

City Council Work Session

Thursday, November 4, 2021 5:00 p.m.

Council Chambers Conference Room 88 E. Chicago St., Chandler, AZ





Work Session

Pursuant to Resolution No. 4464 of the City of Chandler and to A.R.S. 38-431.02, notice is hereby given to the members of the Chandler City Council and to the general public that the Chandler City Council will hold a WORK SESSION open to the public on Thursday, November 4, 2021, at 5 p.m., in the Chandler City Council Chambers Conference Room, 88 E. Chicago Street, Chandler, Arizona. One or more members of the Chandler City Council may attend this meeting by telephone.

Persons with disabilities may request a reasonable modification or communication aids and services by contacting the City Clerk's office at 480-782-2181 (711 via AZRS). Please make requests in advance as it affords the City time to accommodate the request.

Agendas are available in the Office of the City Clerk, 175 S. Arizona Avenue.

Revised Agenda

Call to Order

Discussion

- 1. Proposed amendments to Chapter 35 Land Use and Zoning of the City Code to add provisions that promote sustainable development relating to:
 - 1. Data Centers
 - 2. Electric vehicle charging stations

Adjourn



City Council Memorandum Development Services Memo No.

Date: November 4, 2021To: Mayor and Council

From: Derek Horn, Development Services Director

Subject: Proposed amendments to Chapter 35 Land Use and Zoning of the City Code to add provisions that

promote sustainable development

Attachments

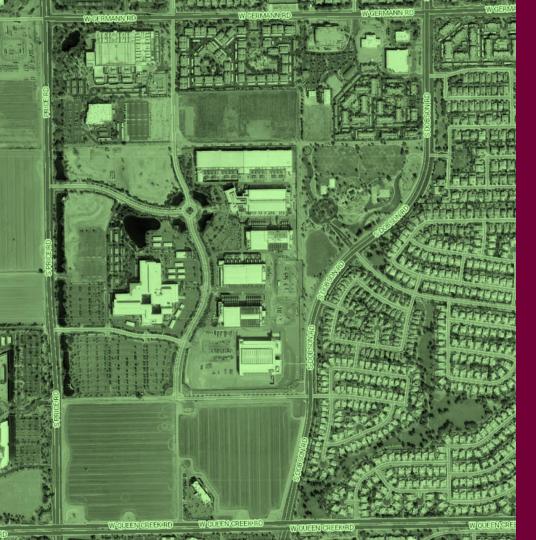
Sustainability Presentation





Sustainability Ordinance

City Council Work Session November 4, 2021



Proposed Amendments:

- Data Centers
- Electric Vehicle Charging

*as a primary use

Current Zoning Code:

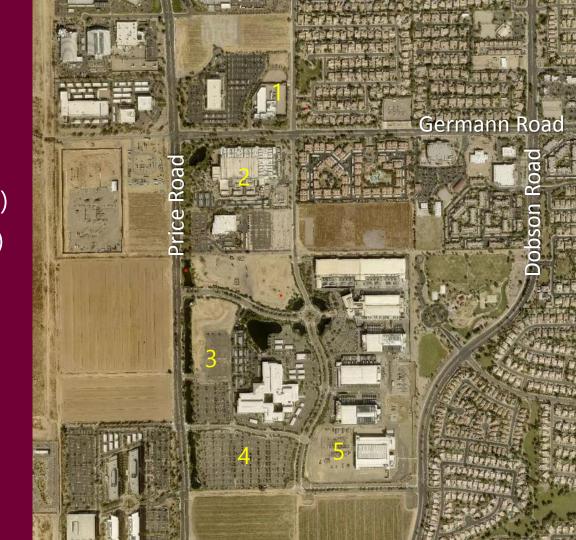
- Table of Permitted Uses Unlisted Use
- Nothing Akin therefore not permitted by-right
- Existing Data Centers located in PAD Zoning



*as a primary use

Remaining zoned sites:

- NWC Germann and Ellis (1)
- SEC Price and Germann (2)
- Continuum (3, 4 & 5)



*as a primary use

Sustainability concerns:

- Require significant cooling
 - Water
 - o Electric
- Noise
- Multiple backup generators
- Minimal employees inconsistent with General Plan Employment Designation



*as a primary use

Proposed Amendment:

-For new data centers-

- Table of Permitted Uses PROHIBITED
- Does not remove existing rights



*as a primary use

Proposed Amendment:

- -For existing data centers-
- Require neighborhood outreach/meetings – notice ½-mile
- Require noise study before/after construction
- Provide sound mitigation for mechanical equipment – chillers, backup generators
- Provide neighborhood liaison



*as a primary use

Proposed Amendment:

- New data centers
- Existing data centers

Questions?





- Definitions
- Things to consider
- Valley comparison
- Draft methodology
- Draft concepts



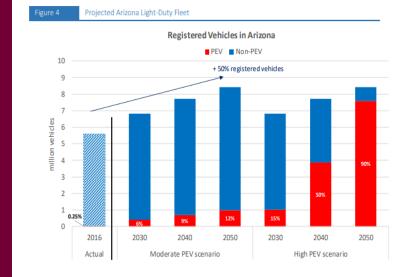
Definitions:

- Charger types:
 - Level 1: 120 V AC plug (house)
 - Level 2: 240 V (Res.) 208 V (Comm.)
 - Level 3: DC Fast Charge 480+ V
- EV Capable: Panel capacity, dedicated branch, raceway
- EV Ready: + Conduit, junction box
- EV Installed: + Level 2 charging stations



Things to consider:

- Wide range of predictions
- EV infrastructure costs significantly less than retrofitting
- Design: Aesthetics, safety, interface with pedestrians
- Where is the EV for extended periods of time?
- Regional system limitations outside of Zoning Code



Cost per EV Parking Space: New Construction vs Retrofit

Case Study prepared for the City and County of San Francisco (2016)



The case study considers a parking lot with ten total spaces and two EV parking spaces, and compares the EV infrastructure installation costs at the time of new construction versus building retrofit. "EV parking spaces" define spaces that have an EV-ready outlet, and include the electrical panel capacity, raceways, breakers, outlet boxes, and wiring to install an EV charger at any given time in the future.



Balance of Circuit

Valley Comparison:

- Zoning Code: Avondale (recently adopted)
- Building Code: 6 yes, 5 no

Nationally

- Excellent case studies
- Blanket percentage vs. targeted



Draft Methodology:

- Take a targeted approach vs. standard percentage
- Concentrate on EV Capable and EV Ready
- Maintain Design Aesthetic expectations
- Signage



Draft concepts:

- Level 2 chargers Residential and **Employment Areas**
- Level 3 fast chargers Downtown, Regional Commercial (Level 3 can be a destination)
- Charging station locations
- Retractable cords, do not obstruct sidewalk (safety)

Multi Family

Multi Family

homes

parking)

Office

Hotels

Entertainment

Industrial

Duplex/Triplex/Town-

Land Use

Single Family

spaces EV ready

EV Ready

parking

20% parking

100% off street

1 Ready per unit

2%, installed for all

0%

spaces

EV Installed

2%, installed for all

developments > 25

0%

(Assigned covered Commercial 15% EV ready

20% EV ready

developments > 25 spaces 2%, installed for all developments > 25

20% EV readv

15% EV ready

spaces

2%, installed for all

spaces

developments > 25

2%, installed for all

developments > 25 spaces

2%, installed for all

15% EV readv developments > 25 spaces

Council feedback/direction



Next Steps

Stakeholder outreach

-Fall/Winter 2021

Finalize draft

-Winter 2021/Spring 2022

Public notification

-Spring 2022

Public hearings

-Summer 2022

