

PUBLIC MEETING AGENDA



Sustainability Commission

MEETING DATE

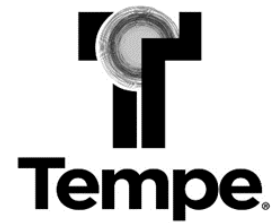
Monday, December 16, 2019
4:30 p.m.

MEETING LOCATION

Engineering & Transportation Conference Room
31 E. 5th Street, City Hall, Garden Level
Tempe, Arizona

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Sustainability Commission welcomes public comment for items listed on this agenda. There is a <i>three-minute time limit</i> per citizen.	Kendon Jung, Commission Chair (4:30 – 4:33 pm)	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the November 18, 2019 meeting.	Kendon Jung, Commission Chair (4:33 – 4:35 pm)	Action
3. Sustainability Density Bonus Staff will provide updates, including details of the International Green Construction Code.	Chad Weaver, Ryan Levesque and Robbie Aaron, Community Development Staff (4:35 – 5:00 pm)	Information
4. Climate Action Plan Update 2021 Engagement Staff will provide updates.	Shauna Warner, Neighborhood Program Manager (5:00 -5:20 pm)	Information
5. Sustainability Awards Staff will provide updates.	Braden Kay, Sustainability Director (5:20 – 5:35 pm)	Information
6. Transit Bus Shelter Staff will provide updates.	Bonnie Richardson, Principal Planner (5:35 – 5:55 pm)	Information
7. Annual Report Staff will provide updates.	Braden Kay, Sustainability Director (5:55 – 6:00 pm)	Action
8. Climate Action Plan – Highlight Actions Check-In Report out on goals and strategies for individual workgroups.	Kendon Jung, Commission Chair (6:00– 6:10 pm)	Information
9. Housekeeping Items - Commission work after adoption of CAP	Braden Kay, Sustainability Director (6:10 – 6:20 pm)	Action
10. Future Agenda Items Commission may request future agenda items.	Kendon Jung, Commission Chair (6:20 – 6:30 pm)	Information

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 accommodation to participate in a public meeting.



Minutes City of Tempe Sustainability Commission November 18, 2019

Minutes of the Tempe Sustainability Commission meeting held on Monday, November 18, 2019, 4:30 p.m., at the Engineering & Transportation Conference Room, City Hall, 31 E. 5th Street, Tempe, Arizona.

(MEMBERS) Present:

Kendon Jung (Chair)
Ryan Mores (Vice Chair)
Barbie Burke
Stephanie Milam-Edwards (phone)
Katja Brundiers (phone)

Serita Sulzman
Steven Russell
Sukki Jahnke (phone)
Gretchen Reinhardt (phone)

(MEMBERS) Absent:

John Kane

City Staff Present:

Braden Kay, Sustainability Director
Grace DelMonte Kelly, Energy Management Coordinator
Andrew Ching, City Manager
Steven Methvin, Deputy City Manager
Craig Hayton, Deputy Community Services Director - Parks

Guests Present:

Daniel Boswell, resident
Linsey Boswell, resident
Hana Callahan, ASU student
Ryan Johnson, ASU & City of Scottsdale
Riley Bowker, ASU Student

Dyandra Jackson LoBrie, ASU Student
Vanessa Ray, ASU Student
Drew Alnas
Katelyn Corning, ASU Student
Lauren Kuby, Vice Mayor

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

Agenda Item 1 – Public Appearance

Chair Jung asked the guests to introduce themselves.

Agenda Item 2 – Approval of Meeting Minutes

Chair Jung introduced the minutes of the October 23, 2019 meeting. Commissioner Burke made a motion to approve the minutes. Vice Mayor Mores seconded.

Motion: Commissioner Burke

Second: Vice Mayor Mores

Decision: Approved 9-0

Voted to Approve:

Kendon Jung (Chair)
Ryan Mores (Vice Chair)
Barbie Burke
Stephanie Milam-Edwards
Katja Brundiers
Serita Sulzman
Steven Russell
Sukki Jahnke
Gretchen Reinhardt

Agenda Item 3 – Integrated Pest Management

Deputy Community Services Director Craig Hayton said he will let the commission know what is new and give the presentation he is going to give the council to update them on Integrated Pest Management (IPM) and Green Organics.

He said he will talk about:

- Update on IPM
- Update on organics
- Next Steps
- Q & A

Understanding the council priority of Integrated Pest Management and performance measure #4.12. for compost use in the city is critical.

- Managing pests is a decision-making process
- Focused on triple-bottom line
- Uses a holistic approach
- If risk reduction is destination, IPM is a vehicle to get there
- If we spend time on proactive measures, chemicals should be infrequent/least often used

In September 2019, we presented to Council at Work Study Session. We are learning from other organizations that have done IPM program well. We want to identify inorganic pesticides. We want to find a way to pull reports. For Organics, at the end of the fiscal year, we eclipsed the 2000 yards per year by 2020 goal, to achieve a cumulative composting usage across city parks, and met the goal.

We are looking at:

- Local and National Research
- Local approach
- Formalized IPM program

Tucson has an IPM program, but nothing formalized. We have a good network. Tucson and Tempe have these programs. A lot of other organizations have IPM programs.

We found there are four main approaches folks are using:

- Individual bans on pesticide

- Organic pesticide – Tucson is following Portland’s lead
- Reduced risk pesticide list
- Pesticide hazard and exposure reduction

We want to make sure we continue to implement the plan and amend it as needed; identify which is the best fit and make recommendations from multiple players at the city.

Glyphosate is an active ingredient in a larger group of herbicides. There are 3 levels of caution:

- Caution is lowest
- Warning is next
- Danger is high risk

We found in our landscape areas, we used it mixed in water for spot treatment in weeds and on stumps.

Our next steps with IPM:

- Review glyphosate alternative
- Evaluate pesticide reduction approach
- With compost/continue
- Few parks will be in herbicide-free parks
- Implement pesticide-free park program

Commissioners commented and asked:

- What is the interest level in communities to clean up parks? Craig said we have neighborhood support; we are looking into working with north and south neighborhoods. Could help with pulling weeds, picking up litter.
- Have you approached high schools about adopting a park or helping to clean up? Craig said Marcos de Niza Key Club has helped. Most of Tempe parks border elementary schools. Pulling weeds is mostly helpful to us.
- We’ve seen different perspectives. What is the impact of health on humans and pets? Craig said we are having the conversations and looking to the Technical Advisory Committee when and where we use pesticides. We care about the residents not coming into contact with the applicators.
- What is your approach to pesticide reduction? How do you evaluate? Craig said the Technical Advisory Committee met in October and will meet again in December. They are a big part of the conservation.

Chair Jung thanked Craig Hayton and asked commissioners to send additional questions to staff.

Chair Jung thanked the Commission for passing the State’s second Climate Action Plan. The Chair said he was particularly proud of this group that was willing to step into an active role, he appreciated the extra work they have done.

Chair Jung and the commission recognized Sustainability Director Braden Kay for all his work and effort on the Climate Action Plan. All applauded. Chair Jung and the commission recognized Vice Mayor Kuby for championing Climate action in Tempe. The Commission celebrated the passing of the climate action plan.

Agenda Item 4 – Climate Action Plan – Highlight Actions

Chair Jung said that the commission is taking on three actions from Climate action plan to make them into a reality.

- Commissioner Burke said she, Katja, and Gretchen met their goal to create a city-wide network to discuss current policies about limiting storage and they reached out to SRP board, they talked with city staff and Sierra Club and SRP.
- We found out there are two different ways to approach SRP. We are going to approach the board first
- Fire station #7 has solar panels. We are looking into this site and doing research on solar with battery storage.
- We are going to meet with SRP management and ask for success with battery storage.
- We are looking at building selection, size of battery and safety issues.
- We will identify a building to start with. We will put a list of 5 to 10 buildings together.
- We will have a meeting with them and identify next steps.

Vice Chair Mores said they are looking at green infrastructure and green building code.

- Green infrastructure uses passive stormwater solutions; there are a couple of examples at Hardy and Rio Salado. The idea is to get council to adopt a green infrastructure policy.
- Commissioner Kane is knowledgeable about the green building code and LEED.
- These actions are under the category of resilience to extreme heat.
- Looking to continue in the coming months.
- Scottsdale green building program as an example.
- Talking through timeline for implementation.
- Working on a process to identify pilot projects for these pieces.

Chair Jung said we will talk about Transportation Demand Management next month. We are eager to speak with the Transportation Commission and the Neighborhood Advisory Commission.

Agenda Item 5 – Sustainability Awards

Sustainability Director Braden Kay said this is the third year of sustainability awards. We have had sustainability awards for businesses, residents and groups/nonprofits.

We have discussed how many categories. We could continue with the three categories and add another category. A commissioner recommended youth award. All agreed.

Braden said we will work with Neighborhood program manager and neighborhood advisory committee chair to get the word out and solicit invitations.

We can do outreach to former recipients, a press release and post card.

Agenda Item 6 – Housekeeping Items

Agenda Item 7 – Future Agenda Items

Future agenda items include the following:

- Awards on next 3 agendas
- Bus shelters
- Neighborhood outreach
- Community engagement for next CAP
- Water department talk about the Nature Conservancy
- GLOCULL

A motion was made to adjourn.
All approved 9 – 0

Motion: Commissioner Mores
Second: Commissioner Burke
Decision: Approved

Voted to Approve:

Kendon Jung (Chair)
Ryan Mores (Vice Chair)
Barbie Burke
Stephanie Milam-Edwards
Katja Brundiers
Serita Sulzman
Steven Russell
Sukki Jahnke
Gretchen Reinhardt

All present approved.

The meeting was adjourned at 6:06 pm.

Prepared by: Grace DelMonte Kelly
Reviewed by: Braden Kay

Development Bonus Program (DBP) for UCD & UCMP

Sustainability Commission

12-16-2019



Session / Discussion Overview

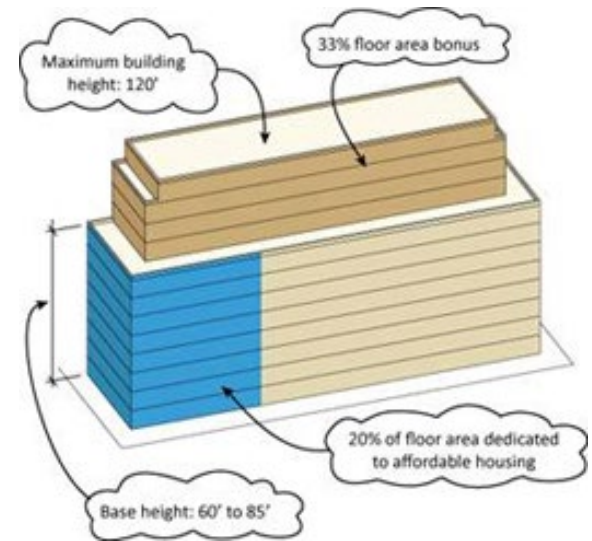


- I. Overview of Development Bonus Program(DBP) for UCD, UCMP
 - Affordable Housing
 - Public Gathering Space
 - Sustainability
 - Historic Preservation
- II. Bonus Elements List - On-site Improvements and In-Lieu Fees
- III. Bonus Program Structure
 - A. UCD Base and Bonus Heights, Tiers 1 + 2
 - B. Historic Preservation through TDR
- IV. Bonus Points Menu
- V. Examples and Pathways to Achieving Development Bonus



I. Development Bonus Program (DBP)

- A voluntary program that offers increases in development potential for developers in exchange for defined list of community benefits (Bonus Elements).
- DBP is being prepared concurrently with the UCD and UCMP adoption process.
- Well-established precedent in other Arizona jurisdictions, such as Phoenix and Scottsdale.
- “Incremental Project Value” derived from Bonus Rights can enable developers to provide community benefits.



I. Development Bonus Program, Approach



- Value of Contributions Required to Achieve Bonus Points equals one half “Incremental Project Value” between the Base and Bonus developments.

$$= \frac{1}{2} * (\text{Bonus Project Value minus Base Project Value})$$

- Structured to incentivize voluntary compliance
 - Based on negotiated community benefit agreements around the United States.
 - Community amenities provide intrinsic social and economic benefits to the City beyond the financial cost of the provision.

II. Bonus Elements – Onsite Improvements



I. Affordable and Workforce Housing

- Include dedicated percentage of onsite units for households earning 50%, 80% or 100% of Area Median Income (AMI).
- 2019 AMI for a family of four in Maricopa County is \$72,900
- Developer can choose to build units for any AMI level On-site. Higher percentage of On-site Units is required if higher AMI levels are chosen.



II. Bonus Elements – Onsite Improvements



II. Public Outdoor Gathering Space

- Dedicate minimum 0.2 acres or 10 percent of net site area to provide Public Outdoor Gathering Space.
- Eligible spaces based on Development Standards in UCD, such as Plazas and Urban Parks



II. Bonus Elements – Onsite Improvements



III. Sustainability Elements

- Qualified Expenditure List includes items such as Rainwater Harvesting, Solar Panels, and Shade Elements.
- Bonus Points based on cost of Total Qualified Expenditures as reviewed by City staff.



II. Bonus Elements – Offsite



In-Lieu Fee

- Can be paid to obtain development Bonus Points, but only *after* providing at least one Onsite Bonus Element.
- In-Lieu Fee is based on Incremental Project Value
 - Varies per UC Zone
 - Calculated on a per Bonus Point basis
- To encourage some On-site public benefits, projects cannot earn sufficient points from in-lieu fees alone to achieve Tier one bonus.



II. Bonus Elements - Historic Preservation



Bonus also available to Historic Eligible, Historic Registered, and National Registered properties:

- Bonus provided through Transfer of Development Rights (TDR) mechanism
- Requires property owner/developer to commit to one of three historic preservation treatments as approved by the HPC:
 - *Preservation*
 - *Restoration*
 - *Rehabilitation*

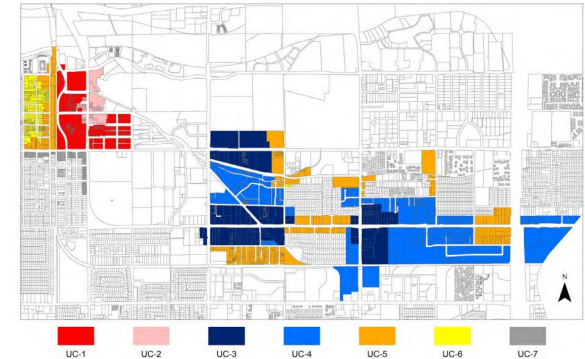


III. Bonus Program Structure



Structure of Development Bonus Program

- Provides a voluntary pathway to achieve additional development rights *beyond* UCD Base by acquiring Bonus Points.
- Provides a menu of bonus elements towards achieving UCMP height through PAD.
- To be eligible, applicant must first comply with UCD Base standards as described in the Code.
 - For a Tier 1 Bonus, applicant must acquire at least 60 Bonus Points.
 - For a Tier 2 Bonus, applicant must acquire at least 100 Bonus Points.

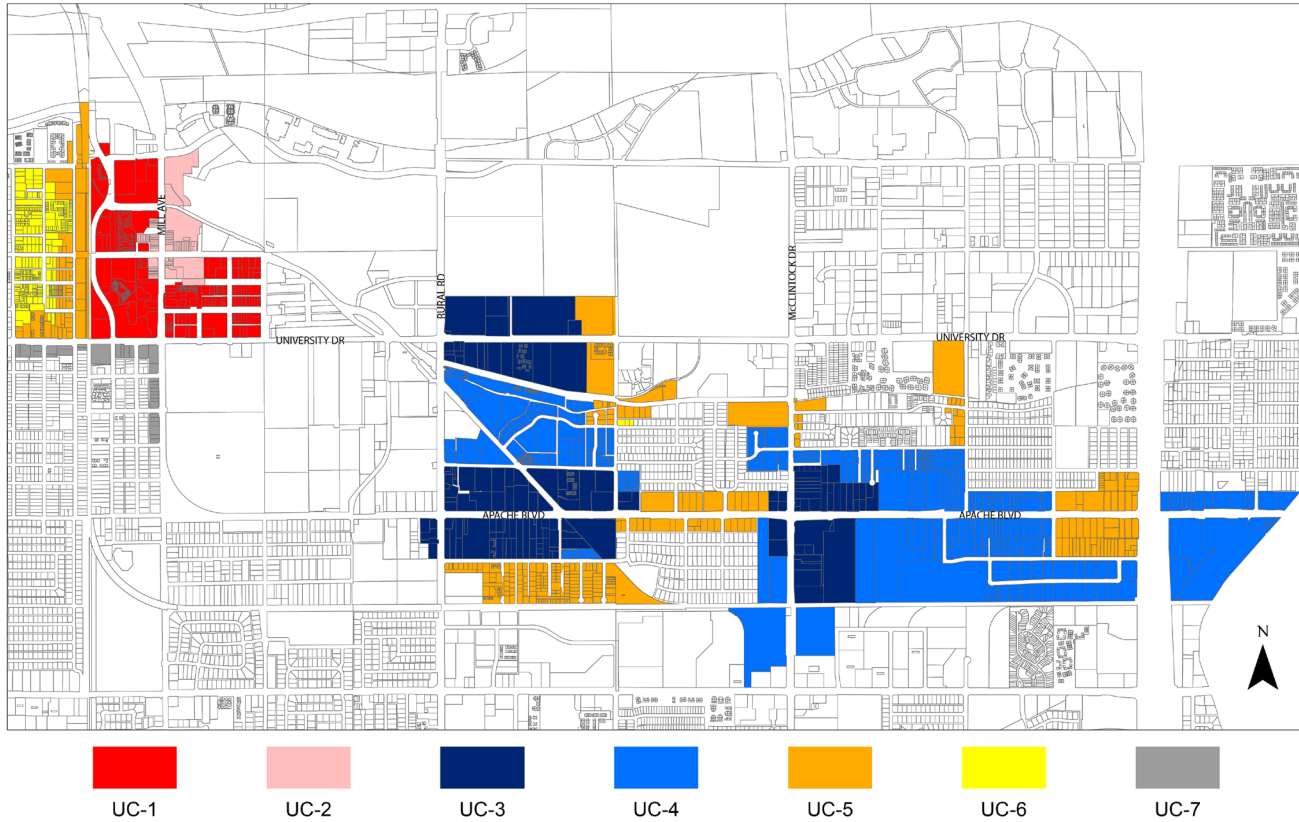


III. UCD Base and Bonus Development Potential



Urban Code District	UCD Base	UCD Bonus - Tier 1 <i>requires 60 points</i>	UCD Bonus - Tier 2 <i>requires 100 points</i>
UC-1	125 ft 65+ du/acre	140 ft 65+ du/acre	160 ft 65+ du/acre
UC-2	90 ft 65+ du/acre	110 ft 65+ du/acre	130 ft 65+ du/acre
UC-3	90 ft up to 65 du/acre	110 ft up to 65 du/acre	130 ft 65+ du/acre
UC-4	70 ft up to 45 du/acre	n/a	90 ft up to 65 du/acre
UC-5	55 ft up to 25 du/acre	n/a	60 ft up to 25 du/acre
UC-6	40 ft up to 20 du/acre	n/a	45 ft up to 20 du/acre

III. UCD Map





III. UCD Bonus - Tier 1

To achieve a Tier 1 Bonus, applicant needs to earn at least 60 Bonus Points.

- Tier 1 Bonus available in UCs 1, 2, and 3 only
- Increased Height but no increased Density
- Include at least one Onsite Improvement, + any In-Lieu Fee necessary to obtain a minimum 60 points.
- Administrative Review in UC-3
- Council Review: UC-1 and UC-2, following staff recommendation.

Urban Code District	UCD Base	UCD Bonus - Tier 1 <i>requires 60 points</i>
UC-1	125 ft 65+ du/acre	140 ft 65+ du/acre
UC-2	90 ft 65+ du/acre	110 ft 65+ du/acre
UC-3	90 ft up to 65 du/acre	110 ft up to 65 du/acre
UC-4	70 ft up to 45 du/acre	n/a
UC-5	55 ft up to 25 du/acre	n/a
UC-6	40 ft up to 20 du/acre	n/a

III. UCD Bonus - Tier 2



To achieve Tier 2 Bonus, applicant needs to earn at least 100 Bonus Points.

- Increased height in all UC Districts
- Increased density in some UC Districts
- Administrative review in UCs 3 through 6
- Council review in UCs 1 and 2, following staff recommendation

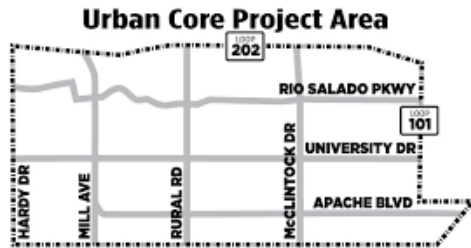
Urban Core District	UCD Base	Tier 2 Bonus
UC-1	125 ft 65+ du/acre	160 ft 65+ du/acre
UC-2	90 ft 65+ du/acre	130 ft 65+ du/acre
UC-3	90 ft up to 65 du/acre	130 ft 65+ du/acre
UC-4	70 ft up to 45 du/acre	90 ft up to 65 du/acre
UC-5	55 ft up to 25 du/acre	60 ft 25 to 45 du/acre
UC-6	40 ft up to 20 du/acre	45 ft up to 20 du/acre

III. Urban Core Master Plan (UCMP)

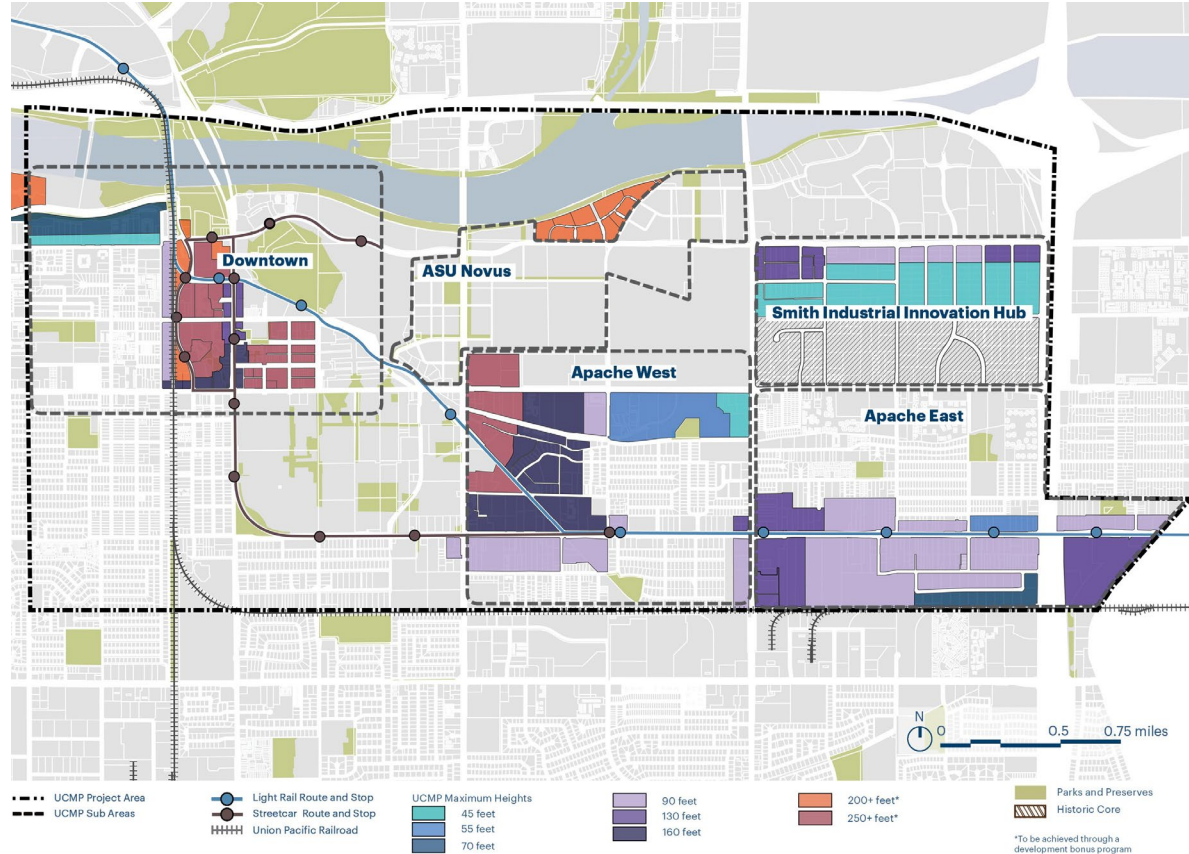


To be eligible for UCMP heights, applicant complies with Tier 2 eligibility, and additional requirements as established in UCMP documentation, including Council review. Utilize the bonus elements menu and approximate points.

Urban Code District	UCD Base	UCD Bonus- Tier 1 <i>requires 60 points</i>	UCD Bonus-Tier 2 <i>requires 100 points</i>	UCMP
UC-1	125 ft 65+ du/acre	140 ft 65+ du/acre	160 ft 65+ du/acre	250+ ft 65+ du/acre
UC-2	90 ft 65+ du/acre	110 ft 65+ du/acre	130 ft 65+ du/acre	130 ft 65+ du/acre
UC-3	90 ft up to 65 du/acre	110 ft up to 65 du/acre	130 ft 65+ du/acre	160-250+ ft 65+ du/acre
UC-4	70 ft up to 45 du/acre		90 ft up to 65 du/acre	130-250+ ft 65+ du/acre
UC-5	55 ft up to 25 du/acre		60 ft 25 to 45 du/acre	90 ft up to 65 du/acre
UC-6	40 ft up to 20 du/acre		45 ft up to 20 du/acre	none ft up to 25 du/acre
UCMP Only				250+ ft 65+ du/acre



III. Urban Core Master Plan (UCMP) Heights Map



IV. Onsite Bonus Menu– Affordable/Workforce Housing



<u>Affordability Level</u>	<u>UC-1 Residential</u>	<u>UC-1 Commercial</u>	<u>UC-3 Residential</u>	<u>UC-4 Residential</u>
Up to 50% AMI	4%	n/a	4%	4%
Up to 80% AMI	10%	n/a	10%	10%
<u>Up to 100% AMI</u>	<u>25%</u>	<u>n/a</u>	<u>25%</u>	<u>25%</u>
Bonus Points Earned	100		100	100

- Applicants can earn 100 Bonus Points by providing On-site Affordable Housing units as described in this table.
- Commercial projects are not eligible for On-site option.
- For On-site units, average number of bedrooms per unit must be equal to the market rate component of the project.

IV. Onsite Bonus Menu – Outdoor Gathering Space



<u>Public Outdoor Gathering Space</u>	<u>UC-1 Residential (a)</u>	<u>UC-1 Commercial</u>	<u>UC-3 Residential</u>	<u>UC-4 Residential</u>
Size by Net Lot Coverage	0.2 acres or 10%	0.2 acres or 10%	0.2 acres or 10%	0.2 acres or 10%
Bonus Points	12	12	18	18

- Applicants earn multiples of 12 or 18 Bonus Points by providing Public Outdoor Gathering Space.
- Must be 0.2 acres in size or 10 percent of net lot coverage, whichever is greater.

IV. Onsite Bonus Menu - Sustainability Expenditures



<u>Sustainability Elements</u>	<u>UC-1 Residential (a)</u>	<u>UC-1 Commercial</u>	<u>UC-3 Residential</u>	<u>UC-4 Residential</u>
<u>Qualified Expenditures</u>	\$250,000	\$250,000	\$250,000	\$250,000
Bonus Points	28	28	10	10

- Applicants can earn multiples of 10 or 28 Bonus Points by providing each \$250,000 in On-site Sustainability expenditures.
- Qualified expenditures and associated cost must be reviewed and approved by City Staff.



DBP – Sustainability Bonus Elements

Resilience Against Extreme Heat

Shade coverage on of east and west walls with biodiverse, native, and adapted plants. Average of the shade coverage at 10 am, noon, and 3 pm on summer solstice.

At least 50% of the site hardscape not covered shall be shaded by biodiverse, native and adapted plants.

Roof covered with any of the following products.

- Materials with a three-year aged SRI value of 35 min.
- Vegetative terrace or roofing to provide foliage

Architectural features to shade 75% of all west facing windows and 50% of all proposed glazed windows.

Min. 50% of the site hardscaped area to have permeable paving or grass.

Functional rainwater harvesting to irrigate min. 75 percent of landscape area.



DBP – Sustainability Bonus Elements

Greenhouse Gas Emissions Reduction

80% of all parking spaces are EV charger ready with 10% of spaces with EV chargers installed.

Solar panels to cover min. 20 % of the net site area, with a min. size of 2.5 kwh/panel.

Space and pathways for future installation of on-site renewable energy systems to provide min. 10 kBtu/ft² x gross roof area in sft.

Comply with any other IgCC 2018 or updated requirements, certified by a third party.

Energy savings min. 50% of the baseline energy consumption, certified by a third party

Provide for on-site microgrid (with control capability powered by distributed generators, batteries or renewable resources) investment for critical uses (30% of expected summer electrical load).

IV. Affordable Housing In-Lieu Fee Points



<u>Affordable Housing In-Lieu Fees</u>	<u>UC-1 Residential (a)</u>	<u>UC-1 Commercial</u>	<u>UC-3 Residential</u>	<u>UC-4 Residential</u>
<u>Per Bonus Point</u>	\$12,500	\$12,500	\$34,700	\$34,700
Bonus Points	1	1	1	1

- Applicants earn up to 42 Bonus Points towards a Tier 1 bonus or 70 Bonus Points towards a Tier 2 bonus by paying an Affordable Housing In-Lieu Fee
- In-lieu fees can only be used to make up a gap in bonus points needed after providing onsite improvements.

V. Pathways to Tier 1 Bonus



Example: Commercial

1.5-acre parcel in UC District 1

60 points to achieve Tier 1 Bonus

- ✓ Provide \$500,000 in qualified sustainability expenditures (56 points)
- ✓ 4 point gap obtained through In-Lieu Fee payment of \$12,500 per point.



V. Pathways to Tier 2 Bonus



Example: Multifamily

5-acre parcel UC District 3

100 points to achieve Tier 2 Bonus

- ✓ Provide 4% of Total Project Units affordable to households earning 50% AMI, *OR*
- ✓ Provide 10% of Total Project Units affordable to households earning 80% AMI, *OR*
- ✓ Provide 25% of Total Project Units affordable to households earning 100% AMI
- ✓ Average number of bedrooms per unit must be equal to the market rate component of the project

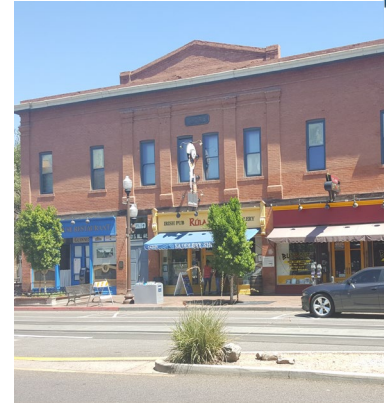


V. Voluntary TDR for Historic Preservation



Voluntary compliance with Historic Preservation can provide transferable Tier Bonus development rights (TDR) under UCD.

- Preservation property acquiring TDR is the *Sending Property*
- Tier 2 Bonus Rights (TDR) can be transferred to *Receiving Properties* in any UCD
- TDR buyers can achieve up to its UCMP maximum heights *without* providing On-site Community Benefits as required under DBP.

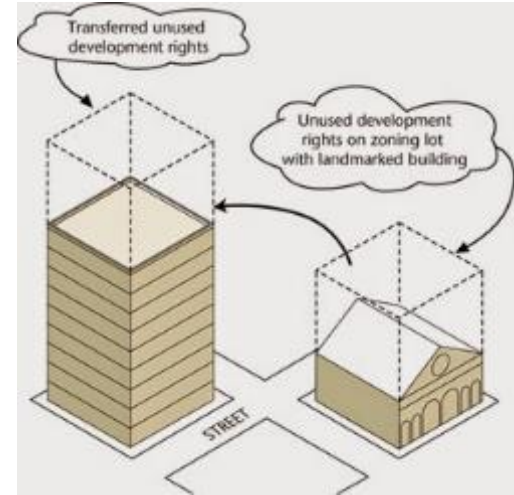


V. Voluntary TDR for Historic Preservation



How to calculate TDR:

UCD Bonus Potential (cubic ft)
minus
Existing Buildout (cubic ft)
Equals
Total permitted TDR



Cubic Feet of Bonus Development Potential (existing floorplate Sq. Ft. x Tier 2 bonus height)	-	Existing Building Cubic Feet (existing floorplate Sq. Ft. x existing building height)	=	Total permitted development transfer in cubic feet
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V. Pathways to TDR for Historic Preservation



Existing Historic Building
Height: 30 feet
Floorplate: 4,500 square feet
Volume: 135,000 cubic feet
(Allowable TDR)

UCD Bonus Development Potential

Height: 130 feet
Floorplate: 4,500 square feet
Bonus Volume: 585,000 cubic feet

Permitted TDR

Height: 100 feet
Volume: 450,000 cubic feet

- 30,000 sf at 15 feet per story
- 37,500 sf at 12 feet per story



III. Process to Achieve Bonus

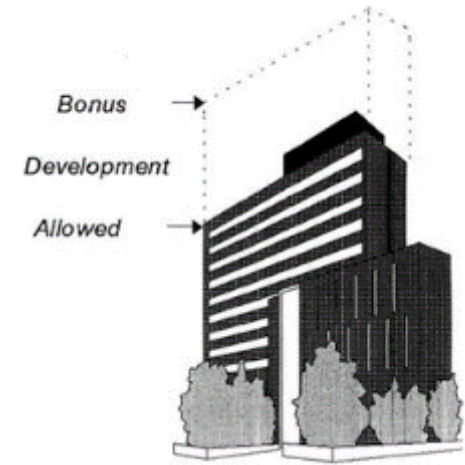
Bonus Achieved/Bonus Elements	UCD Base Height and Density	UCD Base Height and Density + Bonus Height and Density (Tier 1)	UCD Base Height and Density + Bonus Height and Density (Tier 2+)	UCMP Heights and Densities	Remarks
Affordable/Workforce Housing	By opting in and meeting base UCD requirements	Unavailable. Participation results in Tier 2 bonus.	Onsite Affordable Housing achieves Tier 2 Bonus	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	Tier 2 bonus provided for onsite units without Council Review.
Sustainability	By opting in and meeting base UCD requirements for sustainability	Meet IgCC-related base requirements, spend at least \$250K on qualified expenditures (or multiples of \$250K), and provide some other combination of bonus elements as needed to achieve 60 points	Meet Tier 1 requirements, provide additional combination of bonus elements to achieve 100 points, and apply for maximum heights through Development Agreement Process	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	
Public Gathering Space	By opting in and meeting base UCD requirements for public space	Provide minimum amount of onsite public space beyond base requirements and provide some other combination of bonus elements to achieve 60 points	Meet Tier 1 requirements, provide additional combination of bonus elements to achieve 100 points, and apply for maximum heights through Development Agreement Process	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	
Historic Preservation	By opting in and meeting base UCD requirements for HP	Unavailable. Participation results in Tier 2 bonus.	Opt into UCD, go through Historic Preservation Review and Development Agreement, provide historic/façade easement. Obtain TDR equal to Tier 2 bonus height times floorplate (sq. ft.) less existing building.	Receiving properties can use TDR to achieve UCMP heights if it also opts-in to the available UCD and meets all applicable design guidelines.	Purchasers/Users of TDR cannot exceed maximum heights or densities within each UCD.



VI. Summary

Goals and Mechanisms of Development Bonus Program

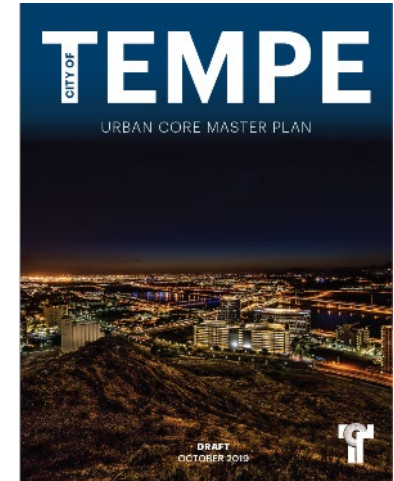
- Promote voluntary participation through creation of Incremental Project Value
- Create certainty in development environment through specified processes
- Reduce the need for discretionary PAD approvals and associated staff time





DBP Adoption Process

- DRC Study Session: December 10, 2019
- Sustainability Commission: Dec 16, 2019
- HPC: January 8, 2020
- Transportation Commission: January 14, 2019
- DRC: January 28, 2020
- Council Work Study Session: January 30, 2020
- Council First Hearing on February 13, 2020
(Continued Date for UCMP, UCD and GPA 2nd Hearing)



ZONING AND DEVELOPMENT CODE
CITY OF TEMPE

URBAN CODE DISTRICT

Questions/Comments



BAE Urban Economics
City of Tempe



II. AZ Case Studies: Precedent for Program

- Multiple cities in Arizona currently administer development bonus programs.
 - Phoenix Sustainability Program
 - Scottsdale Bonus Program, includes TDR program
- Offer additional development potential in exchange for community benefits
- Where applicable, DBP is modeled in part on these programs.

II. AZ Case Studies: City of Scottsdale



- **Purpose:** Allow development flexibility to assist in achieving more development of infrastructure and public amenities
- **Policy Structure:** Allows for height, density, and/or floor area increase for public and cultural improvements/benefits:
 - Cultural Improvements (Public gathering spaces or art)
 - Environmental Enhancements (Compliance with City of Scottsdale's Green Construction Code)
 - Connectivity infrastructure (Street connections)



II. AZ Case Studies: City of Phoenix

- **Purpose:** Provide projects that exhibit environmentally friendly design and performance elements with additional entitlements
- **Policy Structure:** May approve modifications to requirements of zoning for building height, density, lot coverage, and parking for sustainable development:
 - Mobility enhancement (pedestrian and cyclist amenities)
 - Renewable energy (solar, wind, or any similar source)
 - Water efficiency and landscaping enhancements (reuse of non-potable water)

DRAFT DEVELOPMENT BONUS PROGRAM URBAN CODE DISTRICT AND URBAN CORE MASTER PLAN

Memorandum

To: Development Review Commission, City of Tempe, AZ
From: Aaron Barker and Sherry Okun-Rudnak, BAE Urban Economics
Date: December 10, 2019
Re: **DRAFT Urban Code District Voluntary Development Bonus Program**

This Memorandum (memo) provides an overview of the City of Tempe Urban Code District (UCD) Voluntary Development Bonus Program (DBP) for Urban Code (UC) Zones. Several municipalities in Arizona use voluntary DBPs to encourage the incorporation of community benefits such as sustainable development, affordable/workforce housing, and park space in developments. Under a DBP, cities provide developers the opportunity to earn additional project value in exchange for developer contributions that result in community benefits. If the value of these contributions is less than the additional value created by the bonus for the development, the developer will likely voluntarily participate in the program.

The City of Tempe has engaged BAE Urban Economics (BAE) to evaluate and assist in the development of a voluntary DBP that incentivizes developers to provide onsite, off-site or in-lieu funds towards community benefits.

This memo provides a draft of the structure of the DBP, requirements for participating in the program, the participation process, and the substance of an associated Transfer of Development Rights (TDR) program applicable only for Historic Preservation. This program is being prepared concurrently with the adoption process of the Urban Code District (UCD) and Urban Core Master Plan (UCMP) efforts to encourage developer participation when UCD and UCMP are implemented.

1. Structure of the DBP Program

The DBP is a voluntary program available within the UCD that would allow developers to achieve additional building heights and densities in exchange for a defined set of community benefits (Bonus Elements), including affordable and workforce housing, sustainability elements, historic preservation assurance (when applicable), and/or outdoor public gathering space and connections. The program requires developers to provide at least one category of community benefits or connectivity onsite. Developers can then use an Affordable Housing In-Lieu Fee to make up any gap required to achieve the minimum designated points required to

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510.547.9380

Sacramento

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Davis, CA 95616
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Los Angeles

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Los Angeles, CA 90013
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Washington DC

1140 3rd St. NE, 2nd Floor
Washington, DC 20002
202.588.8945

New York City

234 5th Ave.
New York, NY 10001
212.683.4486

obtain a development bonus.

Program Approach

Success of the DBP depends on voluntary developer participation. To incentivize developers to participate, the program is structured to require Bonus Element contributions equal only to approximately half the additional project value that a developer would earn from building to higher maximum heights and/or densities (Incremental Project Value)¹.

Developers are often willing to share additional project value with payments towards community benefits, but need incentives in the form of additional profits to undertake any processes or requirements outside the normal courses of business. Developers are unlikely to make ongoing commitments to affordable housing, historic preservation – or to a lesser extent public gathering space and sustainability improvements – without realizing greater financial gains than under base development allowances.

In its experience negotiating developer community benefits agreements and creating special assessment districts across the United States, BAE notes that developers are most likely to participate in programs where the share in Incremental Project Value is at most evenly split with the cost of providing community benefits. Thus, as a general guideline, this program uses the following calculation to determine the value of Bonus Elements that a developer would be willing to contribute in exchange for additional development rights:

$$\begin{aligned} \text{Value of contribution} &= 0.5 \times (\text{Bonus Project Value minus Base Project Value}), \text{ or} \\ \text{Value of contribution} &= 0.5 \times (\text{Incremental Project Value}) \end{aligned}$$

Although the City is not extracting 100 percent of the developer's Incremental Project Value, it is achieving benefits that outweigh the costs to provide the bonus elements. Sustainability elements in a development contribute to a healthier urban environment and better air quality; outdoor gathering spaces increase mobility and vibrancy and contribute to placemaking efforts; historic preservation provides for the ongoing conservation of local neighborhood and/or cultural character; and affordable housing provides economic opportunities to members of vulnerable populations, increases educational outcomes, and enhances economic development potential by making areas more competitive. All these public benefits are among the priorities of the City.

Bonus Tiers

The DBP offers two tiers of potential development bonus options: Tier 1 and Tier 2. Tiers of bonus development are achieved through the accumulation of Bonus Element Points (points). A developer may obtain a Tier 1 Bonus through the accumulation of minimum 60 points, while

¹ Incremental Project Value equals the value of a project under bonus development less the value of the project under a base development scenario.

a Tier 2 Bonus is achieved through the accumulation of a minimum 100 points. As Table 1 shows, Tier 1 Bonus building heights represent about half of the allowable Tier 2 Bonus heights, and are only available in UCs 1 through 3. Because the City would like to encourage all developers to provide enough Bonus Elements to achieve Tier 2 bonus levels, points are weighted to promote Tier 2 Bonus participation. In addition, base and bonus development heights and densities are structured to minimize changes in construction types, which can have an adverse impact on profitability for developers.

Developers wishing to apply for the UCMP heights shown in Table 1 would first be required to comply with Tier 2 eligibility requirements as a prerequisite.

A more detailed roadmap towards achieving these UCMP heights is currently in process, but the provision of additional Community Benefits beyond those in described in the UCD would still be commensurate with the ultimate height being sought by the applicant.

Table 1: DBP Base and Bonus Development

Urban Code District	UCD Base	UCD Bonus- Tier 1 <i>requires 60 points</i>	UCD Bonus-Tier 2 <i>requires 100 points</i>	UCMP
UC-1	125 ft 65+ du/acre	140 ft 65+ du/acre	160 ft 65+ du/acre	250+ ft 65+ du/acre
UC-2	90 ft 65+ du/acre	110 ft 65+ du/acre	130 ft 65+ du/acre	130 ft 65+ du/acre
UC-3	90 ft up to 65 du/acre	110 ft up to 65 du/acre	130 ft 65+ du/acre	160-250+ ft 65+ du/acre
UC-4	70 ft up to 45 du/acre		90 ft up to 65 du/acre	130-250+ ft 65+ du/acre
UC-5	55 ft up to 25 du/acre		60 ft 25 to 45 du/acre	90 ft up to 65 du/acre
UC-6	40 ft up to 20 du/acre		45 ft up to 20 du/acre	none ft up to 25 du/acre
UCMP Only				250+ ft 65+ du/acre

Entitlement Review Benefits

The DBP provides more than just additional development potential. Projects participating in the DBP at the Tier 1 level will receive Administrative Review in UC-3 Zone. Developments in UCs 3-6 can also participate in Tier 2 through Administrative Review. All other participation requires Council Review. The administrative review is for the calculations of heights and densities available according to the bonus points earned. All projects are required to go through a Development Plan Review (DPR) process to get approval for the design and site plan.

Even for the developments requiring Council Review, staff will recommend approval for those projects which meet the DBP and UCD requirements for heights and densities. This process is designed to provide certainty to the development community, and in most cases, reduce the

need for Council project approvals and associated staff time.

2. Bonus Elements Menu and Points

The Bonus Elements menu provides flexibility to the development community in participating in the Bonus Program. A developer can participate in the DBP through the inclusion of one or more onsite Bonus Elements combined, if necessary, with an In-Lieu Fee payment. Points are assigned to each element to make participation easier for the developer who can choose the most suitable combination to earn bonus points for the development.

Table 2: Bonus Elements and Points by Zone

Bonus Elements and Points	Bonus Elements and Points by Zone							
	UC-1		UC-2		UC-3		UC-4	
	Public Benefit	Pts	Public Benefit	Pts	Public Benefit	Pts	Public Benefit	Pts
Affordable Housing, On-Site								
Up to 50% AMI	4%	100	4%	100	4%	100	4%	100
51% to 80% AMI	10%	100	10%	100	10%	100	10%	100
81% to 100% AMI	25%	100	25%	100	25%	100	25%	100
101% to 120% AMI	N/A	100	N/A	100	N/A	100	N/A	100
Housing In-Lieu Fee, Fee per Point	\$12,500	1	\$12,500	1	\$34,700	1	\$34,700	1
Public Outdoor Gathering Space All Zones provide the greater of 0.2 acres or 10% of lot coverage		12		12		18		18
Sustainability Elements, Points per \$250,000 in qualified expenditures		28		28		10		10

On-Site Affordable Housing

Providing on-site affordable housing units automatically results in the achievement of a Tier 2 Bonus level. Although the City's Housing Services Division will provide ongoing monitoring for affordable housing units, the inclusion of rent or deed-restricted units can be generally outside of a developer's normal course of operations. The City recognizes that providing affordable and workforce housing on site should provide 100 points to the developer without the need for the inclusion of other Bonus Elements. Table 2 shows a menu of options to provide onsite affordable housing, with varying percentages of affordable housing units at different affordability levels. The bonus points have been calibrated to be roughly equivalent to the developer's foregone revenue amounts, with requirements for a larger percentage of units to be provided at higher affordability levels to obtain the same amount of bonus points. To comply with this option, a developer would choose one of the percentages of housing units provided and corresponding affordability levels shown in the table and provide those units

onsite in the same size, mix, and configuration as the overall project. In other words, the units provided as affordable units will have the same number of average bedrooms as the average number of bedrooms in the development. For example, a residential developer in UC-3 would provide either 4 percent of Total Project Units to households earning 50 percent of Area Median Income (AMI)², or 10 percent units to households earning 80 percent of AMI to achieve 100 points, but not both.

Onsite affordable housing benefits are not available to commercial uses or office development. These uses are not appropriate for affordable units and therefore cannot provide this Bonus Element to accumulate DBP points. Commercial project uses can provide other onsite benefits to earn points, including making up gaps in points through affordable housing In-Lieu Fee payments.

On-Site Public Outdoor Gathering Space

Under the DBP, an applicant that dedicates the greater of 0.2 acres or 10 percent of its net site area to public outdoor gathering space is eligible to earn bonus element points for public gathering space. Each additional increment of the net site coverage is eligible to earn additional points. Points can be earned in multiples of the base rate, and *may* be able to be scaled, depending on ultimate program design. For example, a project in UC-3 can earn 18 points by providing 10 percent of its site for public gathering space or 36 points by providing 20 percent of its site area.

Eligible public gathering spaces are based on definitions and development standards listed in the UCD. Selected standards for outdoor gathering spaces are provided below:

1. Incorporates a minimum of three of the following pedestrian scale features:
 - Lighted bollards
 - Movable tables and chairs
 - Benches or swings
 - Seat walls and / or raised landscape planters
 - Shade trees
 - Pots or hanging baskets filled with seasons plant material
 - Informal kiosks
 - Stage, amphitheater, or other performance space,
 - Sculptures, or other public art features
 - Water features

2. Integrates landscaping and/or structures to provide shading for the

² The AMI for the Phoenix-Mesa-Scottsdale MSA in 2019 is \$72,900 (<https://www.huduser.gov/portal/datasets/il/il2019/2019summary.odn>).

outdoor gathering spaces.

3. Provides direct access to sidewalks and pedestrian walkways.

On-Site Sustainability Elements

Under the DBP, a developer will earn points for every \$250,000 in spending on qualified (from the list below) sustainability expenditures. Points for sustainability can be obtained in multiples of the minimum points awarded for each \$250,000 in qualified expenditures but cannot be gradually scaled.

The following elements qualify for inclusion in the sustainability bonus element.

A. Resilience to Extreme Heat

1. Provide shade coverage on at least 30% of the east and west above-grade walls and retaining walls from grade level to a height of 20ft or the wall height. Shade coverage shall be calculated at 10 am for the east walls, and 3 pm for the west walls on summer solstice. Any vegetation providing shading shall consist of biodiverse plantings of native plants and adapted plants.
2. At least 50% of the site hardscape that is not covered by solar energy systems shall be shaded by biodiverse planting of native and adapted plants. The shade coverage on hardscape shall be the arithmetic mean of the shade coverage at 10 am, noon, and 3 pm on summer solstice.
3. A minimum of 75% of the roof shall be covered with any of the following products.
 - a. Roof coverage materials with a three-year aged SRI value of 35.
 - b. Vegetative terrace or roofing system that consist of plants that are suitable for the microclimate, and which provide foliage to at least 50% of the designated area for vegetation.

Note: Photovoltaic solar installation shall be excluded from the required roof area calculations.

4. Site development incorporates minimum 3 ft. deep window overhang(s) or similar architectural features to shade 75% of all west facing windows and 50% of all proposed glazed windows. The shade coverage shall be the arithmetic mean of the shade coverage at 10 am, noon, and 3 pm on summer solstice.
5. Provide on at least 50% of the site hardscaped area, permeable paving, structured soil/grass, open grid paving or similar material which allows for water to permeate the surface to promote natural drainage and filtration.

6. Site development incorporates functional rainwater harvesting that irrigates at least 75 percent of the total landscape area.

B. Greenhouse Gas Emissions Reduction

1. Ensure 80% of all parking spaces are EV charger ready (wiring) and with 10% of spaces with EV chargers installed.
2. Site development at grade and roof incorporates solar panels which cover 20 percent of the net site area, with a minimum size of 2.5 kwh for each panel.
3. Allocate space and pathways for future installation of on-site renewable energy systems including solar and battery, which provide not less than 10 kBtu/ft² multiplied by the gross roof area in square feet.
4. Any other sustainability feature (s) from the International Green Construction Code (IgCC) 2018 or updated IgCC codes adopted by City of Tempe to enhance the sustainability of the development, to be reviewed and accepted by the Community Development Director or designee.
5. Achieve Deep Energy (conservation) levels that are at least 50% of the baseline energy consumption in the project, and get it certified by a third party.
6. Provide for on-site microgrid (local energy grid with control capability powered by distributed generators, batteries or renewable resources) investment for critical uses (30% of expected summer electrical load).

Affordable Housing In-Lieu Fee Payment

To achieve additional bonus points even after providing onsite community benefits, a developer may pay an affordable housing in-lieu fee to make up the difference to reach the Tier 1 or Tier 2 Bonus levels. In-lieu fee payment can only yield bonus points which have defined maximum limits. Developers can only earn a maximum of 42 points from in-lieu fees towards achieving a Tier 1 Bonus, or a maximum of 70 points towards achieving a Tier 2 Bonus. In-lieu fee amounts per point vary by UC zone, and are based on the preferential value given to the Tier 2 Bonus development. The amounts are paid on a per bonus point basis. For example, if a developer needs thirty points to achieve the required total of 100 bonus points, that developer would pay 30 times the amount of the in-lieu fee per point for its associated UC zone. Table 2 shows the in-lieu fee amount for each bonus point by UC zone.

Historic Preservation

The DBP can also be accessed through historic preservation on properties that are Historic Eligible, Historic Registered, and National Registered properties. Because many of the parcels containing historic preservation properties do not have enough site space to accommodate

additional development, the DBP provides developers an opportunity to earn development bonus points through a Transfer of Development Rights (TDR) program. To receive the TDR credits, the owner of historic property would need to provide the City with a perpetual historic and façade conservation easement, sign a Development Agreement with the City, and commit to one of the following three historic preservation treatments acceptable to the Historic Preservation Commission (HPC):

- **Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.
- **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- **Restoration** depicts a property at a particular period of time in its history, while removing evidence of other periods.

Although the Secretary of Interior standards includes Reconstruction as a preservation treatment, Reconstruction of historic properties is not eligible to earn bonus points under the DBP.

Like on-site affordable housing, historic preservation alone automatically can result in a Tier 2 bonus level and does not require additional on- or off-site community benefits to enjoy the benefits of Tier 2 bonus.

The next section provides a description of Transfer of Development Rights process for historic preservation.

Transfer of Development Rights (TDR) Program

Tempe enjoys a rich multi-cultural heritage evident through its historic buildings, neighborhoods and structures. Less visible, but equally important, are the archaeological resources of Tempe's past. Protection and enhancement of Tempe's heritage is critical to preserving the unique identity of our community. The blending of the past with the present enriches our city and all of its citizens. However, the tools available for historic preservation are limited and the development of a regulatory structure that favors preservation is critical to protecting Tempe past, both historic or prehistoric. The goal of the Transferable Development Rights (TDR) regulations is to allow for the preservation/protection of significant historic properties and archaeological sites while allowing for additional growth in the appropriate locations.

As part of the DBP, the City of Tempe is also creating a TDR program to promote voluntary historic preservation. TDR allows owners of historic eligible, local historic register, and national historic register properties to obtain Incremental Project Value in exchange for voluntarily committing to the preservation of Tempe's historic properties. The City can protect

historic resources and establish a process and procedure by which a landowner can transfer the development rights of a certain property with historic structures or historic significance and apply the rights to another property that is eligible to receive additional development rights. Projects eligible to participate and that voluntarily participate in the DBP via Historic Preservation will receive bonus development rights in the form of TDR. TDR transfers with the sending property until sold to a receiving property, where the rights will reside once purchased.

Sending Properties

Properties that participate in the UCD and meet DBP Historic Preservation eligibility requirements (i.e., have structures that are listed on the National Register of Historic Places (NR), Tempe Historic Property Register (THPR), Tempe Historic Eligible (HE), and structures which are fifty (50) years or older and upon review are deemed eligible for the National Register of Historic Places) can become sending properties. In addition to opting into the UCD, the property owner must also undertake the following:

- Provide a permanent historic conservation easement on the property to the City
- Preserve the historic property to Historic Preservation Commission (HPC) standards
- Sign a Development Agreement with the City

Prior to exercising the rights of the TDR, the sending property must grant an historic conservation easement to the City and sign the Development Agreement. Once the TDR is approved, the development rights of the sending properties will be severed from the property.

Receiving Properties

Any property within UCs 1-5 that is eligible to receive a Tier 1 or Tier 2 Bonus — and has opted-in to the UCD and met the baseline requirements - is eligible to purchase and receive TDR, including the sending property if it is large enough to accommodate both the historic building and new development. A Receiving Property does not need to acquire Tier 1 or Tier 2 Bonus Points to build to the development potential obtained through TDR. However, under no circumstances can a receiving property exceed its specific UCMP heights and densities. A receiving property can use Administrative Review to obtain its bonus heights and densities pursuant to the process in its Zone.

Procedure for Transfer

The procedure for the TDR shall be in accordance with the TDR ordinance which will describe how a sending and receiving properties will be required to document the transfer.

TDR Calculation

The TDR on a property will be calculated as follows:

1. Determine the existing height and floorplate of the existing building in the sending property to calculate existing volume (in cubic feet) of development.
2. Determine the development potential (cubic feet) in the sending property under the corresponding Tier 2 Bonus using the bonus height times the square footage of the existing floorplate.
3. Subtract the development potential cubic feet from the existing building cubic feet. This is the amount of TDR available to be sent to a receiving property.

The calculation established above can be summarized in through the following formula:

Cubic Feet of Bonus Development Potential (existing floorplate Sq. Ft. x Tier 2 bonus height)	-	Existing Building Cubic Feet (existing floorplate Sq. Ft. x existing building height)	=	Total permitted development transfer in cubic feet
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3. Examples of Achieving Bonus Points

This section provides some examples of how a developer could voluntarily participate in the DBP to achieve Tier 2 and Tier 1 Bonus levels.

Tier 2 Bonus: UC-3 Multifamily

Assume a Development Bonus Potential on a Site: A maximum of 130 ft and 65+ du/acre (100 points required)

Example parcel: 5 acres

- Base Development: 317,260 Square Feet, or 325 units
- Bonus Development: 383,500 Square Feet
- Bonus Increment: 66,240 Square Feet, or 100 units
- Potential Value Capture: \$2.9 million

Path to Tier 2 Bonus

- Provide 20% of net lot area as outdoor public gathering space (36 points)
- Provide \$1 million in qualified sustainability expenditures (40 points)
- Total onsite element points: 76
- Total Bonus Points Required: 100
- Gap: 24 points obtained through in-lieu fee payment of \$34,700 per bonus point.

Table 3: Tier 2 Bonus, UC-3 Multifamily

	UC-3 Multifamily		Points
	Base	Tier 2 Bonus	
Parcel Size (acres)	5.0	5.0	
Project Size (sf)	317,260	383,501	
Profits	\$7,364,349	\$13,193,200	
Potential Value Capture		\$2,914,425	
Required Points		100	
Open Space		\$871,200	36
<u>Sustainability Element Expenditures</u>		<u>\$1,000,000</u>	<u>40</u>
<i>Subtotal</i>		<i>\$1,871,200</i>	76
<u>Gap Required Through Affordable Housing In-Lieu</u>		<u>\$832,800</u>	<u>24</u>
Total		\$2,704,000	100

Source: BAE; 2019.

Tier 1: UC-1 Commercial Office

Assume a Development Bonus Potential on a Site: 140 ft (60 points required)

Example parcel: 1.5 acres

- Base Development: 170,000 Square Feet
- Bonus Development: 200,000 Square Feet
- Bonus Increment: 30,000 Square Feet
- Potential Value Capture: \$527,000

Path to Tier 1 Bonus

- Provide \$500,000 in qualified sustainability expenditures (56 points)
- Total onsite element points: 56
- Amount Required: 60
- Gap: 4 points obtained through in-lieu fee payment of \$12,500 per bonus point.

Table 4: Tier 1 Bonus, UC-1 Commercial Office

	UC-1 Commercial		Points
	Base	Tier 1 Bonus	
Parcel Size (acres)	1.5	1.5	
Project Size (sf)	160,000	190,000	
Profits	\$3,569,374	\$5,326,185	
Potential Value Capture		\$878,405	
Value Capture @ 60%		\$527,043	
Open Space		\$0	0
<u>Sustainability Element Expenditures</u>		<u>\$500,000</u>	<u>56</u>
<i>Subtotal</i>		<i>\$500,000</i>	<i>56</i>
Gap Required Through Affordable Housing In-Lieu		<u>\$50,000</u>	4
Total		\$550,000	60

Source: BAE; 2019.

Tier 2: UC-2 Historic Preservation through TDR

Development Bonus Potential: 140 ft

Existing Building

- Height: 30 Feet
- Floorplate: 4,500 Square Feet
- Total Existing Volume: 135,000 Cubic Feet (cft)

Bonus Development Potential

- Height: 130 Feet
- Floorplate: 4,500 Square Feet
- Total Bonus Volume: 585,000 Cubic Feet (cft)

TDR

- Height: 100 Feet (130'-30'), if the floor plate at the sending and receiving properties are the same
- Volume: 450,000 Cubic Feet (585,000 cft – 135,000 cft)
 - 30,000 Square Feet at an average 15 ft ceiling height
 - 37,500 Square Feet at an average 12 ft ceiling height

Table on the next page shows Pathways to Achieve Bonus Heights and Densities.

bae urban economics

Pathways to Achieve Bonus Heights and Densities

Bonus Achieved/Bonus Elements	UCD Base Height and Density	UCD Base Height and Density + Bonus Height and Density (Tier 1)	UCD Base Height and Density + Bonus Height and Density (Tier 2+)	UCMP Heights and Densities	Remarks
Affordable/Workforce Housing	By opting in and meeting base UCD requirements	Unavailable. Participation results in Tier 2 bonus.	Onsite Affordable Housing achieves Tier 2 Bonus	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	Tier 2 bonus provided for onsite units available without Council Review.
Sustainability	By opting in and meeting base UCD requirements for sustainability	Meet IgCC-related base requirements, spend at least \$250K on qualified expenditures (or multiples of \$250K), and provide some other combination of bonus elements as needed to achieve 60 points	Meet Tier 1 requirements, provide additional combination of bonus elements to achieve 100 points, and apply for maximum heights through Development Agreement Process	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	
Public Gathering Space	By opting in and meeting base UCD requirements for public space	Provide minimum amount of onsite public space beyond base requirements and provide some other combination of bonus elements to achieve 60 points	Meet Tier 1 requirements, provide additional combination of bonus elements to achieve 100 points, and apply for maximum heights through Development Agreement Process	Opt-in to the available UCD, provide bonus, and meet all applicable design guidelines. Apply for UCMP heights through a PAD or Development Agreement process.	
Historic Preservation	By opting in and meeting base UCD requirements for HP	Unavailable. Participation results in Tier 2 bonus.	Opt into UCD, go through Historic Preservation Review and Development Agreement, provide historic/façade easement. Obtain TDR equal to Tier 2 bonus height times floorplate (sq. ft.) less existing building.	Receiving properties can use TDR to achieve UCMP heights if it also opts-in to the available UCD and meets all applicable design guidelines.	Purchasers/Users of TDR cannot exceed maximum heights or densities within each UCD.

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Designing Tempe's New Transit Shelters

Sustainability Commission

December 16, 2019

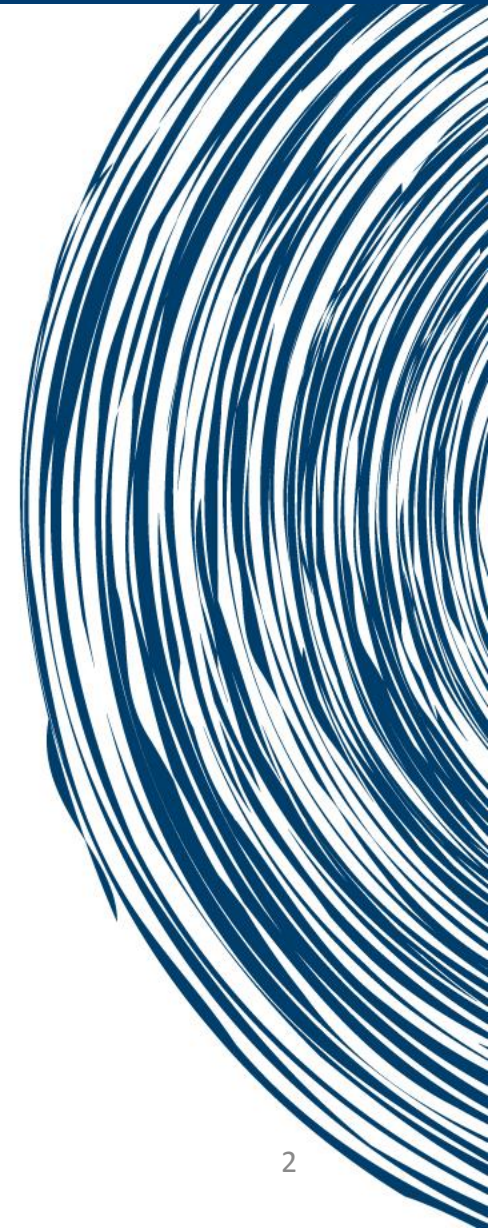




Quality of Life

3.26: Achieve a multimodal transportation system (20-minute city) where residents can walk, bicycle, or use public transit to meet all basic daily, non-work needs.

3.29: Achieve a rating of “Very Satisfied” or “Satisfied” with the “Overall Satisfaction with Transit System in Tempe” greater than or equal to 80% as measured by the City of Tempe Transit Survey.



Transit Shelter Design Steering Committee



Purpose: to provide their experience & knowledge about Tempe's transit system & shelters, as members who:



- have specific skills in design, art, materials research;
- use the shelters, ride or drive the bus, or manage bus systems;
- participate on related city commissions;
- are residents, local businesses, students & property owners;
- represent ASU Transit, Valley Metro, First Transit

Value: to assist in developing & finalizing the best solutions for Tempe's new transit shelters

Transit Shelter Design Project



What makes a good transit shelter?

- easy to fabricate & maintain?
- convenient?
- comfortable?
- safe?
- functional?
- attractive?
- iconic?



- does it consider the local environment?
- are the materials appropriate?

Transit shelter design goals



maximize shade!

architecturally unique to the City of Tempe

sustainability focused

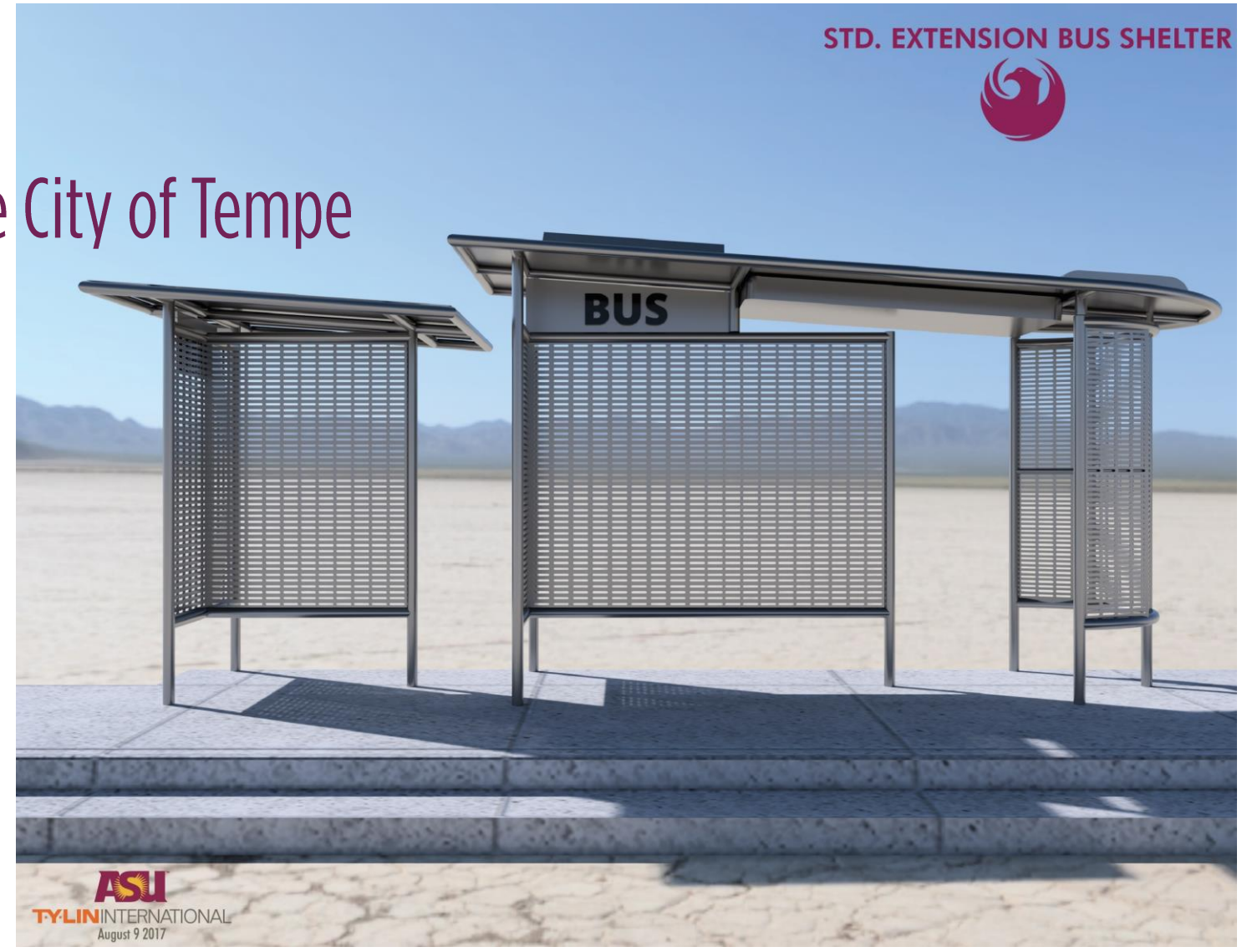
good investment for long life
comfortable and safe

flexible modular design
for variety of sites

cool

ADA

easy to install
& maintain



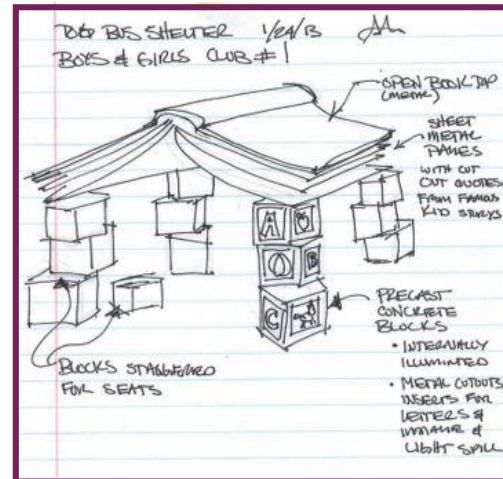
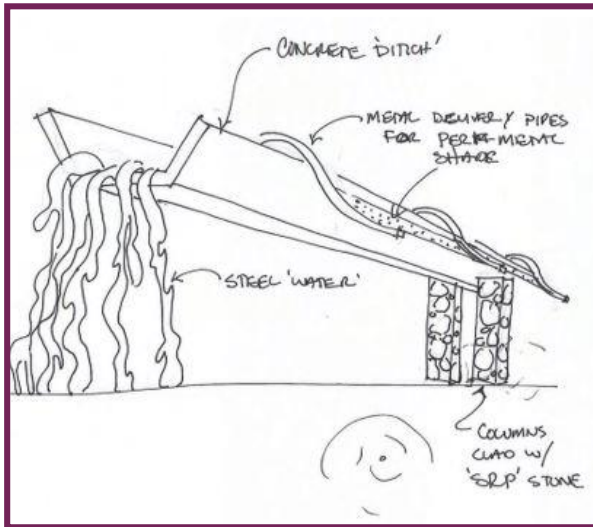
Process – Concept Stage



- 9 initial concept sketches
- 3 recommended alternatives
- Time-of-day shade analysis
- 1 preferred concept



TY·LIN INTERNATIONAL



Transit Shelter Prioritization



Households with no vehicles 9.4%
Use transit as means to work 5%
Households living below poverty 21%
**Population density:
people per square mile 4,050**

A Site Priority Matrix will be used to identify which transit stops merit further study.



Ridership 9 million+

Tempe Transit System



- **Multi-Modal**

- Light Rail
- 16 local bus routes
- 3 commuter express routes
- 7 neighborhood circulator routes (Orbit + FLASH)
- Tempe Streetcar (May, 2021)
- Paratransit and RideChoice

- **Dedicated transit sales tax**



- **9 Million+** annual boardings
- 5.1 million annual miles of transit service
- **806 bus stops**, 308 have shelters
- 124 buses
- Partnership with Valley Metro for transit service operations



Tempe Key Transit Stop Locations



- **high ridership locations**
 1. Tempe Transportation Center
 2. SB Priest at Washington
 3. Tempe Marketplace
 4. WB Baseline at Priest
 5. SB McClintock at Southern
 6. University/Rural Transit Center
 7. NB McClintock at Southern
 8. NB McClintock at Apache
 9. NB Rural at Southern
 10. SB Mill at Southern
- **right-of-way constraints**
- **physical constraints**



What makes a Tempe transit shelter 'iconic'?



design approach

origami?

subtle?

bold?

branding

materials

city-wide system

regional system

Tempe values



consistent shape with different colors

different shapes with same color

??????????



Tempe: what are we known for...



ASU / Tempe Town Lake / Mill Avenue

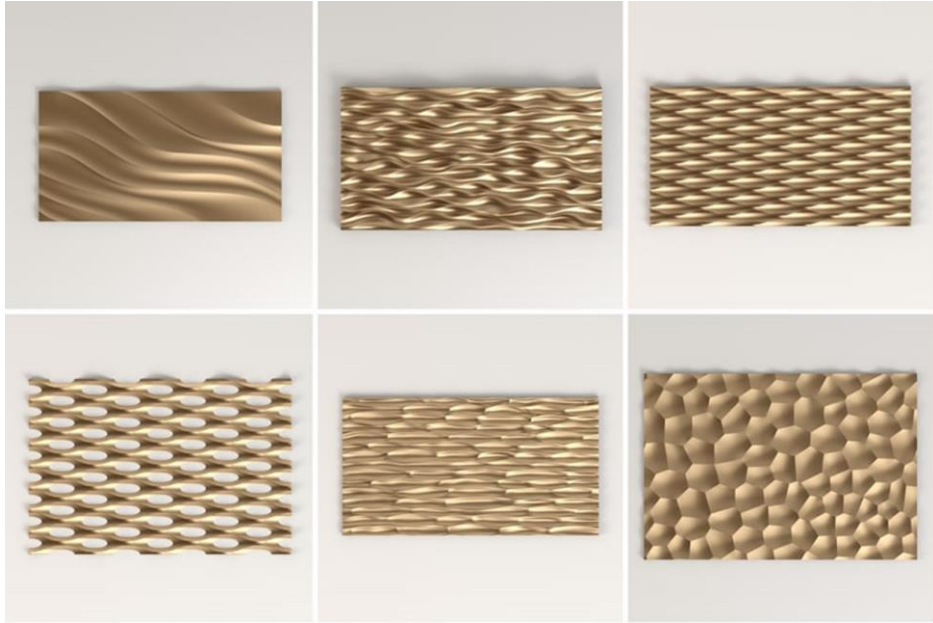
Innovative / Smart / Progressive / Creative

Compassionate Problem Solvers

Outspoken and Engaged

Friendly / Diverse / Active / Outgoing

Looking around for inspiration

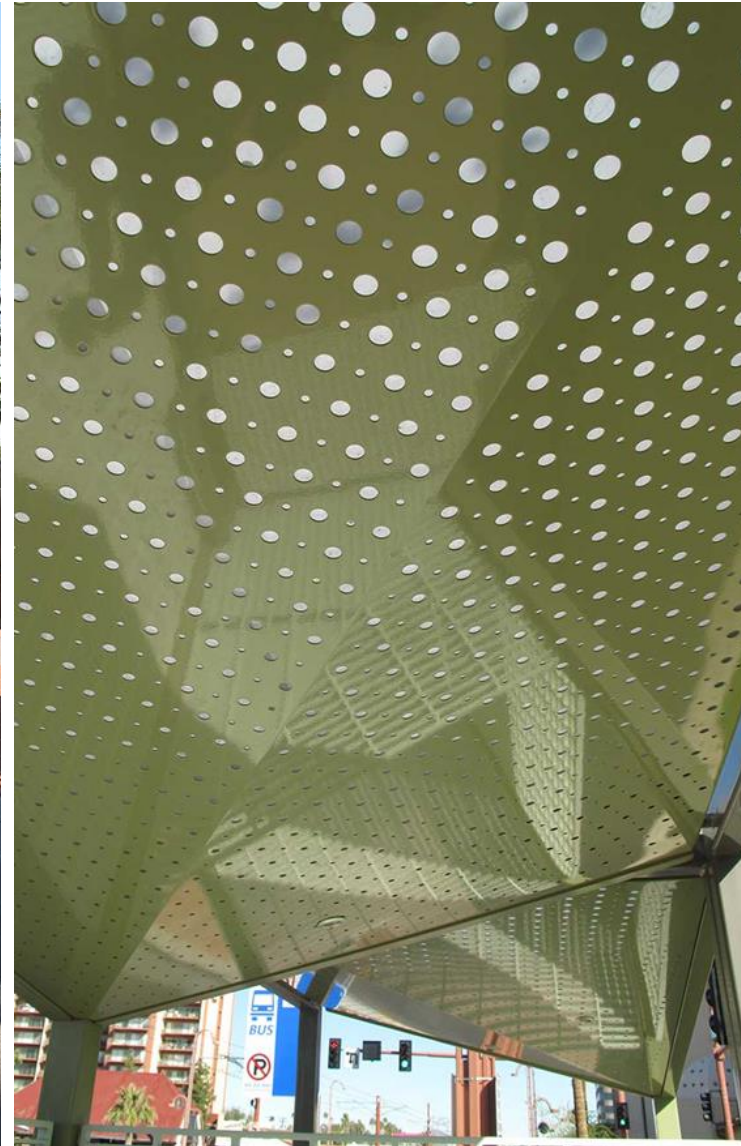


nature
buildings
infrastructure
art, sculpture
materials

other cities
countries



Looking around for inspiration



- variety in vertical screens
- colorful perforated roof
- heat reducing materials
- air movement
- modular
- good visibility
- unique lighting at night



Darren Petrucci, A-I-R
with TranSystems

Looking around for inspiration - materials



new materials



Community Outreach



PUBLIC MEETINGS

January 21, 2020

January 28, 2020

Online comment will be taken from Jan. 21
to Feb. 12, 2020

tempe.gov/TransitShelters



Contact:
Bonnie Richardson
Architect/Urban Planner
City of Tempe Transportation

480-350-8628
bonnie_richardson@tempe.gov

SUSTAINABILITY COMMISSION 2019 ANNUAL REPORT -



Description as Defined in Ordinance:

The Tempe sustainability commission shall have the following powers and duties:

(1) To research, advise, and recommend to the city council policies and programs that advance sustainability in Tempe, with particular attention to sustainability in the following areas:

- a. Energy management (city operations and the city as a whole);
- b. Climate-action plan with a roadmap of actions to be recommended;
- c. Local food and agriculture;
- d. Livable neighborhoods and happy communities;
- e. Land use and development;
- f. Building practices;
- g. Purchasing practices;
- h. Economic development (green jobs);
- i. Solid waste, recycling, and hazardous waste;
- j. Water and wastewater management;
- k. Transportation;
- l. Dark skies;
- m. Air quality;
- n. Environmental justice; and as of June 2015
- o. Preparedness and resiliency.

(2) Assist city departments in executing approved policies and programs;

(3) To support education and outreach related to the city's sustainability practices;

(4) To identify potential sustainability partnerships with public, private and educational entities; and

(5) To recommend for city council consideration a comprehensive sustainability plan with measurable goals and benchmarks to ensure year-to-year progress. (Ord. No. O2015.24, 6-25-15)

TCC § {City Code, Chapter 2, Article V, Division 21 }

List of Board and Commission Members, Including Attendance and Service Dates:

<u>Board/Commission Members:</u>	<u>Service Dates:</u>	<u>Attendance Record:</u>
Kendon, Jung	12/31/2019	Attended 9 meetings out of 10
Mores, Ryan	12/31/2019	Attended 9 meetings out of 10
Kane, John	12/31/2019	Attended 7 meetings out of 10
Reinhardt, Gretchen	12/31/2019	Attended 9 meetings out of 10
Milam-Edwards, Stephanie	12/31/2019	Attended 9 meetings out of 10
Burke, Barbie	12/31/2019	Attended 10 meetings out of 10
Sulzman, Serita	12/31/2019	Attended 10 meetings out of 10
Russell, Steven	12/31/2019	Attended 9 meetings out of 10
Jahnke, Sukki	12/31/2019	Attended 8 meetings out of 10
Brundiers, Katja	12/31/2019	Attended 3 meetings out of 4

Name of Chair and Vice Chair:

- Chair – Kendon Jung
- Vice Chair – Ryan Mores

Staff Liaison and Contact Information:

<u>Staff Liaison:</u>	<u>Department:</u>	<u>Phone:</u>	<u>Email:</u>
Braden Kay	Office of Sustainability	480-350-8867	Braden_kay@tempe.gov

Meeting Frequency and Location:

Meetings are typically held the third Monday of the month at 4:30 p.m. at 31 E. Fifth Street, Engineering & Transportation Conference Room, Tempe, AZ 85281. In 2019, nine meetings were held.

Number of Meetings Cancelled and Reason for Cancellation:

July 2018, summer vacation.

Vacancies and Duration of Vacancies:

Three vacancies occurred in 2018.

Subcommittee and Subcommittee Activity:

Did the Board/Commission have any subcommittees active during the reporting period? YES NO

Mission Statement:

The mission statement of the Sustainability Commission is to be a culture-catalyst to provide leadership, education, and guidance on sustainability programs and policies to City Council and for our entire community to transform Tempe into a healthy and resilient city that inspires the region, the nation and world.

Accomplishments (Past 12 Months):

- Supported the Climate Action Plan, attended several public meetings to solicit input from stakeholders and residents, and provided input to City Council on the importance of the Climate Action Plan.
- Made recommendations to Council to support the adoption of a new performance measures to reduce community Greenhouse Gas Emissions Reduction. The Commission also supported actions in the Climate Action Plan to make Tempe more resilient to extreme heat. The Commission made recommendations on programs, policies and investments that support progress or greenhouse gas reduction and resilience to extreme heat.
- Guided Tempe's Climate Action Plan process and gave feedback on outreach strategy.
- Created policy recommendations and forwarded to City Council. The commission made recommendations on revising conservation targets, adding additional programs, and adopting new rates, codes, and polices.
- Made recommendations to Council on Innovation funds for potential sustainability projects.
- Supported urban core master plan and provided feedback on critical transportation projects, such as North-South spur and feasibility of Tempe/Mesa Streetcar extension.
- Supported Tempe Chamber of Commerce's sustainability pledge and funding of Local First Arizona's Green Business certification.

- Commission recommended Sustainability Awards in the categories of Businesses and Residents at the 2019 Mayor's State of the Neighborhood Awards and Workshop.

Goals Related to City Council Strategic Priorities, if Applicable (Next 12 Months):

Council Priority: Implementing sustainable growth and development strategies, including improving Tempe's public transit system to meet future needs, by actively seeking innovative technologies and leading the way in creating a more sustainable community.

- The Commission will support implementation of Tempe's first Climate Action Plan. The Commission will work on four highlighted actions in the Climate Action Plan and will develop strategies to encourage residents and stakeholders to move actions forward.
- The Commission will support public engagement of Tempe Climate Action Plan 2021 to begin in Spring of 2020.
- The Commission will monitor and make recommendations on Resilient energy hubs, Transportation Demand Management International Green Construction Code policy to Council. These will include making recommendations on energy policy, green infrastructure projects, and projects that promote energy reduction, carbon neutrality, water conservation, tree canopy coverage and the new resilience to extreme heat.



Tempe Sustainability Award Application: Achievement of the Year 2020



The Sustainability Commission asks Tempe residents to nominate people, projects or organizations for the sustainability achievement of the year award. This award is meant to highlight people and projects in our city that are setting an example of how we can create a more sustainable and resilient city.

Who's eligible? Sustainability Awards recognize residents, youth, organizations and businesses that help to strengthen and creatively build the Tempe community through their commitment to and involvement in sustainability.

Who can nominate? Individuals, neighborhood groups, community organizations, and homeowners associations are encouraged to nominate any person, group, youth or business they feel exemplify sustainability at its best.

Include:

1. Completed form (reverse side)
2. Narrative: Why this nominee or project merits recognition. What has this individual, group, youth or business done to create a more sustainable and resilient neighborhood or community that is "above and beyond" notable? Describe how it meets recognition criteria, 1 page maximum.
3. Letters, emails, and documentations in support of the nomination.

Submit:

By Wednesday, February 5, 2020 at 5 pm. *Late or incomplete nominations will not be considered.*

Email: grace_kelly@tempe.gov (Subject Line: Sustainability Award Nominee) – or – mail to City of Tempe Engineering & Transportation Department, Attn: Grace Kelly, 31 E. 5th St, Tempe, AZ 85281

Awards will be presented at the State of the Neighborhoods Awards & Workshop on Saturday, April 4, 2020

Award recognizes excellence in:

- Energy efficiency and conservation
- Water conservation and reclamation
- Sustainable practices such as high-performance building
- Leadership in building and engaging neighborhood communication, projects, activities and improvements
- Creativity and innovation in sustainable solutions
- Unique contributions of time, effort, skills, and/or financial resources to City's sustainable goals and objectives

IMPORTANT NOTE:

The award winner is selected by the Sustainability Commission, an advisory board to the Mayor and Council on sustainable initiatives and achievements.

