

### **CECAP** and Resilient Fairfax

Climate Change Planning and Action Update

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# Climate Change Planning and Action



### **CECAP: Community-Wide Climate & Energy Action Plan**

### Reducing emissions that contribute to climate change

- Ex: Transition to renewable energy, energy efficiency, waste reduction, alternative transportation
- Community-oriented plan, because 95% of emissions are from the community
- January 2020 July 2021 plan; Fall 2021 BOS



### **Resilient Fairfax**

### Adaptation & resilience to climate effects

- Ex: Resilience to flooding, extreme temperatures, extreme weather, health hazards, precipitation pattern changes
- Lead by government, infrastructure partners
- Feb 2021 June 2022 plan; Fall 2022 BOS

### **CECAP Process**



February 2021

# Working Group Goals

### Overall CECAP Goal

 Carbon neutral by 2050, with 87% reduction in total greenhouse gas (GHG) emissions from 2005 level

### Interim Goals – 2030 and 2040

- 2030: 50% reduction in GHG emissions
- 2040: 75% reduction in GHG emissions

### Sector-based goals

- Green buildings
- Retrofitting existing housing for energy efficiency
- Increasing transit and non-motorized commuting
- Increasing use of electric vehicles
- Natural resources

### Sector-Based Goals

### Buildings and Energy Efficiency

- All new, eligible buildings will have a commitment to green building
- Retrofit at least 100,000 housing units with energy efficiency measures by 2030

### Transportation

- Increase transit and non-motorized commuting to 30% (including telework) by 2030
- Increase plug-in electric vehicles (PHEVs) and battery electric vehicles (BEVs) to at least 9% of all light-duty vehicle registrations by 2030

### Natural Resources

 Goal is currently under discussion. The current draft goal is focused on tree canopy.

### **CECAP Strategies**

#### **Buildings and Energy Efficiency**

- Strategy #1: Increase energy efficiency and conservation in existing buildings
- Strategy #2: Pursue beneficial electrification in existing buildings
- Strategy #3: Implement green building standards for new buildings

#### **Energy Supply**

- Strategy #4: Increase renewable energy in grid mix
- Strategy #5: Increase production of onsite renewable energy
- Strategy #6: Increase energy supply from renewable natural gas (RNG), hydrogen, and power-to-gas

#### **Transportation**

- Strategy #7: Increase electric vehicle (EV) adoption
- Strategy #8: Support efficient land use, active transportation, public transportation, and transportation demand management (TDM) to reduce vehicle miles traveled
- Strategy #9: Increase fuel economy and use of low carbon fuels for transportation

#### Waste

- Strategy #10: Reduce the amount of waste generated and divert waste from landfills and waste-to-energy facilities
- Strategy #11: Responsibly manage all waste generated including collected residential and commercial waste, wastewater and other items

#### **Natural Resources**

 Strategy #12: Support preservation, restoration, and expansion of Fairfax County's natural systems and public spaces

# Public Feedback Opportunities

CECAP is a community-driven plan

- Three public feedback series
  - August/September 2020
  - February/March 2021
  - May 2021
- Other opportunities
  - Surveys
  - Email in-box
  - Community briefings
- Positive receptions of CECAP goals, strategies, and actions

## Next Steps for CECAP

- Remaining Working Group (WG) activity
  - WG finalizes Natural Resources sector-based goal in June
  - WG reviews draft report in May and June meetings
- Presentations to Board
  - Environmental Committee reviews CECAP report in July
  - Board adopts Final CECAP Report in September
- Transition from planning to implementation
  - Initial implementation
    - Public education and outreach, including public survey
    - Build on existing County policies, programs, and efforts
  - Develop an implementation plan with Board guidance

### Resilient Fairfax: Background

- Board of Supervisors direction
  - Environmental Vision
  - Fairfax Green Initiatives Board Matter

- June 16, 2020: <u>Climate adaptation and resilience</u> <u>plan proposal</u> endorsed by BOSEC
- September 29, 2020: Funds approved in FY2020 Carryover budget





# Climate Hazards in Fairfax County



Extreme Heat



Drought



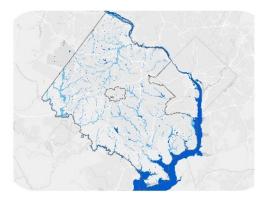
Extreme Cold



**Extreme Precipitation Events** 



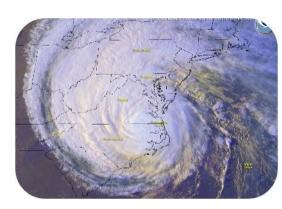
Inland Flooding



**Coastal Flooding** 



Severe Wind



Extreme Storms 10

## Resilient Fairfax's purpose is to determine:

- What climate change *effects* will our county face?
  - Flooding, temperature, storm severity, etc.
- Where are we vulnerable?
  - Infrastructure, Population, Services/Operations
- What policies, programs, and plans do we have in place?
  - Which work well and can be expanded?
  - O Where are the gaps?
- Which strategies will strengthen our resilience?
  - Feasibility, Priority
- What is the path to implementation?
  - Funding, policies, operations, partnerships





## Resilient Fairfax Key Players

**Project Management Team:** Office of Environmental and Energy Coordination Staff

Consultant Team: Cadmus, WSP, NSpireGreen

Planning Team (PT): County departments & agencies (DFS, DOT, DPD, DPWES, DVS, FCPA, FCPS, FMD, GIS, HD, HCD, LDS, NCS, NVSWCD, OEEC, OEM, OneFairfax, PSC)

Infrastructure Advisory Group (IAG): Utilities, authorities, building industry groups, transportation commissions, and regional partners

Community Advisory Group (CAG): District reps, community, advocacy groups

Steering Committee (SC): Deputy County Executives, Equity Officer

# Resilient Fairfax Scope of Work

**Task 1: Initiation** 

Task 2: Vulnerability & Risk Task 3: Adaptation & Resilience Strategies

Task 4: Plan & Materials Finalization

#### Feb - May 2021

- Project initiation tasks
- 2. Kickoff meetings
- 3. Charters

#### **April** – Oct. 2021

- Climate projections
- 2. Vulnerability and risk assessment
- 3. Audit of policies, plans, and programs

#### Aug 2021 – Feb 2022

- Strategy identification
- 2. Assessment& prioritization
- 3. Implementation roadmap

#### Jan - Jun 2022

- 1. Plan compilation
- 2. Fact sheets
- 3. Interactive web resources

**Task 5: Project Management** 

(February 2021 – June 2022)

### Resilient Fairfax: Stakeholder & Community Engagement

**Task 1: Initiation** 

Task 2: Vulnerability & Risk Task 3: Adaptation & Resilience Strategies

Task 4: Plan & Materials Finalization

### Feb – May 2021

- PT meetings
- IAG meeting
- CAG meeting
- SC meeting
- Regional meetings
- Requested meetings

#### **April – Oct. 2021**

- Public meeting
- Public survey
- PT meetings
- IAG meeting
- CAG meeting
- Regional meetings
- Requested meetings
- BOS presentations

### Aug 2021 – Feb 2022

- Public meeting
- PT meetings
- IAG meeting
- CAG meeting
- Regional meetings
- Requested meetings
- BOS presentations

#### Jan - Jun 2022

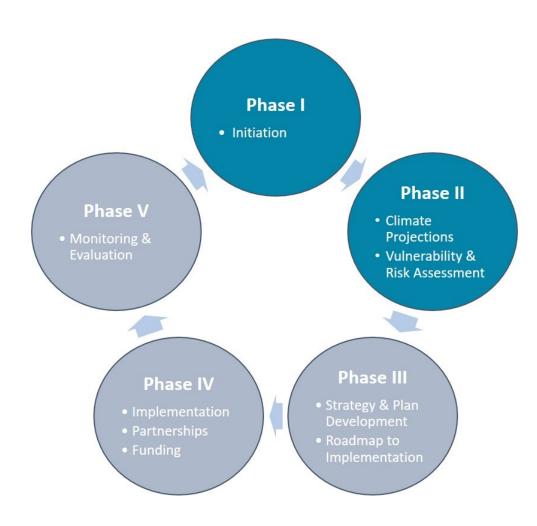
- Public comment
- PT meetings
- IAG meeting
- CAG meeting
- Regional meetings
- Requested meetings
- BOS presentations

Continually open to community feedback: ResilientFairfax@fairfaxcounty.gov

Web updates & materials: <a href="https://www.fairfaxcounty.gov/environment-energy-coordination/resilient-fairfax">https://www.fairfaxcounty.gov/environment-energy-coordination/resilient-fairfax</a>



### Resilient Fairfax Program Implementation



- Roadmap to Implementation
- Build on Existing Plans and Programs
- Partnerships
- Funding
- Adaptive Management Approach

## Resilient Fairfax: Next Steps

- Public Meeting: Tonight, June 15, 6:30 8:30 pm
  - https://zoom.us/j/94857252810
- Public Survey: Ongoing through July 2
  - https://www.fairfaxcounty.gov/environment-energy-coordination/resilient-fairfax
- Task 2: Vulnerability and Risk Assessment: April October 2021
  - Climate Projections
  - Vulnerability and Risk Assessment
  - Audit of Policies, Plans and Programs
- Next BOS Environmental Committee Update: Fall 2021