



Minutes

City of Tempe Sustainability Commission March 14, 2022

Minutes of the Tempe Sustainability Commission meeting held on Monday, March 14, 2022, 4:30 p.m. at a virtual meeting on MS Teams, through City Hall, 31 E. 5th Street, Tempe, Arizona.

(MEMBERS) Present:

Kendon Jung (Chair)
Natalie Mendoza
Joyce Vesper
Katja Brundiers

Meaghan Coon
Shawn Swisher
Jake Swanson
Barbie Burke

(MEMBERS) Absent:

Stephanie Milam-Edwards (excused)
Ryan Mores

City Staff Present:

Braden Kay
Brienne Fisher
TaiAnna Yee
Julian Dresang
Dino Accardo
Shelly Seyler
Donna Hancock-Sullivan
Robert Yabes

Guests Present:

David Sokolowski
Matt Smith

Chair Jung called the meeting to order at 4:35 p.m.

Agenda Item 1 – Public Appearances

David Sokolowski commented on green construction codes and the EnVision Center. He said that he believes that the city needs to reduce the regulatory burdens on developers and exclude residential properties. Developers always find ways to recuperate costs and the developer will have to maintain the property even if car chargers are not being utilized. They will expect residents to pay for the additional charges incurred even if they are unable to utilize the green building additions. This will burden low-income renters. He is not interested in saving developers money. He knows the developer will always pass the costs onto the renter. He is not speaking about homeowners, who have collateral. He thinks they should exclude residential from the codes and instead require new codes for commercial and office that include full solar, not just solar-ready. He wants the costs to be shared by the community and less burden on low-income renters.

David asked what type of generator will be used in the EnVision Center. He asked about vehicle to grid technology, which has been successful in the UK. This would allow city vehicles to act as emergency batteries.

Agenda Item 2 – Approval of Meeting Minutes

Chair Jung called for a motion to approve the minutes from February 14, 2022.

Motion: Jake Swanson

Second: Barbie Burke

Decision: Approved 10-0

Voted to Approve:

Kendon Jung (Chair)

Natalie Mendoza

Stephanie Milam-Edwards

Joyce Vesper

Katja Brundiars

Meaghan Coon

Shawn Swisher

Jake Swanson

Ryan Mores

Barbie Burke

Agenda Item 3 – Urban Cooling Green Stormwater

Chair Jung said that the theme of the meeting is to highlight the areas that the commission wants to take ownership of and provide updates on where they are at.

Tempe City Engineer Julian Dresang gave a presentation about Green Infrastructure.

- Council Strategic Priority Performance Measures
 - o Sustainable Growth and Development 4.11
 - Tree coverage: Citywide 25% tree and shade canopy by 2040.
 - o Safe and Secure Communities 1.27
 - City Infrastructure and Assets: 100% compliance with industry standards related to the replacement of infrastructure/assets.
- Climate Action Plan
 - o Emissions reduction
 - o Resilience to extreme heat/green infrastructure.
- Green Infrastructure
 - o Urban Cooling
 - o Shade
 - o Save Water
 - o Capture stormwater
 - o Clean Streets
- Partners/Collaborations
 - o Office of sustainability, sustainability commission, municipal utilities, engineering/transportation, private projects, ASU, businesses, residents.
- Examples of GI in Tempe:
 - o College Ave: Vegetation provides water retention, urban cooling, and less pavement.
 - o Dorsey/Lemon: Stormwater diverted into the landscape, trees help with cooling, compost from city waste.
 - o Rio/Hardy: Cut the curb to allow water to flow into landscape, provide vegetation for cooling, city compost.
 - o 5th/Evergreen: Stormwater diverted from gutter to landscape, trees and vegetation help with cooling.
- Tempe Engineering Design Criteria
 - o Storm water retention
 - o Storm water quality
 - o Low impact development
 - Currently using Mesa's LID Toolkit

- Challenges
 - Tempe is built out, existing right of way, new high-density development
 - Lack of education and training related to LID and GI
 - Lack of dedicated funding for pilot projects/community-initiated projects.
 - Significant amount of existing storm drain infrastructure
 - Maintenance can be difficult.
- Questions
 - Chair Jung asked what he meant by “existing infrastructure”. Does he think that additional capacity can be built into the infrastructure by utilizing GI?
 - Julian clarified that there are opportunities to introduce new elements into existing properties as well as future growth. There are good ways to use stormwater instead of diverting it.
 - Matt asked what the impact of additional shade canopy would be on water usage.
 - Julian said it would be a case by case basis, but the goal is to use native plants that do not require significant water. Our rainfall is far less than average so we need to be selective on what plants we use, and in some cases could have to use some irrigation. The most important thing is to use the proper pallet.
 - Matt asked for a source for the study for Tempe’s water usage.
 - Chair Jung said that it is part of the water rate structure.
 - Commissioner Brundiers asked if there are points of measurement to measure additional impacts such as cooling.
 - Julian asked how you could measure the cooling.
 - Commissioner Brundiers said there are projects that do this, like the heat equity maps. She said it would be interesting to do a study like that to quantify how the cooling infrastructure will work.
 - Julian said that that is a likely next step.
 - Commissioner Swisher asked how we have adopted to LID guidelines.
 - Julian said every new development is required to be able to store the 100 year storm event. This can be done through retention, on site storage, or others. It gives new development options to use green infrastructure to do this, but it is not required.
 - Commissioner Swisher asked if off-site retention is required.
 - Julian replied that new development or redevelopment is required for capturing the half-street.
 - Commissioner Swisher stated that the city should incentivize using GI to retain water. Julian agreed.
 - Commissioner Mendoza asked about the design guidelines that incentivize the proper plant pallet.

- Julian said that currently they are limited to pilot projects using internal resources. As the program develops, they will include those pallets in the guidelines. This project is in early stages so it has not been codified yet.
- Chair Jung emphasized how important this project is and how essential funding is.

Agenda Item 4 – Solar Ready Code

Shelly Seyler, Interim Community Development Director introduced the presentation.

- City Council Strategic Performance Measures
 - Sustainable Growth and Development (4.18)
- 2018 IECC Adoption and Solar Ready
 - Jan 1, 2019- City adopted IECC code.
 - Sep 30, 2021- Presentation to Sustainable and Livable Communities Committee on Solar Ready Code.
 - Nov 17, 2021- Council supports moving forward with stakeholder and outreach.
- Why it matters
 - Encourages installation of renewables.
 - Prepares buildings for future installation of solar equipment.
 - Supports the CAP Initiatives.
- Solar Ready Code Appendix
 - Applicable for all new commercial buildings to include all multi-family.
 - Solar Ready Zone is located on commercial buildings 5 stories or less.
 - SRZ shall be 40% of the calculated roof areas minus vegetated roofs, skylights, and occupied roofs.
 - Structural dead loads of 5lb/sq ft will be included.
 - Interconnection pathways are required for SRZ.
- Who has adopted solar ready codes?
 - Scottsdale, Tucson, and Pima County.
- Public Involvement
 - Feb 10- Stakeholder Meeting
 - Feb 15- Virtual Public Meeting
 - Online comments on Tempe.gov/forum
 - Mar 2- Tempe Chamber
 - Mar 14- Sustainability and Resilience Committee
 - TBD- Update to committee and council
 - TBD- Work study to present feedback
- Commission Feedback

- Chair Jung asked for an example of the difference between residential vs commercial.
 - Tempe does not have much new single-family residential development. There are more opportunities in commercial as that is the majority of the new development.
- Chair Jung and Commissioner Swisher highlighted that new single-family development can take up large areas, and should be required to be solar ready.
- Chair Jung addressed the comments from David at the beginning about the cost for renters due to solar ready codes. David clarified his comments. His main concern is rent price increases for low-income people.
- Chair Jung asked about the difference between solar-ready vs retrofitting existing properties.
- Commissioner Brundiers asked if they could use the argument that commercial buildings would offset more emissions through solar installation. Shelley agreed that there are opportunities to gather more data and use that as an argument.
- Chair Jung asked if there are any current incentives for properties to install solar at the time of build. Shelley was not able to answer. Braden said there are not enough incentives as they are very capital intensive.

Agenda Item 5- International Green Construction Code (IgCC)

Dino Accardo, City Building Safety Specialist spoke about the IgCC code development.

- They have a team that is using the CAP to guide them through the code process.
- Update
 - In FY 2022 budget approval came for a Green Building Program Specialist. They received \$63,683.
 - Next step is to maximize the limited funds with seeking an RFP to assist staff with:
 - Develop 2018 Tempe IgCC code.
 - Pilot city projects.
 - Recommendations for training of city staff.
 - Pilot 1-3 private projects.
 - Resource plan for voluntary use of code.
 - EV capable and solar ready code.
- Questions
 - Chair Jung asked why they are still looking at the 2018 codes.

- Dino replied that they adopted the 2018 family of codes. They are staying within the same family of codes. They cannot adopt a later code into the current family of codes.
- Chair Jung asked how their actions will translate into something beyond just pilots, i.e. more permanent solutions.
 - Braden replied that they will be moving forward with a city building policy to institutionalize the actions.
 - There is a multi-phase project on the private building side. Eventually, a full temporary code will be adopted, followed by mandatory city-wide adoption of the IgCC, which is where Scottsdale is now.
- Commissioner Swisher asked for a timeline for the temporary code.
 - Braden said that the program will be running in 2023. Making it permanent will require additional funding. The true timeline for this adoption is somewhere around 2030. It depends on political support and funding.
- Commissioner Swisher asked if the commission could consider writing a letter of support for the adoption of these codes.

Agenda Item 6 – Transportation Demand Management (TDM) and Mobility Hubs

Robert Yabes, Transportation Planner, spoke about TDM/Mobility Hubs.

- Tempe's Sustainable Vision
 - The projects support the 20 minute city, the traffic congestion performance measure, and reduce GHG emissions.
- Partners
 - Regional and State
 - Local
 - City Departments
- Current Planning Work
 - TDM Plan
 - Enhance system efficiency and promote use of multi-modal investments.
 - TMA Plan
 - Forum of collaboration to improve effectiveness of TDM.
 - Mobility Hubs Plan
 - Provides the infrastructure needed to support multimodal transit.
- Stakeholder engagement
 - General interest and enthusiasm
 - Education and awareness will be key
 - Need to start conversation about TDM strategies during initial development.

- Businesses are interested in the ROI for investment
- Positive response about the potential of TMA in addressing transit issues and allowing efficient travel.
- Public Meetings/Surveys
 - Many are open to other options besides driving alone
 - Bike, pedestrian, rideshare and transit are used by respondents.
 - We need to provide more complete and real time information about transit options.
 - Comfortable waiting areas, secure bicycle parking and more convenient transit.
- Mobility Hubs
 - Provide infrastructure for multiple modes of transportation in one location. Example is the Tempe Transportation Center.
- Equity Focus on Mobility Hubs.
 - Emphasis on placing hubs in lower income areas that will benefit most.
- Hubs on Public Property
 - Can be located at parks.
- Public/Private Partnerships
 - Urban core/high density environments.
 - Reduce on site parking and VMT.
 - Amenities will cater to development and public.
- Potential Locations
 - Residential Density, employment density, nearby transit, access to employment are all considered.
- What is a TMA?
 - Collaborative agency or initiative that exists to provide a variety of TDM services.
 - Public and private can work together to deliver transit services.
- Tempe Context
 - TMA can help respond to Tempe's growth pressures.
 - Public and private leaders are committed to this work.
 - There has been significant recent planning and investments in multimodal infrastructure.
- Stakeholder Response
 - Set the stage for change before travel returns to its peak.
 - Support needs of businesses and individual travellers.
 - Align with other planning efforts.
- Settings up the TMA
 - Confirm the missions and goals
 - Establish the structure and cross-sector partnerships

- Outline key strategies
- Identify funding
- Questions
 - Chair Jung commended Robert on the work that has been done. He is very excited about the project.
 - Commissioner Brundiers asked about the usage of equity maps for where hubs can be placed. She asked if there is an overlap between the heat vulnerability maps and green infrastructure placement with the hub locations.
 - Robert said that they want to be the lead in implementing these projects. They need to be part of the work to ensure that green infrastructure will be placed in their projects.

Agenda Item 7 – Envision Tempe Update

Braden Kay, Suitability and resilience Director gave an update on EnVision Tempe.

- Unlimited Potential Partnership
 - June 19, 2021- Climate Justice Forum
 - June 22, 2021- Neighborhood Forum
 - Oct 19, 2021- Neighborhood Resilience Event
 - Nov 6, 2021- EnVision Tempe Event
- Main Findings
 - Health and Wellness
 - Workforce Development/Affordable Housing
 - Emergency Management/Community Resiliency
- Why Hubs and Centers?
 - Resilience Hub (USDN)
 - Localized approach to emergency preparedness that utilizes well-trusted community spaces.
 - EnVision Center (HUD concept)
 - Centralized facilities designed to provide greater access to economic, social, and health services.
- National Models
 - Orlando FL, Austin TX, Baltimore MD, Puerto Rico
- Core Pillars
 - Economic Empowerment, Educational Advancement, Health and Wellness, Character and Leadership, Resilience to Extreme Heat, Community Resilience.
- Overview
 - Open Fall 2022
 - Services Offered

- Finding a job, GED classes, Housing assistance, Parenting programs, Before/after school care, Heat relief location.
- Capital Improvement Budget
 - Master plan for up to 20 sites
 - Microgrid- Solar and battery storage system.
 - Total Five-Year \$1,300,000
 - 3rd budget request is for a neighborhood resilience coordinator.
- Questions
 - If solar and battery were added to Clark park, that project would be a great site.
 - Chair Jung commented that he liked how they are blending the ideas of the resilience of people looking to get on their feet and the resilience to environmental hazards.
 - Commissioner Vesper asked if they have worked with existing agencies that provide these services.
 - Braden said most of the functions will be done with partner agencies. This will not just be city staff running these programs.
 - Commissioner Brundiers commented on the use of map overlays that could help with the selection of future hub locations.
 - They will do a full description of the master plan. The idea is that they will use all of the heat, income, transit data to help identify locations.

Agenda Item 8 – Housekeeping Items

- Chair Jung thanked members for submitting comments in favor of the CAP.
- Neighborhood Celebration on March 26. Chair Jung is asking 2-3 commissioners to table at the event. This is an opportunity to practice their pitch.
 - Jake Swanson and Joyce Vesper offered to table.
 - Barbie Burke and Kendon Jung will be there.
- April 10- Down to Earth event with 2nd Sundays. Same setup as the neighborhood celebration.
 - Shawn Swisher and Stephanie Milam-Edwards tentatively agreed to table.

Chair Jung asked for a motion to submit a letter of support for TDM/Mobility Hubs work.

Motion: Kendon Jung

Second: Barbie Burke

Decision: Approved 10-0

Voted to Approve:

Kendon Jung (Chair)

Natalie Mendoza

Stephanie Milam-Edwards

Joyce Vesper

Katja Brundiers

Meaghan Coon

Shawn Swisher

Jake Swanson

Ryan Mores

Barbie Burke

Agenda Item 9 – Future Agenda Items

Kendon asked commissioners to send any items to staff.

The meeting was adjourned at 6:31 pm.

Prepared by: Henry Pearson

Reviewed by: Brianne Fisher