

Mayor Cooper's Sustainability Advisory Committee

June 25th, 2020

Agenda

- 10:30 am - 10:40 am Welcome and Introduction (Breggin and Kopstain)**
- 10:40 am - 10:55 am Vanderbilt Advisory Team's scope of work (Gilligan)**
- 10:55 am - 11:10 am Metro's updated gas greenhouse inventory (Ikard and Creech)**
- 11:10 am - 11:20 am Climate Adaptation Plan (Mothupi, Camp)**
- 11:20 am - 11:25 am Youth Council participation (Fox, et al.)**
- 11:25 am - 11:55 am Subcommittee Co-Chair remarks (Co-chairs)**
- 11:55 am - 12:00 pm Wrap up (Breggin and Kopstain)**

Quick Reminders

- ✓ Upload your workbook to the SharePoint site if you have not already.
 - ✓ Updates are encouraged but please send to Committee Chairs and do not replace version of document uploaded to SharePoint, as the Vanderbilt Team and others will already have downloaded it. We want to avoid multiple versions!
- ✓ Submitting your workbooks is the “end of the beginning” of the process.
We still have a lot to do!
 - ✓ Expect lots of back and forth with Committee Chairs, Vanderbilt Team and others, as we refine and integrate the documents into a coherent whole and work to address overarching issues such as environmental justice and financing approaches.
- ✓ Reach out to your subcommittee co-chairs, and subcommittee co-chairs to Linda and Eric if you have questions.

Updated Mayor's Sustainability Advisory Committee Timeline – Year 1

Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	------	------	-----	-----	-----	-----	-----

Create & Publish Climate Action Plan	Information gathering and template completion by sub-committees.			Create and Submit Sustainability Advisory Committee Report to Mayor			Public comment period on CAP draft			Nashville Submits Climate Action Plan
				Mayor's and Metro staff draft Climate Action Plan						

Full Committee Meetings	02/20				TBD		TBD		TBD		TBD
-------------------------	-------	--	--	--	-----	--	-----	--	-----	--	-----

Sub Committee Meetings	To occur at pace and frequency established by Sub-Committee Co-Chairs and Sub-Committee Members									
------------------------	---	--	--	--	--	--	--	--	--	--

Next Steps

- ✓ Jonathan Gilligan and Team to Analyze and Integrate Subcommittee recommendations into toolset
- ✓ Chairs and Co-Chairs to work on Sustainability Advisory Committee Report to Mayor (submission target = end of August 2020)
- ✓ Mayor's team to begin work on Climate Action plan (submission target = December 2020)
- ✓ Chairs to scheduled and identify speaker(s) environmental justice and possibly other topics for next Full Committee Meeting (target date = August 2020)

Agenda

- 10:30 am - 10:40 am** **Welcome and Introduction (Breggin and Kopstain)**
- 10:40 am - 10:55 am** **Vanderbilt Advisory Team's scope of work (Gilligan)**
- 10:55 am - 11:10 am** **Metro's updated gas greenhouse inventory (Ikard and Creech)**
- 11:10 am - 11:20 am** **Climate Adaptation Plan (Mothupi, Camp)**
- 11:20 am - 11:25 am** **Youth Council participation (Fox, et al.)**
- 11:25 am - 11:55 am** **Subcommittee Co-Chair remarks (Co-chairs)**
- 11:55 am - 12:00 pm** **Wrap up (Breggin and Kopstain)**

Agenda

- 10:30 am - 10:40 am **Welcome and Introduction** (Breggin and Kopstain)
- 10:40 am - 10:55 am **Vanderbilt Advisory Team's scope of work** (Gilligan)
- 10:55 am - 11:10 am **Metro's updated gas greenhouse inventory** (Ikard and Creech)
- 11:10 am - 11:20 am **Climate Adaptation Plan** (Mothupi, Camp)
- 11:20 am - 11:25 am **Youth Council participation** (Fox, et al.)
- 11:25 am - 11:55 am **Subcommittee Co-Chair remarks** (Co-chairs)
- 11:55 am - 12:00 pm **Wrap up** (Breggin and Kopstain)

Agenda

- 10:30 am - 10:40 am** **Welcome and Introduction** (Breggin and Kopstain)
- 10:40 am - 10:55 am** **Vanderbilt Advisory Team's scope of work** (Gilligan)
- 10:55 am - 11:10 am** **Metro's updated gas greenhouse inventory** (Ikard and Creech)
- 11:10 am - 11:20 am** **Climate Adaptation Plan** (Mothupi, Camp)
- 11:20 am - 11:25 am** **Youth Council participation** (Fox, et al.)
- 11:25 am - 11:55 am** **Subcommittee Co-Chair remarks** (Co-chairs)
- 11:55 am - 12:00 pm** **Wrap up** (Breggin and Kopstain)

Adaptation and Resilience Subcommittee

Jaclyn Mothupi and Janey Camp

Mitigation vs Adaptation

Mitigation

- Actions taken to reduce and curb greenhouse gas emissions
- “Gets to the Root” of climate change
- Direct Human Intervention

Adaptation

- Measures taken to reduce vulnerability to the effects of climate change
- Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects which moderates harm or exploits mutual opportunities

re·sil·ient

adjective

(of a person or animal) able to withstand or recover quickly from difficult conditions.

re·sil·ience

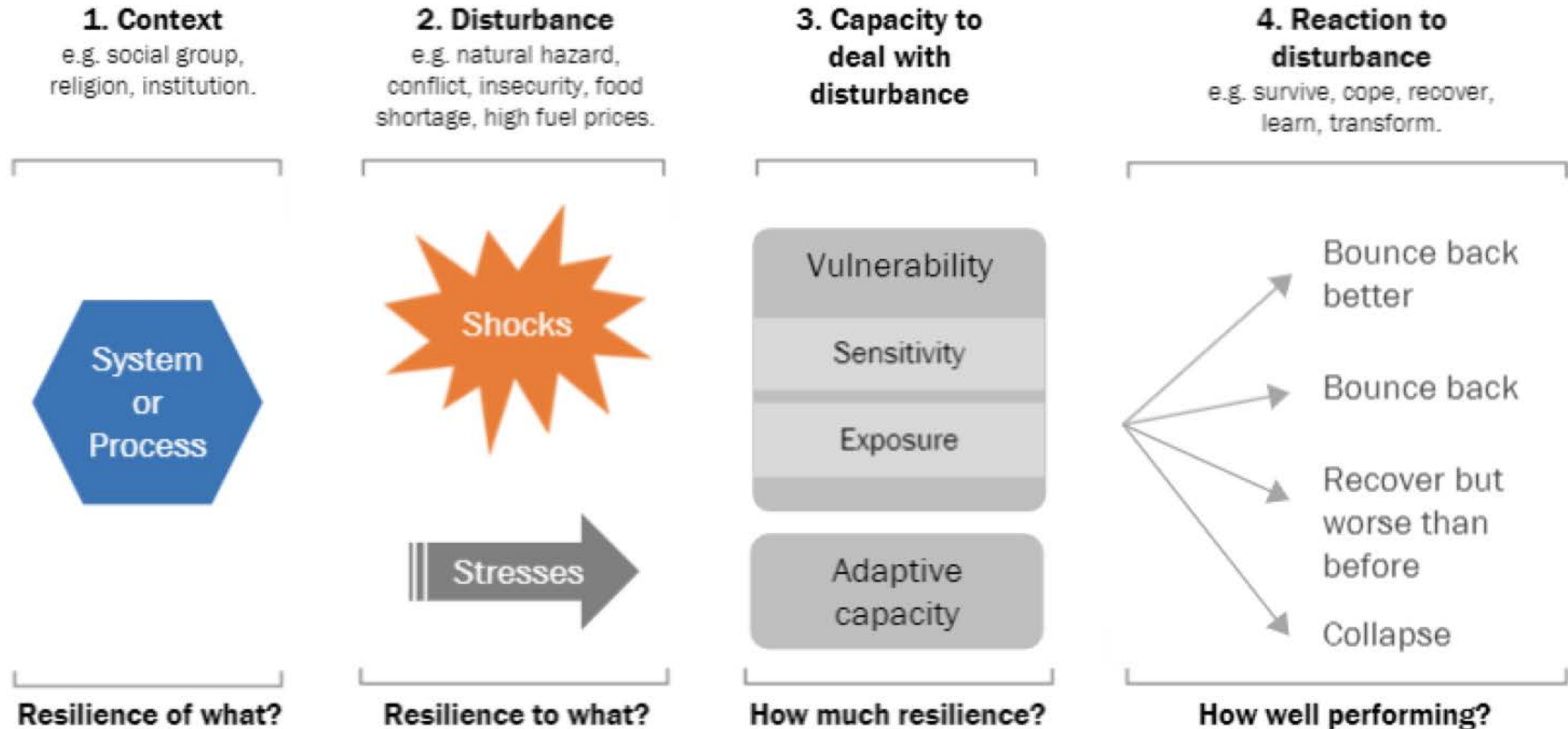
noun

The capacity or ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions

Shocks and Stresses

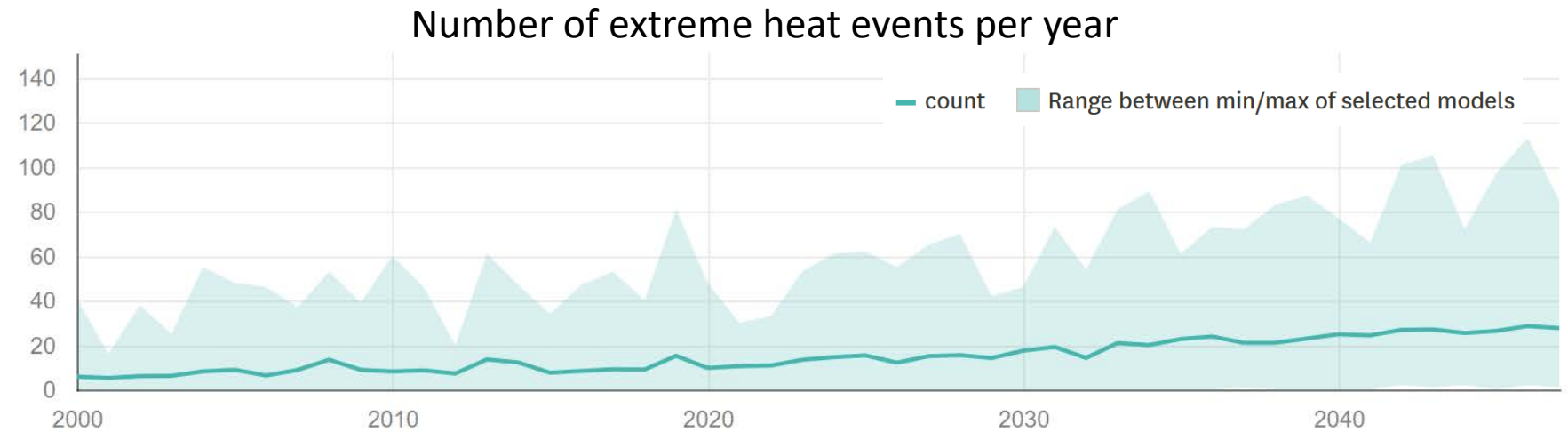
Image from AIA Course
Adapted from: www.fsnnetwork.org

THE FOUR ELEMENTS OF A RESILIENCE FRAMEWORK

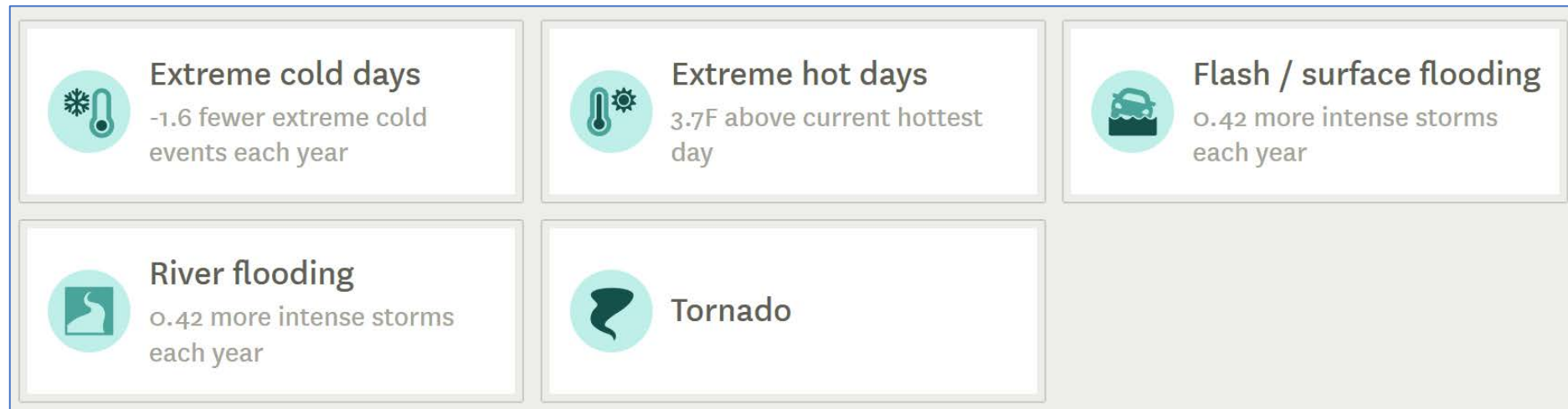


Risk Assessment Results & Focus Areas:

1. Extreme Heat
2. Extreme Cold
3. Tornadoes
4. Flooding



The future landscape for Nashville (estimates for 2025-2035)



Adaptation Examples: Building & Energy

BUILDINGS & ENERGY

Goal 1: Reduce vulnerability to building energy supply disruptions

Strategy 1: Energy efficiency

Energy Efficiency Activities

Long-term

Encourage green building standards in Office of Economic Development projects in coordination with Denver Water, Community Planning & Development, and Public Works

Explore zero-net energy building options as part of Sustainable Neighborhoods program

Pilot net-zero building strategies in new City facility

Medium-term

Continue to support energy efficiency/savings in private housing through the activities of the Denver Energy Challenge

Explore commercial building energy benchmarking and disclosure options through the Natural Resources Defense Council and Institute for Market Transformation's City Energy Project

Adopt 2015 International Energy Conservation Code

Continue CIP and FIT programs to secure dedicated funding for energy efficiency operations and maintenance projects in annual budgets and future bond issuances

Use energy performance contracting model to generate funds for capital improvements at City facilities.

Improve effectiveness of preventative maintenance programs and ensure continual commissioning and maximum efficiency of mechanical systems in City facilities

Increase market penetration of energy efficiency efforts into the commercial and private markets through technical assistance and outreach using Certifiably Green Denver and the Denver Energy Challenge

Reinvest utility rebates to City into Sustainability Fund to fund future energy efficiency projects in City facilities

Approve and implement City energy management plan

Adaptation Examples: Water Resources

WATER CONSUMPTION

Goal 1: Reduce per capita use of potable water

Strategy 1: Continue and expand water conservation planning and programs

Activities

Long-term

Continue to use a fee structure that incentivizes reduced wastewater use

Fully Implement DPR GamePlan: Green infrastructure, wise water management, water conservation plans

Medium-term

Continue to assess Denver Water's resilience to climate change using the latest local climate projections, coordinate and be aware of new City adaptation policies and adjust practices accordingly

Intensify water management and conservation through funding research and incentives

Complete construction of Phase II of the Central Control Master Plan

Adaptation Examples: Natural Resources

Long-term

Review city ordinance in regards to tree permitting, tree protection on construction sites, heritage or historic trees, incentives and alternatives, planting and irrigation standards, and landscape standards

Evaluate sustainable forestry certification programs as a potential mechanism to increase resilience of forest resources

Activity

Medium-term

Draft a new landscape ordinance to accommodate plants that can tolerate city's projected future climate

Update the right of way tree list that focuses on trees that can thrive in future climates

URBAN NATURAL RESOURCES

Goal 1: Enhance existing urban forest resources and expand range

Strategy 2: Increase Denver's canopy coverage and maintain existing street resources

Activity

Medium-term

Implement/complete the Tree and Shade Master Plan

Achieve the City's tree canopy cover goal of 18% of land area

Replace trees planted in public property and public right of way

Continue to participate in Emerging Pests in Colorado Roundtable and the Denver Pest Roundtable to find best practices to reduce stress on urban landscapes

Continue to follow Colorado Dept. of Agriculture invasive species list to control damage to Denver's existing terrestrial ecosystems

Address tree canopy in upcoming community plans

Create a Canopy Keepers program in which people adopt trees and commit to watering new trees for two years

Initiate a contract to inventory existing trees within the city in preparation for the tree and shade master plan



Next Steps:

1. Submit a Word doc that flags your existing recommendations with an adaptation component to it
2. Submit to Adaptation Committee by July 8th

Agenda

- | | |
|---------------------|---|
| 10:30 am - 10:40 am | Welcome and Introduction (Breggin and Kopstain) |
| 10:40 am - 10:55 am | Vanderbilt Advisory Team's scope of work (Gilligan) |
| 10:55 am - 11:10 am | Metro's updated gas greenhouse inventory (Ikard and Creech) |
| 11:10 am - 11:20 am | Climate Adaptation Plan (Mothupi, Camp) |
| 11:20 am - 11:25 am | Youth Council participation (Fox, et al.) |
| 11:25 am - 11:55 am | Subcommittee Co-Chair remarks (Co-chairs) |
| 11:55 am - 12:00 pm | Wrap up (Breggin and Kopstain) |

Agenda

- | | |
|---------------------|---|
| 10:30 am - 10:40 am | Welcome and Introduction (Breggin and Kopstain) |
| 10:40 am - 10:55 am | Vanderbilt Advisory Team's scope of work (Gilligan) |
| 10:55 am - 11:10 am | Metro's updated gas greenhouse inventory (Ikard and Creech) |
| 11:10 am - 11:20 am | Climate Adaptation Plan (Mothupi, Camp) |
| 11:20 am - 11:25 am | Youth Council participation (Fox, et al.) |
| 11:25 am - 11:55 am | Subcommittee Co-Chair remarks (Co-chairs) |
| 11:55 am - 12:00 pm | Wrap up (Breggin and Kopstain) |