



E_Bikes: Summary of Actions & Potential Next Steps

Connectivity Subcommittee: October 7, 2025

E-Bikes in Chandler: Actions Taken & Future Options

Purpose

- Summarize actions taken to address e_bike regulations on canal and city trails.
- Propose potential next steps for policy, education, and enforcement.

Key Areas

- Legal Framework & Clarifications
- Education & Outreach Efforts
- Enforcement Actions
- Potential New Options



E_Bike Classifications

Definitions of E_Bike Classes

- Class 1: Pedal_assist only, no throttle, max speed 20 mph.
- Class 2: Throttle_assisted, max speed 20 mph, may also have pedal_assist.
- Class 3: Pedal_assist only, no throttle, max speed 28 mph.

Key Notes

- Arizona law
- Class 3 often

			
	CLASS 1	CLASS 2	CLASS 3
Pedal Assist	✓	✓	✓
Throttle		✓	
Max Speed	20 mph	20 mph	28 mph

City of Chandler Shared Use Paths

Bikeway Type and Ownership

Paved Shared Use Paths

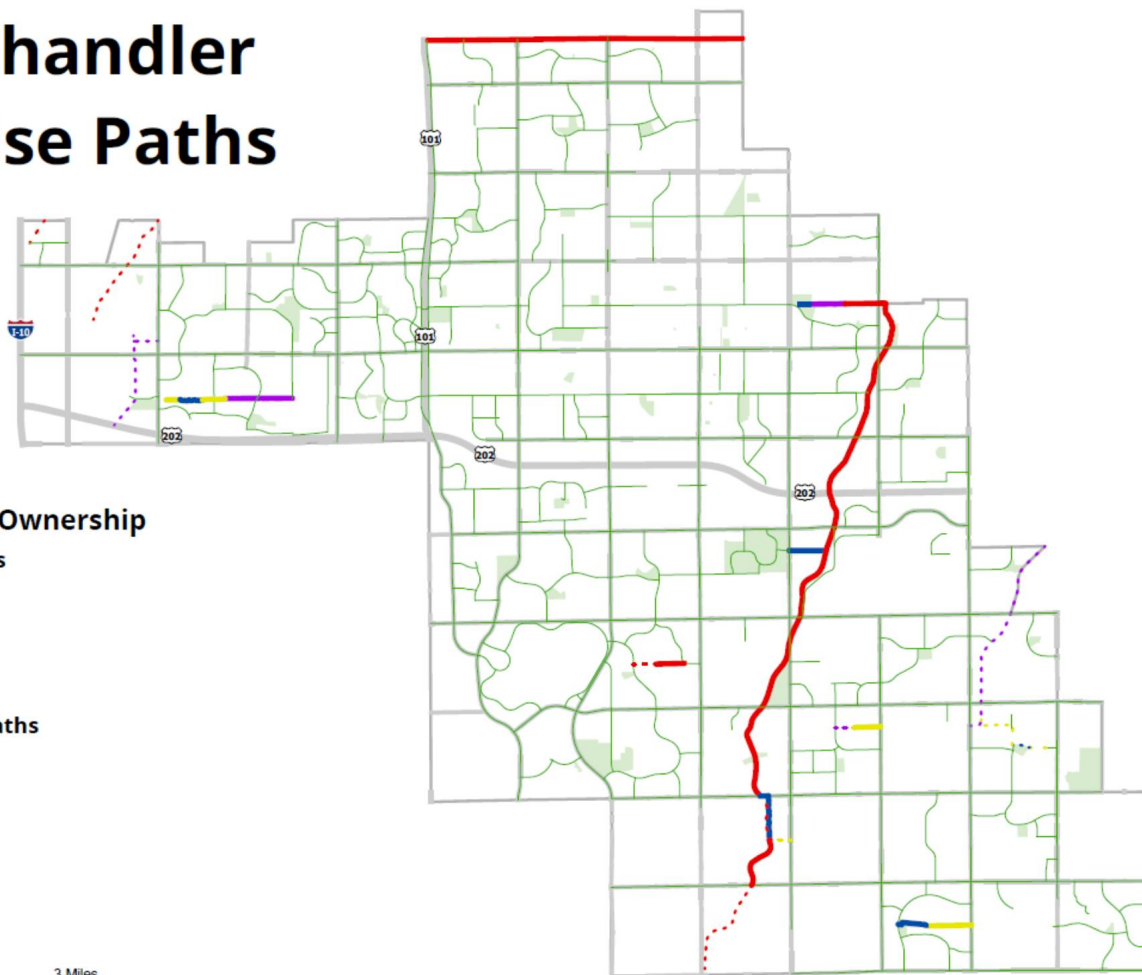
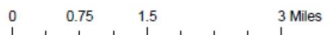
- City of Chandler
- Federal
- Other Utilities
- HOA

Unpaved Shared Use Paths

- City of Chandler
- Federal
- Other Utilities
- HOA

Bike Lanes

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Legal Framework & Clarifications

Federal Oversight on Canal Trails

- Owned by U.S. Bureau of Reclamation, managed by SRP.
- Federal regulations prohibit all e-bikes and e-scooters, regardless of motor use.

City Enforcement Role

- City collaborates with SRP to enforce restrictions.
- SRP serves as complainant in formal actions.

State vs. Federal Law

- Arizona permits Class 1 & 2 e-bikes on shared-use paths unless locally restricted.
- Federal rules supersede on canal paths.

ADA Considerations

- E-bikes not recognized as required mobility devices under federal guidance.



Enforcement Challenges

Jurisdictional Complexity

- Canal trails: Federal oversight (Bureau of Reclamation/SRP) vs. City enforcement
- City must collaborate with SRP, who serves as complainant in formal actions
- Federal rules supersede state law on canal paths

Limited Enforcement Tools

- Unlike vehicles, bicycles lack registration/license plates for identification
- Trail cameras ineffective due to inability to identify riders from footage
- Speed detection technology has limited enforcement value without registration system

Resource Intensive

- April 2023 through July 7, 2025: 337 calls for service (32 originated from officers or anonymous/citizen 305 were generated from single complainant)
- Requires dedicated patrol presence and coordination between agencies



Enforcement Challenges

Classification & Detection Issues

- Difficult to distinguish between Class 1, 2, and 3 e-bikes during patrol
- E-bikes can operate without motor engaged, making violations harder to identify
- Mixed-use trails create complex enforcement scenarios with pedestrians and cyclists

Discretionary Enforcement Challenges

- Seniors and individuals with mobility limitations rely on e-bikes for recreation and exercise
- Difficulty distinguishing between recreational users and violations
- Creates enforcement dilemma: strict compliance vs. community access to trails

Scale of Problem

- Multiple trail systems across city requiring coverage
- Educational efforts ongoing but enforcement remains challenging



Enforcement Efforts _ Actions Taken (2024–2025)

Fall 2024:

- Police Team 16 pop-up events to educate trail users.

April 2025:

- Traffic trailers displayed educational messages along canals.
- Ongoing: Citywide messaging via social media, CityScope, ChandlerAZ.gov, and bike map.
- Signage: Posted along canal trails (e.g., Paseo Trail) prohibiting motorized vehicles.

August 2025:

- Arizona College Prep High School Informational Night (Thursday, August 21st from 7:00-8:00 p.m.)
- Chandler PD presents laws and enforcement capabilities of e-bike violations
- Collaborative social media campaign between CAPA & CPD



E-Bike Restrictions in Other Jurisdictions

		Scottsdale	Phoenix	Mesa	Tempe	Gilbert	Chandler Current	Chandler Proposed
Class 1, 2	Sidewalks	✓	X	X	✓*	✓	✓	✓
	Bike Lanes	✓	✓ 16+ Only	✓ 16+ Only	✓	✓	✓	✓
	Shared Use Paths	✓	✓ 16+ Only	✓ 16+ Only	✓	✓	✓	✓
Class 3	Sidewalks	X	X	X	✓*	X	✓	X
	Bike Lanes	✓ 16+ Only	X	✓ 16+ Only	✓	✓	✓	✓ 16+ Only
	Shared Use Paths	X	X	X**	X*	X	X**	X

* The City of Tempe only allows bikes (e-bikes or traditional bikes) on sidewalks of high speed roads (greater than 25 mph) that lack bike lanes. Tempe does not restrict E-bike classes, but sets speed limits of 28mph in bike lanes, 20mph on paths, and 5mph on sidewalks when passing a pedestrian.

** Chandler and Mesa Code do not specifically restrict Class-3 E-Bikes, but state law generally prohibits Class-3 E-Bikes from Shared Use Paths.

Key Takeaway

- Chandler's proposed restrictions align with regional trends, particularly sidewalk and age restrictions for Class 3 e-bikes.

Regulatory Perspective: Balancing Innovation with Safety

Reaction Time and Urban Environment: electric motorcycle-style bikes are commonly found in dense cities where obstacles such as pedestrians or cars may exist



Injury Severity and Impact Forces: Collisions increase in intensity as their speed does, so the collision force at 15 mph may be much lower than at 28 mph.



Global Regulatory Consistency: Consistency is essential, as standard speed limits for e-bikes ensure safety across regions and borders.



Technological Limitations: Modern e-bike technology is optimized for specific speed limits.

Helmet laws play a crucial role, too. An NPR article highlighted that fewer riders were wearing helmets even as accidents increased on e-bikes.



Potential New Options – Policy & Regulatory

Consistent Local Ordinance for Non-SRP Trails

- Prohibit Class 3 e-bikes
- Recommended: Ensures clarity and consistency.

Sidewalk Restrictions for E-Bikes

- Prohibit Class 3 e-bikes on sidewalks.
- Recommended: Aligns with Scottsdale, Mesa, and Phoenix policies.

Youth Restrictions for E-Bikes

- Limit Class 3 e-bike usage to Age 16+.
- Require helmets under at 18.
- Recommended: Aligns with some other East Valley cities.

Designated E-Bike Zones/Hours

- Pilot areas or hours for Class 1 & 2 e-bikes on non-canal trails.
- Not Recommended: Short, dispersed trails make this confusing.

Trail Speed Limits

- Enforce 10–15 mph limits on city trails.
- Not Recommended: Limited impact, adds complexity.

Potential New Options – Education & Engagement

Enhanced Public Awareness Campaign

- Launch updated campaign with videos, maps, infographics, and trail rules.

School-Based Safety Programs

- Partner with schools to teach e_bike safety, targeting teens.
- Requires additional resources.

Trail Etiquette Ambassador Program

- Train volunteers/staff to educate riders and report violations



Potential New Options – Enforcement & Infrastructure

QR Code Trail Signs

- Install signs with QR codes linking to e_bike rules guide.

Rules Reminder Signs

- Place at high_use trailheads/parking areas to reinforce rules.

Trail Cameras/Smart Detection

- Deploy in high_traffic areas to monitor speed.
- Not Recommended: Limited enforcement value due to lack of bike registration.

Traffic Calming at Trail Access Points

- Add rumble strips, speed humps, or narrowing elements.
- Use Selectively: Broad use may hinder responsible riders.

Pedestrian_Priority Zones

- Use painted lanes or textured surfaces.

Ride

TIPS TO KEEP
YOU SAFE 

S

Secure your helmet.



A



Allow extra time
to stop and watch
your speed.

F

Follow the rules
of the road.



E



Eyes up.
Distractions down.

E-BIKE: Know your type

VEHICLE TYPE	Pedal Operated	Maximum Motor Assisted Speed (MPH)
BICYCLE	YES	N/A
TYPE 1 - E-BIKE	YES	20
TYPE 2 - E-BIKE	NO	20
TYPE 3 - E-BIKE	YES	28 MINIMUM AGE 16
MOPED/ MOTORIZED BICYCLE	NO	N/A MINIMUM AGE 16 LICENSE REQUIRED

stay safe 
ORANGE COUNTY SHERIFF

 Providence





Recommendations Summary

Recommended Actions

- Adopt local ordinance for non-SRP trails (prohibit Class 3). Restrict Class 3 e-bikes on sidewalks and for youth (16+ only).
- Enhance public awareness with updated campaign.
- Install QR code signs and rules reminders at trailheads.

Proceed with Caution

- School programs and ambassador program (resource-intensive).
- Selective traffic calming at trail access points.

Not Recommended

- Designated e-bike zones/hours, trail speed limits, cameras, pedestrian-priority zones.



Next Steps

- **Short-Term:** Implement recommended ordinances and signage.
- **Medium-Term:** Launch enhanced awareness campaign and explore school programs.
- **Long-Term:** Evaluate effectiveness of new measures and adjust enforcement strategies.
- **Stakeholder Engagement:** Continue collaboration with SRP, schools, and community.



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