PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE
Tuesday, August 13, 2019
7:30 a.m.

MEETING LOCATION
City of Tempe
Don Cassano Community Room
200. E. Fifth Street, 2nd floor
Tempe, Arizona

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.	Brian Fellows, Commission Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the June 11, 2019 meeting.	Brian Fellows, Commission Chair	Action
3. Transportation Overlay District Staff will make a presentation regarding the transportation overlay district.	Ambika Adhikari, Community Development	Information and Possible Action
4. Setting Speed Limits Staff will provide a recommendation for modifying speed limits throughout Tempe.	Julian Dresang, Engineering & Transportation Department	Information and Possible Action
5. El Paso Multi-use Path Staff will provide an update on the El Paso Multi-use Path Project located on the eastern side of Tempe.	Chase Walman, Engineering & Transportation Department	Information and Possible Action
6. 3-Feet Bicycle Signage Staff will have a discussion with the Commission regarding signage related to motorists providing three feet when passing a cyclist.	Julian Dresang, Engineering & Transportation Department	Information and Possible Action
7. Department & Regional Transportation Updates Staff will provide updates and current issues being discussed at regional transportation and transit agencies.	Engineering & Transportation Department Staff	Information
8. Future Agenda Items Commission may request future agenda items.	Brian Fellows, Commission Chair	Information and Possible Action

According to the Arizona Open Meeting Law, the Transportation 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 350-4311 (voice) or for Relay Users: 711 to request an accommodation to participate in a public meeting.

Minutes
City of Tempe Meeting of the Transportation Commission
June 11, 2019

Minutes of the meeting of Tempe Transportation Commission held on Tuesday, June 11, 2019, 7:30 a.m. in the Tempe Transportation Center, Don Cassano Community Room located at 200 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Susan Conklu
Jeremy Browning (via phone)
JC Porter (via phone)
Paul Hubbell
David A. King
Ryan Guzy (via phone)
Lloyd Thomas
John Federico
Peter Schelstraete
Pam Goronkin (via phone)
Brian Fellows
Cyndi Streid

(MEMBERS) Absent:

Bonnie Gerepka
John Kissinger
Shana Ellis

City Staff Present:

Robert Yabes, Principal Planner
Bonnie Richardson, Principal Planner
Shelly Seyler, Deputy Engineering & Transportation Director
Eric Iwersen, Transit Manager
Chase Walman, Planner II
Joe Clements, Transportation Financial Analyst
Ambika Adhikari, Principal Planner
Julian Dresang, City Traffic Engineer
Sue Taaffe, Senior Management Assistant
TaiAnna Yee, Public Information Officer
Laura Kajfez, Neighborhood Services Specialist
Amanda Nelson, Public Information Officer
Vanessa Spartan, Planner II
Marilyn DeRosa, Engineering & Transportation Director
Robbie Aaron, Planner II

Guests Present:

Becky Fly
David Sokolowski
Amy Ritz
Jason Simmers

Commission Chair Brian Fellows called the meeting to order at 7:30 a.m.

Agenda Item 1 – Public Appearances

None.

Agenda Item 2 – Minutes

Brian Fellows introduced the minutes of May 28, 2019 meeting of the Transportation Commission and asked for a motion for approval with one change under agenda item number seven.

Motion: Commissioner Cyndi Streid

Second: Commissioner Peter Schelstraete

Decision: Approved by Commissioners:

Susan Conklu	Lloyd Thomas
Jeremy Browning	John Federico
JC Porter	Peter Schelstraete
Paul Hubbell	Pam Goronkin
David A. King	Brian Fellows
Ryan Guzy	Cyndi Streid

Agenda Item 3 – Interstate 10 Broadway Curve & Interstate 17 (Split) to Loop 202 Update

Amy Ritz with the Arizona Department of Transportation presented information on the status of the I-10 Broadway Curve project. Topics included:

- Study area
- History
- Reason for improvements
- Travel patterns
- Potential improvements
- Collector-distributor system
- Business outreach
- Schedule

Discussion included the collector-distributor system, existing right-of way needs, timeline and I-10 pedestrian bridge.

Agenda Item 4 – Downtown Tempe Association Update

Kate Borders with the Downtown Tempe Association (DTA) provided an overview of DTA activities. Topics included:

- History
- Downtown boundaries
- Budget
- Mission and vision
- Parking,
- Public art
- Security
- Cleaning
- Events
- Stakeholder outreach
- Branding

Discussion included the impact of development on traffic and downtown and the possibility of hosting an open street bike/ped event.

Agenda Item 5 – Transit Fund Update

Shelly Seyler and Eric Iwersen provided an overview of the Transit Fund. Topics included:

- Transit Tax ballot language
- Program elements
- History of program
- Transit Fund revenue

- CIP budget
- 10-year Transit Fund expenditures
- 10-year Transit Fund forecast

Discussion included the impact rideshare has had on ridership and increasing the Transit Tax.

Agenda Item 6 – Transportation Overlay District

Ambika Adhikari provided an overview of the Transportation Overlay District (TOD) and Urban Core Master Plan. Topics included:

- Goals
- Urban Core boundaries and sub-areas
- Existing Transportation Overlay District
- TOD principles and sub-zones
- Design and frontage standards
- Incentives
- Building heights
- Growth projections
- Public outreach
- Connectivity, sidewalks, travel and parking management
- Timeline

Agenda Item 7 – Alameda Drive Streetscape

Bonnie Richardson provided an overview of the Alameda Drive Streetscape Project. Topics of discussion included:

- Existing conditions
- Adjacent projects
- Conceptual plan development
- Design
    - Tempe Diablo
    - Fountainhead
    - Industrial Districts
    - UPRR to Mill Avenue
    - Mill Avenue to College Avenue
    - College Avenue to Rural Road
- Public outreach
- Schedule

Discussion included the budget and reasons for escalating costs.

Agenda Item 8 – Department & Regional Transportation Updates

Shelly Seyler introduced Marilyn DeRosa as the Engineering & Transportation Director.

Agenda Item 9 - Future Agenda Items

- July 9
- August 13
    - Speed Limits
    - Transportation Overlay District
    - Scooter Update
    - 3-Feet Bicycle Signage

  - El Paso Multi-use Path Project
- September 10
  - Transit Security Update
  - North/South Railroad Multi-use Path Project
  - Bus Shelter Design
  - Grand Canal Multi-use Path Project
- October 8
  - Annual Report
  - McClintock Drive Project Update
  - ASU ADA Program
  - Bicycle Plan for Achieving Platinum Level Bike Friendly Community
- November 12
  - Annual Report
  - Bus Shelter Design
  - Tempe/Mesa Streetcar Extension Feasibility Study
- December 10
- January 14
  - Commission Business
- February 11
- March 10
- April 14
  - Paid Media Plan
- May 12
  - Bike Hero
  - Capital Improvements Project Update
  - MAG Design Assistance Grants

The July meeting was cancelled. The next meeting is scheduled for August 13, 2019.

The meeting was adjourned at 8:48 a.m.

Prepared by: Sue Taaffe
Reviewed by: Shelly Seyler

MEMORANDUM

TO: Transportation Commission

THROUGH: Shelly Seyler, Deputy Director, Engineering and Transportation

FROM: Ambika P. Adhikari, Principal Planner

DATE: August 13, 2019

SUBJECT: Transportation Overlay District (TOD) Project Update

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PURPOSE:

This memo provides a summary of the drafts for Transportation Overlay District (TOD), being called Urban Code District (UCD), and a time schedule towards adoption.

BACKGROUND INFORMATION:
Introduction

The City of Tempe is updating and expanding the existing Transportation Overlay District (TOD) as necessitated by the potential impacts of the upcoming Streetcar, and to accommodate any changes in the planning and development environment since 2005, when the existing TOD was adopted. Simultaneously, the City is preparing an Urban Core Master Plan (UCMP) to coordinate regulations, infrastructure investment, and policies related to development to achieve an active and sustainable Urban Core area.

The updated TOD is being called Urban Code District (UCD), and will be available to property owners through an opt-in process. It will be added as a new Chapter in the Tempe Zoning and Development Code.

The UCD is intended to maximize the economic potential of the transit corridor, increase transit ridership and achieve high-quality pedestrian-oriented places while preserving the existing neighborhoods and historic properties.

Brief on TOD Update (UCD) document draft

The proposed UCD has seven different zones that are tailored to suit different locations near the Light Rail and Streetcar transit systems. It proposes significantly more heights and densities compared to the existing TOD. It includes a list of allowed land uses, development standards and design requirements and a development bonus program for developments within the UCD area. Additionally, the UCD includes the requirements for a Trip Reduction Plan for applicable projects.

A major General Plan Amendment process is simultaneously being pursued to support the visions articulated in the UCD.

Latest Public Outreach

Staff has conducted extensive public outreach in the past 18 months to gather public input on the initial ideas for the TOD update and UCMP. Staff conducted three public meetings on May 18 and 20, and one meeting with private businesses on May 21, 2019. Staff also organized neighborhood meetings on July 8 and 22 towards the General Plan Amendment application.

Staff will continue to present the drafts to several relevant Boards and Commissions, and then take them to the City Council for their considerations on September 26 and October 17, 2019.

--End--

Urban Code District (Updated TOD)

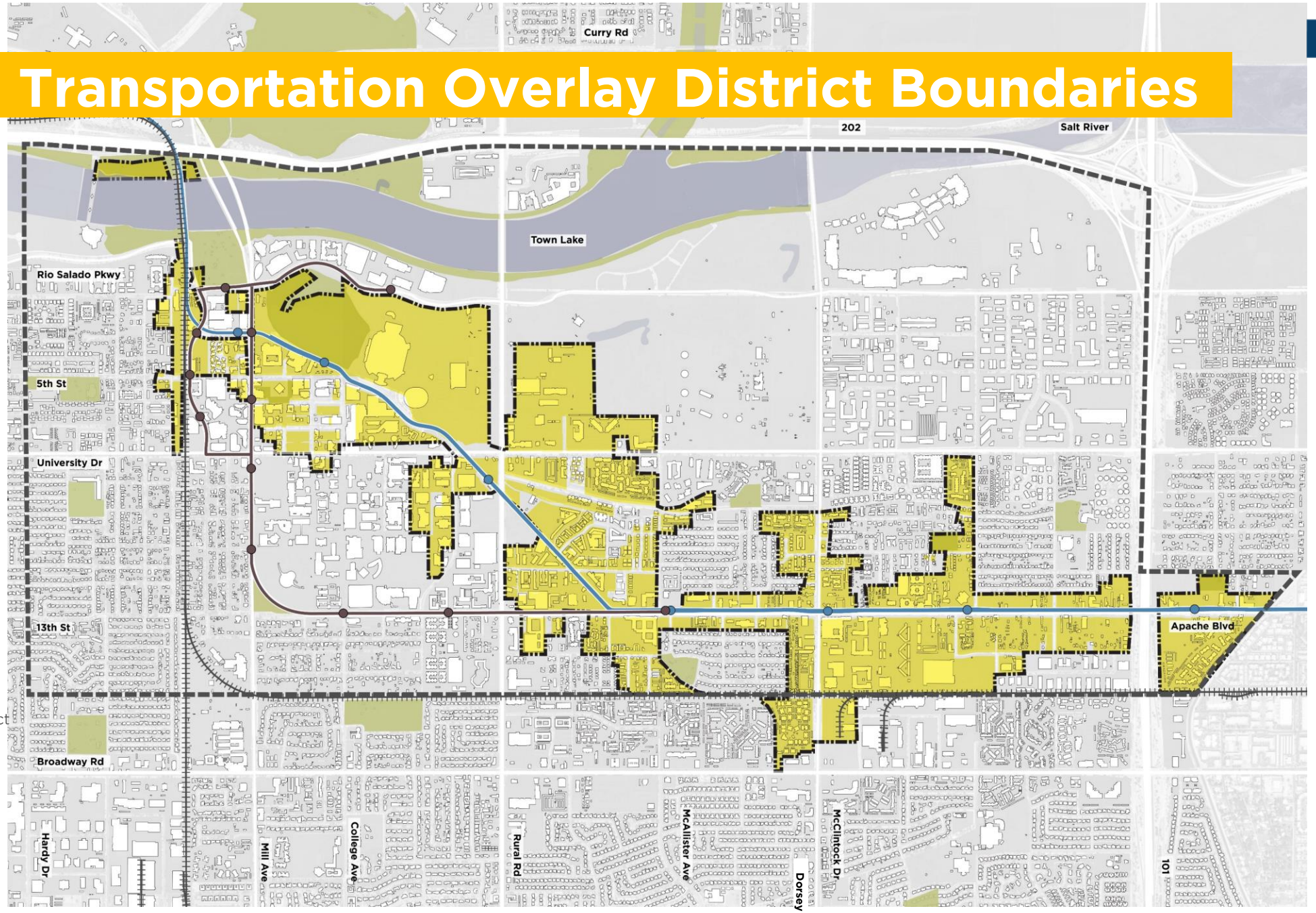
Highlights from Revised Draft Document

August 13, 2019

Tempe

Making waves in the desert

Existing Transportation Overlay District Boundaries

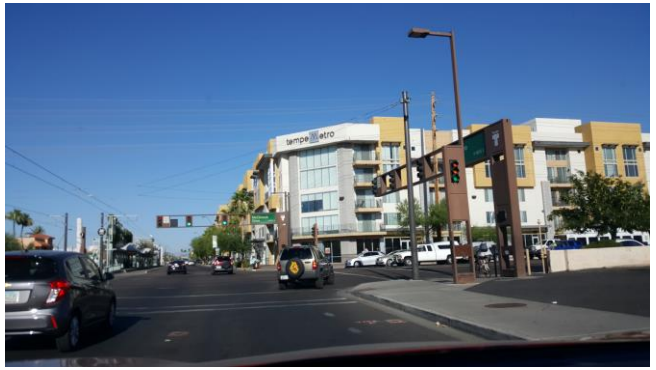


- Transportation Overlay District
- UCMP Project
- Street Car (Construction)
- Light Rail Line
- Union Pacific Railroad
- Open Spaces, Parks and Reserves

UCD Updates

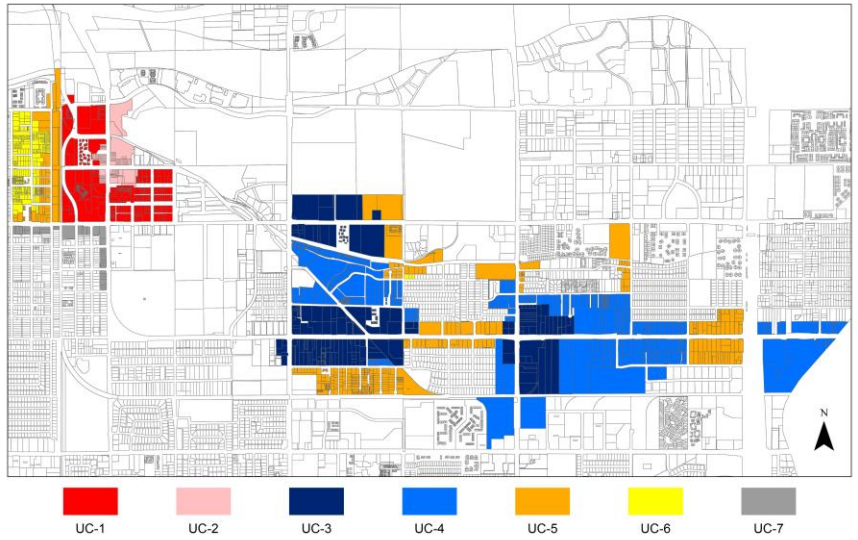
Key Updates in the Draft UCD include:

- Establishes 7 Zones
- Refines List of Permitted Uses
- Refines Development and Façade Standards
- Adds Civic Space Standards
- Adds a Trip Reduction and Parking
- Adds a Bonus Program – Affordable Housing, Historic Preservation, Sustainability, Public amenities



UCD Update Sub-Zones

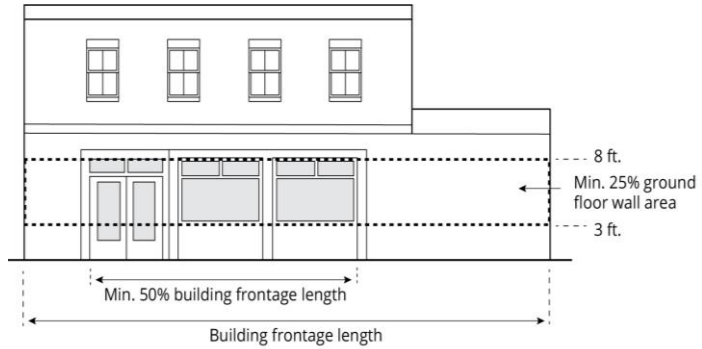
	UC-1	UC-2	UC-3	UC-3	UC-5	UC-6	UC-7
Height in Ft. (min-max)*	90-160	90 (max)	60-90	40-70	30-60	20-40	Per Base Zoning
Stories (min-max)	8-15	8 (max)	5-8	3-6	2-4	1-3	Per Base Zoning
Density (DU/acre)	50 min.	40 min.	40 min.	20 min., 65 max.	12 min., 25 max.	8 min., 20 max.	Per Base Zoning

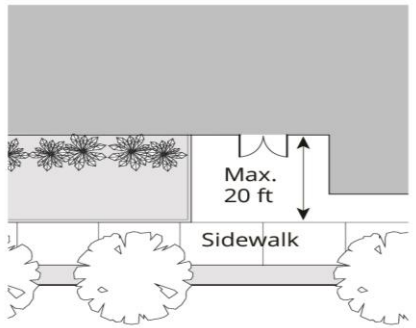


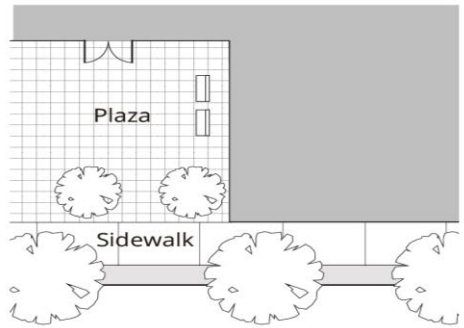
JCD Heights Diagram

Design Standards, Frontage Standards

- Sidewalk Standards
  - 6’ wide on local, 8’ wide on arterial
- Parking Structures
  - Adaptable for new uses in future
- Bicycle Parking
  - Enhanced requirements
- Large Sites
  - Block length, pedestrian & bicycle connectivity
- Sustainable Development
  - Solar access, Shade, Light, Low Impact Dev.
- Trip reduction Plan
  - For developments generating > 75 peak trips







Proposed Incentives in UCD and UCMP + CIP Request

The following incentives are being developed (as of June 2019)

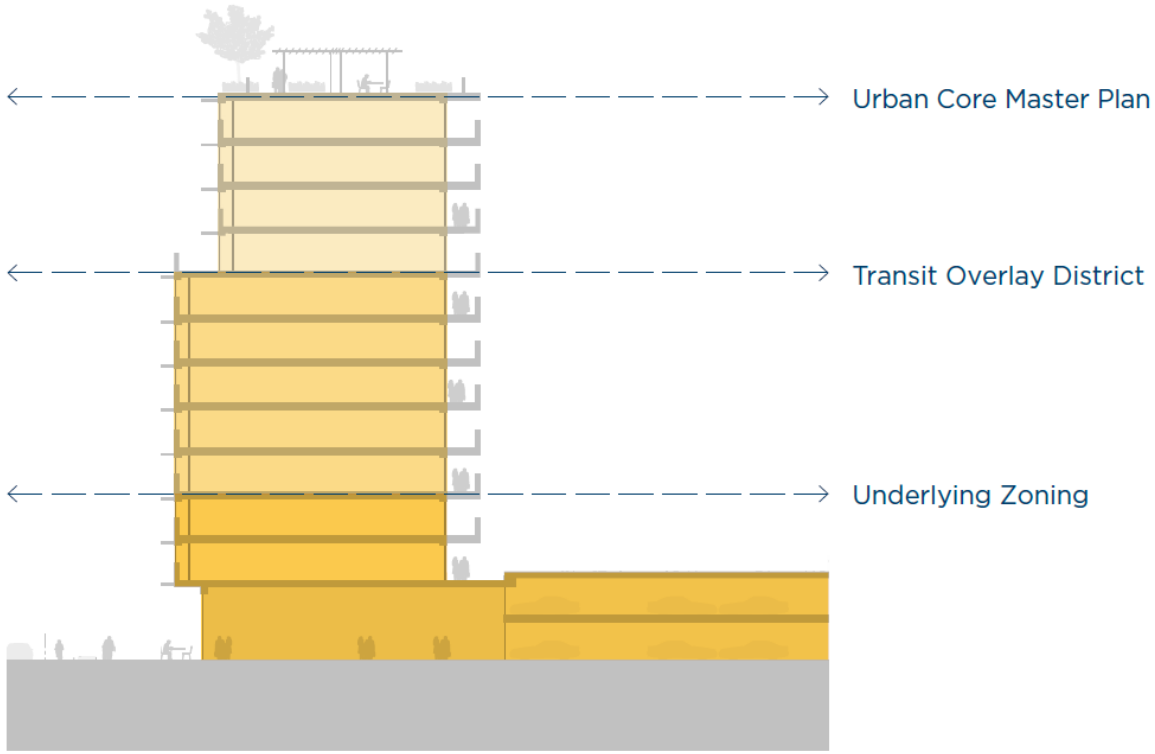
- Affordable Housing Bonus
  - Providing affordable housing units as per the prevailing Area Median Income (AMI)
- Historic Preservation Incentive & Bonus
  - For eligible sites (otherwise exempt), applicants can opt into the TOD
  - Will receive height & density bonus for providing historic preservation guarantees
- Sustainability Bonus
  - Providing elements to promote sustainability (e.g., rain water harvesting, solar energy, green roofs, low impact development)
- Public Amenities Bonus
  - Providing amenities such as publicly accessible plazas, drinking fountains, mini-parks, etc.
- City has approved a CIP request to prepare a Historic property inventory, and HP plan

TOD & Urban Core Master Plan Heights

Means to achieve heights and density

- Base Zoning
  - By right
- Updated TOD (UCD)
  - By right (heights and densities), within the TOD Overlay, bonus is available
- Urban Core Master Plan
  - On a case by case basis through rezoning.
  - Can be within the TOD overlay or outside
  - Heights achievable by meeting design guidelines and through bonus

Managing Development Heights (Conceptual Example)



Highlights from Public Consultation

Growth Locations
(Downtown, Intersections, Apache Corridor)

Connectivity and Public Realm
(Public Spaces, Sidewalks, Building Frontage)

New Development Character

Parking (Less when feasible)

Sustainability (Green bldg., Shade, Water Harvesting)

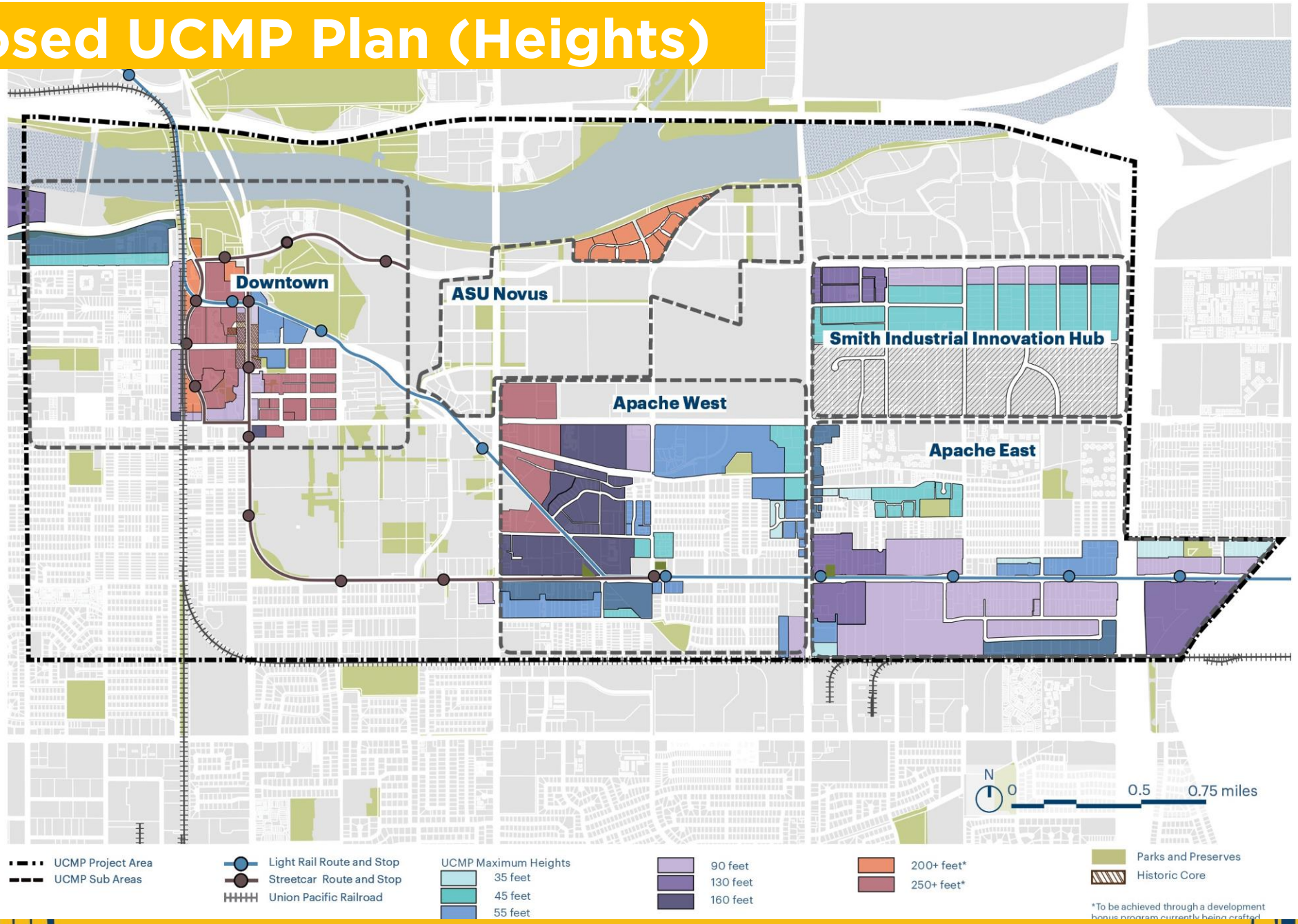
Image from focus group meeting June 2018

Image from public meeting on Feb 28, 2018

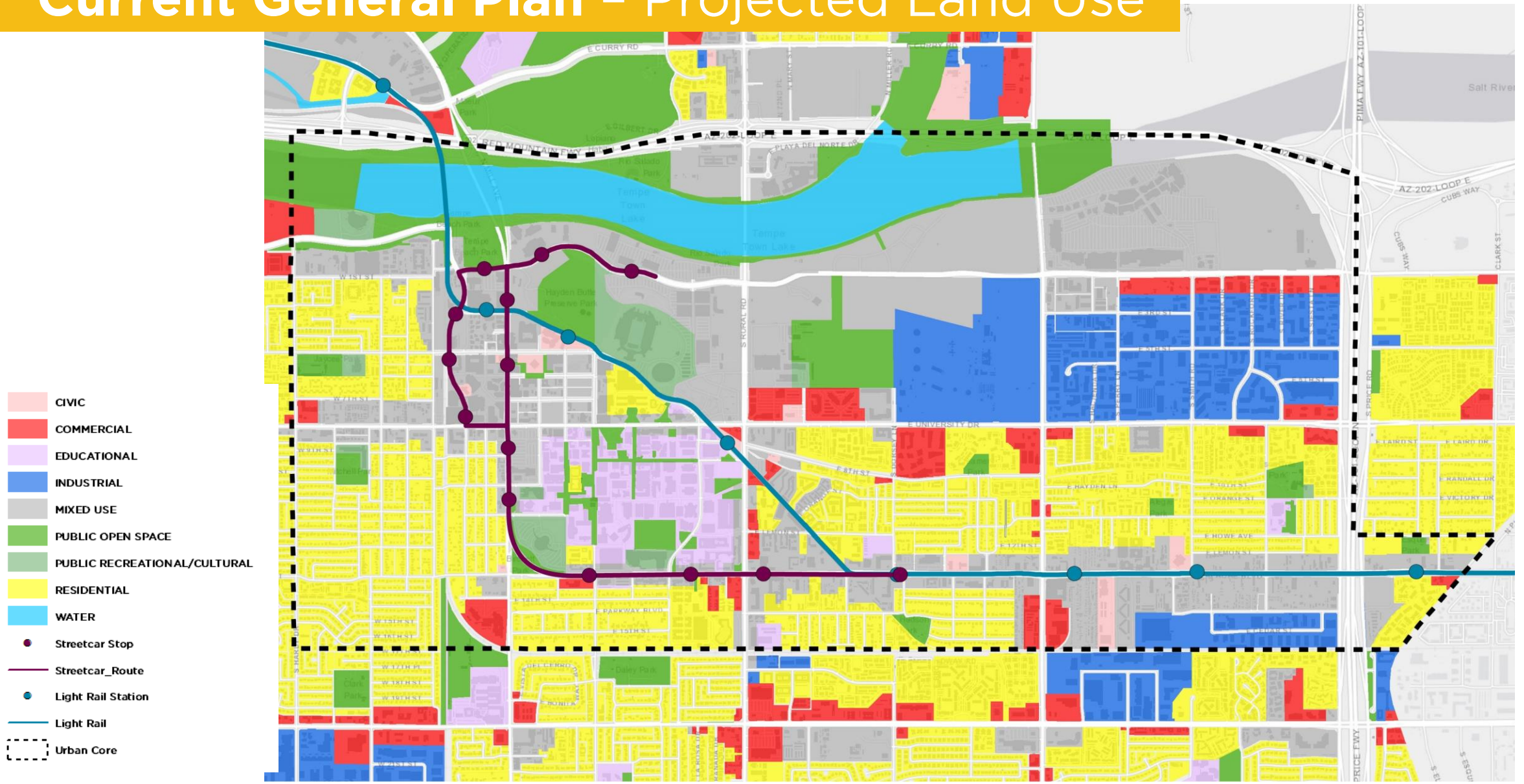
Image from outreach event Feb 2018

Image from public meeting on Feb 28, 2018

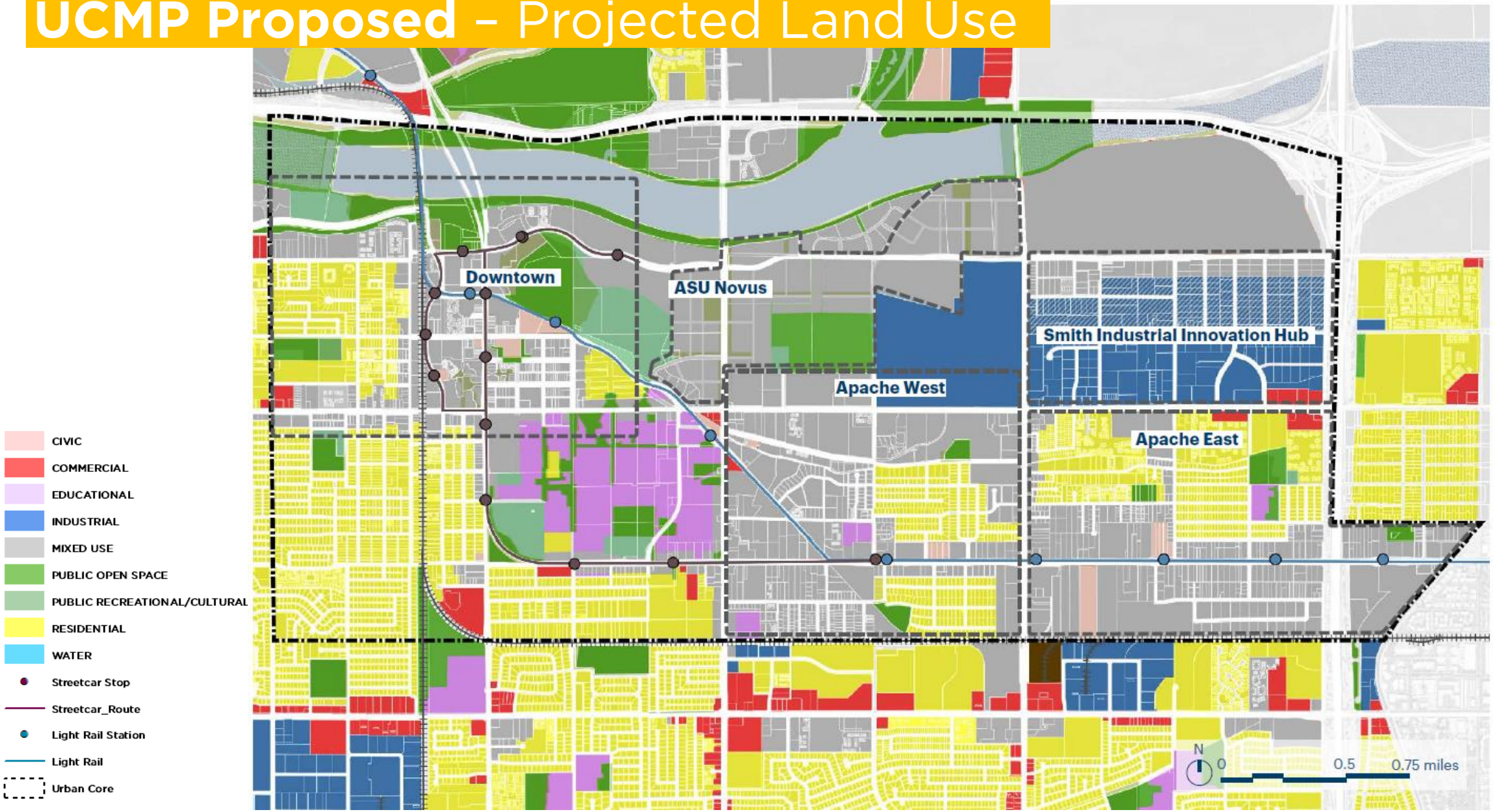
Proposed UCMP Plan (Heights)



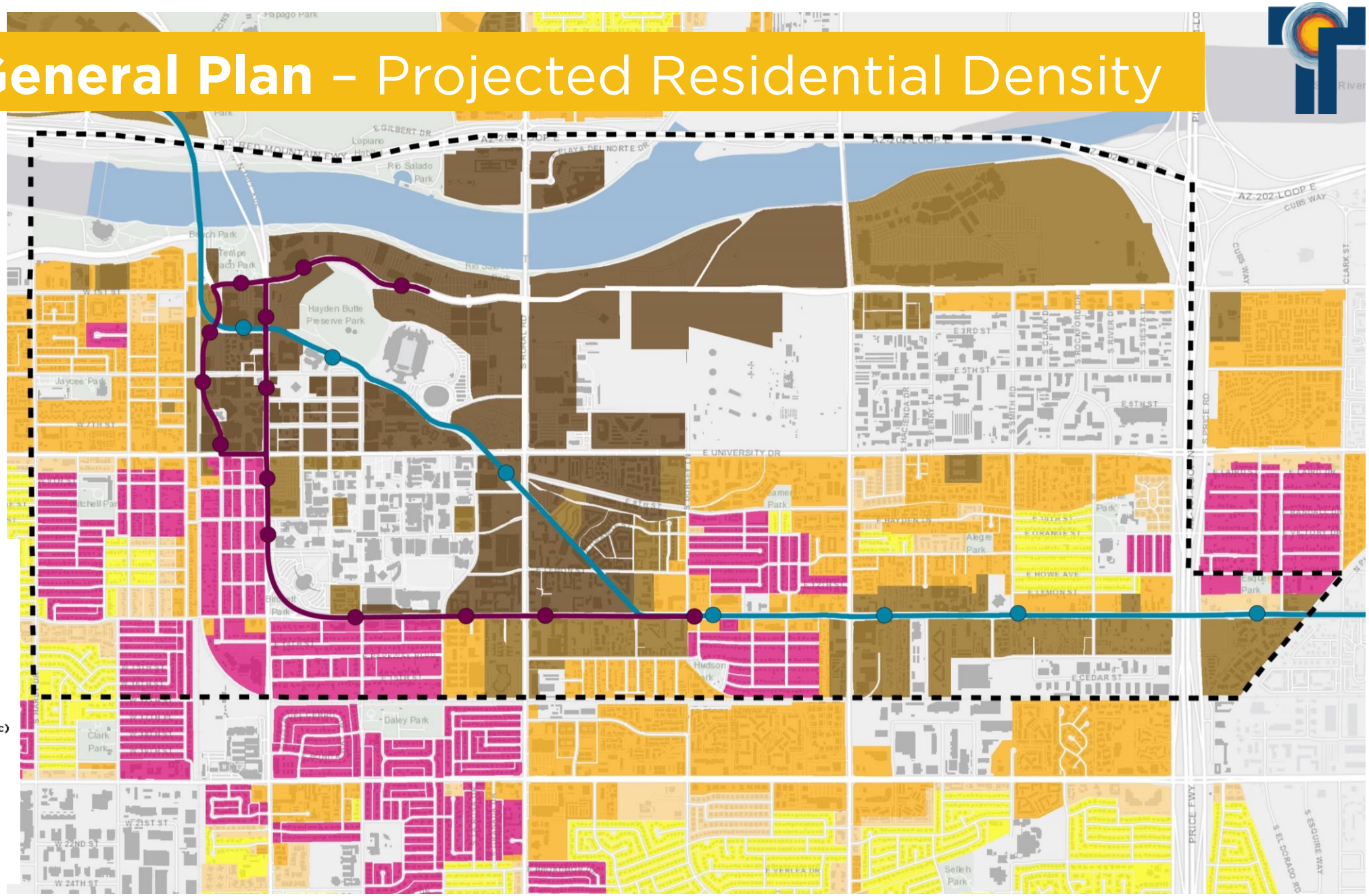
Current General Plan – Projected Land Use



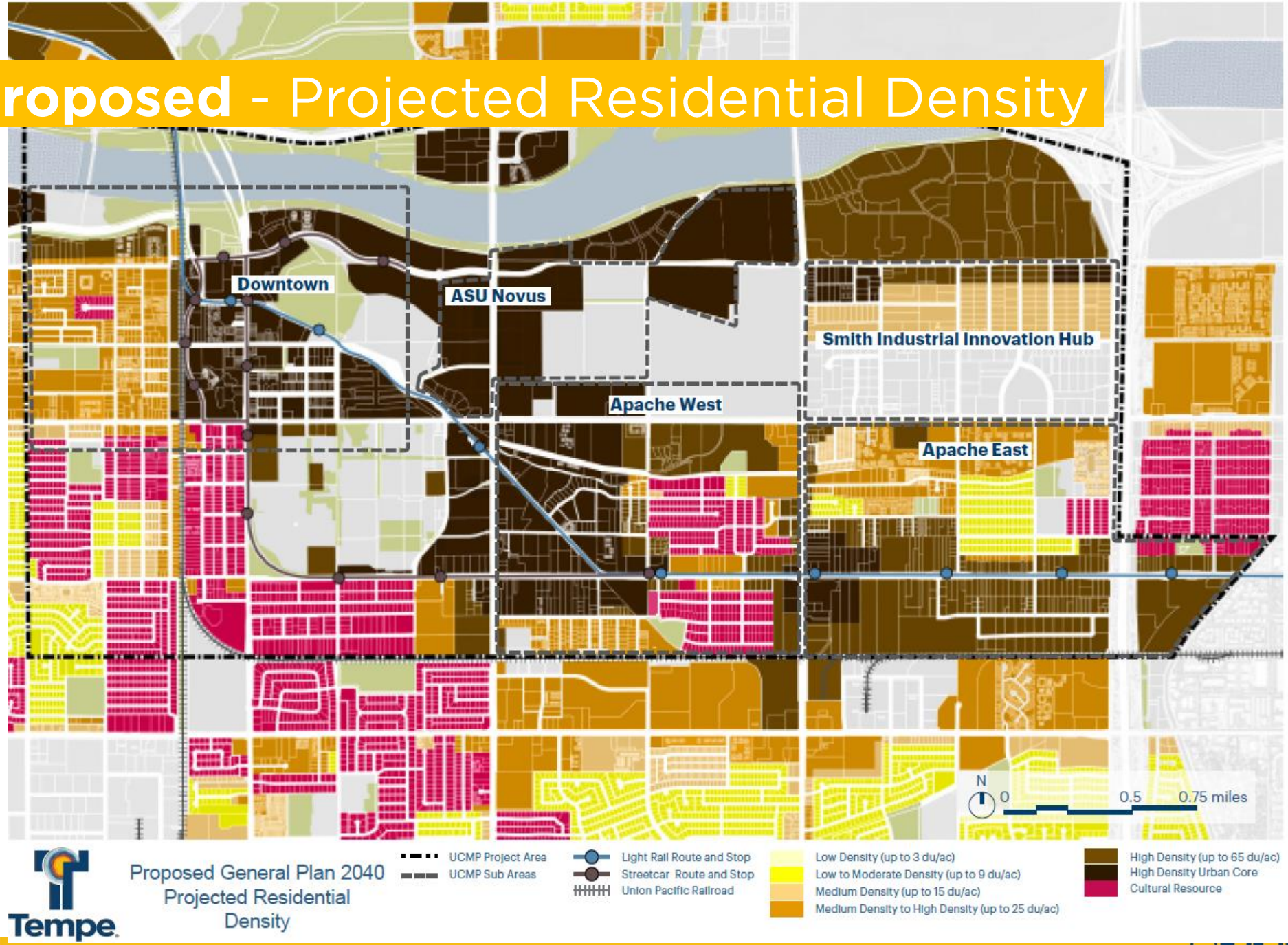
UCMP Proposed – Projected Land Use



Current General Plan – Projected Residential Density



UCMP Proposed - Projected Residential Density



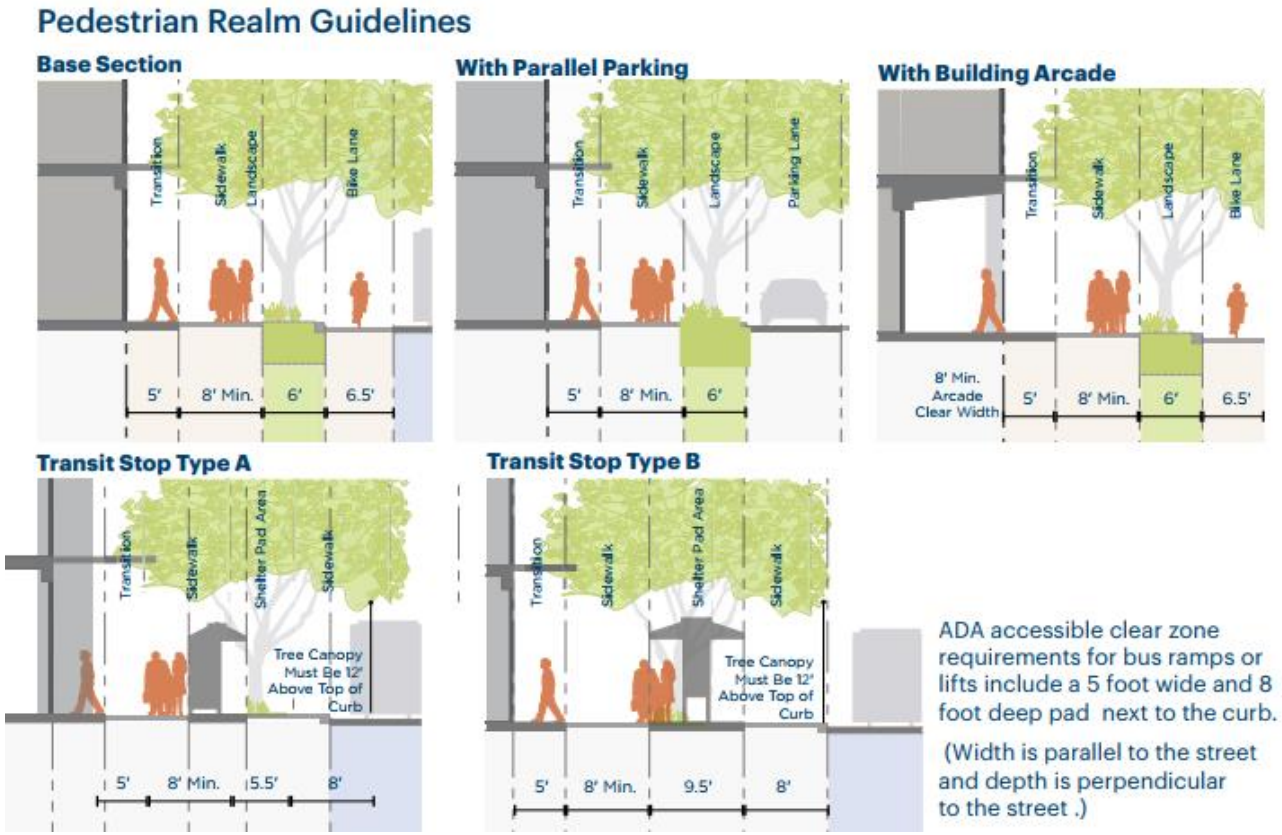
Connectivity, Sidewalks, and Trip reduction Plan

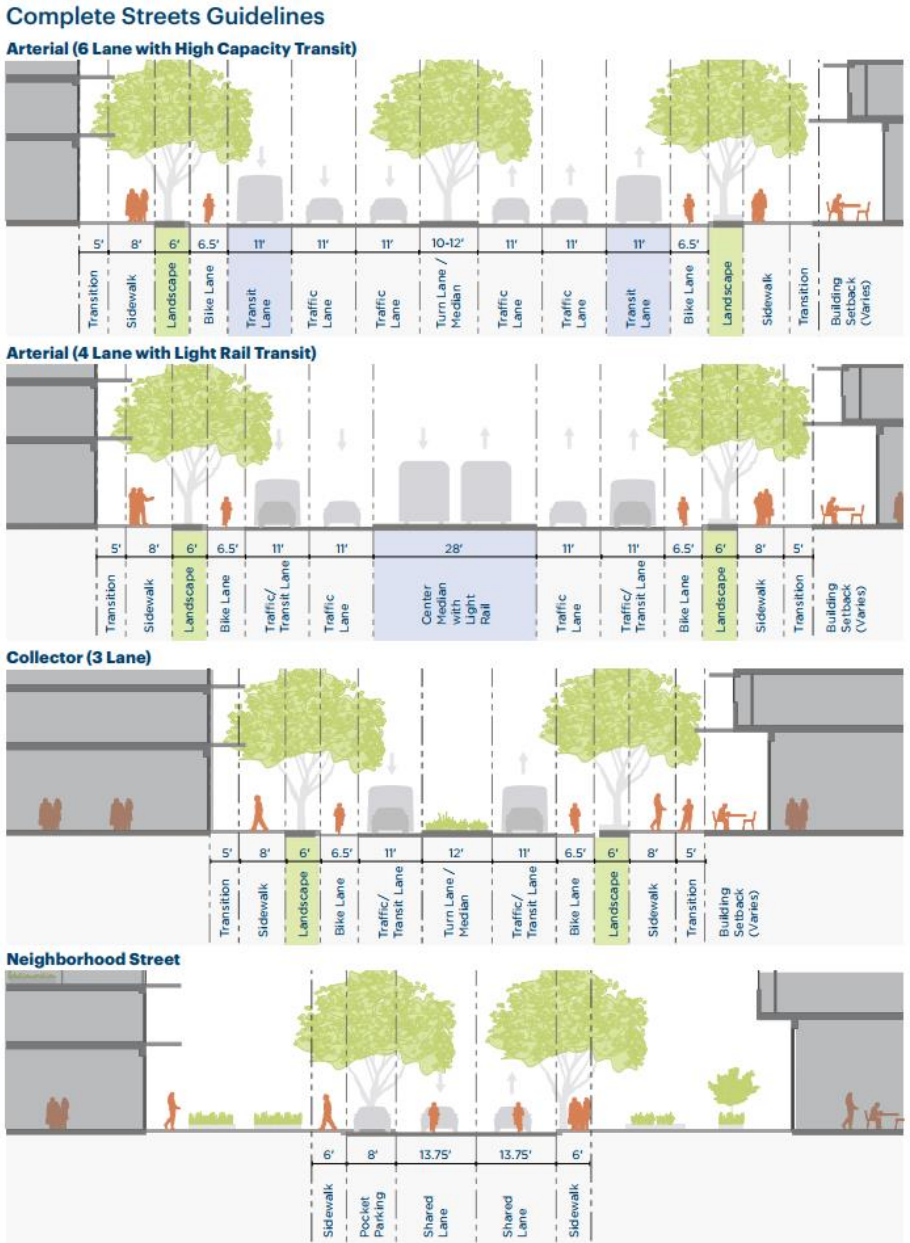
Strategic Connectivity Priorities

Accessible Land Uses	• Compact and mixed development • Connected road networks • Pedestrian enhancements in site design and development • Reduced parking requirements
Mobility Options	• Improved walking and cycling options • High quality public transit services • Ridesharing, carsharing, bike-sharing, and micro-mobility
Mode Shift Incentives	• HOV (high occupancy vehicle) priority on highways • Trip reduction strategies

Accessible Land Uses: **Pedestrian Realm**

- Provides specific design guidelines for the **Pedestrian Realm**
- Provides conceptual prototype illustrations for the **Travelway**





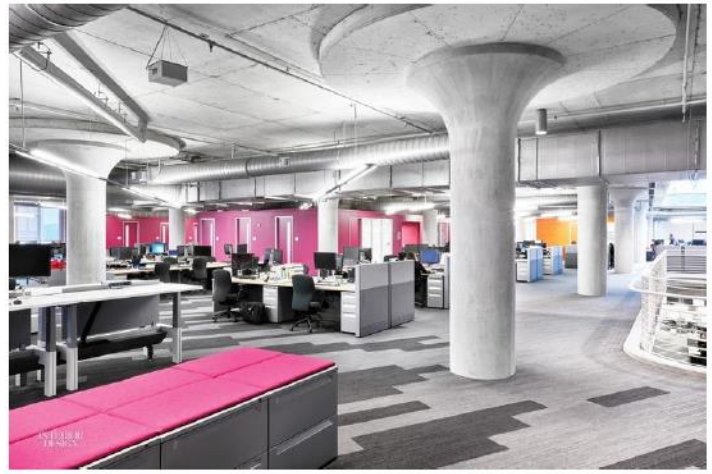
Accessible Land Uses: **Parking Requirements**

Minimum and Maximum Vehicle Parking Requirements

- Reduces minimum requirements, specified by TOD Zone
- Creates maximum – approx. 125% of the maximum allowed parking

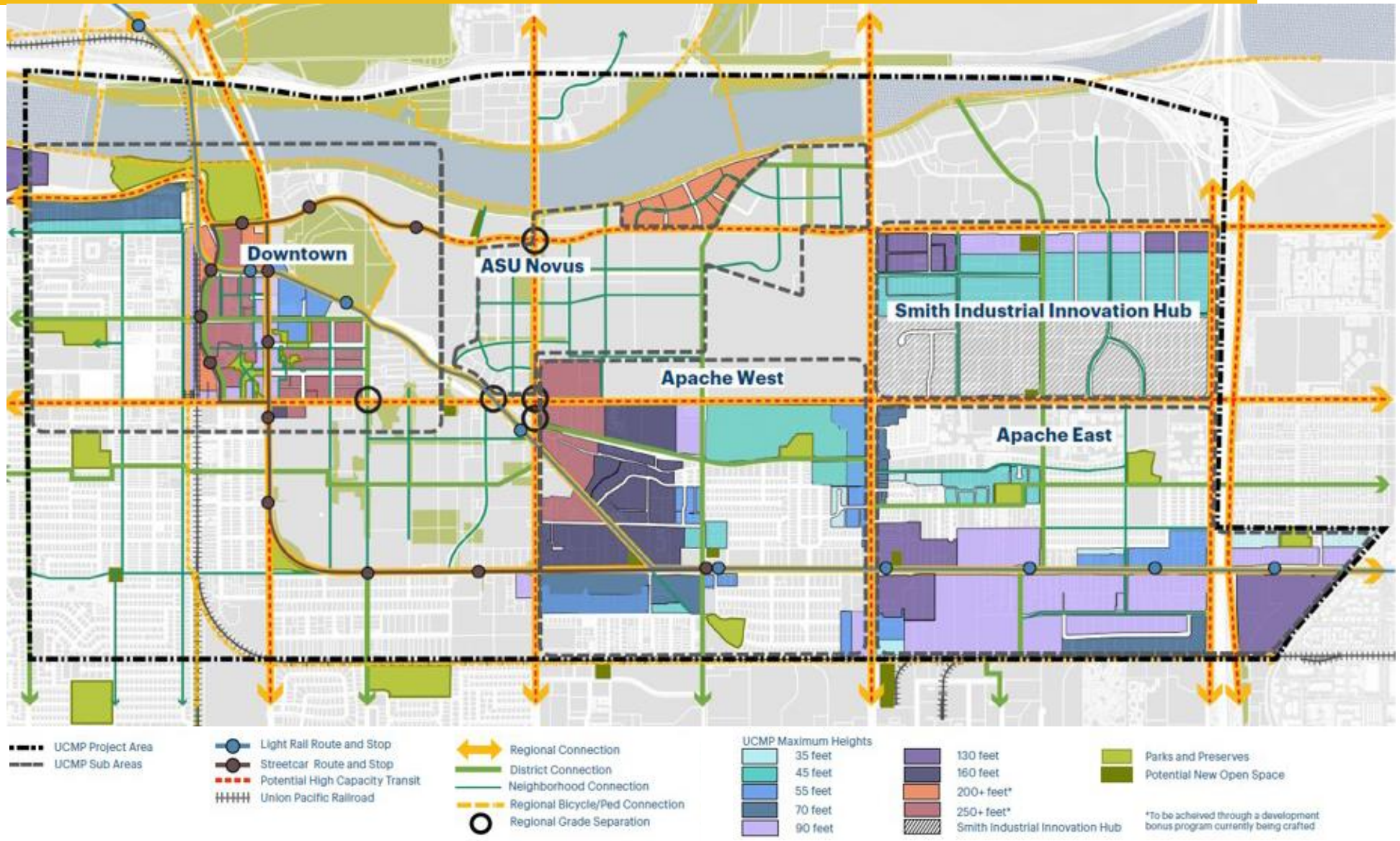
Increases the Minimum Bicycle Parking Requirements

Addresses Parking Structures Conversions – for future adaptability for new use



Includes Parking Reduction Strategies

Mobility Options: **Connectivity Improvements**



Mode Shift Incentives: **Trip Reduction Strategies**

Purpose and Applicability

- Requiring Trip Reduction Plans will:
  - Ensure compliance with **Maricopa County Trip Reduction Ordinance (Ordinance No. P-7)**
  - **Accommodate growth and development** allowed under the TOD, Urban Core Master Plan and General Plan **while reducing peak period automobile commute trips** to achieve the goals of the City's Transportation Master Plan

- **Tier 1 Trip Reduction Plans**
  - Required when developments generate **75 to 149 peak hour trips**
  - Trip Reduction Target = **10%**

- **Tier 2 Trip Reduction Plans**
  - Required when developments generate **150 or more peak hour trips**
  - Trip Reduction Target = **20%**

- UCMP recommends the creation of a **Transportation Management Association** to support properties, businesses, and other stakeholders in implementing commute solutions.

Adoption Process & Timeline

UCMP & TOD Adoption Process

- Last major **public meetings: May 18 and 20, 2019**.
  (Letters were sent to the Four Southern Tribes in April 2019. No response received.)

- Presentations to **Boards & Commissions, & Partners: May-September 2019**
  - Development Review Commission
  - Transportation Commission
  - Historic Preservation Commission
  - Tempe Chamber of Commerce
  - Neighborhood Advisory Commission
  - Sustainability Commission
  - Joint Review Committee (ASU-Tempe)
  - Downtown Tempe Authority

- **Neighborhood Meetings** on General Plan amendment
  - **July 8** (Escalante Comm. Ctr.), **& 22, 2019** (West Multi-Gen. Comm. Ctr.)

- **DRC Hearings: August 13 & 26, 2019**

- **First Hearing** by the Council: **September 26, 2019**

- **City Council Consideration: October 17, 2019**

Thank you.
Questions?

www.tempe.gov/urbancore

MEMORANDUM

TO: Tempe Transportation Commission

FROM: Julian Dresang, City Traffic Engineer, 350-8025

DATE: August 13, 2019

SUBJECT: Setting Speed Limits – Vision Zero

ITEM #: 4

PURPOSE:
The purpose of this memo is to provide information about speed limits to the Commission and request feedback on setting speed limits using the "safe systems" approach.

RECOMMENDATION OR DIRECTION REQUESTED:
Staff seeks feedback from the Commission on setting speed limits using the "safe systems" approach.

CITY COUNCIL STRATEGIC PRIORITY:

- Safe & Secure Communities - 1.08: Achieve a reduction in the number of fatal and serious injury crashes to zero.

BACKGROUND INFORMATION:
On May 3, 2018 staff made a presentation to the City Council that recommended changes to posted speed limits on nine arterial street segments, nine collector/local street segments, and six "35 mph school zones" near high schools. The criteria that was used for those recommended changes was limited to:

- 35 mph school zones near high schools,
- Locations with inconsistency/discontinuity,
- Arterial midblock changes, and
- Recently completed streetscape projects.

Following that presentation, staff reached out to the effected schools and school districts to gather feedback on whether they would be supportive of converting the "35 MPH AT ALL TIMES" to "35 MPH WHEN LIGHTS FLASHING." The idea is that drivers would be more likely to comply with the regulations if the regulations better reflected times of the day that high volumes of students are present. All the schools and school districts that we contacted were supportive of the proposed changes.

Between May 2018 and June 2019, staff and the community were actively developing the Vision Zero Action Plan. In reviewing crash data, it became apparent that there would need to be strategies related to speeding in the action plan. It seemed prudent to delay any changes to City speed limits until that plan was finalized.

In Tempe, speeding related crashes account for 20 percent of all high-severity (fatal and serious injury) crashes. Traveling at "Speeds Too Fast for Conditions" is the second highest violation leading up to high-severity crashes, exceeded only by "Failure to Yield Right-of-Way." The most common crash types for speeding related high-severity crashes are Rear End (46%) and Single Vehicle (39%). Speed related high-severity crashes had previously been decreasing year-over-year from a high of 19 in 2012 to a low of 12 in 2015. Unfortunately, more recently the trend has been increasing rapidly, with 18 in 2016 and 29 in 2017. The age groups most likely to be involved in speeding related high-severity crashes are drivers 19 to 23 years in age.

There are two scientifically proven reasons why managing speed is important. As speeds increase (1) There is a greater chance of being injured, and (2) The injuries are likely to be more sever or fatal. At speeds of 10 to 15 miles per hour (mph), the crash risk is five percent and the fatality risk is two percent. At speeds of 40+ mph, the crash risk is 90 percent and the fatality risk is 85 percent.

CURRENT STATUS:
A recent U.S. Department of Transportation - Federal Highway Administration document titled "Methods and Practices for Setting Speed Limits: An Informational Report" identified four general approaches for setting speed limits:

1. Engineering Approach (85th percentile speed with minor adjustments)
2. Expert System Approach (computer programing)
3. Optimization (minimize the total societal costs of transport)
4. Safe Systems Approach (injury minimization)

The Engineering Approach is the most common method used in the United States and is what the City of Tempe has traditionally used. This has resulted in maximum arterial speed limits of 35 to 45 mph, maximum collector speed limits of 25 to 35 mph, and maximum local/neighborhood street speed limits of 25 mph.

The Safe Systems Approach is the method being used in most Vision Zero cities. A safe systems approach recognizes that humans are going to make mistakes and seeks to design a system that allows for these mistakes, rather than expecting perfect behavior to minimize death and injury. A safe systems approach aims to provide safe travel for all users by focusing on safe streets, **safe speeds**, safe vehicles and safe people.

Using this method, speed limits are set according to the crash types that are likely to occur, the impact forces that result, and the tolerance of the human body to withstand these forces. As a result, this method focuses on the type of users, particularly vulnerable users like pedestrians and bicyclists. For these reasons, Tempe's Vision Zero Action Plan identified two "safe systems" strategies related specifically to speeding:

1. Initiate a citywide speed limit evaluation with the safe systems approach to incorporate other critical factors, such as crash history and the safety of people walking and bicycling.
2. Improve driver compliance by converting "24 hour" 35 MPH high school zones to time-of-day with flashing warning lights.

The Tempe Police Department was very involved in developing these strategies and is supportive of these proposed changes to improve safety.

Speed limits using the Safe Systems method should look something like the following:

- Maximum arterial speed limits (low bike/pedestrian activity) = 40 mph
- Maximum arterial speed limits (medium bike/pedestrian activity) = 35 mph
- Maximum arterial speed limits (high bike/pedestrian activity) = 30 mph
- Maximum arterial speed limits (very high bike/pedestrian activity) = 25 mph
- Maximum arterial speed limits = 25 to 30 mph
- Maximum local/neighborhood speed limits = 20 to 25 mph

The resulting changes to posted speed limits on arterial streets in Tempe would then look something like the following:

- 40 mph = All arterial streets south of Southern Avenue, 48th Street, McClintock (north of Loop 202)
- 35 mph = "Nearly" all arterial streets north of and including Southern Avenue, Kyrene Road north of Baseline Road
- 30 mph = Arterial streets immediately in and around Arizona State University and Tempe Beach Park
- 25 mph = Mill Avenue between University Drive and Rio Salado Parkway

There is often a misconception that lowering speed limits will result in increased congestion. This is not the case because congestion is a function of delay, not speed. Traffic signal timing is based on a progression speed that is equal to or slightly less than the posted speed limit. As a result, it is common for drivers that speed between signals to consistently get stopped at each signalized intersection along a corridor. Most recurring delay (congestion) occurs at intersections and is a function of demand exceeding capacity and inconsistent signal spacing. Most non-recurring delay is a result of crashes and work zones. Lowering speeds should result in less crashes, which reduces congestion. Also, low speed crashes are usually less severe and can be moved from the road more easily, which minimizes congestion. Tempe is already addressing work zone delay by limiting construction hours on the roadway to between 8:30 a.m. and 3:30 p.m.

NEXT STEPS:

- Receive Council feedback on setting speed limits using the "safe systems" approach.
- Staff will develop a Request for Council Action to amend the City Code.
- There will be two public hearings, as required for any modifications to the City Code.
- Staff will educate residents of any changes.
- Staff will fabricate and install new speed limit signs.
- Staff will continue to educate residents.

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:

The costs would include removal of old signs, fabrication of new signs, installation of new signs, installation of flashing lights (at high school zones).

$ 187,000 Highway User Revenue Funds

Sufficient funding is available in the Capital Improvement Program and operating budget.

ATTACHMENTS:

1. PowerPoint

Setting Speed Limits
Vision Zero

Transportation Commission
August 13, 2019

Tempe

Performance Measures

Safe & Secure Communities

1.08: Achieve a reduction in the number of fatal and serious injury crashes to zero.

VISION ZERO TEMPE

A Little History on Speed Limits

- First gasoline-powered automobiles traveled a maximum speed of 13 mph.
- First posted speed limits were in England (5 mph outside of towns and 2 mph in towns).
- Automobiles were required to have three operators for each vehicle (two traveling in the vehicle and one walking ahead and carrying a red flag to warn pedestrians and equestrians).

Update from May 2018 to Today

- On May 3, 2018 staff made a presentation to the Council that recommended changes to posted speed limits on:
    - Nine arterial street segments,
    - Nine collector/local street segments, and
    - Six 35 mph high school zones.

- Criteria for recommended changes was limited to:
    - 35 mph high school zones,
    - Locations with inconsistency/discontinuity,
    - Arterial midblock changes, and
    - Recently completed streetscape projects.

Update from May 2018 to Today

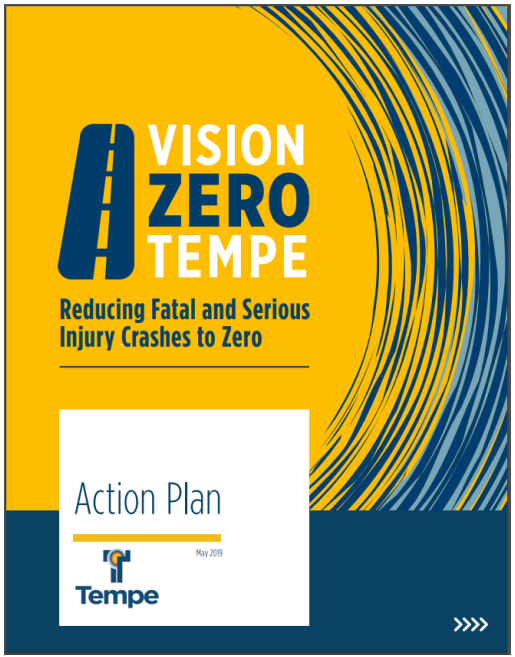
- The Council requested that staff reach out to schools and school districts to get their feedback on converting from “35 MPH AT ALL TIMES” to “35 MPH WHEN LIGHTS ARE FLASHING”.

- Feedback for this change was positive and everybody agreed that this would likely improve driver compliance.

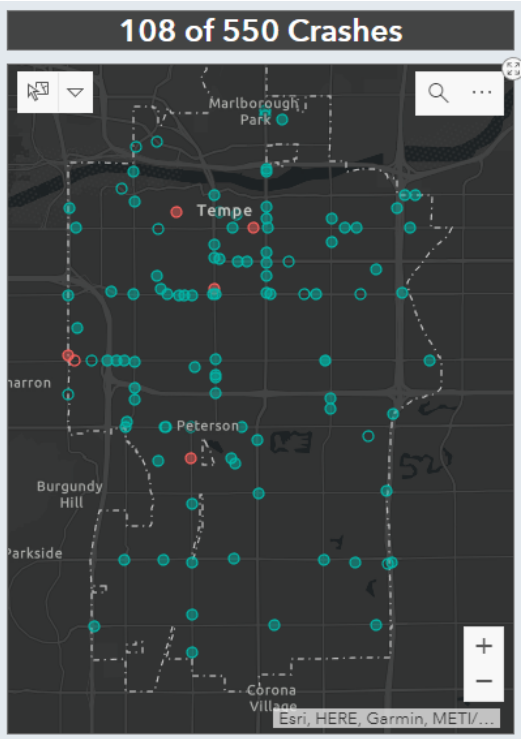
Update from May 2018 to Today

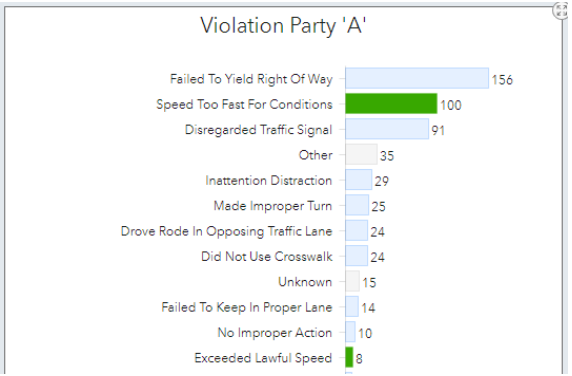
- Between May 2018 and June 2019, staff and the community were actively developing the Vision Zero Action Plan.

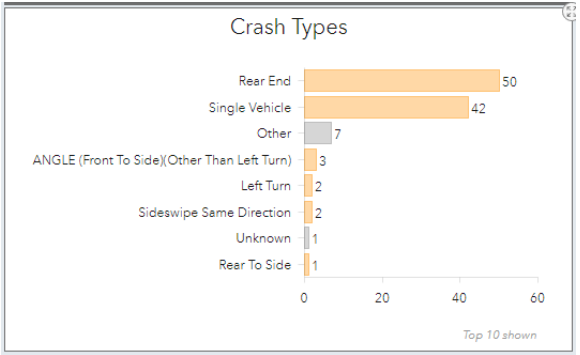
- As crash data was reviewed, it became apparent early on that there would need to be strategies related to speeding in the action plan. So, staff delayed implementing any of the proposed changes until the plan was finalized.

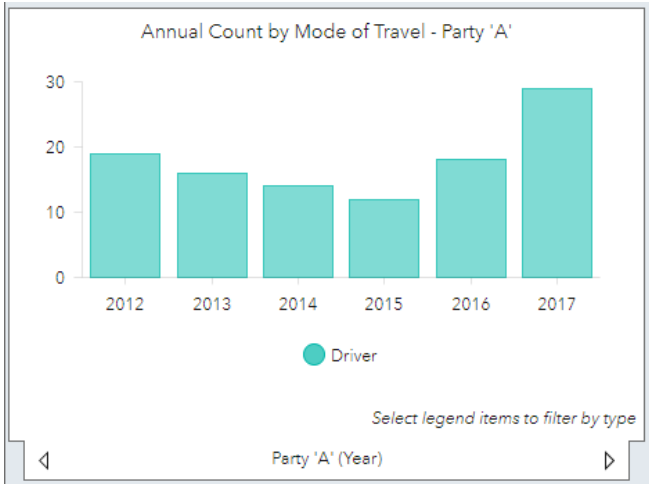


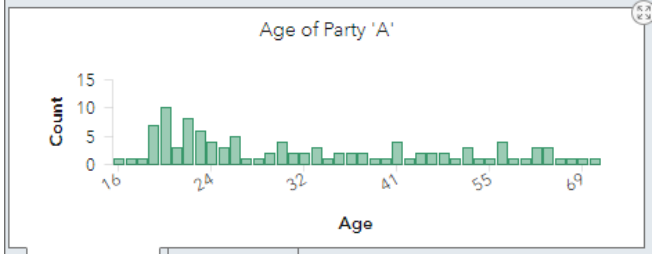
Speed Related Crashes – Tempe











Tempe Crash Data (2012-2017), available at tempe.gov/visionzero

How Does Speed Effect Safety?

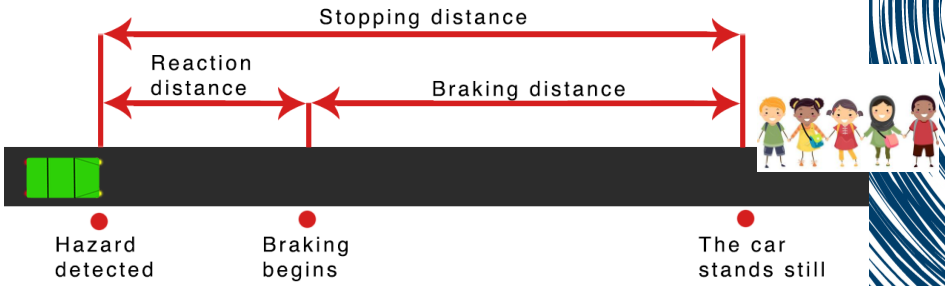
As speed increases:

1. There is a greater chance of being injured.
2. The injuries are likely to be more severe or fatal.

SPEED (MPH)	STOPPING DISTANCE (FT)*	CRASH RISK (%)†	FATALITY RISK (%)†
10–15	25	5	2
20–25	40	15	5
30–35	75	55	45
40+	118	90	85

* Stopping Distance includes perception, reaction, and braking times.

† Source: Traditional Neighborhood Development: Street Design Guidelines (1999), ITE Transportation Planning Council Committee 5P-8.



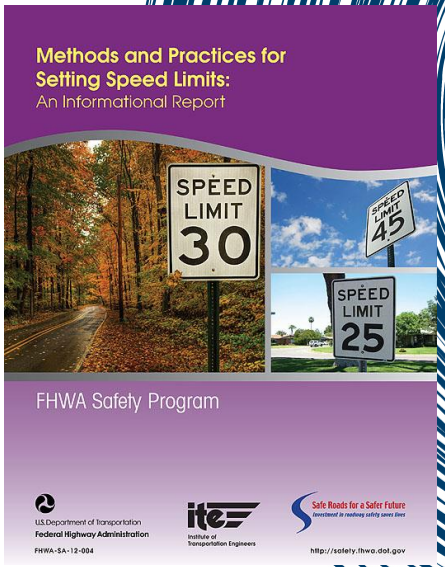
Setting Speed Limits

There are four general approaches for setting speed limits:

1. **Engineering Approach** (85th percentile speed with minor adjustments)
2. **Expert System Approach** (computer program)
3. **Optimization** (minimize the total societal costs of transport)
4. **Safe Systems Approach** (injury minimization)

Approach #1 is the most common method in the US.

Approach #4 is the most consistent with Vision Zero.



Safe Systems

Vision Zero brings a ***safe systems*** approach to transportation planning, priorities, and implementation.

A safe systems approach recognizes that humans are going to make mistakes, and seeks to design a system that allows for these mistakes, rather than expecting perfect behavior to minimize death and injury.

Safe Systems

Safe Systems

Tempe's Vision Zero Action Plan identifies two "Safe Systems" strategies related specifically to speeding:

1. Initiate a citywide speed limit evaluation with the safe systems approach to incorporate other critical factors, such as crash history and the safety of people walking and bicycling.
2. Improve driver compliance by converting "24 hour" 35 MPH high school zones to time-of-day with flashing warning lights.

Setting Speed Limits – Engineering Approach

What do Tempe's speed limits currently look like?

Speed limits set by 85th percentile with minor modifications (+/- 5 mph) for special conditions:

- **Maximum arterial speed limits = 35-45 mph**
- **Maximum collector speed limits =25-35 mph**
- **Maximum local/neighborhood speed limits = 25 mph**

Setting Speed Limits – Safe Systems Approach

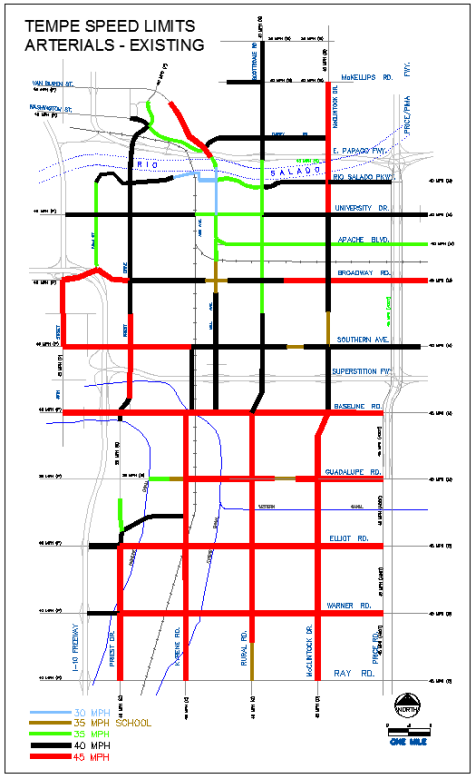
What should Tempe's speed limits look like?

Speed limits set according to the crash types that are likely to occur, the impact forces that result, and the tolerance of the human body to withstand these forces:

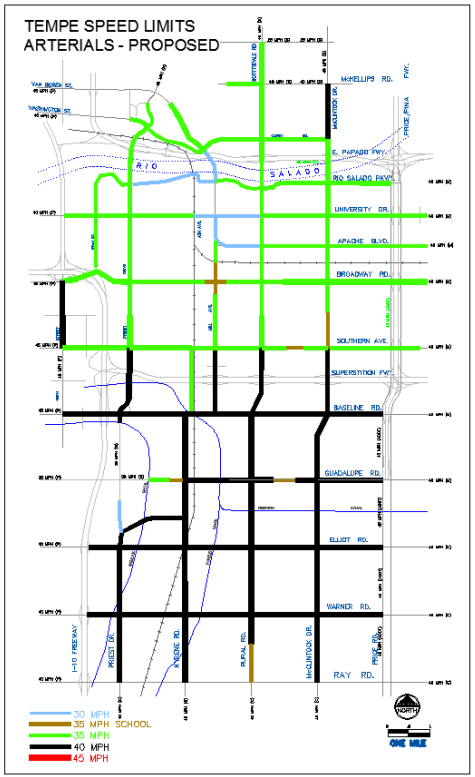
- Maximum arterial speed limits (low bike/ped activity) = 40 mph
- Maximum arterial speed limits (medium bike/ped activity) =35 mph
- Maximum arterial speed limits (high bike/ped activity) = 30 mph
- Maximum arterial speed limits (very high bike/ped activity) = 25 mph
- Maximum collector speed limits = 25-30 mph
- Maximum local/neighborhood speed limits = 20-25 mph

Setting Speed Limits – Safe Systems Approach

EXISTING



PROPOSED



Setting Speed Limits – Safe Systems Approach

Lower speed limits will NOT result in increased congestion.

- Congestion is a function of delay, not speed.
- Traffic signals are timed for a progression speed.
  - "Racing to the next red light"
- Most recurring delay occurs at intersections and is a function of demand exceeding capacity and inconsistent signal spacing.
- Most non-recurring delay is a result of crashes and work zones.
  - Lower speeds should result in less crashes.
  - Low speed crashes are usually less severe and can be moved quickly.
  - Tempe already limits construction work to between 8:30am and 3:30pm.

Next Steps

- Receive Council feedback on setting speed limits using the “safe systems” approach.
- Staff will develop a Request for Council Action to amend the City Code.
- Hold two public hearings (as required for modifications to the City Code).
- Educate our residents of ensuing changes.
- Fabricate and install speed limit signs.
- Continue to educate our residents.

VISION ZERO TEMPE

MEMORANDUM

TO: Tempe Transportation Commission

FROM: Chase Walman, Planner II, 480-858-2072

DATE: August 13, 2019

SUBJECT: El Paso Multi-Use Path Update

ITEM #: 5

PURPOSE:
The purpose of this memo is to provide the Commission with a review of the 30% design of the El Paso Path Improvement Project which extends from Price Road to just east of McClintock Drive. The multi-use path is proposed to be 10' wide, completing the gap across Fuller Elementary and Optimist Park with additional improvements to the lighting, landscaping, irrigation, ramps, and crosswalks.

RECOMMENDATION OR DIRECTION REQUESTED:
Information only.

CITY COUNCIL STRATEGIC PRIORITY:

- Performance Measure 3.26 - 20 Minute City
- Performance Measure 3.14 - ADA Transition Plan

BACKGROUND INFORMATION:
The El Paso Gasline path project (between Price and McClintock) was the result of a neighborhood grant request awarded in 1994 to clean up the easement located behind homes of Yale Drive and Sesame Street. The project evolved into a path project between Price Road and Country Club Way to encourage local neighborhood resident activity along the easement. The improvements included a 6' path, landscaping, and lighting and was completed in 1998. With the success of the first phase, a second phase was implemented and completed from Kenwood Lane to just east of McClintock Drive in 2001. Since the original completion, no improvements have been made to project beyond regular maintenance.

Considering the popularity and constant heavy use of the path, the age of the lighting equipment, the damages to the landscaping from severe weather conditions; the path needs to be refreshed and refurbished. There are two scheduled maintenance projects for the El Paso paths programmed within a year of each other. The initial project was a lighting replacement and upgrade followed by a landscaping refresh with concrete improvements. In the interest of minimizing the impact on the neighborhood and damaging any of the improved lighting fixtures, as well as, generating project cost savings, these projects have been consolidated into a single path improvement project to be implemented at the same time. In addition, Optimist Park residents and Tempe's Transportation Commission also requested staff explore and provide a design solution to eliminate the gap of the pathway between Country Club Way and Kenwood Lane.

Improvements as part of this project will include new trees, ground cover, shrubs, irrigation, ADA- compliant ramps, crosswalks, vandal resistant LED lighting, and a continuous 10' pathway extending from Price Rd to just east of McClintock Drive.

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:
$1,250,000 Pathway Capital Maintenance (Local)

ATTACHMENTS:
PowerPoint

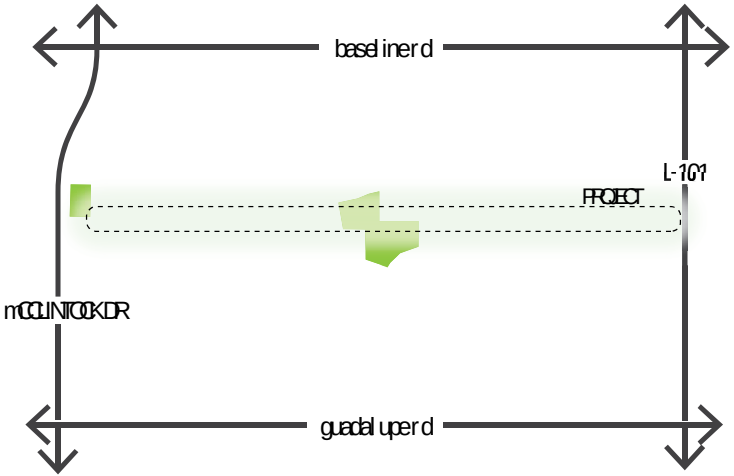
El Paso Multi-Use Path Project Update

Transportation Commission
August 13, 2019

Tempe

History of Path

- The El Paso path was created in 1997 as a neighborhood grant request from area neighbors to improve the wide abandoned gas easement behind their homes



This Project

- The consolidation of two programmed pathway capital maintenance projects into one holistic path improvement project

- Complete the gap in pathway from Country Club Way to Kenwood Lane
- New vandal resistant light poles
- New trees/landscaping/ irrigation
- Improved crosswalks and ADA compliant directional ramps
- Bring existing path to current width standards (10’)

30% Design

Opportunities & Constraints

OPPORTUNITIES

COMPLETE THE GAP THROUGH FULLER ELEMENTARY AND OPTIMIST PARK TO PROVIDE A CONTINOUS PATH FROM PRICE TO MCCLINTOCK

IMPROVED VANDAL RESISTANT LED LIGHTING WITH ENERGY EFFICIENT WARM WHITE LIGHT

IMPROVED RAMPS AND CROSSWALKS

100 NET ADDITIONAL TREES TO PROVIDE SHADE

IMPROVE GRADING TO REDUCE WATER PONDING ON PATH

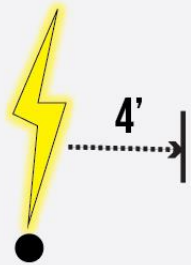
NEW IRRIGATION TO SUPPLY NEW/ EXISTING TREES, SHRUBS, ACCENTS, & GROUNDCOVERS

OPPORTUNITIES & CONSTRAINTS

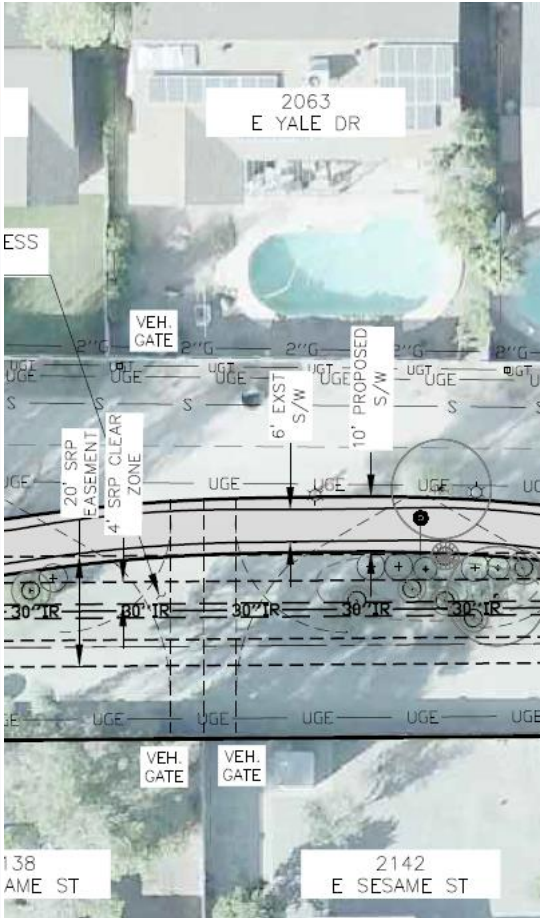
CONSTRAINTS

MAINTAIN VEHICULAR ACCESS FOR RV GATES AND SOLID WASTE PICK-UP

MAINTAIN REQUIRED OFFSET FROM SRP IRRIGATION TREES (10') - SHRUBS (4')



MAINTAIN 4' OFFSET FOR TREES & SHRUBS FROM UNDERGROUND ELECTRIC



Landscape Palette


CONVOVULUS CNEORUM
BUSH MORNING GLORY


DALEA GREGGII
TRAILING INDIGO BUSH


MACFADYENA UNGUIS-CATI
CAT'S CLAW


ROSMARINUS OFFICINALIS
CREEPING ROSEMARY


RUELLIA PENINSULARIS
BAJA RUELLIA


SIMMONDSIA CHINENSIS
JOJOBA


TECOMA STANS 'CRIMSON FLARE'
CRIMSON FLARE


ALOE VERA
MEDICINAL ALOE


DASYLIRION WHEELERI
DESERT SPOON


HESPERALOE PARVIFLORA
RED YUCCA


ACACIA REDOLENS 'LOW BOY'
PROSTRATE ACACIA


ACACIA STENOPHYLLA
SHOESTRING ACACIA


PARKINSONIA FLORIDUM
BLUE PALO VERDE


PROSOPIS CHILENSIS
CHILEAN MESQUITE


VITEX AGNUS-CASTUS
HEMP TREE


THEVETIA PERUVIANA
YELLOW OLEANDER


AMBROSIA DELTOIDEA
BUR-SAGE


CAESALPINIA PULCHERRIMA
RED BIRD OF PARADISE


CALLIANDRA ERIOPHYLLA
FAIRY DUSTER


CASSIA PHYLLODENIA
SILVER LEAF CASSIA


DODONAEA VISCOSA
HOP BUSH (PURPLE)

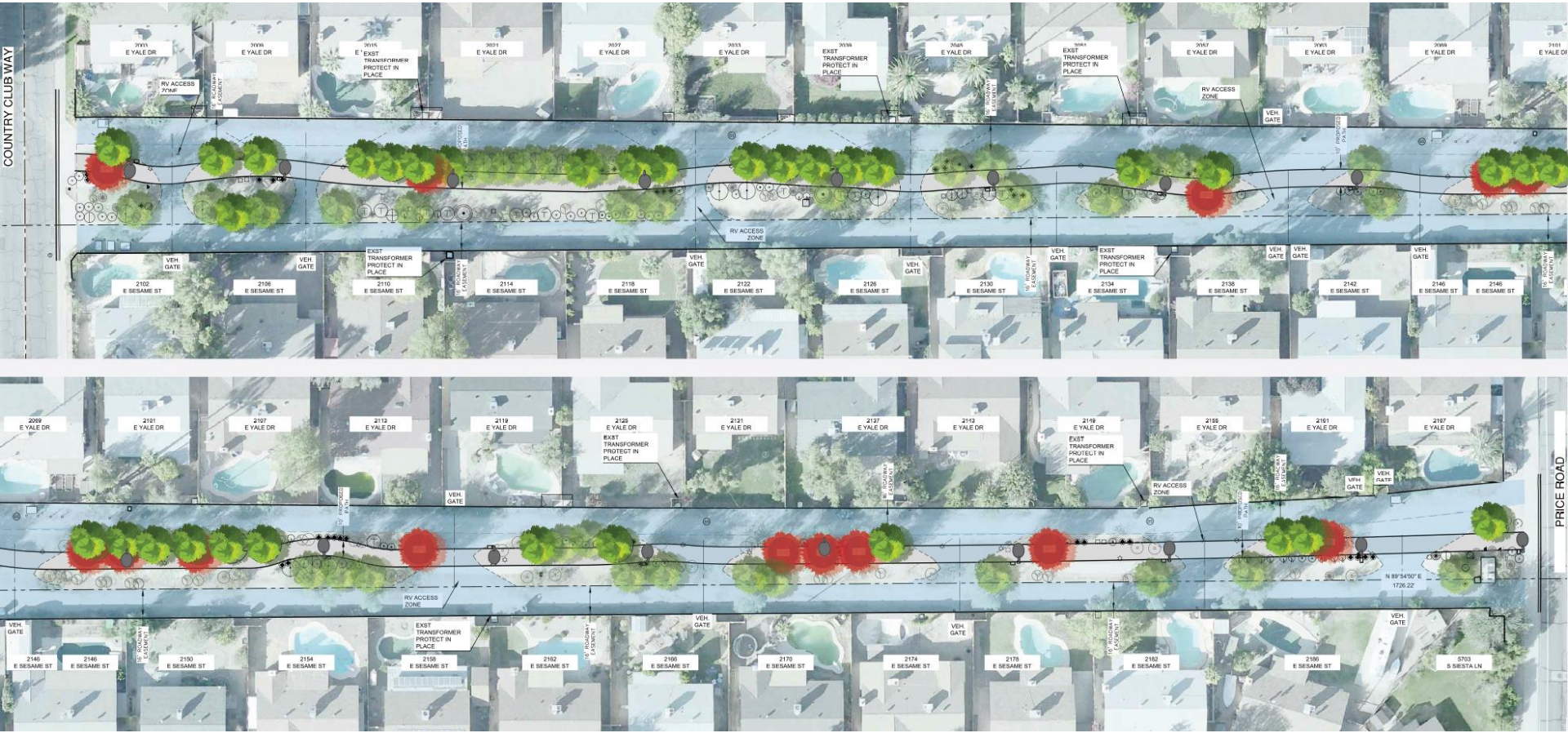

ENCELIA FARINOSA
BRITTLEBUSH


JUSTICIA CALIFORNICA
CHUPAROSA


LARREA TRIDENTATA
CREOSOTE

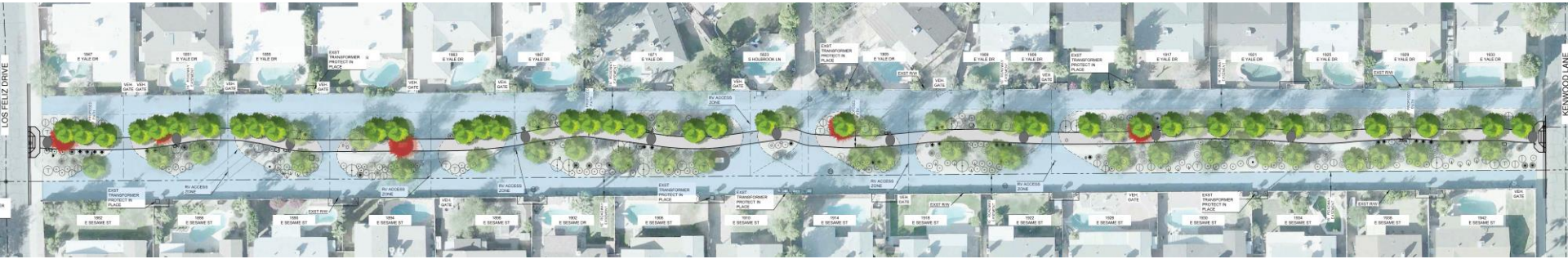

LEUCOPHYLLUM FRUTESCENS
TEXAS RANGER

Plan View – Price Road to Country Club Way

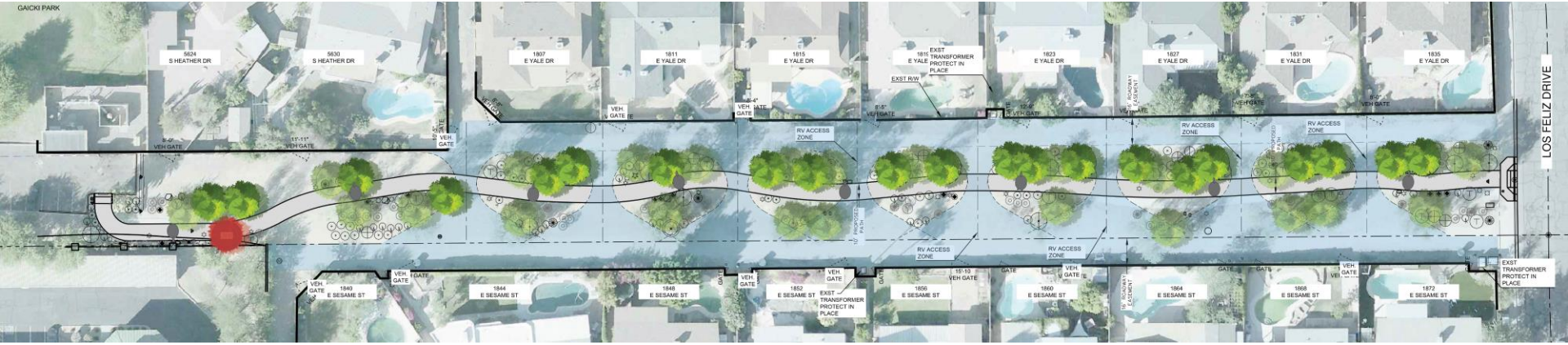


Plan View – Country Club Way to Kenwood Lane

Plan View – Kenwood Lane to Los Feliz Drive



Plan View – Los Feliz Drive to Gaicki Park



Next Steps

Next Steps

- Transportation Commission
- Public Meetings Round 1
  - Fuller Elementary **August 20th** 7-8pm
  - El Paso Path (Just East of Country Club Way) **August 24th** 9:30 to 10:30 am
- Parks, Recreation, Golf, and Double Butte Cemetery Advisory Board **August 21st**
- 60% Design **October 2019**
- Transportation Commission **October 8th**
- Public Meetings Round 2 **October 16th and 19th**
- Final Plans, Specs, & Estimates **December 2019**
- Anticipated Construction Start **Spring 2020**
- Anticipated Project Completion **Fall 2020**

QUESTIONS?

MEMORANDUM

TO: Tempe Transportation Commission

FROM: Julian Dresang, City Traffic Engineer, 480-350-8025

DATE: August 13, 2019

SUBJECT: 3-Feet Bicycle Signage

ITEM #: 6

PURPOSE:
Staff will have a discussion with the Commission regarding signage related to motorists providing three feet when passing a cyclist.

RECOMMENDATION OR DIRECTION REQUESTED:
This item is for information only.

CITY COUNCIL STRATEGIC PRIORITY:
N/a

BACKGROUND INFORMATION:

The Commission requested that staff discuss the possibilty of installing signage in Tempe similar to the City of Phoenix as seen below.

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES: N/a

ATTACHMENTS: N/a

MEMORANDUM

TO: Tempe Transportation Commission

FROM: Shelly Seyler, Deputy Engineering & Transportation Director, 350-8854

DATE: August 13, 2019

SUBJECT: Future Agenda Items

ITEM #: 8

PURPOSE:
The Chair will request future agenda items from the Commission members.

RECOMMENDATION OR DIRECTION REQUESTED:
This item is for information only.

CITY COUNCIL STRATEGIC PRIORITY:

- N/a

BACKGROUND INFORMATION:
The following future agenda items have been previously identified by the Commission or staff:

- September 10
  - North/South Railroad Multi-use Path Project
  - Transit Shelter Design
  - Grand Canal Multi-use Path Project
  - Transit Program/Security Update
- October 8
  - Annual Report
  - McClintock Drive Project Update
  - ASU ADA Program
  - El Paso Multi-use Paths
  - MAG Value Mapping Survey Results
- November 12
  - Annual Report
  - Bike Share
  - Tempe/Mesa Streetcar Extension Feasibility Study
  - Bicycle Plan for Achieving Platinum Level Bike Friendly Community
- December 10
- January 14
  - Commission Business
  - Transit Shelter Design
  - Orbit Vehicles
- February 11
- March 10
- April 14
  - Paid Media Plan
- May 12
  - Bike Hero
  - Capital Improvements Project Update
  - MAG Design Assistance Grants

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES: N/a

ATTACHMENTS: None