

# PUBLIC MEETING AGENDA

## Sustainability & Resilience Commission

### MEETING DATE

Monday, August 19, 2024  
4:30 pm – 6:00 pm

### MEETING LOCATION

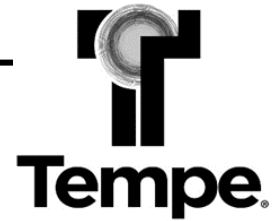
Tempe Transportation Center  
Don Cassano Room  
200 E. 5<sup>th</sup> St. Tempe, AZ 85281

### PUBLIC VIRTUAL ACCESS

[Click here to join the meeting](#)  
Meeting ID: 217 680 508 212  
Passcode: axwEy9  
**Or call in (audio only)**  
+1 480-498-8745,,750057568#  
Phone Conference ID: 750 057 568#

AGENDA ITEM	PRESENTER	ACTION or DISCUSSION
<b>1. Welcome &amp; Sustainability Quiz</b>	Shawn Swisher, Chair (4:30 – 4:40 pm)	
<b>2. Public Appearances</b> The Sustainability Commission welcomes public comment for items listed on this agenda. There is a <i>three-minute time limit</i> per citizen.	Shawn Swisher, Chair (4:40 – 4:42 pm)	
<b>3. Review of Meeting Minutes</b> The Commission will be asked to review meeting minutes from the May 20, 2024 and June 5, 2024 meetings.	Shawn Swisher, Chair (4:42 – 4:45 pm)	Action
<b>4. Retreat Opening &amp; Logistics</b>	Brianne Fisher, Climate Action Manager (4:45 – 4:50 pm)	Discussion
<b>5. Highlight Action – Green Codes and Standards</b>	Brianne Fisher, Climate Action Manager (4:50pm – 5:10pm)	Discussion
<b>6. Highlight Action – Transportation Master Plan</b>	Lindsey Post, Transportation Planner Brianne Fisher, Climate Action Manager (5:10 – 5:30 pm)	Discussion
<b>7. Highlight Action – Resilient Energy Hubs</b>	Carissa Fowler, Neighborhood Resilience Coordinator Andy Escobar, Energy Equity Coordinator (5:30pm-5:50pm)	Discussion
<b>8. Future Agenda Items and Adjournment -</b> Commission may request future agenda items.	Shawn Swisher, Chair (5:50 – 6:00pm)	Action

According to the Arizona Open Meeting Law, the Sustainability Commission may only discuss matters listed on the agenda. The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-2775 (voice) or 350-8400 (TDD) to request an a



## Minutes

# City of Tempe Sustainability Commission May 20, 2024

Minutes of the Tempe Sustainability Commission meeting held on Monday, May 20, 2024, 4:30 p.m. hybrid meeting with in-person attendance option at the Tempe Transportation Center, Don Cassano Community Room, 200 E. 5<sup>th</sup> Street, Tempe, Arizona.

### **(MEMBERS) Present:**

Shawn Swisher (Chair)  
Kendon Jung (Vice Chair)  
Barbie Burke  
Erin Boyd  
Jake Swanson

Taylor Conley  
Ben Paulat  
Joshua Randall  
Jacob Bethem

### **(MEMBERS) Absent:**

Morgan Winburn

### **City Staff Present:**

Eric Iwersen  
Brienne Fisher  
David Tavares  
Helen Track  
Dawn Ratcliffe  
Maddie Mercer  
Carissa Fowler  
Evelyn Brumfield

### **Guests Present:**

### **Agenda Item 1 – Welcome and SRC Mission**

Chair Swisher called the meeting to order at 4:31 p.m. and read the commissions' charge and mission.

## **Agenda Item 2 – Public Appearances**

No public comments were shared.

## **Agenda Item 3 – Review of Meeting Minutes**

The minutes of the April 15, 2024, meeting were accepted.

**Motion:** Commissioner

**Second:** Commissioner

**Voted to Approve:** 9-0

## **Agenda Item 4 – Diversion Program Updates**

David Tavares, Deputy Municipal Utilities Director, gave an update about the city Diversion Program. The current program target for residential is 25% and 15% for commercial. Commingled and Green Waste Recycling are the two largest contribution categories in the diversion program. and to help reach these goals, a pilot green organic collection program is being offered to specific areas.

Commingled Recycling provides 10,467 tons of materials to the program with paper and cardboard being the most recycled components making 29% and 27% respectively. Green Waste Recycling gives 2,774 tons, approximately 20%, and an expansion of green organic collection is in place and nearby areas of the current pilot will also have this option.

In May of this year, after the IgCC guideline adoption, Inter Recycling was launched for residential and commercial purpose since the city must follow the IGCC guidelines by collecting concrete, cardboard, and other commodities to repurpose to a certain standard. Communication is one of their biggest challenges with the contractors since the criteria for the recycled content of these materials are very specific.

The Household Products Collection Center provides opportunities for zero waste day events and household Hazardous Wates (HHW). Since its opening in 2002, it has collected more than 6,991,167 tons, with 150,000 drop off and less than 1% of asbestos material. Recycling efforts were also extended to special events by adding composting as part of it.

### **Commissioner comments and questions included:**

? - Have you done landfill repertorization for material in the landfill stream?

They did waste characterization in 2016 and found the number are different from the city of Phoenix. City of Tempe recoverable were 40%, and composable 30% which was very similar.

?- How could Tempe increase the collection of recycling materials?

A: David Tavares said increasing outreach campaigns and focus on the education piece of the different types of the material that can be recycled. Also, having outreach campaigns tailored to the needs of each area since they are different.

? - What is the current status of the recycling accessibility for multifamily?

A: David explained that multifamily recycling is not necessary provided by the city. The city price is very competitive since there is no profit. They are planning on going back to the Multi-family complexes that are getting the city service, addressing the service and fee provided to them versus the city 's service and fee.

? - Is there a city ordinance with recycling requirements?

A: David said there is not one.

? - What tools does the city use to address contamination stream?

A: David The city of Tempe can require recycling but cannot mandate the usage of the city recycle services, specifically cannot say you have to recycle xyz. The biggest challenge is to have the resources to be able to advocate.

? - Is there a plan to meet the 2025/2026 fiscal year goals?

A: David explained the residential goal for sure, but the commercial side is more difficult since they are competing with the private sector. The commercial doesn't recycle as much as they should it. They are expanding programs and reach out business to try to meet the goals.

### **Agenda Item 5 – Accessory Dwelling Unit (ADU) Letter of Support**

The ADU draft letter of support from the Sustainability & Resilience Commission was reviewed by the commissioners. Brianne Fisher, Climate Action Manager, gave an overview of the State Legislature Bill HB2720 that mandates that municipalities in Arizona with populations over 75,000 must adopt regulations to allow accessory dwelling units (ADUs) on lots zoned for single-family homes. It requires that these lots permit at least one attached and one detached ADU, with an additional detached ADU allowed on lots over one acre if it is designated as affordable housing. The bill sets size limits for ADUs, removes certain restrictions such as additional parking or design matching requirements, and exempts specific lands from ADU regulations. Chair Swisher emphasized the benefits and opportunities the pre-approved plans will have in conjunction with the International Green Construction Code (IgCC) inclusion.

Suggestion to replace commend to support, and desire to intention, in the Additional and Diverse Appropriately Scale Density paragraph.

Chair Swisher asked Community Development to provide any ADU policy changes or adjustments based on the new State Bill before the June 5, NAC meeting.

### **Agenda Item 6 – Sustainability and Resilience Commission Vice Chair**

Commissioner Kendon Jung, current Sustainability and Resilience Commission Vice Chair, due to unforeseen career opportunities will serve as a Vice Chair Until September 2024. Chair Swisher explained the new Vice Chair term will start at the October 21, 2024, meeting and it would serve until December. In January of 2025, there will be a new vice chair election to serve another term.

**SRC Member Motion:** Chair Swisher made a motion to appoint Eric Boyd as the new Sustainability and Resilience Commission Vice Chair.

**Second:** Commissioner Jung seconded the motion

**Result:** The motion was approved by a unanimous vote of those present, 9 ayes and 0 nays

### **Agenda Item 7 – Joint Meeting with Neighborhood Advisory Committee (NAC)**

Brianna Fisher, Climate Action Manager, went over the agenda items that will be discussed during the June 5 Joint Meeting with Neighborhood Advisory Committee.

- Valley Metro Streetcar Extension Study
- ADUs Policy and Letter from SRC
- Rain Roots Masterplan

This meeting will take place of the June's SRC meeting. It will be in person at the Don Cassano Conference Room.

### **Agenda Item 8 – Sustainability and Resilience Commission Dates of Interest**

Brianna Fisher, Climate Action Manager, shared the calendar events with the Commission. She highlighted some upcoming events the Commission should attend it.

Chair Swisher asked if there will be time for any updates or actions that the Commission will need to be involved in. Brianne said that in the joint meeting there will be no time, and if any updates are needed, she will follow up virtually. Brianne will confirm if the Council will discuss the ADU proposal at the June 20 meeting, and encourage commissioners to attend it. Chair Swisher suggested the ADUs letter of support be issued before the June 20 meeting.

### **Commissioner comments and questions included:**

Commissioner Jung reminded the legislative bill that was approved last year which cities are no longer allowed to collect rental taxes. Tempe is impacted the most of any other city in Arizona since it is a residential rental city.

? - Since there are some budget constraints, will the programs be funded by grants?

A: Brianne Fisher, Climate Action Manager, explained the grant position is helping with the grant management system, supporting the Transportation and Sustainability department, and helping other departments finding certain grants. The position is not a grant writer. There are a lot of federal funds available, and the department is constantly looking for them. Eric Iwersen added that the merger of the Transportation and Sustainability divisions, ended up creating funding allocation strategies benefiting both divisions equally.

? - Are you getting any support or partnership from faculty within the University?

The largest program, Growing Together, was created through this opportunity and there is an APA grant they are working with ASU as well.

### **Agenda Item 9 – Sustainability and Resilience Office Updates and Housekeeping**

Eric Iwersen, Transportation and Resilience Director updated the commission on the new Budget Director, Ben Beutler. Ben has more than 15 years of experience and was the City of Peoria Budget Manager. He starts on June 3<sup>rd</sup>. Tom Duesing, CFO - Chief Deputy City Manager, is retiring and his last day will be in the beginning of July. There interview process for this position started this week.

### **Agenda Item 10 – Future Agenda Item**

Bicycle Infrastructure

Climate Resilience and Capital projects

Update status of the international green construction code (IgCC) program and the impact on developers.

Green Building and Energy Conservation Specialist position update

Invite Anthony Floyd, City of Scottsdale Sr Building Consultant, to the October meeting

Chair Swisher motions to adjourn the meeting at 5:57 p.m.

**Motion: Chair Swisher**

**Second:** Commissioner Kendon

The meeting was adjourned at 5:57pm.

Prepared by: Carla Sidi

Reviewed by:

## Minutes

# Joint Meeting of the Neighborhood Advisory Commission and Sustainability and Resilience Commission

June 5, 2024



Minutes of the Joint Meeting of the Neighborhood Advisory Commission and Sustainability and Resilience Commission meeting held on Wednesday, June 5, 2024, 5:30 p.m. hybrid meeting with in-person attendance option at the Tempe Transportation Center, Don Cassano Community Room, 200 E. 5<sup>th</sup> Street, Tempe, Arizona with virtual component option via Microsoft Teams platform

### **(MEMBERS) Present:**

#### **Sustainability and Resilience Commission:**

Shawn Swisher (Chair)  
Kendon Jung (Vice Chair)  
Jacob Bethem  
Erin Boyd  
Barbie Burke  
Taylor Conley  
Ben Paulat  
Joshua Randall  
Jake Swanson  
Morgan Winburn

#### **Neighborhood Advisory Commission (NAC):**

Joel Stern (Chair)  
Gabe Hagen (Vice-Chair)  
Lane Carraway  
Jan Doughty  
Jana Lynn Granillo  
John Kozel  
Stacy Novis  
Suri Wall  
Dwayne Washkowiak  
Brittney Wong

#### **NAC (MEMBERS) Absent:**

Brandon Abrahams  
Martha Carter  
Kriste Melcher  
Nancy Puffer

### **City Staff Present:**

Eric Iwersen  
Sam Stevenson  
Brianna Fisher  
Keith Burke  
Lucas Jensen  
Helene Track  
Shauna Warner  
Elizabeth Thomas

Dawn Ratcliffe  
Maddie Mercer  
Carissa Fowler  
Evelyn Brumfield  
Jessica Wright  
Carla Sidi

**Guests and Speakers Present:**

- Michael Book, Valley Metro Community Outreach Coordinator
- Robert Forrest, Valley Metro Deputy Chief Capital Planning
- Brian Pessaro, Valley Metro Principal Planner
- Marty Ziech, Valley Metro Manager of Capital Planning

**Agenda Item 1 - Call to Order**

Sustainability and Resilience Chair Swisher and Neighborhood Advisory Commission Vice Chair Hagen called the meeting to order at 5:32 p.m. Members from each commission introduced themselves.

**Agenda Item 2 - Public Comment**

No comments.

**Agenda Item 3 - Presentation on Rio East-Dobson Streetcar Extension – Brian Pessaro, Valley Metro\***

Sam Stevenson, City of Tempe Transit Manager, introduced Brian Pessaro/Valley Metro Principal Planner, Michael Book, Valley Metro/Community Outreach Coordinator, Marty Ziech/Valley Metro Manager and Capital Planning and Robert Forrest/Valley Metro Deputy Chief Capital Planning. Sam noted that City of Tempe is working in collaboration with Valley Metro and the City of Mesa on the next phase of the Rio East-Dobson Streetcar Extension planning projects process.

Streetcar ridership has exceeded expectations. Ridership was originally projected to carry around 300,000 riders within the first 26 months. However, that number was reached within the first 7 to 8 months. The Streetcar is designed to run on tracks that are embedded in the street or in a dedicated rail corridor. *The Light Rail will always be in its dedicated guide way.* The Streetcar can be in a dedicated guide way and in mixed traffic, we have both options in Tempe. Streetcar is meant to serve shorter to medium-distance trips, whereas Light Rail is designed for longer distance regional trips.

This Rio East-Dobson Streetcar Extension Route was identified in the Tempe Mesa Streetcar Feasibility Study, a previous study to identify future streetcar corridors that could connect to the Tempe Streetcar. Originally, there were thirteen corridors, narrowed to five and then further narrowed down to three. The Rio East-Dobson Streetcar extension was created using two segments of those three corridors.

Now that the route has been identified, this study is focused on how the streetcar is going to effectively operate in the street. Staff and consultant team members will be looking at positioning of the tracks (center or side of the road depending on the location), dedicated guideway or mixed traffic and identification of the stop locations. Streetcar expansion will serve activity centers including downtown Tempe, Arena Heights, ASU and the Novus Innovation District, Tempe Marketplace, Sloan Park, Riverview Park, Mesa Riverview Mall and the Asian District.

The study area is bordered by Loop 202 on the north, Broadway on the south, Priest Drive to the west and Alma School Road to the east. Based on data from the Maricopa Association of Governments (MAG), by 2050 population projections for the study area show a 55% increase in residents and a 45% increase in workers. Based on data from the United States Census, 79% of study area households currently have zero or one car marking this as a transit reliant population.



Track and Stops Evaluation Criteria is based on the below factors:

- Access to Transit Connections and Adjacent Land Uses (existing and planning) - They are going to look at access to transit connections and the adjacent land uses which will impact the stop areas.
- Cost - There is the operational/capital costs, and the ridership. Particularly, the combination of those two costs since we are looking at the cost per trip.
- Ridership Potential - They plan to apply for federal money and the Federal Transit Administration looks at the cost per trip of a project to determine how competitive it is.
- Right-of-Way needs – They have a right-of-way needs assessment of how much space do they need in a roadway to make the Streetcar fit. There is a transit easement along some portions of Rio Salado Parkway in Tempe. This land has been set aside for the city of Tempe from developers for future transit use. Where they do not have easements, they will have to find a way to fit the street part within the curb-to-curb width.
- Potential Impacts to Environment and Existing Infrastructure – They will be looking at potential impacts to the environment and existing infrastructure, particularly how it would impact the utilities' location.

**Commissioner comments and questions included:**

? - What would make it into consideration, whether it's protected bike lane versus not protected on the Rio Salado Parkway four track location options?

A: Brian Passaro, Valley Metro Principal Planner, offered that if the Streetcar is going to be next to a bike lane, they will have to put a buffer or a barrier between the Streetcar and the bicycles.

? – Is streetcar envisioned to tie in with light rail? How will connections between streetcar and light rail work?

A: Main Street is, is probably going to be the trickiest part of the project because our light rail station is actually a little bit further away from the intersection.

? – Any concern re: changing track locations from existing system to different configurations in new segment? Might this be confusing for drivers?

A: Good signage warns drivers where to switch. There will not be one option for the entire corridor, will have to look at existing conditions and minimize track location switches best possible.

? – Any plans for park and ride lots with this project?

A: No, not this project. Streetcar usage is intended for more localized users, more localized traffic.

? – How many extra vehicles are you adding? What is capacity of vehicles?

A: Likely similar to existing streetcar with two vehicles every 20 minutes. Greater number of vehicles and frequency for special events like Spring Training games. Capacity is 125 comfortably per car.

Excited to see the different configurations, looks like one of them is able to advance the 20 minute city goal with particular reference to multimodal. Artful configuration can help with dedicated bike lanes.

Really interested regarding how streetcar will connect to existing neighborhoods like Escalante. For future stops, consider needs of this neighborhood. Low car ownership, need for increased accessibility, would love to see Escalante incorporated in your plans.

? – What are we talking about for implementation?

We are at the very beginning of the study and are evaluating alternatives. We plan to wrap up the study by early 2025 and will then be going to the City of Mesa and the City of Tempe with what's called a locally preferred alternative. Maybe by 2031 if everything and every phase from planning to preliminary engineering to design and construction went off without any hitches. We did apply for a grant for preliminary engineering, the next phase of this project, and are waiting to hear.

? – Very curious to see a negative photo map of how someone can get to 80% of their needs/different locations, accessibility to services with any form of transit. Staff should work with Economic Development to ensure services are available and help co-locate any services that are missing that would further help the accessibility of this community.

? – What about ADA, shade, connectivity to Orbit?

A: We are considering existing services as well as planned services. Existing Streetcar connects to all five Orbit routes and that will remain the same. Some sustainability elements built in ADA and shade best that we can for riders.

? – What is cost per ride status?

A: Working with Valley Metro to implement a fare. Currently going through a fare collection system modernization project which is anticipated to be completed late this year or early 2025. It's a transition to smart cards and mobile ticketing and it requires all new infrastructure. This will enable \$1.00/Streetcar ride, \$4.00 daily maximum and same fare media to be used for all modes. So you'd only pay up to \$4.00 a day, \$20.00 a week or \$64.00 a month.

? – What considerations for removing traffic lane at Dobson Road?

A: If dedicated guideway, how much more does that give us in terms of ridership, travel time, etc. Lots of homes back up to this street. How do we make it fit? Traffic and impacts, prefer to take a lane to a land purchase. Need to work with City of Mesa.

Curious about your Design Manual criteria. What else embodies sustainability goals and sense of identity/Arts Commission goals?

I support protected bike lanes. I trust Streetcar more than cars.

? – What does outlook look like for roadway expansion?

A: Transit setbacks/easements in City of Tempe. Existing utilities are a big factor as is aging infrastructure and what will have to be replaced. Along portions of Rio Salado Parkway in Tempe, we have what are called transit easements. This is land that has been set aside to the city from developers for future transit use so we do have some of these easements available to us. Where we do not have easements, we will have to find a way to fit the street part within the curb to curb width.

The study timeline expansion is divided into four phases. Currently, they are evaluating alternatives and plan to wrap up the study by early 2025. At the completion of the study, they will present a final recommendation to the cities of Mesa and Tempe for consideration and possible adoption.

- Winter/Spring 2024 – Define the Purpose and Need
- Spring 2024 – Identify Alternatives
- Spring/Summer 2024 - Evaluate Alternatives
- Fall 2024 - Identify Locally Preferred Alternative
- Fall 2024/Winter 2025 – Locally preferred Alternative Adoption Process

Stop area options are being assessed and the following locations are being researched and considered:

- Marina Heights/Rio Salado to McClintock Drive - one stop near Rural Rd, and one in the vicinity of Vista Del Lago Drive, west of McClintock. These two stops are in the Novus Innovation District.
- McClintock Drive to Loop 101 Loop – one stop to serve Tempe Marketplace
- Loop 101 to Dobson Road - one stop near the vicinity of Sloan Park near Evergreen Rd, and another one in the vicinity of the intersection with Dobson.
- Dobson Rd (south to Main Street) from Rio Salado to Main Street – a stop area at University Drive, and another one at the end of the line, at Main Street. Main Street is probably the trickiest part of the project since the Light Rail station is a little bit further away from the intersection. It's going to be difficult trying to make that connection with the Light Rail

Two open houses are scheduled from 6 to 8 p.m. on June 10 at Escalante Community Center, Senior Center and on June 12 at Adelante Healthcare, Community Room. A virtual option is also available through June 28 at [www.redestreetcar.com](http://www.redestreetcar.com)

#### **Agenda Item 4 - Sustainability Elements of Accessory Dwelling Units (ADUs) – Shawn Swisher, Sustainability and Resilience Commission Chair\***

Given that the State Legislature passed HB2720 in May 2024, a bill that mandates that municipalities in Arizona with populations over 75,000 must adopt regulations to allow accessory dwelling units (ADUs) on lots zoned for single-family homes. It requires that these lots permit at least one attached and one detached ADU, with an additional detached ADU allowed on lots over one acre if it is designated as affordable housing. The bill sets size limits for ADUs, removes certain restrictions such as additional parking or design matching requirements, and exempts specific lands from ADU regulations.

Sustainability and Resilience Chair Shawn Swisher provided brief background comments and presented options regarding how ADU's can encourage a more resilient, diverse and beautiful built environment and emphasized the importance of contributing to the development of this policy to help support the best way forward to implement. He emphasized that there is an opportunity, with "pre-approved plans" to help guide design of ADU's that meet neighborhood character and encompass sustainability elements by ensuring elements of the voluntary International Green Construction Code (IgCC) are part of the design of the pre-approved plans.

Neighborhood Advisory Commission Vice Chair Hagen noted this will not mandate use of pre-approved plans but can reduce friction for paths that seem to align more to our neighborhood and sustainability values making it easier for income expansion and aging in place.

NAC members were provided the following options:

- Sign on to the Sustainability and Resilience Commission letter as presented
- Use any agreed upon points outlined in the Sustainability & Resilience letter to craft a separate NAC letter to Council.
- Gain understanding about the points noted in the letter and later address Council during public meeting with public comments.

There was sustained discussion amongst NAC members about whether they wanted to sign on to the existing letter or secure more information and understanding about elements like the International Green Construction Code (IgCC) to create their own letter. NAC Chair Stern recommended that NAC members table their conversation and asked that they vote re: creating their own letter, which could then be crafted at the retreat meeting.

**NAC Member Motion:** Commissioner Washkowiak made a motion to add the writing of an ADU letter for Council to the August Retreat agenda.

**Second:** Commissioner Granillo seconded the motion

**Result:** The motion was approved by a unanimous vote of those present, 10 ayes and 0 nays

**NAC Commission Member Ayes:** Lane Carraway, Jan Doughty, Jana Lynn Granillo, Gabe Hagen, John Kozel, Stacy Novis, Joel Stern, Suri Wall, Duane Washkowiak, Brittney Wong

**Absent:** Brandon Abrahams, Martha Carter, Kriste Melcher, Nancy Puffer

Brianne Fisher, Climate Action Manager, agreed to email the Proposal to Update the Accessory Dwelling Unit (ADU) Code FAQ's document recently created by staff for Neighborhood Advisory Commission members' reference. Sustainability & Resilience Chair Shawn Swisher thanked NAC members for their consideration and requested they share their letter once crafted with the Commission for awareness and so they can review it and consider co-signing the letter as well if desired.

#### **Agenda Item 5 - Rain to Roots Initiative, Maddie Mercer, Sustainability and Resilience Office – Transportation and Sustainability Department and Richard Adkins, Urban Forester - Parks and Recreation\***

Brianne briefly shared staff members, background and recent accomplishments of the Sustainability and Resilience Division. This Division has grown from an office of two staff two years ago to eight and is now housed in the Transportation Department providing greater opportunities to work together collaboratively.

Sustainability and Resilience can also be framed and described by mitigation efforts and adaptation meaning addressing the current conditions caused by climate change. How are we mitigating future climate change? How are we preventing greenhouse gas emissions from continuing to heat up our community? How do we encourage people away from single use vehicles to riding the streetcar and extend streetcar into further neighborhoods so more have that option. How are we having renewable energy as opposed to dirty energy from coal powered plants? How are we becoming more resilient as a community, as an individual to rising temperatures and extreme heat? Brianne emphasized that doing the mitigation work is really tough.

Green Stormwater Infrastructure creates “sponges” to pull water in allowing for rainwater harvesting. Benefits of Green Stormwater Infrastructure:

- Supports tree canopy
- Reduces temperatures
- Reduces portable water use
- Mitigates flooding
- Promotes cleaner waterways
- Creates wildlife habitat

The Rain to Roots Master Plan is one of the highlight actions in the Climate Action Plan. The project purpose is to expand green infrastructure and urban cooling initiatives, promote cross-departmental integration and planning and identify opportunities for long-term funding. Areas of opportunity include: streetscapes/public ROW, multi-use paths, parks, neighborhoods and residential properties and private development. Rain to Roots project outcomes are expected to include pilot project designs, city codes and standards, an Urban Forestry Master Plan Update and sustainable funding strategy.

Rain water harvesting is now an eligible Maryanne Corder Neighborhood Grant Program project type. It's possible to benefit the natural hydrology of the land that we occupy and make communities more livable and sustainable.

?: What about trees in alleys?

A: There's a lot of great opportunity with alleyways along with a lot of utilities and usage challenges to work through and we are not looking at alleys for this program unless it's a very particular, unique kind of alley situation.

The Rain to Roots Ambassador Program provides opportunities to advise on direction of programs and policy, to learn more about Tempe's stormwater and urban cooling initiatives and to participate in site visits for pilot projects. Hybrid meetings are held on the first Wednesday of the month from 5:30 to 6:30 p.m. at the Escalante Multi-Generational Center.

### **Agenda Item 6 - Adjournment**

Chair Swisher requested a motion to adjourn the meeting.

Motion: Sustainability and Resilience Commissioner Jung made the motion to adjourn the joint meeting.

Second: Neighborhood Advisory Commission Vice Chair Hagen

Result: All present were in favor.

The meeting was adjourned at 7:15 pm.

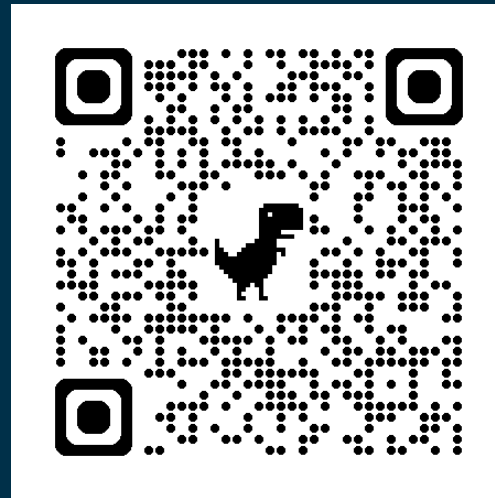
Prepared by: Carla Sidi

Reviewed by: Elizabeth Thomas

# Welcome Sustainability and Resilience Commission Retreat

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Grab some pizza and take the Adaptation Personality Quiz





# Logistics

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10 minutes

- Background on initiative
- Where are we at with initiative (timeline poster?)

5 minutes

- Group Discussion

5 minutes

- How does Commission want to support?
  - Commissioner Tools & Resources



# Commissioner Intervention

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- Council Communicator (pink)
- Social Media (orange)
- Council Aides & Councilmembers monthly events (blue)
- Neighborhood Association Meetings (purple)
- Council Meetings (green)
- Other (yellow)



# Commissioner Intervention - Example

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## IgCC Approval Process:

- Presentations to Commission through development 2022-23
- Commissioner participation in Council Committee IgCC presentations throughout 2022-23
- Letter of support Sept 2023
- Commissioner participation in Sept., IgCC presentation
- Commissioner participation in Nov., IgCC code adoption

- Summary Timeline stage of all 3 Highlight Action
- Commission appointment





# Green Codes and Standards

## International Green Construction Code (IgCC)

- Green construction is an alternative to conventional construction
- Reduces green house gas emissions
- Increases life span of building
- Reduces heat island affect
- Promotes tree planting & structural shade
- Improves heat resiliency
- Reduces water consumption
- Improves access to EV charging
- Reduces dependency on fossil fuels

### November 2023 Approval

Private Development – Voluntary Adoption

Municipal Buildings – Mandatory

### Code Development Elements

Chapter 5: Site Sustainability

Chapter 6: Water Use Efficiency

Chapter 7: Energy Efficiency

Chapter 8: Indoor Environmental Quality

Chapter 9: Materials and Resources

Chapter 10: Construction and Plans for Operation





# Green Codes and Standards

## Rain to Roots Master Plan Project Purpose

- Expand green infrastructure & urban cooling initiatives.
- Promote cross-departmental integration & planning.
- Identify opportunities for long-term funding.



## Benefits of Rain to Roots (GSI)

- Supports tree canopy
- Reduces temperatures
- Reduces potable water use
- Mitigates flooding
- Promotes cleaner waterways
- Creates wildlife habitat





# Green Codes and Standards

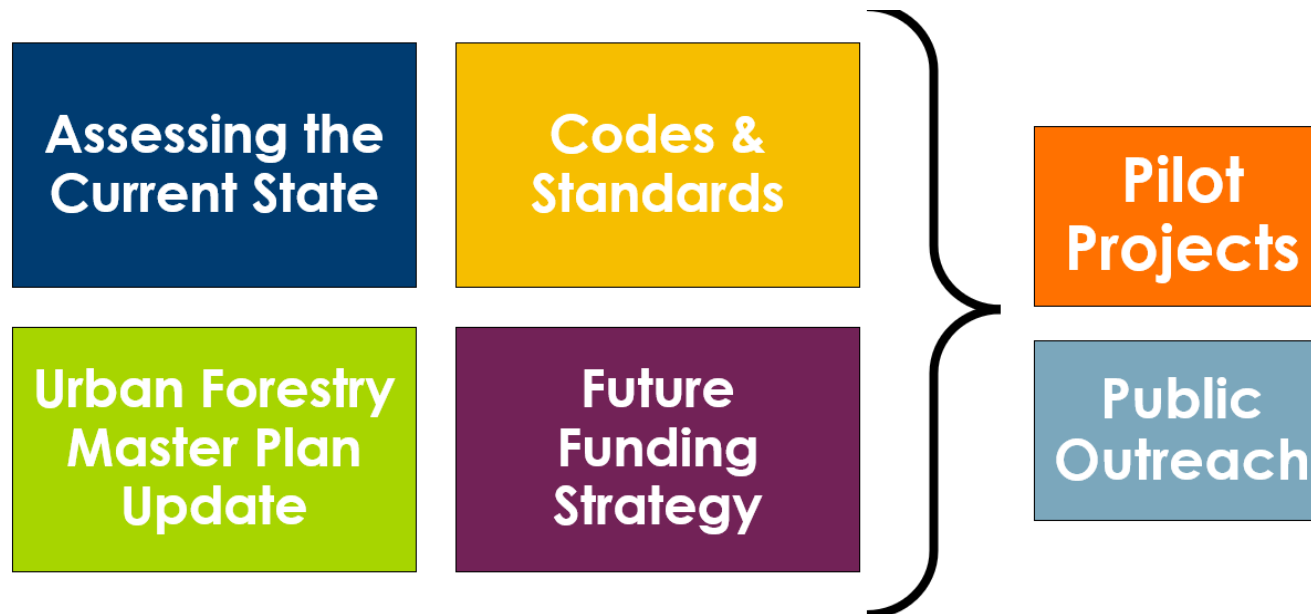
## Rain to Roots Master Plan

### Project Purpose

- Expand green infrastructure & urban cooling initiatives.
- Promote cross-departmental coordination & planning.
- Identify opportunities for long-term funding.

### Areas of Opportunity

- Streetscapes – Public ROW, traffic calming
- Multi-Use Paths
- Parks
- Neighborhoods
- Private Development





# Green Codes and Standards

## Urban Cooling Performance Measure and Policy Recommendations

### *Intentional Built Environment – IgCC + Rain to Roots*

Cool materials

Cool and reflective roofs

Limiting asphalt expansion

Limiting hardscape and replacing with permeable surfaces

Tree and Shade Canopy (Rain to Roots)

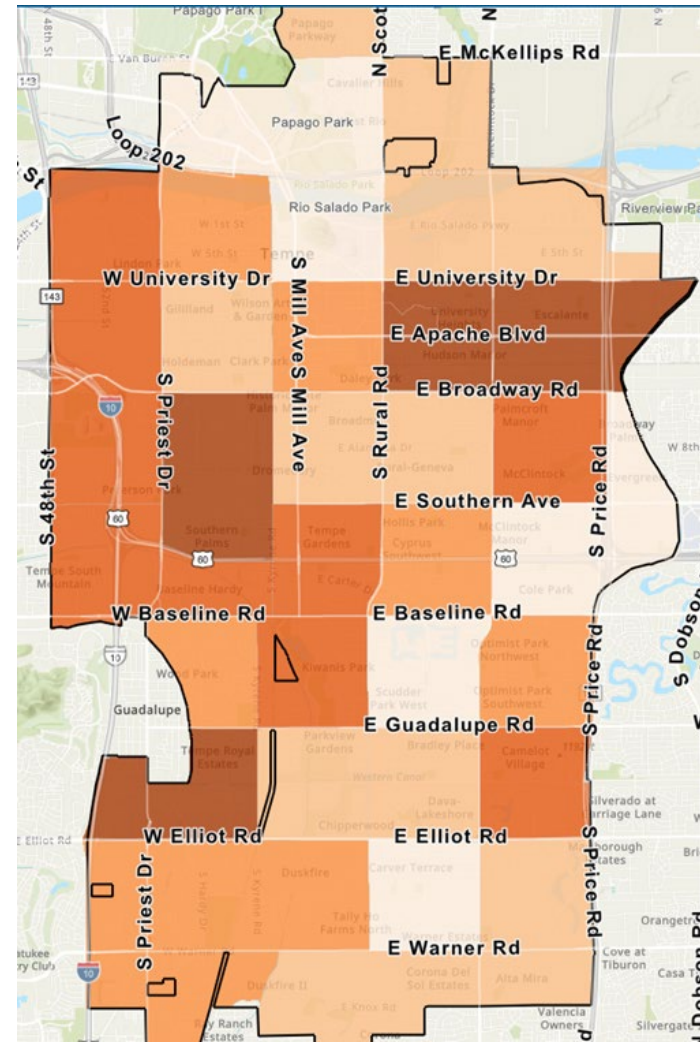
Water conservation

Shade requirements

Landscape code

Capital Improvement Program

Pavement Quality Index



(Heat Exposure + Social Demographics)

Heat Priority Map



# Transportation Master Plan (TMP)

- **Background:** Tempe's 1st Transportation Master Plan = Jan 2015
  - Previous goals were wrapped into General Plan
- **Details:** Turning **multi-modal goals** into data-driven **implementation programs** that make traveling easier and safer as a pedestrian, bicyclist, transit user, or motorist.
- **Future:** 20- to 25-year vision for Tempe's Transportation Network





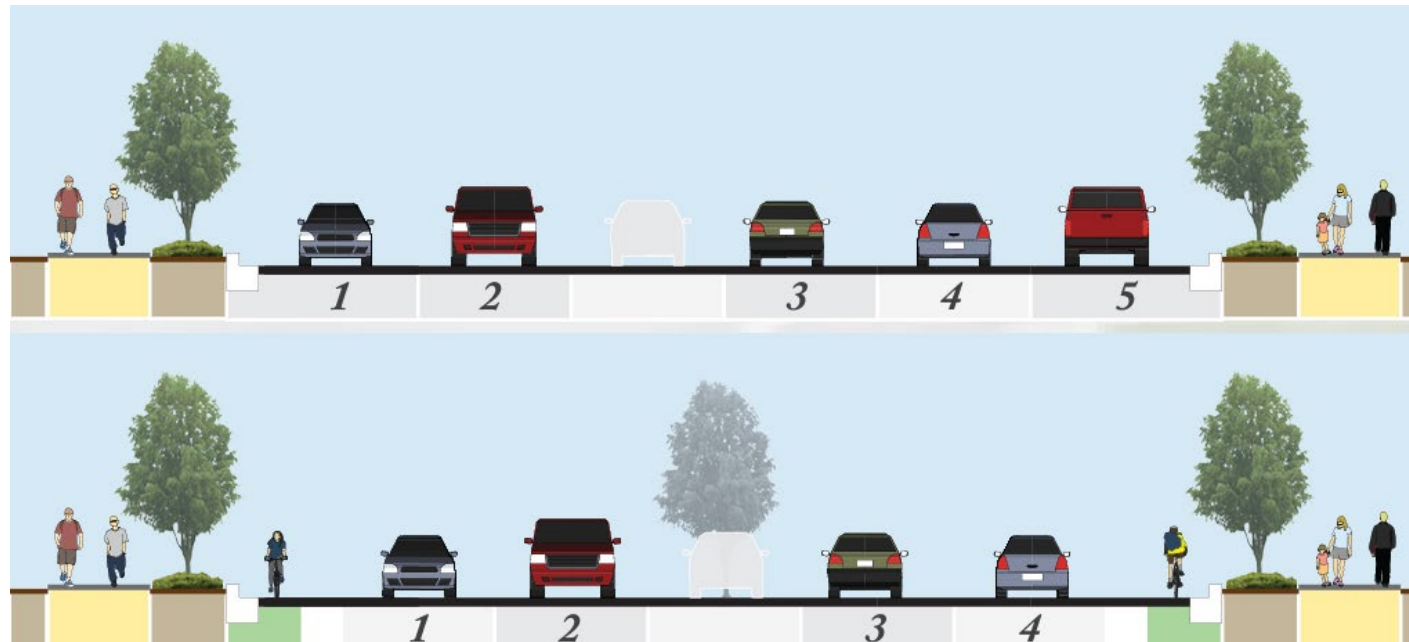
# Transportation Master Plan (TMP) Update



- **Update:** Includes analyses of existing conditions, gaps and needs assessments, future modeling and project prioritization
  - **Collaborative:** Transportation planning staff works with traffic engineering, sustainability, planning, and transit staff.
  - Additionally, other city departments will see engagement (PD, IT, Public Works, Solid Waste) to ensure the plan comprehensively addresses their needs.
- **Prioritization:** data includes inputs like disadvantaged communities, lack of tree canopy, crash occurrences, etc.

# Transportation Master Plan (TMP) Update

- Part of this Master Plan will include the update to Tempe's **Safety Action Plan** called **Vision Zero** which aims to reduce traffic deaths and serious injury to zero.
- The plan will take a comprehensive **review of all existing plans** such as the **climate action plan** and look to integrate and inform future recommendations.
- **Public Outreach and equity analyses are critical to this update.**





# Resilience Energy Hubs

Trusted, community-led spaces designed to operate in Three Resilience Hub Modes:

**EVERYDAY**  
(99% OF THE TIME)

Space to mobilize to reduce socio-economic vulnerabilities and promote equity through community identified **programming & services**



**DISRUPTION**

Central point for gathering, assembling information, and assessing damage during an emergency disruption



**RECOVERY**

Plays a critical role in post-emergency recovery and ongoing communication needs.





## Common City of Tempe Hazards

### HEAT WAVES

Tempe's relentless 110+ degree heat waves, intensified by the urban heat island, prove deadly without respite even at night.



### FIRES

Residential fires in Tempe pose an additional hazard, potentially displacing people from their homes.



### POWER OUTAGES

Power outages in Tempe, whether due to heat or accidents, can make staying at home unsafe.





# Resilience Energy Hub Focus Areas



# Resilient Energy Hub Master Plan

## (Microgrid Feasibility Assessment)

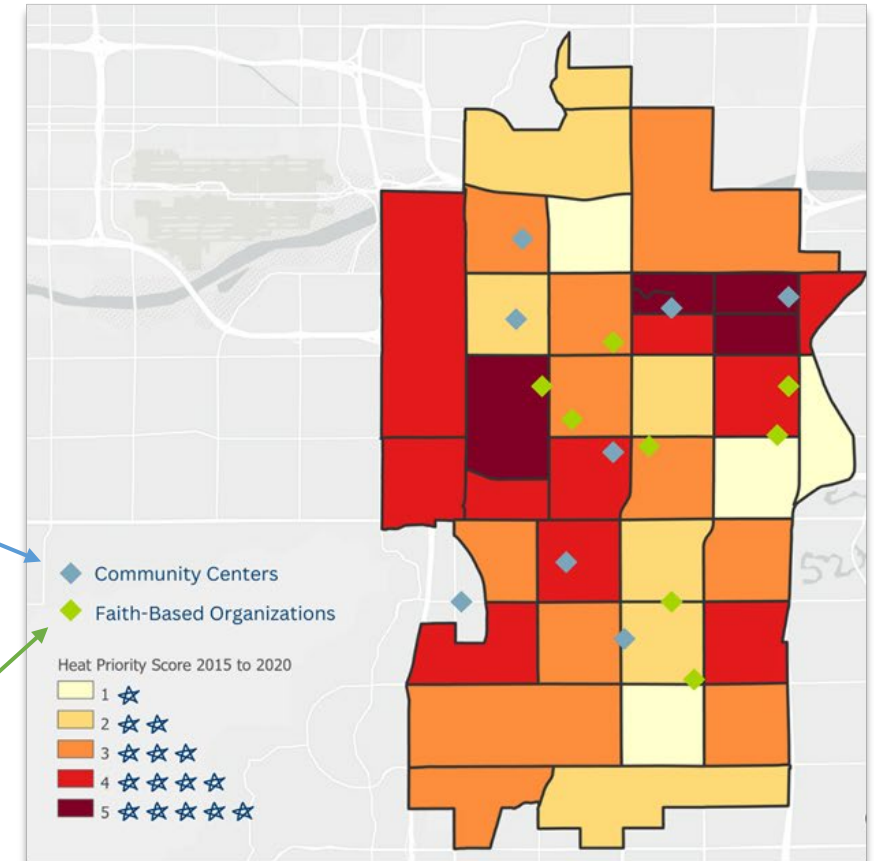
Solar + Battery Storage

### Resilient Infrastructure Investment



#### Microgrid Assessment Locations

- Police/Fire (10)
  - Main Police Courts Building Complex
  - Apache PD Substation
  - South PD Substation
  - Fire Stations 1, 2, 3, 4, 5, 6, 7
- Community Centers (7)
  - Tempe Library
  - Kiwanis Recreation Center
  - Escalante Multi Gen Center
  - North Tempe Multi Gen Center
  - West Side Multi Gen Facility
  - Pyle Adult Recreation Center
  - EnVision Center
- Community-Led Facilities (9)
  - YMCA
  - 8 Faith-Based Organizations



# Community Response Plan

## Community Disruption Response Plan



Based On:

- Community Resource & Assets
- Organizational Connections

A large grid of various forms and documents, including tables, text boxes, and headers, representing the detailed content of the Community Response Plan. The forms contain text, tables, and checkboxes, organized into a grid structure.

# Resilience Hub Project Grant

## Everyday Programs and Services

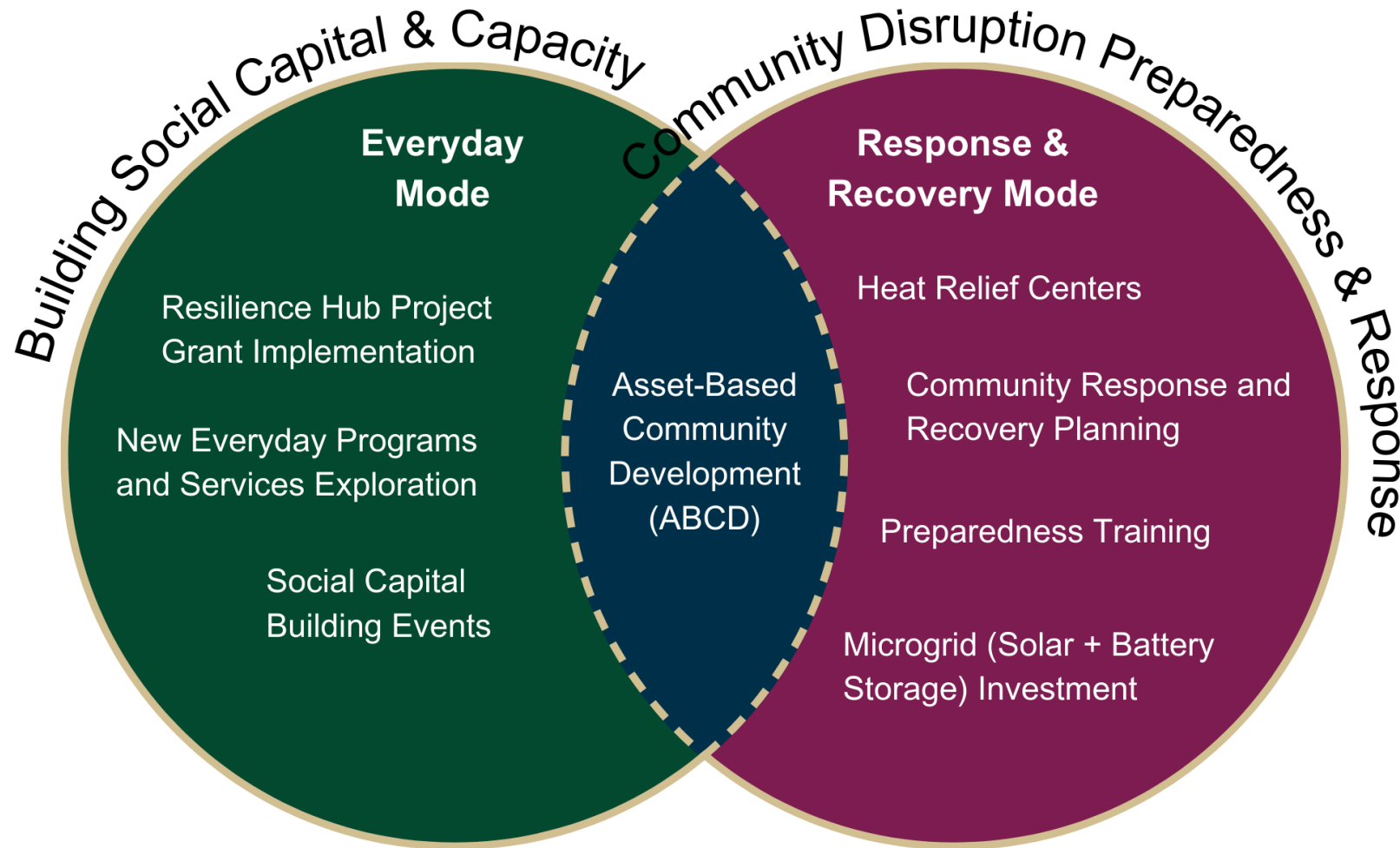


## Resilience Hub Project Grant Projects

- Desert Palm: **Community Garden**
- Tempe Church of Christ: **Community Landscape Design**
- Dayspring UMC: **CRP/AED/First Aid Training for the Community**
- King of Glory: **Afterschool Music Program**
- Citypoint Church: **HOPE Center Support**
- Community Christian: **Food Bank Support**



# Resilience Energy Hub Approach



- + Monthly Resilience Hub Network **Meetings**
- + Monthly Resilience Hub Network **Newsletters**



# Community Energy

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- Community EV Charging Site Plan
  - Plan will assess policy, technical, and spatial needs for EV charging, covering public and private sites. Recommendations will include potential City policies and public-private partnership opportunities and prime geographic areas with or projected to have high demand for EV charging.
- Energy Equity Roadmap
  - Seeking feedback from residents on energy use and extreme heat challenges to co-create a community Energy Equity Roadmap to use to pursue funding for community-identified investments.
- Mobile Home Retrofit Program
  - Offering free energy audits and home improvements. Program aims to increase energy efficiency, reduce utility bills, and enhance resilience to extreme heat.