

Item #4 Commercial Parking Requirements

Proposed UDC Text Amendment
Electric Vehicle Readiness
Individual Parking Plans



City of Tucson
Planning & Development Services
Planning Commission Study Session February 2, 2022



Proposal Summary

Proposed Commercial Parking Requirements UDC Text Amendment

- 1 Require EV Readiness in new multifamily and commercial development and provide incentives for additional infrastructure beyond minimum standards.

Proposed			
COMMERCIAL	20%	
 Stations		0%	
 Outlets		5%	
 Conduit		15%	

Proposed			
MULTIFAMILY	25%	
 Stations		0%	
 Outlets		10%	
 Conduit		15%	

Proposed			
RETAIL	10%	
 Stations		5%	
 Outlets		5%	
 Conduit		0%	

- 2 Expand the use of the Individual Parking Plan (IPP) by including affordable housing as a permitted type of development and removing the restaurant and bar exception.

All existing IPP requirements, findings, and approval procedures would remain in place and apply to these uses

Existing Parking Regulations



Parking regulations in Tucson are generally governed by **Section 7.4 of the Unified Development Code: Motor Vehicle and Bicycle Parking**

Which specifies:

- Minimum number of motor vehicle & bicycle parking spaces for different land uses
- Design criteria
- Reductions and exceptions

7.4.5 Reductions & Exceptions

Options for reduced parking include:

- Providing features including EV charging infrastructure
- Individual Parking Plan

Presented as one set of amendments because of the overlapping goals of climate action response, local business support, infill development, walkable neighborhoods, and high-quality public spaces that motor vehicle parking policy affects. Coordination of these amendments is an efficient and holistic approach to revising parking requirements in support of sustainable development policies.

Outline

Electric Vehicle Readiness

Trends & Research

Proposals

Cost Estimates

Further Considerations

Individual Parking Plan

Affordable Housing

Restaurants & Bars

Proposal

Further Considerations



Stakeholder Engagement

2021

2022



**Mayor &
Council
Direction**

- **Research**
- **Stakeholder Meetings**

- **Public Meetings**
- **Surveys**

- **Draft Proposals**
- **Stakeholder Meetings**

Present Proposal to:
Planning Commission
Mayor & Council

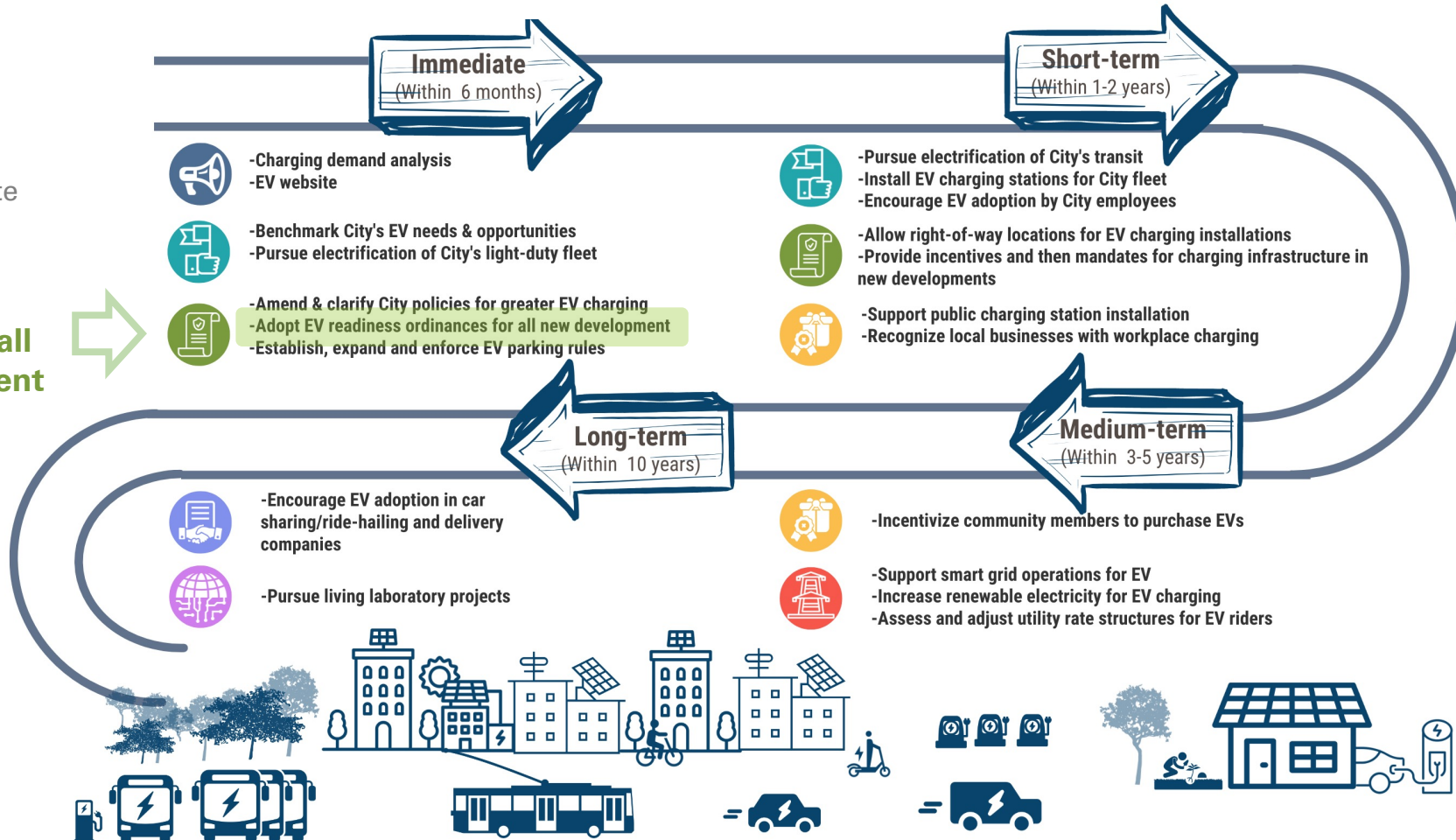
Proposed Code Amendments

City of Tucson Electric Vehicle Roadmap Adopted April 2021

VISION: The City is a leader in clean, convenient & affordable transportation that is accessible to historically underserved communities & it is powered by locally sourced clean & renewable energy

Tucson is a city where residents, businesses & visitors will choose electric vehicles over conventional fuel vehicles

Item for immediate action:
Adopt EV readiness ordinances for all new development



National Trends

Market Availability

50 EV models available today

130 EV models expected by 2023

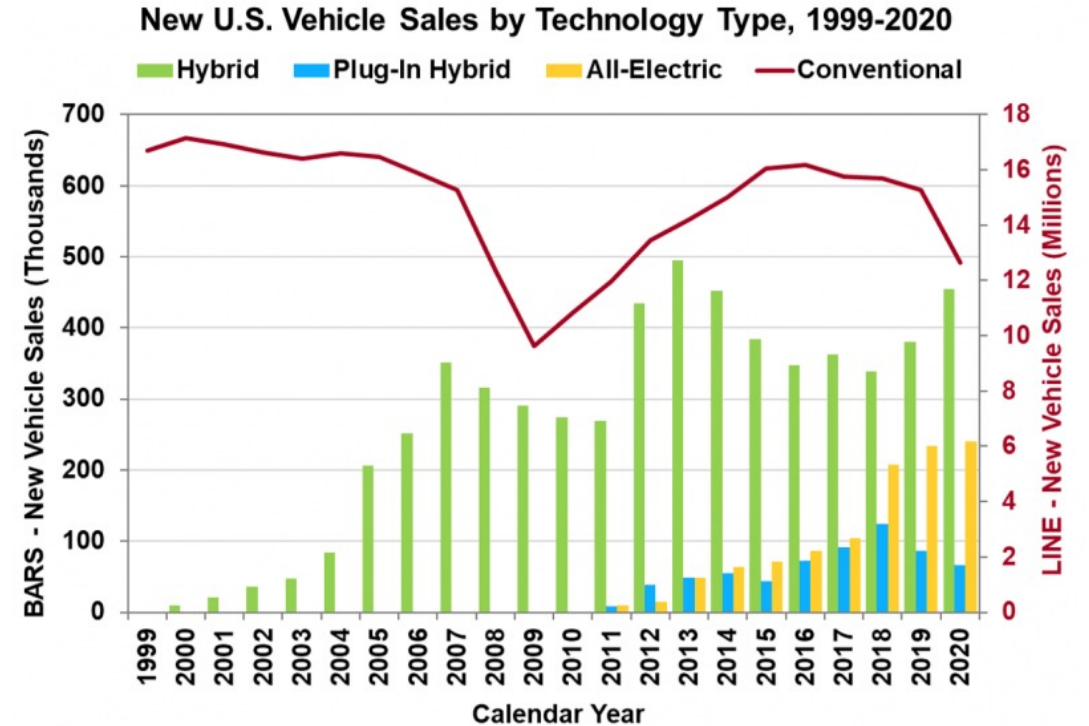
+5 years
According to one study, EVs should be cheaper to buy on average than combustion vehicles in about 5 years, without subsidies

+15 years
6 Major automakers (Ford, GM, Volvo) pledged to phase out new gas and diesel vehicles by 2035-2040 as they help build customer demand

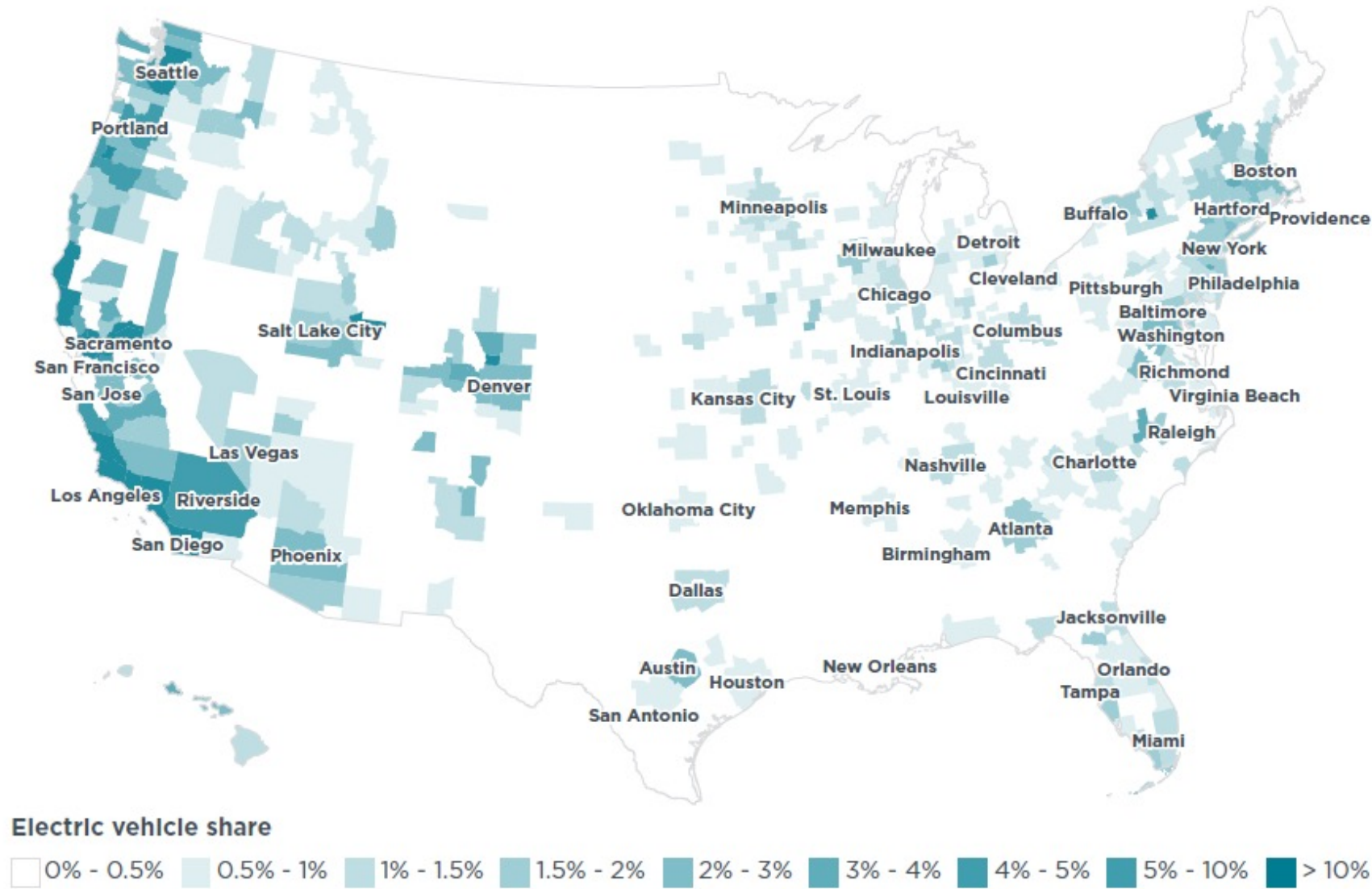
New building lifespan average starts at 30 years

Federal Priority

- 50% EV share by 2030
- Acceleration and deployment of EV tech, charging infrastructure, alternative fuel corridors, EV jobs prioritized in Electric Vehicle Charging Action Plan
- “Transformative down payment on on the transition to a zero-emission future”



National Trends



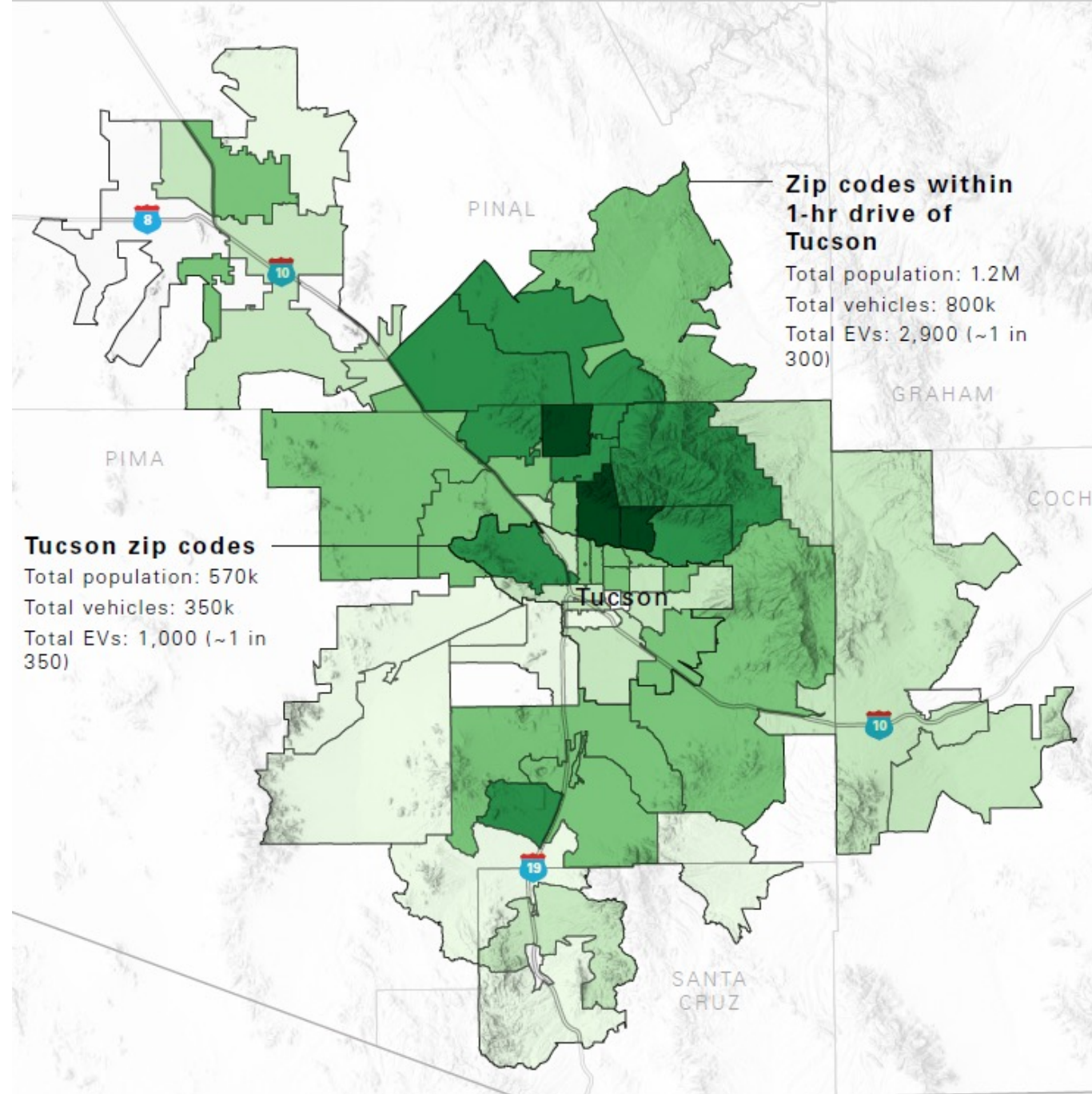
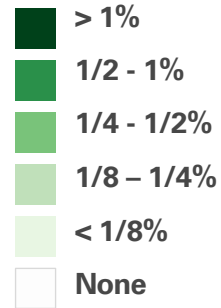
**National
EV Share**
2%
2018 - 2020

Figure 3. Electric vehicle share of new 2018 vehicle registrations by metropolitan area. (New vehicle registration data are from IHS Markit)

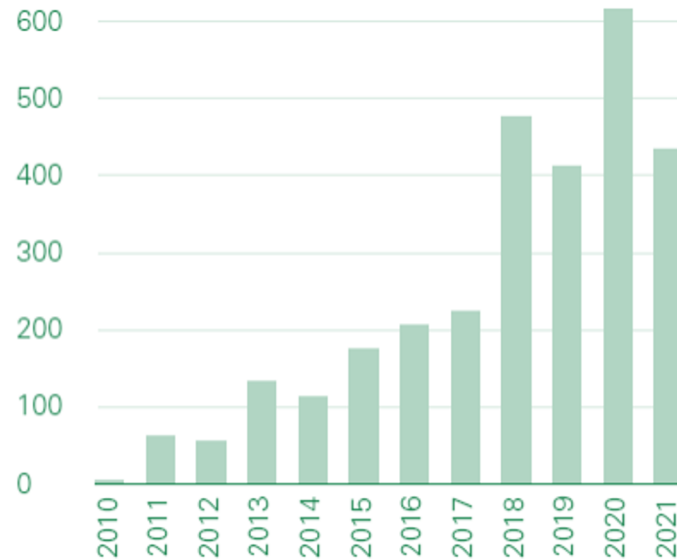
Local Ownership

About **one in 300** vehicles in the Tucson Metro Area is an EV

Around **1,000 EVs** are registered within the City of Tucson itself



Total Electric Vehicles by Model Year
 Registered in Zip Codes within a 1-hour drive of Tucson



Newer models outnumber older ones, suggesting stronger EV sales in recent years

More affordable models of EVs make up the majority, like the Model 3 Tesla and the Nissan Leaf.

Charging Habits & Patterns

Expanding the infrastructure network will help make EVs a viable option for all drivers, even those without garages



Charging at home

- More than 80% of EV drivers charge their cars at home
- It requires no (waking) time, no detours, and is gentler on the battery than high speed charging



Charging at multifamily buildings

- About half of Americans do not have access to a dedicated off-street parking space for overnight or low cost EV charging



Charging at workplaces

- Employers can help increase the convenience and affordability of driving electric for their employees



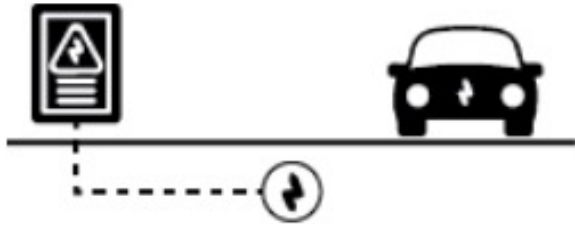
Public charging

- Public charging stations can increase the daily useful range of EVs
- Public charging stations should typically be located where vehicle owners are highly concentrated and parked for long periods of time, such as shopping centers, airports, hotels, government offices, and other businesses

EV Readiness – a range of infrastructure

future

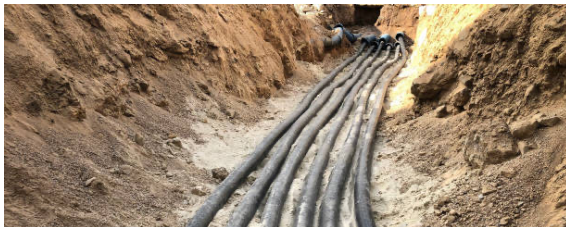
EV Capable Conduit



EV Capable Conduit

- + electric capacity
- + “pre-wired”
- = **future** EV parking space

- Includes hard to retrofit elements during new construction
- Minimizes upfront costs



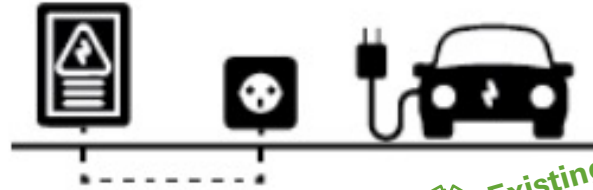
costs

Trenching / conduit **\$20 – \$41 per linear ft**
 Electric upgrades **\$0 – \$27,500 per lot**

Retrofits. **300% more on average**

ready to use

EVSE Ready Outlet



EVSE Ready Outlet

- + electric capacity
- + wiring
- + outlet
- = **ready to charge** EV parking space

Existing requirement for new 1 & 2 family residential in Tucson

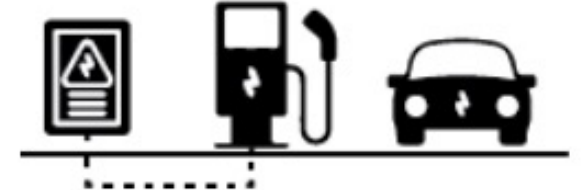
- Ready to “plug in”
- Infrastructure can still be upgraded



NEMA 14 – 50 outlet **\$15 – \$50 per space**

Trenching / conduit **\$20 – \$41 per linear ft**
 Electric upgrades **\$0 – \$27,500 per lot**

EVSE Installed Station



EVSE Installed Station

- + electric capacity
- + wiring
- + charging station
- = **ready to charge with controlled access** EV parking space


- Most visible commitment to EV charging



Charging station. **\$500 – \$4,100 per space**

Trenching / conduit **\$20 – \$41 per linear ft**
 Electric upgrades **\$0 – \$27,500 per lot**

Peer City Research



National
2%
 2018 – 2020
 EV Share


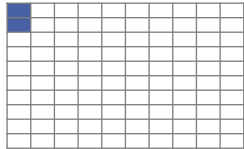

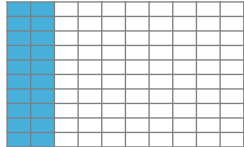

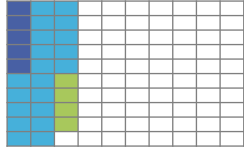


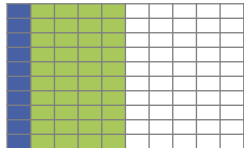
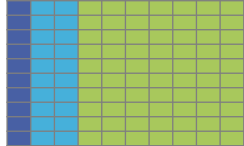
Arizona



Tucson
0% - >1%
Incentive only: Total parking spaces -1 for every 1 EV station, up to 25%

Phoenix
3% - 4%
 EV Roadmap in development

Mesa
 Likely similar to Phoenix
Incentive only: Compact parking spaces +1% for every 2 EV stations, up to 25%

	EV Ownership	EV Requirements		Stations	Outlets	Conduit	Incentives
 Albuquerque New Mexico 2021	2%	All New Development 200+ spaces	2% 	2%			1 EV Station = - 2 Spaces
 Miami Dade Florida 2019	2%	Multi-family 9+ spaces	20% 		20% <i>10% phase in 2019</i>		
 Salt Lake City Utah 2018	2.5%	Multi-family	~25% 	1:25	20%	4% <i>All ADA Spaces EV Capable</i> 	
 San Jose California 2020	>20%	Non-residential	50% 	10%		40%	
		Multi-family & Hotel	100% 	10%	20%	70%	

□ = 1 parking space

Proposal Goals

In addition to furthering the goals outlined in the EV Roadmap



Ensure equitable access to the benefits of advancing technology, cost savings, and environmental benefits of EV adoption



Provide significant cost savings by avoiding extensive future retrofits to add EV charging infrastructure in the future



Implement baseline requirements at various commercial locations, based on visitation frequency, parking time, and diverse users



Require the most usable readiness for the least cost in building lifetimes to span the next 30 years and beyond

Proposals

Level of EV Readiness

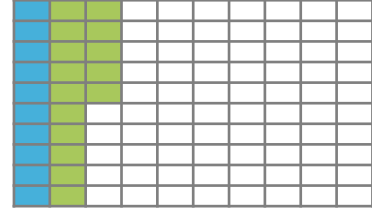
 Stations
  Outlets
  Conduit
 +
 Incentives

Total EV Requirement _____



Multifamily

25%



Stations

Outlets

Conduit

Incentives



Summary

outlets & conduit required

- EV drivers most likely to charge at home.
- Residents' regular use possible to manage without stations

10%

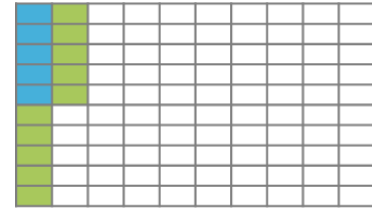
15%

for each 
or additional 
= 1 less space





Commercial

20%



5%

15%

for each 
or additional 
= 1 less space

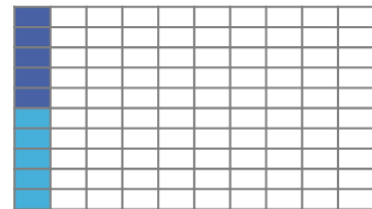
outlets & conduit required

- The regularity and duration of a work shift is next preferred for charging.
- Employees' regular use possible to manage without stations




Retail

10%



5%

5%

for each additional 
= 2 less spaces

stations & outlets required

- Shorter dwell times than home or workplace
- Public charging stations can increase the daily useful range of EVs
- Stations are appropriate interface for varied EV drivers/visits

□ = 1 parking space





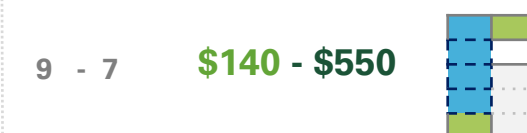
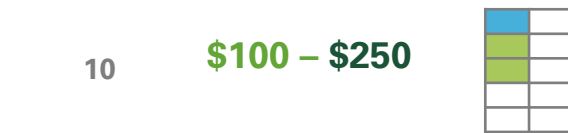
MULTIFAMILY Cost Estimates

REQUIRED 25%

-  Stations 0%
-  Outlets 10%
-  Conduit 15%

INCENTIVES

1 for 1
 or 
 Stations Outlets



- Additional EV Ready Outlets or EV Installed Stations qualifies for reduction incentive
- For each additional EV space, number of total provided spaces reduced by 1, up to 30% reduction of required lot size



COMMERCIAL Cost Estimates

REQUIRED 20%

- Stations 0%
- Outlets 5%
- Conduit 15%

INCENTIVES

- 1 for 1**
- Stations *or* Outlets

Required Lot Size	COST PER SPACE		
	LOW	HIGH	
100	\$70 - \$150		
50	\$90 - \$190		
10	\$80 - \$200		

Reduced Lot Size	COST PER SPACE		Additional EV Infrastructure	1 for 1 reduction up to 30% of required lot size
	LOW	HIGH		
99 - 70	\$70 - \$240			
49 - 35	\$90 - \$260			
9 - 7	\$110 - \$470			

- Additional EV Ready Outlets or EV Installed Stations qualifies for reduction incentive
- For each additional EV space, number of total provided spaces reduced by 1, up to 30% reduction of required lot size



RETAIL Cost Estimates

REQUIRED

10%

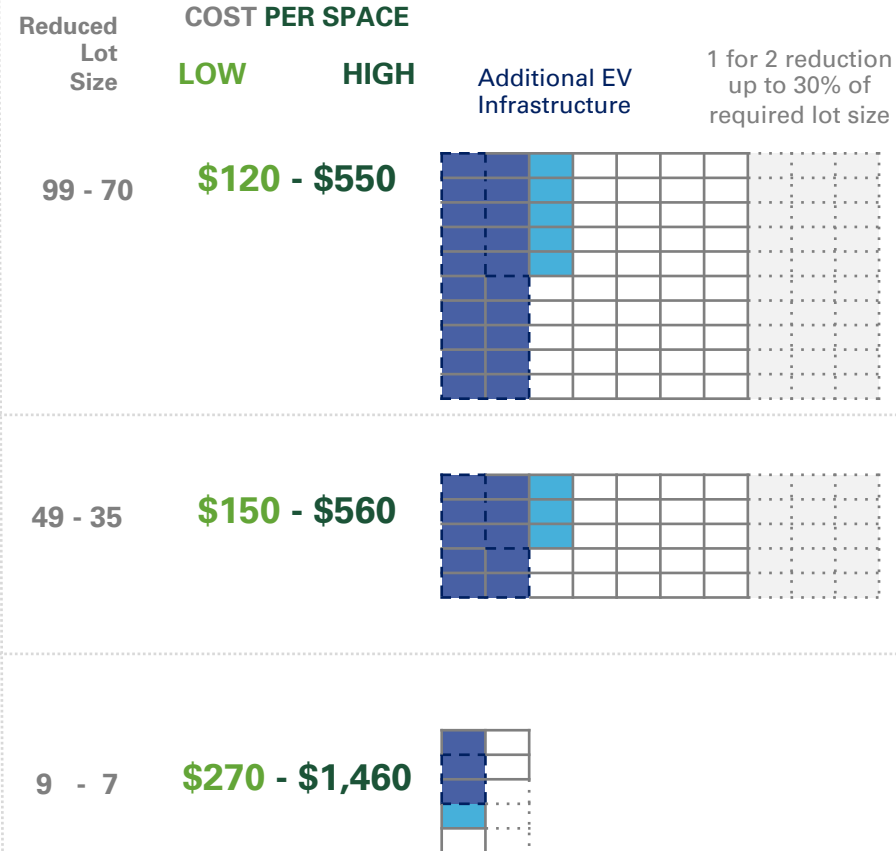
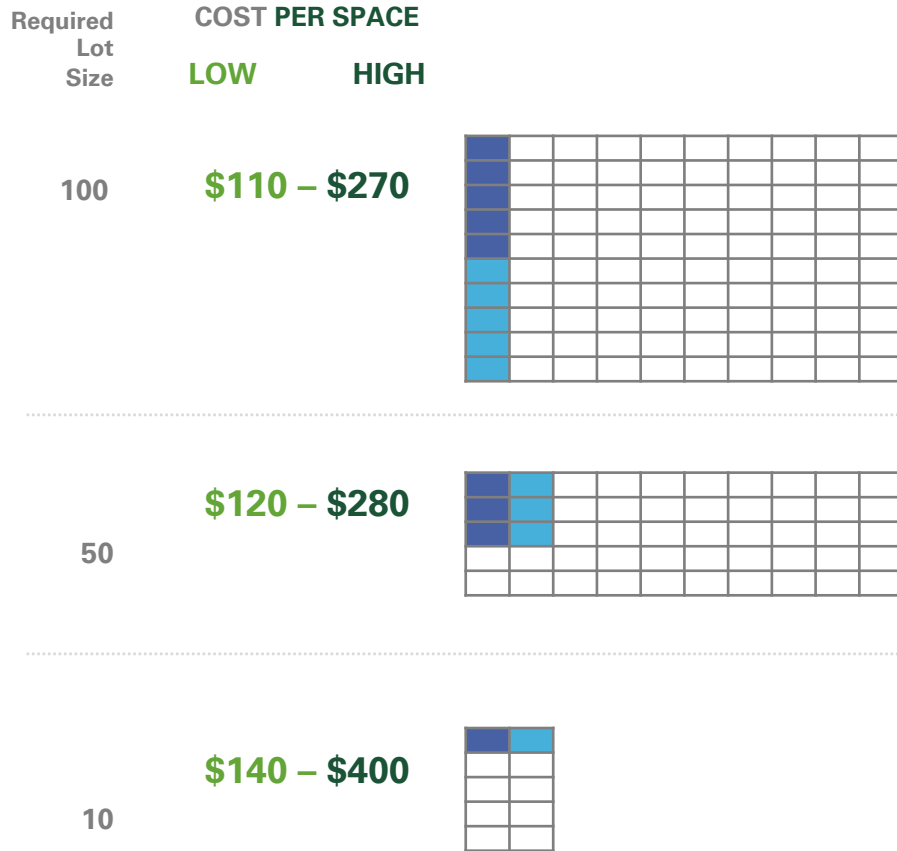
- Stations 5%
- Outlets 5%
- Conduit 0%

1 for 2



Stations

INCENTIVES



- Additional EV Installed Stations qualifies for reduction incentive
- For each additional EV Station, number of total provided spaces reduced by 2, up to 30% reduction of required lot size

Further Considerations

Accessibility

- Four percent (e.g., 1 in 25 spaces) but no less than one of the EV charging spaces, in any given parking facility, must be accessible compliant.
- These spaces are accessible EV charging spaces, not ADA parking spaces.



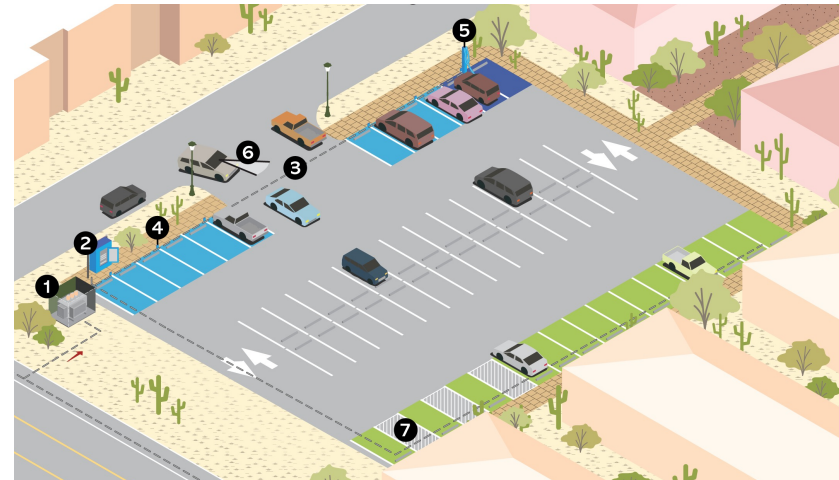
Guidelines Recommended

Signage & markings

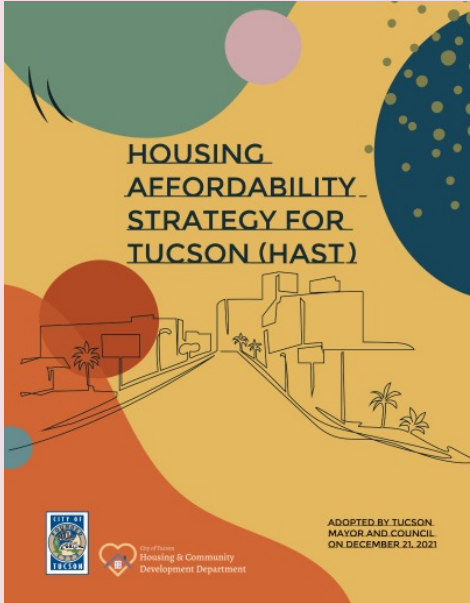
- Regulations
- Wayfinding

Lot design

- maximum EV visibility
- user ease and safety
- implementation cost savings



Individual Parking Plan IPP



Individual Parking Plan IPP

Existing Parking Reduction Application: Individual Parking Plan Section 7.4.5.A of the UDC

Certain project types qualify

To provide less parking than required by code, applicant location **MUST**

- Conduct traffic study, show parking occupancy at peak use
- Demonstrate mitigation strategies
- Notify property owners when within 300' of R-3 Zone and more restrictive and hold meeting to propose project & address concerns
- Be located within ¼ mile of transit or public parking facility

AND/OR

- Utilize shared parking agreements

If a development is operated in a manner that violates the conditions of the approved IPP, the use may be suspended or terminated in accordance with Section 10.4, Penalties and Remedies.

Current Limitations

Affordable housing not currently a qualifying project type

Restaurants & Bars not permitted to apply unless part of mixed use

Affordable Housing

Issue

- Multifamily housing requires onsite parking
typically utilizes a substantial portion of the lot and can be a significant piece of the project cost
- No distinction in parking requirements between affordable and market-rate multifamily housing, *despite evidence that parking demand is lower for affordable housing projects*

Proposal

Allowing Affordable Housing to apply to reduce parking requirements would help mitigate development costs, making affordable housing more financially viable

Expanded Restaurant & Bar Seating

Patio Expansions vs. Streateries

Shared Spaces: Streateries

Seating Location	Right of Way ROW : Sidewalk, Street
Site Context	No extra space onsite
Adjacent Street	Speed limit 25MPH
Current Examples	Ten55, Ermanos, El Charro
Program managed by	Department of Transportation & Mobility DTM

today's discussion

Patio Expansions

Private Property: Parking lot, Landscape area
Potential extra space onsite
Major corridor / Speed limit over 25MPH
Casa Video, Prep and Pastry
Planning & Development Services PDS

Both programs will continue with different requirements & process



Expanded Restaurant & Bar Seating

47 Total Sites ○ 26 Streatery ROW Sites ○ 21 Patio Private Sites

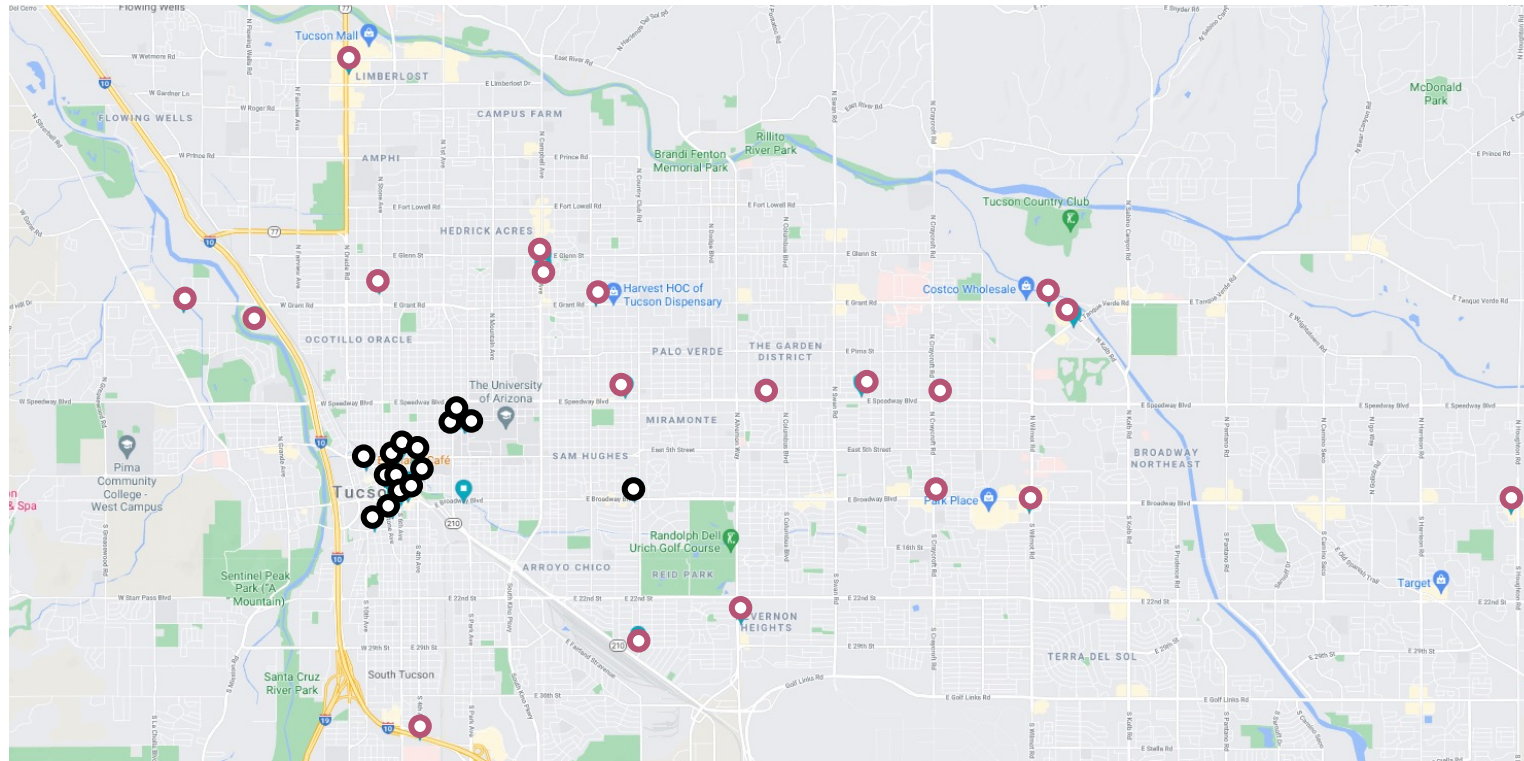
Likelihood to meet parking requirements when temporary program ends

21 Total

Likely

- 1 Excess parking available on site
- 2 Located within the IID (parking reductions allowed)
- 9 Lot is already shared
- 5 Cannot meet parking requirements onsite

Unlikely



Most participating private sites are located on arterial streets

Minimum Number of motor vehicle spaces Required among the highest parking requirements in the UDC

Bars 1 space per 50 sqft

Restaurants 1 space per 100 sqft

4 site plans do not clearly show sq ft or seats added

Expanded Restaurant & Bar Seating



Concerns: What we've heard

Stakeholder & Public Meetings Surveys

Feedback on Outdoor Seating

- Kept tenants afloat
- Customers still prefer the option to sit outside
- Existing high number of parking spaces at bars supports drinking and driving
- Replacing cars with seats is good for sales tax, easy decision
- Preference to place seating on parking areas instead of sidewalk areas
- Best time of year (from restaurant/bar survey): 64% all year 29% seasonally

Neighborhood Parking Concerns

- Reducing on-site parking requirements will cause customers to park in adjacent neighborhoods
- Customers returning to parking in neighborhoods late at night are noisy, inconsiderate
- Additional noise concerns when outdoor seating is sited near homes
- Enforcement is difficult with limited city resources
- Restaurants and Bars were negotiated out of reduced parking applications (IPP) 10 years ago
- Concerns about accessibility for pedestrians and disabled (ADA requirements)

Policy Suggestions

- Avoid multiple barriers to program – consider resource limits of small business
- Interest in minimum threshold, percentage of lot allowed for seating

Expanded Restaurant & Bar Seating

Issue	Proposal
<ul style="list-style-type: none">• Many locations unlikely to continue outdoor seating under existing code requirements	<ul style="list-style-type: none">• More opportunity for businesses to successfully configure their locations to include outdoor seating
<ul style="list-style-type: none">• Large parking requirements have prevented restaurants and cafes from occupying existing, often historic, structures - a common constraint on older sites.	<ul style="list-style-type: none">• Supports adaptive reuse of existing structures
<ul style="list-style-type: none">• Concerns expressed regarding negative effects on surrounding neighborhoods	<ul style="list-style-type: none">• IPP includes a neighborhood meeting, a parking analysis, and the ability to add site-specific conditions to deal with concerns such as noise. <p><i>Other existing options for reductions are as of right/require no neighbor notification</i></p>

Individual Parking Plan IPP

Site Specific Reduction Proposal

Allows an applicant to propose fewer parking spaces through a parking analysis

- Requires notification and neighborhood meeting if within 300 feet of R-1, R-2, & R-3 zones
- PDSD Director approves or denies parking reduction based on findings

Site specific reduction – Not a blanket waiver

Application Requirements

- Existing and proposed parking configuration
Including no reduction of ADA spaces
- Traffic counts and circulation study
- Identify alternate modes of transportation
Possible to propose shared parking agreement with adjacent sites
- Notify adjacent neighborhoods and show that
 - noise and light will be minimized
 - vehicle access will be deterred
 - neighborhood parking will be prevented
- Application fee

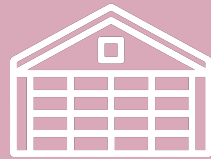
Particular site configurations may be part of the approval, for example, to require that outdoor seating be located adjacent to street frontage/parking areas rather than adjoining residential areas.

Proposal Goals

Expanding the IPP option will advance the following goals



Provide site-specific flexibility in standards to **incentivize & increase the feasibility of affordable housing projects**



Support more **adaptive reuse projects** outside of the Infill Incentive District (IID)



Encourage **vibrant community atmosphere & appealing activation** of public & outdoor space



Encourage efficient use of space & appropriate density that contributes to **more walkable, bikeable & public transit-accessible neighborhoods**



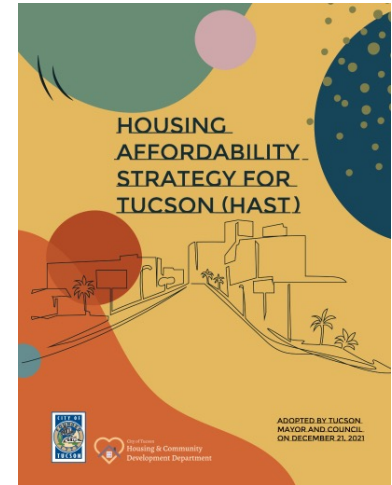
Provide **business relief** as well as **space for health & safety standards** in restaurant & bar operations through ongoing pandemic conditions

Further Consideration

Review parking requirements for affordable housing and other land uses

HAST identifies potential zoning reforms to support the creation of affordable housing

- Review and consider reducing the minimum parking requirements for affordable housing projects, and potentially other residential uses, and/or other land uses.



Review of Liquor Mitigation Plan requirement for bars and restaurants

- Arizona Department of Liquor Licenses and Control will no longer grant extensions for Liquor License applications affecting the timing of State and City processes
- Mayor and Council could direct PDSD to review the Liquor Mitigation Plan requirement for its effectiveness and consider amending the UDC to remove this requirement if it is no longer warranted

Proposal Summary

Proposed Commercial Parking Requirements UDC Text Amendment

- 1 Require EV Readiness in new multifamily and commercial development and provide incentives for additional infrastructure beyond minimum standards.



- 2 Expand the use of the Individual Parking Plan (IPP) by including affordable housing as a permitted type of development and removing the restaurant and bar exception.

All existing IPP requirements, findings, and approval procedures would remain in place and apply to these uses

Recommendation

Public Hearing

Staff recommends that the Planning Commission set the Commercial Parking UDC Text Amendments for a public hearing on March 2, 2022