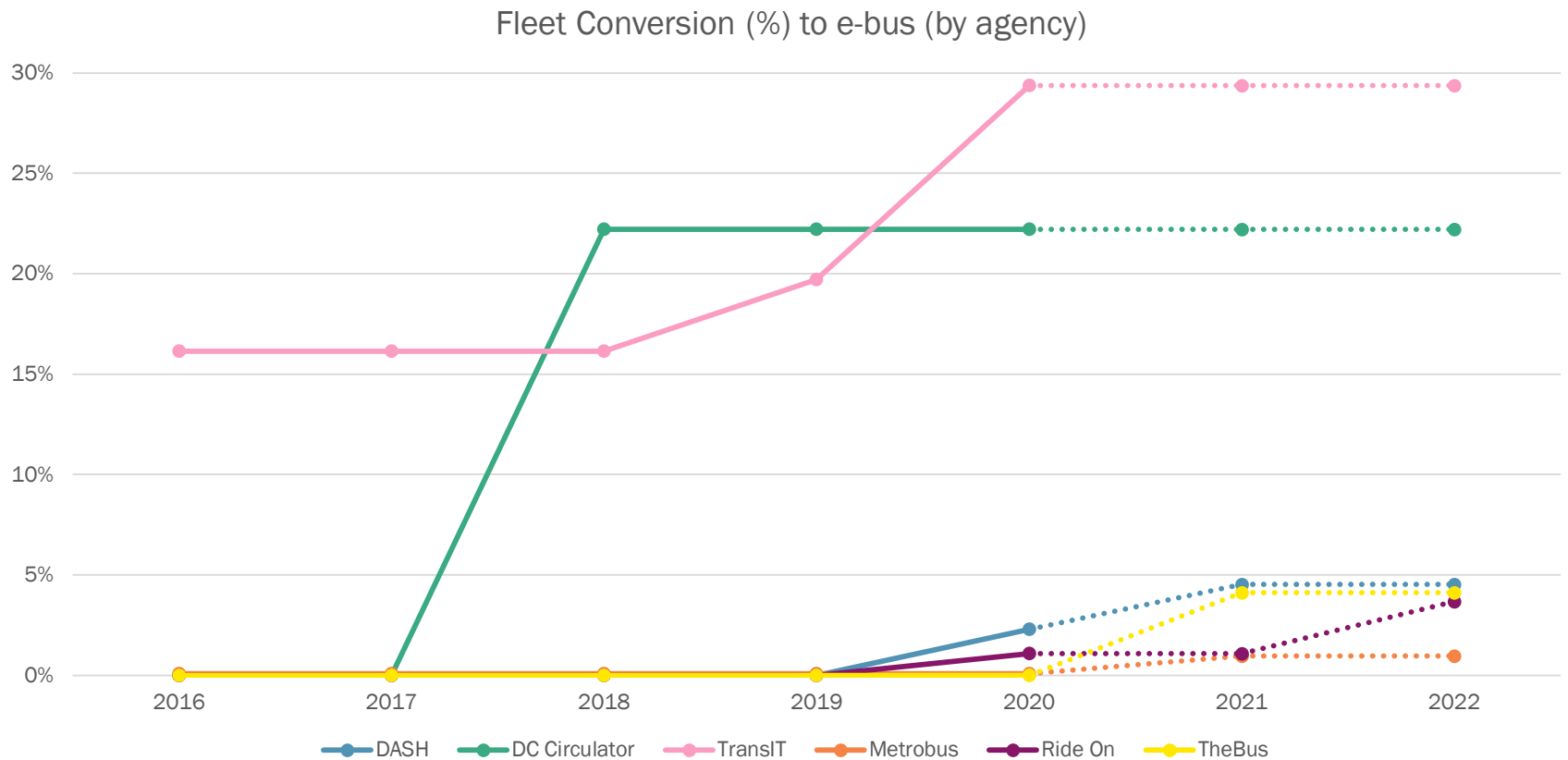
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APPENDIX

- Additional graphics

- Sources for reports

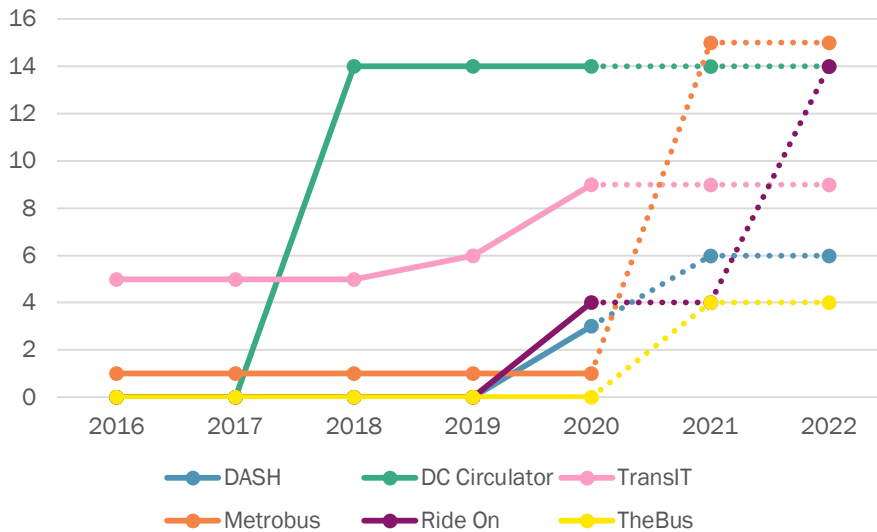- News articles

- General information

APPENDIX fig. 1

Fleet Conversion (%) to e-bus (by agency)

Source: Mixed: NTD RVI & review of local reports / articles

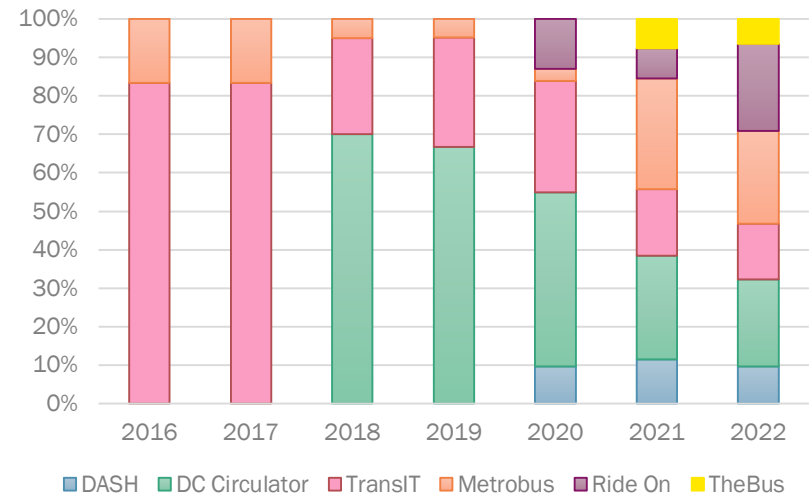National Capital Region
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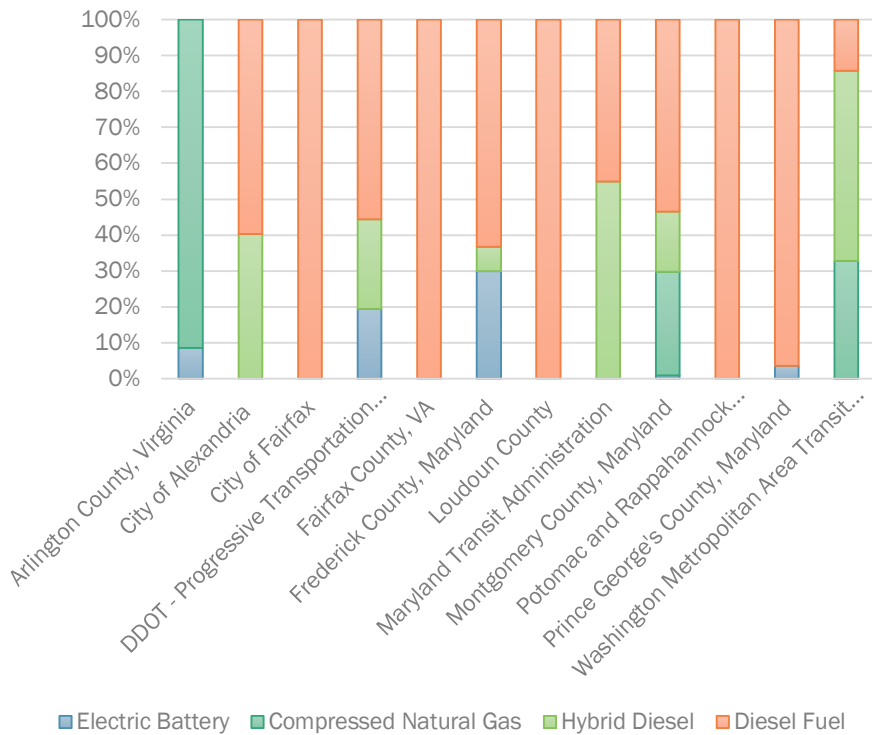
APPENDIX fig. 2 & 3

Regional e-bus fleet (by agency)

Agency % of regional e-bus fleet

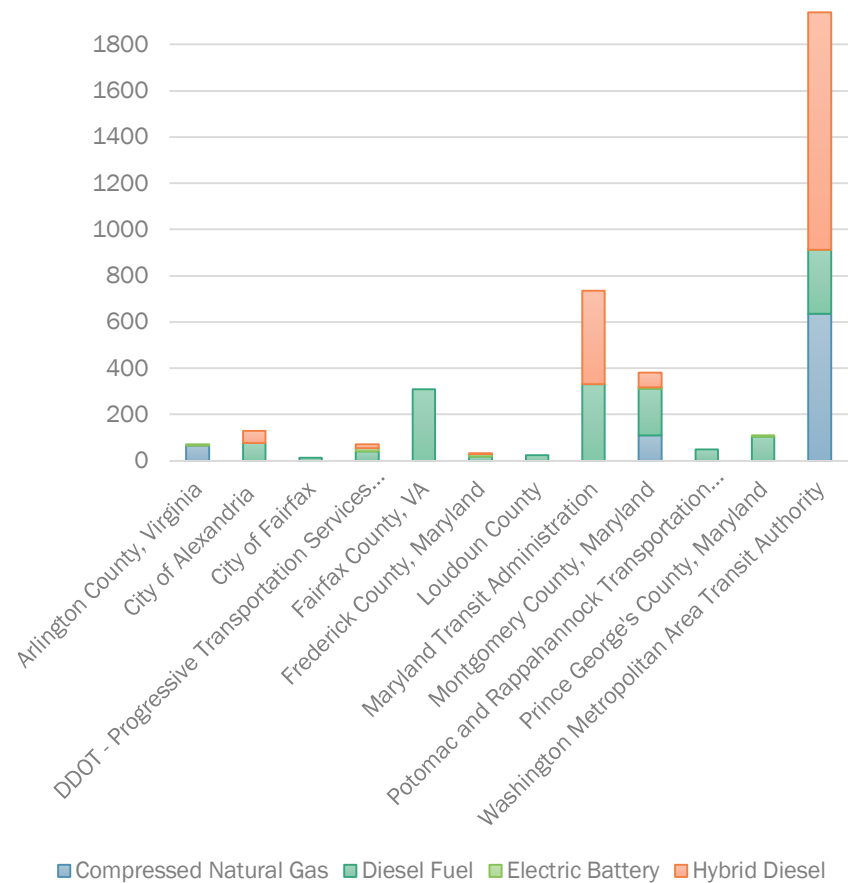Source: Mixed: NTD RVI & review of local reports / articles

Regional Bus Fleet (%) by Fuel Type

Regional Bus Fleet (by Fuel Type)

Source: NTD RVI

APPENDIX table 1: NTD agency profiles (2019)

Agency	NTDID	# of E-Buses	Total Fleet (VAMS)	% of total fleet
Alexandria DASH	30071	3	128	2.3%
DC Circulator	30112	14	61	23.0%
Frederick County Translt	30072	9	28	32.1%
Metrobus	30030	1	1558	0.1%
Montgomery County Ride On	30051	4	369	1.1%
Prince George 's County The Bus	30085	0	93	0.0%
		31	2237	1.4%
Agencies w/o E Bus Fleet				
Arlington Transit (ART)	30080	0	78	0.0%
City of Fairfax CUE	30058	0	12	0.0%
Fairfax Connector	30068	0	308	0.0%
Loudoun Commuter Transit	30081	0	30	0.0%
PRTC Omni Ride	30070	0	49	0.0%

Source: NTD Agency Profiles

APPENDIX tables 2 & 3:
e-bus procurement by year / VAMS by year

Year	Alexandria (DASH)	DC Circulator	Frederick County TransIt	Metrobus	Montgomery County (Ride On)	Prince George 's County (The Bus)
2016	0	0	5	1	0	0
2017	0	0	0	0	0	0
2018	0	14	0	0	0	0
2019	0	0	1	0	0	0
2020	3	0	3	0	4	0
2021	3	0	0	14		4
2022	0	0	0	0	10	0

AGENCY VAMS	*assumes 2020-2022 projection growth is only via increase in e-bus procurement and no other buses					
Year	Alexandria (DASH)	DC Circulator	Frederick County TransIt	Metrobus	Montgomery County (Ride On)	Prince George 's County (The Bus)
2016	85	67	31	1503	338	93
2017	85	67	31	1488	344	93
2018	86	63	25	1478	369	93
2019	128	61	28	1558	369	93
2020	131	61	31	1558	373	93
2021	134	61	31	1572	373	97
2022	134	61	31	1572	383	97

Source: Mixed: NTD RVI & review of local reports/ articles

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APPENDIX links

Sources

Context Source Links

https://www.cleantransitnetwork.org/us-zero-emission-bus-fleet-grows-nearly-37-percent-over-previous-year/
https://insideclimatenews.org/news/14112019/electric-bus-cost-savings-health-fuel-charging/
https://bnef.turtl.co/story/evo-2020/page/4/1?teaser=yes
https://about.bnef.com/electric-vehicle-outlook/
https://www.bloomberg.com/professional/blog/e-buses-surge-even-faster-evs-conventional-vehicles-fade/
https://www.transit.dot.gov/ntd/data-product/2019-annual-database-revenue-vehicle-inventory

Methodology Source Links

https://alexandrialivingmagazine.com/news/dash-adds-electric-buses-to-fleet/
https://www.proterra.com/press-release/washington-d-c-circulator-deploys-proterra-battery-electric-buses-across-nations-capital/
https://dc.curbed.com/2018/4/20/17261378/dc-circulator-electric-proterra
https://www.govtech.com/transportation/Maryland-County-Shows-Off-Electric-Bus-Fleet-to-Congress.html
https://www.sierraclub.org/sites/www.sierraclub.org/files/press-room/WMATAReport_Web.pdf
https://www2.montgomerycountymd.gov/mcgportalapps/Press_Detail.aspx?Item_ID=26756
https://content.govdelivery.com/accounts/MDPGC/bulletins/2a5ae3d
https://dbknews.com/2019/09/20/umd-college-park-electric-buses-pg-county/