# Transportation Commission

November 16, 2022
7PM
City Council Workroom and Electronic



## **Notice**

The November meeting of the Transportation Commission is being held in the City Council Workroom on the second floor of City Hall (301 King Street, Alexandria, Virginia, 22314) and electronically. Members of Transportation Commission and staff are participating either in-person or from a remote location through video conference call on Zoom.



#### **Commission Members**

- Oleksandr Faryga Environmental Policy Commission
- Oscar Gonzalez Resident East, High School Project
- Casey Kane Traffic and Parking Board, Eisenhower West/Landmark/Van Dorn Advisory Group, Ad Hoc Duke Street Transitway Committee
- Jody Manor- Planning Commission
- Bruce Marsh Resident East, Potomac Yard Metro Implementation Working Group
- Jim Maslanka— Resident West
- Melissa McMahon Planning Commission
- Matthew McManus Resident West, DASH
- Murat Omay DASH
- John Chapman Council (non-voting)
- Kirk McPike Council (non-voting)



# **Public Comment Period**

Agenda Item #1

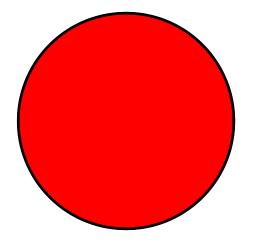


#### **Public Comment**

- For speakers not discussing items related to the public hearings.
- For virtual attendees:
  - Raise hand or press \*9
  - Mute or unmute press \*6
  - 3 minutes per speaker



3 Minute Timer Announcement will sound automatically when time is up





# **Transportation Commission Minutes: October 19, 2022**

Agenda Item #2



# King and Commonwealth Railroad Bridges Project (VRPA)

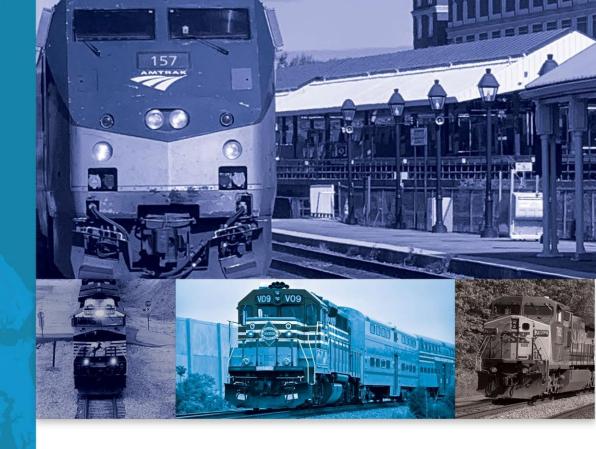
Agenda Item #3



# King and Commonwealth Railroad Bridges Project

# Transportation Commission Meeting

Wednesday November 16, 2022





#### **AGENDA**

- Introductions
- VPRA Overview
- Project Information
- Q & A Session



Naomi Klein VPRA



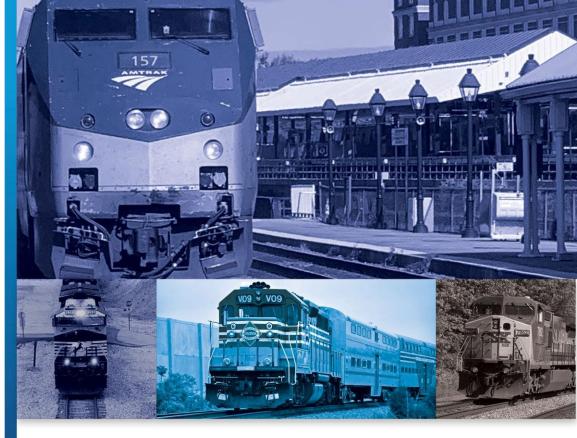
Todd Hopkins VPRA



Claire Mansfield VPRA



Teresa Gresham Kimley-Horn





# Who Is the Virginia Passenger Rail Authority?

#### **MISSION**

To promote, sustain, and expand the availability of passenger and commuter rail service in the Commonwealth.

#### **VISION**

Deliver passenger rail service as an integrated, affordable, convenient travel option that benefits the Commonwealth.

#### **VALUES**









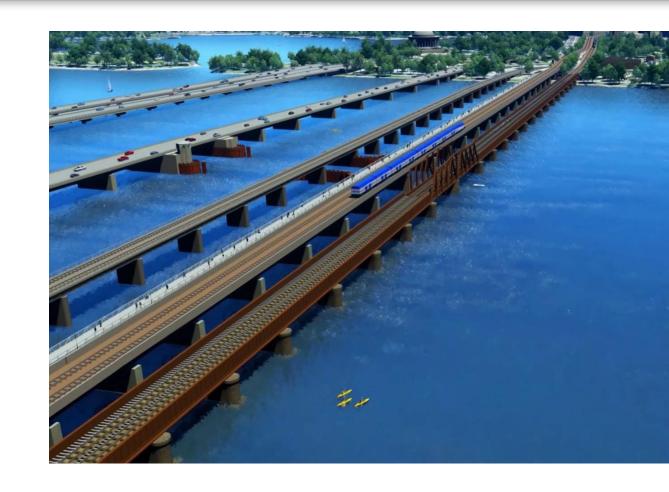






# Virginia Passenger Rail Authority

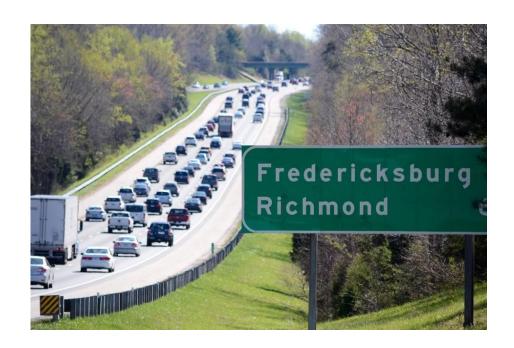
- Created by 2020 General Assembly
- Given all powers necessary for carrying out its statutory purposes:
  - Design, build, finance, and maintainrail facilities
  - Direct recipient of USDOT Grants
  - Eminent domain powers
- Owns rail assets and right of way
- Will partner with others to operate passenger and commuter railservice
- Governed by a 15-MemberBoard





## Today's Constraints

- Virginia's interstate congestion is growing at unsustainable pace
  - 1-95 from Fairfax County to Fredericksburg is the most congested stretch of highway in the U.S.
  - Vehicle miles traveled forecasted to reach 100 billion by 2040 (15% increase)
- Cost of adding one lane to I-95 between I-495 and Thornburg:
   \$12.6 Billion
  - Within 10 years, congestion would be worse than today's conditions
- Currently, Passenger Rail cannot grow due to bottleneck between Virginia and DC
  - Long Bridge over the Potomac River is at 98% capacity during peak hours
- Port of Virginia is increasing capacity by 40%, however, rail will need to move 45% of freight by 2040 (up from 34% today)
- Highway capacity limited but rail capacity available if win-win agreement could be struck with freight railroads

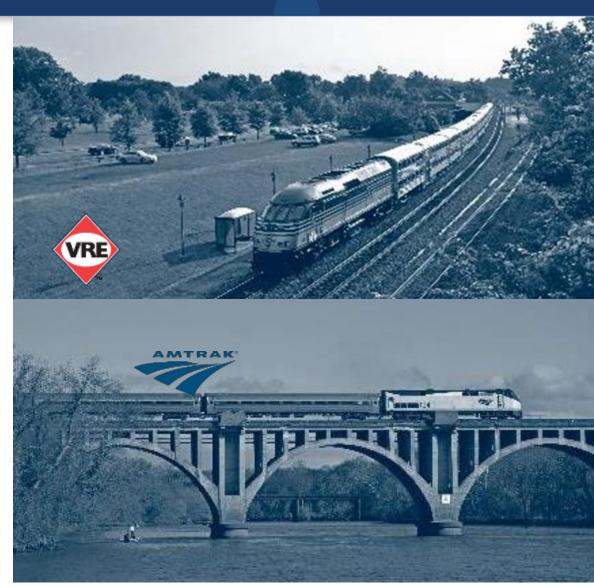




# New Service Corresponds with Construction

- 4 new VRE Roundtrips by the end of Phase 1 and 2 additional new VRE Roundtrips by the end of Phase 2 increases VRE Service by 75% along the Fredericksburg Line.
- Provides Virginia with control and guaranteed VRE / Amtrakservice.
- More than doubles state-supported
   Amtrak from 6 to 13, with nearly hourly service from DC to Richmond.
- Allows future ability to increase VRE Manassas Line.

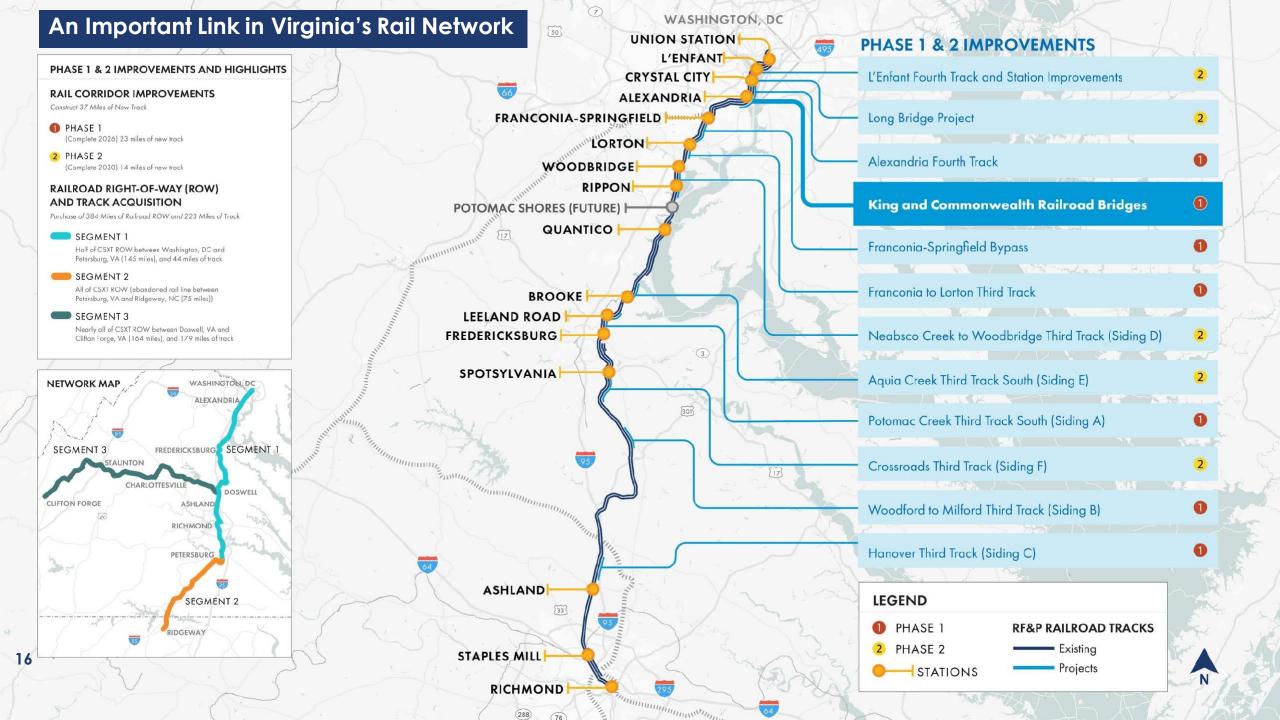




#### What are we here to talk about?

- 1. The Virginia Passenger Rail Authority (VPRA) began a Feasibility Study (the "Study") in Spring 2022 to investigate the King Street railroad bridge and the Commonwealth Avenue railroad bridge in Alexandria, VA.
- 2. The King and Commonwealth Railroad Bridges are important links in the Virginia rail network.
- 3. The Study was performed to identify, screen, and establish a recommended design option to either rehabilitate or replace the existing rail bridges.
- 4. VPRA developed **four (4) design options** to modernize the existing rail bridges, reduce maintenance, and accommodate a future fourth railroad track.
- 5. VPRA is recommending a design option and soliciting public input via a comment survey open through December 2,2022





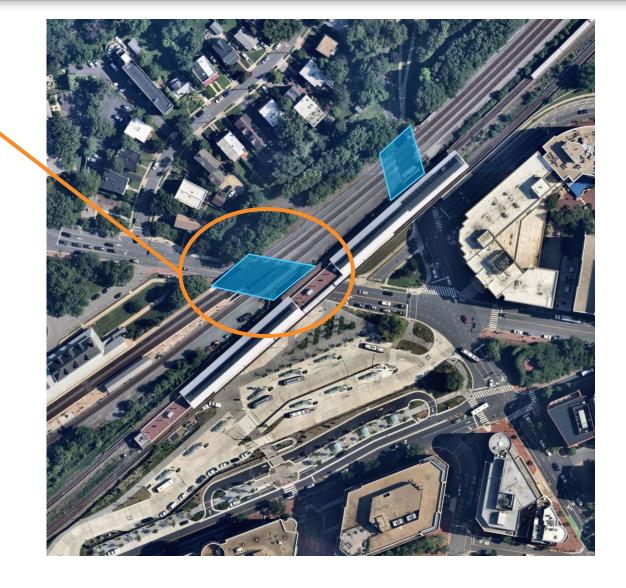
## Existing King Street Rail Bridge





#### **Existing King Street Rail Bridge**

- Built in 1905
- Structure Overview:
  - Bridge Type(s): Two open deck, steel through plate girder bridges
  - Tracks: The west structure carries two tracks; the east structure carries one existing track and has a reserved space for a fourth track





## Existing Commonwealth Avenue Rail Bridge







**Existing Commonwealth Avenue Rail Bridge** 

- Built in 1904
- Structure Overview:
  - Bridge Type: One open deck, steel through plate girder bridge
  - Tracks: The structure carries three existing tracks and has a reserved space for a fourth track



#### Why should we rebuild or replace the bridges?

- Allow for more efficient and reliable train travel to, from, and through the city of Alexandria
- To extend the life of the bridges and reduce maintenance needs
- To coordinate design and construction with the Alexandria Fourth Track project and minimize disruptions to the community from construction
- To improve the designs based on railroad and road design guidelines



## **Study Process**

Define Purpose and Need of Project

Concept Design Options Developed

Design Option Screening Level 1

Design Option Screening Level 2

Select Recommended Design Option



## Study Approach

Need: Adjacent projects are proposed

Need: Bridges are beyond design life

**Need**: Bridges do not meet current design standards

#### Purpose:

- Improve regional rail system
- Minimize impacts to adjacent infrastructure and operations

#### Purpose:

- Achieve a state of good repair
- Extend the life of the Bridges
- Reduce maintenance needs

#### Purpose:

- Establish design based on railroad requirements
- Improve design based on roadway clearance requirements



## **Design Options**

# Option 1: Repair Existing Bridges

- Short-term rehabilitation
- Raise bridge to remove low point in the track profile
- Would not fully integrate with adjacent projects

10-Year life

#### Option 2: Comprehensive Repairs

- Long-term rehabilitation
- Repair and Replace open deck with ballasted bridge deck
- Increase v ertical clearance under KingSt bridge
- Would not preclude VPRA's Alexandria Fourth Track project

50+ Year life

# Option 3: Bridge Replacement

- Remov e existing bridges and replace open bridge deck with ballasted bridge deck
- Increase v ertical clearance under KingSt bridge
- Possible horizontal widening under both bridges
- Would not preclude adjacent projects

100+Year life

#### Option 4: Raise Bridge

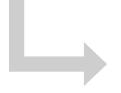
- Replace or repair components for a shortterm rehabilitation
- Increase v ertical clearance under KingSt bridge
- Would not preclude VPRA's Alexandria Fourth Track project

10-Year life



# Screening Results

Level 1 Screening Criterion	Option 1: Repair Existing Bridge	Option 2: Comprehensive Repairs	Option 3: Bridge Replacement	Option 4: Raise Bridge
Extend functional life of bridges by at least 50 years	X	<b>✓</b>	<b>✓</b>	X
Replace open bridge deckwith ballasted bridge deck	X	<b>✓</b>	<b>✓</b>	X



Level 2 Screening Criterion	Option 2: Comprehensive Repairs	Option 3: Bridge Replacement
Would not preclude adjacent projects	<b>✓</b>	<b>✓</b>
Minimize rail operations interruptions and impacts	X	<b>✓</b>
Establish the design based on current railroad requirements and vertical roadway clearance requirements	X	<b>✓</b>

Note: A ✓ indicates that the option meets the screening criterion, and a X indicates that it does not.

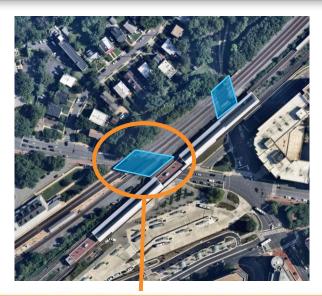




# VPRA Recommended Design Option: Option 3 Bridge Replacement (+100yr)

#### King Street Bridge

- Replaces the existing structure
- Increases bridge height and may increase the width under the bridge
- Reduces maintenance and minimizes rail service interruptions
- Modernizes the bridges to current bridge standards and improves the design







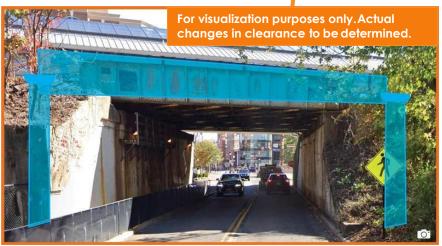


# VPRA Recommended Design Option: Option 3 Bridge Replacement (+100yr)

#### Commonwealth Avenue Bridge

- Replaces the existing structure
- May increase the width under the bridge
- Reduces maintenance and minimizes rail service interruptions
- Modernizes the bridges to current bridge standards and improves the design

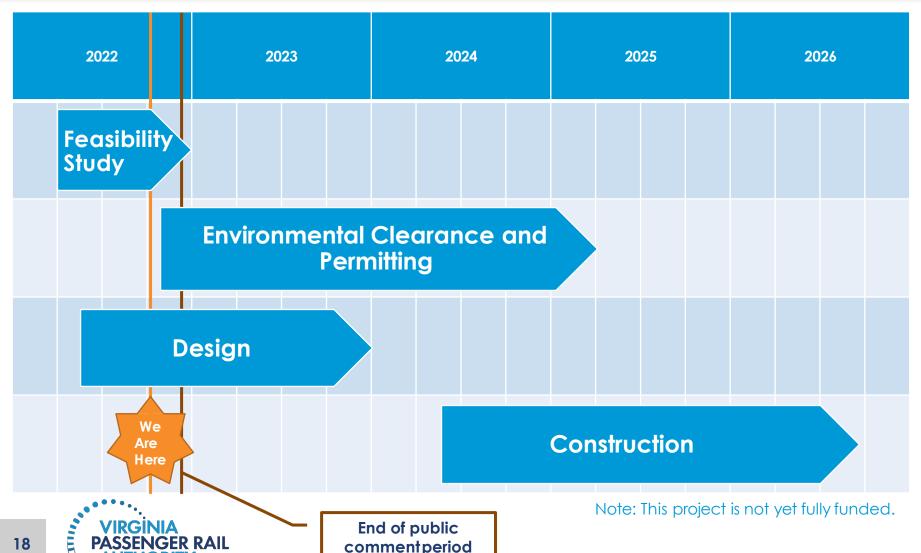




Commonwealth Avenue looking east. The proposed recommended design option may increase the horizontal clearance underneath the railroad bridge.



# Anticipated Project Schedule



December 2

#### **Current Status:**

- The Study is scheduled to be completed at the end of 2022.
- Funding was approved for the completion of the environmental, permitting and design tasks.

#### **Next Steps:**

- VPRA will review public feedback and complete the environmental clearance process before progressing a preferred design option
- VPRA will continue to seek funding for the project to complete construction.

#### We Want Public Feedback

#### **Recommendation:**

VPRA is recommending
Design Option 3
Replacement of both bridges

We are soliciting public comment now through December 2, 2022.



Scan to take the survey



Scan to visit the website



Submit your comments via a digital survey form



You can also email contactus@vpra.virginia.gov



The Draft Feasibility Study and a recording of our Nov 2nd public meeting are posted online on VPRA's projectwebsite



Public comments will be used to finalize the Feasibility Study. The final study will be published online by Early 2023.



# **ECCAP Update**

Agenda Item #4





# Energy and Climate Change Action Plan

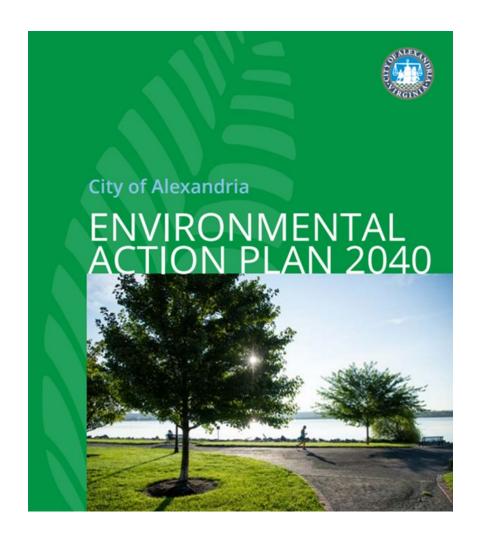
**Discussion and Feedback** 

Transportation Commission November 16, 2022





#### **Environmental Action Plan 2040**





#### GOAL

Increase the City's preparedness to respond to the impacts of climate change and environmental emergencies

#### **TARGET**

Reduce community-wide GHG emissions by 50 percent by FY2030 and 80–100 percent by FY2050 (base year 2005) supported by significant contributions at the state and federal level toward renewable energy and energy efficiency mandates





# Overview: Environmental/Climate Action History

- 2007 Eco-City Alexandria Charter
- 2009 Environmental Action Plan 2030
- 2009 Green Building Policy
- 2011 Energy and Climate Change Action Plan
- 2005, 2012, 2015, 2018 Greenhouse Gas Inventories
- 2019 updated Environmental Action Plan 2040
- 2019 updated Green Building Policy
- 2019 City Council Climate Emergency Resolution
- 2021 Energy and Climate Change Task Force and ECCAP update process
- 2022 Office of Climate Action





# FY23 Climate Change Budget Priorities





\$2.0

To establish an Office of Climate Change to support climate change initiatives and programs that prioritize sustainability solutions in the City's Environmental Action Plan (EAP).



#### **DASH Fleet**

\$29.2 MILLION

DASH Fleet Expansion & Electrification (FY24 –FY26: \$29.1M) Includes funding for at least 20 100% electric expansion buses and supporting chargers over the next five years.



#### Electric Vehicle Charging Stations

\$9.5

Citywide Electric Vehicle Charging Stations (FY23 - \$500K; 10-yr - \$9.5M) New project to provide charging for City fleet and some public access points.



Electric Vehicle Charging Station Navigator position.



#### Waterfront Infrastructure

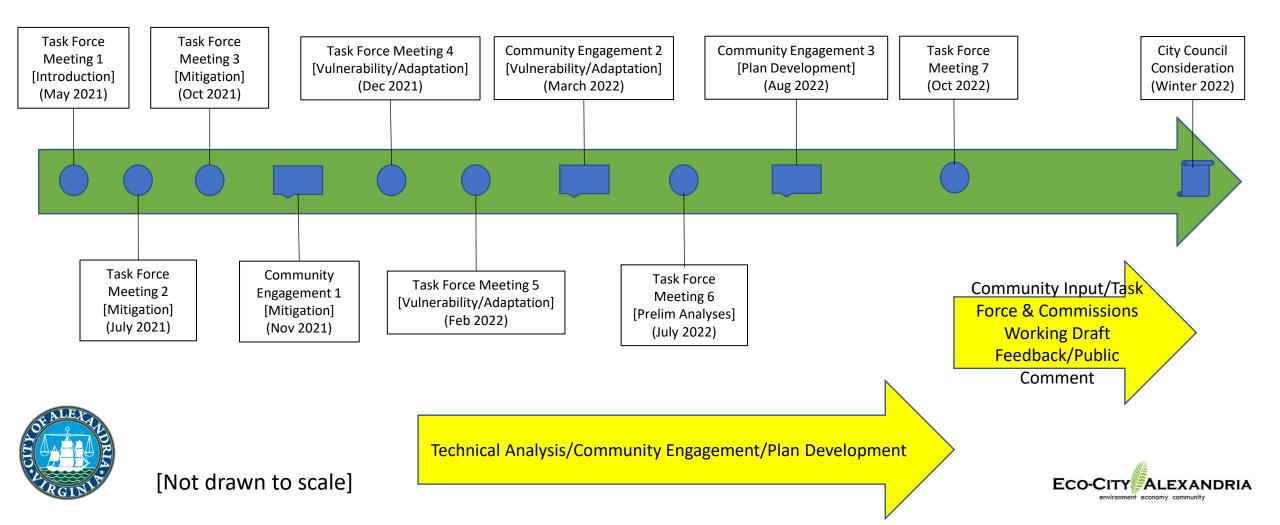
\$35.0

To begin work on implementing infrastructure recommended in the City Council approved Waterfront Small Area Plan, including flood mitiaction.



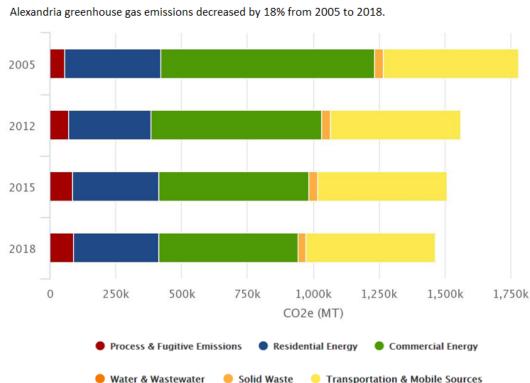


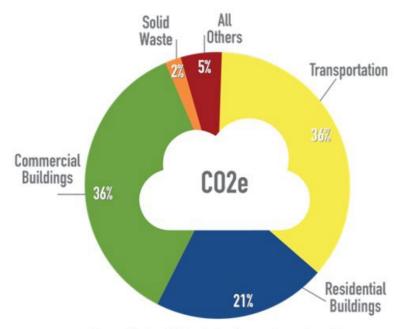
# **ECCAP Development Process**



# Community-wide Greenhouse Gas Emissions

#### GREENHOUSE GAS TRENDS CHART - CITY OF ALEXANDRIA



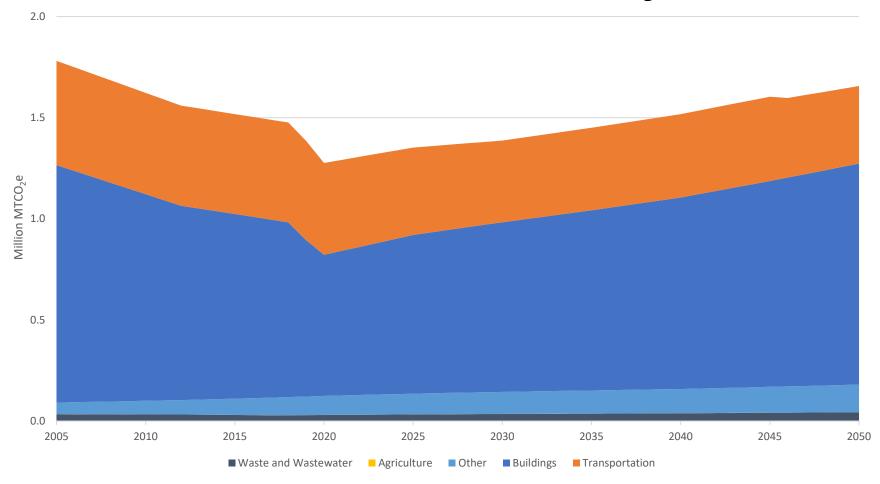


The contribution of City emissions from various sectors of the community show that the majority emissions are from the built environment, followed by transportation.





# Business-as-Usual Community-wide Greenhouse Gas Emission Projections







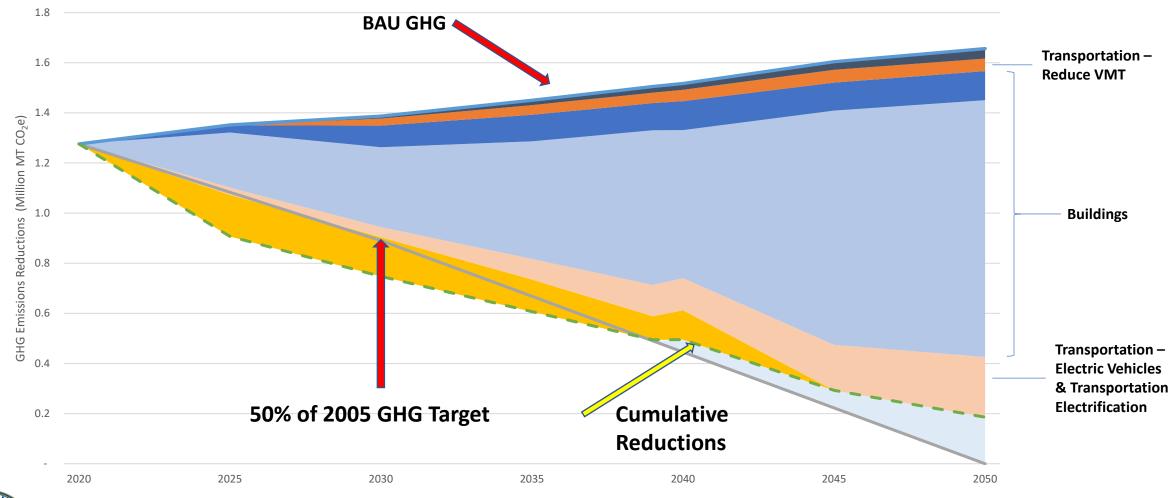
# Business-as-Usual Community-wide GHG Emission Projections

- In 2018
  - Buildings 57% of emissions
  - Transportation 36%
- Population and job growth
- Absent action, new and existing building emissions increase
- Transportation emissions remain consistent





### Community-wide GHG Emission Reductions







## Transportation GHG Emission Reductions

Transportation (Draft Actions)

Strategy	Action	EAP/City Plan
Transportation		
T-1. Reduce vehicle miles	T-1.A: Improve, expand and integrate access to public transit systems and bicylcle/pedestrian access through enacting actions within the EAP 2040, Alexandria Transit Vision and Mobility Plan	EAP, AMP, ATV
	T-1.B: Land use changes focused on redistribution of future growth to activity centers and areas better served by transit across jurisdictions	AMP, ATV
	T-1.C: Advocate for reduced Metro transit fares and increased parking pricing at workplaces	AMP, ATV
	T-1.D: Support telework policies	
	T-1.E: Promote a job/housing balance by focusing on-site affordable housing units near transit access	AHMP
T-2: Accelerate the deployment of electric and alternative fuel vehicles	T-2.A: Implement recommendationss supporrting expanding EV charging infrastructure access in line with the EVSE, including addressing gaps in meeting charging demand (e.g., opportunity charging, residents without driveways/garages, multifamily dwelling residents); enhancing communication and awareness; strengthen zoning, building codes, and permitting; advocating in state government or with Dominion Energy; building successful business models for chargers; and working to secure funding (e.g., federal).	EAP, EVRS
	T-2.B: Provide education and outreach to the community about EVs and available state and national incentives	EVRS
	T-2.C: Advocate with Dominion and regulators for fee-based EV charging; educate the community about these options	EVRS
	T-2.D: Transition DASH bus transit fleet to electric	EAP, EVRS
	T-2.E: Connect private fleets with partners and opportunities to educate and incentivize electrification	EVRS

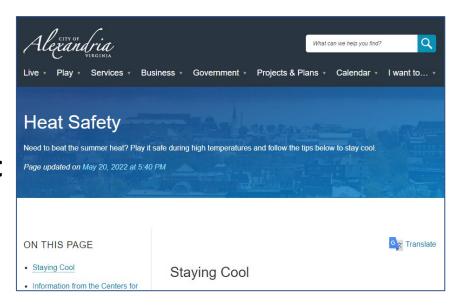




## Climate Adaptation/Resiliency Strategies/Actions

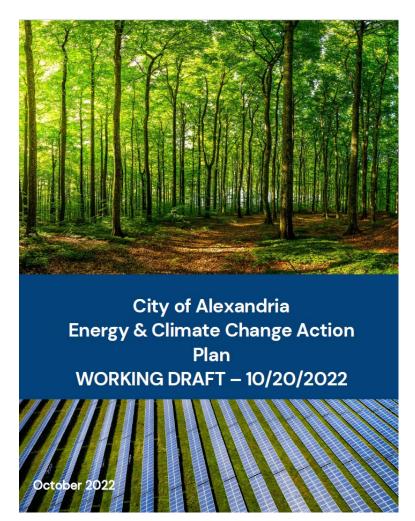
- Continue Existing Activities
- Enhance Equity in Planning and Actions
- Integrate Climate Change in Municipal Decisions and Activities
- Implement Strategies to Adapt to Extreme Heat
- Implement Flooding Hazard Adaptation Strategies







### Working Draft Feedback – Transportation



#### **Prompting Questions:**

- How does the ECCAP succeed in reducing transportation GHG emissions?
- What do believe is missing from the ECCAP?
- Where does ECCAP need additional information or focus?
- What would you prioritize in writing of the ECCAP report?





#### **Contact Information**

Bill Eger, PE, CEM®, CC-P®, ISSP-SEA, CPM, LEED AP Energy Manager
Bill.Eger@alexandriava.gov

Jessica E. B. Lassetter, MNR Senior Environmental Specialist Jessica.Lassetter@alexandriava.gov

Sharath Rereddy Energy Management Analyst Sharath.rereddy@alexandriava.gov





# Consideration of Endorsement of the Duke Street *in Motion* Guiding Principles

Agenda Item #5



## Background

• October – staff presented on the Duke Street in Motion Project

- Transportation Commission voted to endorse Guiding Principles
- Directed staff to return with a letter to formally endorse Guiding Principles



#### Recommendation

That the Transportation Commission endorse the Guiding Principles
of the Duke Street in Motion Project through the draft letter provided
in the docket.



## Commissioner Updates

Agenda Item #6



#### **Commission Members**

- Oleksandr Faryga Environmental Policy Commission
- Oscar Gonzalez Citizen East, High School Project
- Casey Kane Traffic and Parking Board, Eisenhower West/Landmark/Van Dorn Advisory Group, Ad Hoc Duke Street Transitway Committee
- Jody Manor- Planning Commission
- Bruce Marsh Citizen East, Potomac Yard Metro Implementation Working Group
- **Jim Maslanka** Citizen West
- Melissa McMahon Planning Commission
- Matthew McManus Citizen West, DASH
- Murat Omay DASH
- John Chapman Council (non-voting)
- Kirk McPike Council (non-voting)



## **Items for Consent**

Agenda Item #7



#### **Other Business**

- Bike lanes article
- Fully Virtual December 21 Meeting



## Adjourn Transportation Commission Meeting

Next meeting: December 21, 2022 (VIRTUAL ONLY)

