



# HANFORD

# CONNECTED

**Kings-Tulare High-Speed Rail Station  
Transit Oriented Development Plan**

FINAL DRAFT: December 2025

# HANFORD CONNECTED

Shaped by Rail.  
Grounded by Community.  
Rooted in Resilience.

December 2025

## Acknowledgements

### Project Partners

*This project was made possible by a Caltrans Sustainable Communities Competitive Grant.*

### City of Hanford

#### City Council

**Travis Paden**, Mayor, District A Council Member

**Kimber Regan**, District B Council Member

**Nancy Howze**, Vice Mayor, District C Council Member

**Lou Martinez**, District D Council Member

**Mark Kairis**, District E Council Member

#### City Staff

**Chris Tavarez**, Interim City Manager

**Jason Waters**, Deputy City Manager

**Gabrielle Myers**, Senior Planner

**Brian Johnson**, Community Relations Manager

**Frank Senteno**, Utilities and Engineering Director

**Lisa Dock**, City Engineer

**Jaklin Hart**, Associate Engineer

#### Consultant Team

**Perkins&Will**, Prime Consultant, Urban Design

**Alta Planning + Design Inc.**, Community Outreach and Active Transportation Planning

**Nelson\Nygaard**, Multi-Modal Planning

**Economic & Planning Systems Inc.**, Economic Consulting

**Mark Thomas**, Rail Engineering

**David J. Powers & Associates Inc.**, Environmental Planning

### Community

#### Hanford City Council

**Travis Paden**, Mayor, District A Council Member

**Kimber Regan**, District B Council Member

**Nancy Howze**, Vice Mayor, District C Council Member

**Lou Martinez**, District D Council Member

**Mark Kairis**, District E Council Member

#### Partners Working Group (PWG)

**Andy Cooke**, San Joaquin Regional Rail Commission

**Ben Lichtry**, California High-Speed Rail Authority

**Betsy McGovern Garcia**, Self-Help Housing

**Chuck Kinney**, Kings County

**Debbie Williams**, Hanford Chamber of Commerce

**Dennis Ham**, Hanford Planning Commission

**Edgar Hernandez**, Caltrans District 6

**Lorena Mendibles**, Caltrans District 6

**Lisa McDuffee**, Caltrans District 6

**Michelle Brown**, Main Street Hanford

**Shelley Maggard**, Caltrans District 6

**Stephanie Huddleston**, Hanford Police Department

### Transportation

# Table of Contents

<b>01</b>		<b>02</b>		<b>03</b>		<b>04</b>		<b>05</b>		<b>06</b>		<b>07</b>		<b>AA</b>
<b>Introduction</b>	<b>11</b>	<b>Opportunity</b>	<b>22</b>	<b>Process</b>	<b>33</b>	<b>Context</b>	<b>40</b>	<b>Planning Framework</b>	<b>48</b>	<b>Neighborhoods &amp; Districts</b>	<b>86</b>	<b>Implementation</b>	<b>96</b>	<b>Appendix</b>
Hanford: Shaped by Rail		The Three Design Lenses		The Process Overview		Learning From The Land		The Planning Framework		Public Facilities Financing Plan		Kings-Tulare High-Speed Rail		
A Pivotal Crossroads		Environment Design Strategies		Partners Working Group		Groundwater Challenges		Land Use		Conceptual Intersection		Station Area Plan Conceptual		
The Plan's Focus Areas		Community Mobility Design Strategies		Community Workshops		Understanding Demographics		Our Approach		Crossings and CVC		Public Facilities Financing Plan		
A Reader's Guide		Economy Design Strategies				Existing Market Conditions		Working with the Climate		Rail Corridor		Kings-Tulare High-Speed		
		The Vision						A Healthy Street Grid		Residential Neighborhood		Rail Station Equitability		
								Production and Innovation District		Production and Innovation District		Displacement Analysis		
								Open Space Network		Institutional District				
								Hubs				Hanford High-Speed Rail /		
								Patches				Cross Valley Corridor Project		
								Corridors				Constraints Analysis Overview		
								Closed Loop Infrastructure						
								Street Network				Cross Valley Corridor Project Description Memo		
								Bike Network				Cross Valley Corridor Infrastructure Summary Memo		
								Boulevards						
								Lacey Boulevard & Loop Road						
								Florinda Avenue						
								Grangeville Boulevard						
								7th Avenue						
								9th Avenue						
								Local Streets						

# List of Figures

## 01 Introduction

**Figure 1** A Visual timeline of Hanford 15

**Figure 2** A Regional Aerial Map showing CAHSR and CVC 17

**Figure 3** A Map of the Plan's Three Focus Areas 19

## 02 Opportunity

**Figure 4** Apricot Lane Farms, Moorpark, California.  
Credit: Apricot Lane Farms 27

**Figure 5** Burswood Park, Perth  
Credit: HelloPerth 29

**Figure 6** Mariposa Phase IV, Denver, Colorado.  
Credit: Daniel O'Connor 31

**Figure 7** A Bird's Eye Illustration of the Proposed TOD Vision 33

## 03 Process

**Figure 8** City of Hanford Website Screenshots 36

**Figure 9** Photos from the Community Workshops 39

## 04 Context

**Figure 10** An Existing Regional Natural Context Map 43

**Figure 11** An Existing Groundwater Impacts Map 45

**Figure 12** Hanford's Demographics and Travel Patterns in 2025  
Credit: U.S Census 2024 46

**Figure 13** Hanford's Industry Anchors and Agricultural Trends in 2025  
Credit: U.S Bureau of Labor Statistics for Industry Anchors 47

## 05 Planning Framework

**Figure 14** Map Illustrating Blue and Green Infrastructure Opportunities 52

**Figure 15** Map Highlighting Pathways Connectivity Opportunities 53

**Figure 16** Maps Identifying Economic Opportunities 53

**Figure 17** Map of Existing Environmental Conditions 55

**Figure 18** Map of TOD's Climate-Informed Street Grid 57

**Figure 19** Conceptual Diagram of Ecological Matrix 58

**Figure 20** Map of the TOD's Open-Space Framework 59

**Figure 21** Axonometric of Regenerative Agriculture 60

**Figure 22** Axonometric of Groundwater Recharge Zones 60

**Figure 23** Map of the TOD's Hubs 61

**Figure 24** Axonometric of a Pocket Park 62

**Figure 25** Axonometric of a Miyawaki Forest 62

**Figure 26** Axonometric of a Bio-Retention Basin 62

**Figure 27** Axonometric of a Green Roof 62

**Figure 28** Map of the TOD's Patches 63

**Figure 29** Axonometric of Green Streets 64

**Figure 30** Axonometric of Green Alleys 64

**Figure 31** Axonometric of Oak Habitat along Florinda Avenue 64

**Figure 32** Map of the Corridors 65

**Figure 33** Closed-Loop Framework Diagram 69

**Figure 34** Map of Proposed Street Network 71

**Figure 35** Class I Shared Use Path 72

**Figure 36**

Class III Bike Route  
Credit: Kendra Ramsey 72

**Figure 37**

Class IV Separated Bikeway  
Credit: Joe Linton 72

**Figure 38**

Map of Bike Network  
Constitution Avenue, Canberra, Australia 73

**Figure 39**

Credit: John Gollings 74

**Figure 40**

Rue Garibaldi, Lyon, France  
Credit: Ilex, Metropole de Lyon 74

**Figure 41**

Conceptual Section of Lacey Boulevard and Loop Road 75

**Figure 42**

Redevelopment Project, Mail Mendes, France  
Credit: Playeen 76

**Figure 43**

Rua Gonçalo de Carvalho, Porto Alegre, Brazil  
Credit: Unknown 76

**Figure 44**

Conceptual Section of Florinda Avenue 77

**Figure 45**

"Gray to Green," Sheffield, England  
Credit: Nigel Dunnet 78

**Figure 46**

Downtown San Luis Obispo, California, U.S.A  
Credit: VisitSLO Website 78

**Figure 47**

Conceptual Section of Grangeville Boulevard 79

**Figure 48**

First Flight, Auckland, Aotearoa (New Zealand)  
Credit: Blake Marvin 80

**Figure 49**

LEAP Lebanon Innovation District, Indiana, U.S.A  
Credit: MKSK and Perkins&Will 80

**Figure 50**

Conceptual Section of 7th Avenue 81

**Figure 51**

Les Basses Promenades, Reims, France  
Credit: Unknown 82

**Figure 52**

Townbranch Commons, Lexington, Kentucky, U.S.A  
Credit: SCAPE 82

**Figure 53**

Conceptual Section of 9th Avenue 83

**Figure 54**

"Rain Garden," Auckland, Aotearoa (New Zealand)  
Credit: Taylor Cullity Leathlean and Wright+Associates 84

**Figure 55**

Blatchford Redevelopment, Edmonton, Alberta, Canada  
Credit: Perkins&Will 84

**Figure 56**

Conceptual Section of Local North-South Streets 85

**Figure 57**

Conceptual Section of Local East-West Streets 85

## 06 Neighborhoods & Districts

**Figure 58**

Map of TOD Land Uses 89

**Figure 59**

Axonometric of Mixed-Use Block 90

**Figure 60**

Mariposa Phase IV, Denver, Colorado.  
Credit: Daniel O'Connor 90

**Figure 61**

Multifamily Housing in San Luis Obispo, California, U.S.A 90

**Figure 62**

Axonometric of Residential Block 91

**Figure 63**

Moylan Terrace, San Luis Obispo, California, U.S.A  
Credit: RRM Design Group 91

**Figure 64**

Townhomes in San Luis Obispo, California, U.S.A 91

**Figure 65**

Axonometric of a Production & Innovation District Block 92

**Figure 66**

Confidential 92

**Figure 67**

LEAP Lebanon Innovation District, Indiana, U.S.A  
Credit: MKSK and Perkins&Will 92

**Figure 68**

Kas&Co Housing Community, Utrecht, The Netherlands  
Credit: INBO Architecture and Planning 93

<b>Figure 69</b>	University of Texas, El Paso, U.S.A <i>Credit: Adam Barbe</i>	94
<b>Figure 70</b>	The Edible Academy, New York Botanical Gardens, New York, U.S.A <i>Credit: Robert Benson Photography</i>	94
<b>Figure 71</b>	Illustrative Birdseye of Institutional Anchor	95

<b>Figure 82</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 4)	115
<b>Figure 83</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 5)	116
<b>Figure 84</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 6)	117

## 07 Implementation

<b>Figure 72</b>	Kings-Tulare HSR Station Area Context Map by Census Tracts	99
<b>Figure 73</b>	Kings-Tulare HSR Station Area Land Use Designation Map	101
<b>Figure 74</b>	Backbone Infrastructure and Public Facilities Cost Estimates Summary (2025 Dollars)	103
<b>Figure 75</b>	Estimated Sources and Uses of Funding (2025 Dollars)	105
<b>Figure 76</b>	Summary of Estimated Infrastructure Burden (2025 Dollars)	107
<b>Figure 77</b>	Conceptual design for the Intersection of Highway 43 and Florinda Avenue	110
<b>Figure 78</b>	Conceptual design for the intersection of Highway 43 and CVC BRT Intersection	111
<b>Figure 79</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 1)	112
<b>Figure 80</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 2)	113
<b>Figure 81</b>	Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 3)	114

*This page is intentionally left blank.*

# 01

## Introduction

This chapter explains why the City is undertaking this planning effort, outlines the Plan's geographic focus areas, and provides guidance on how to navigate the document.

## Hanford: Shaped By Rail

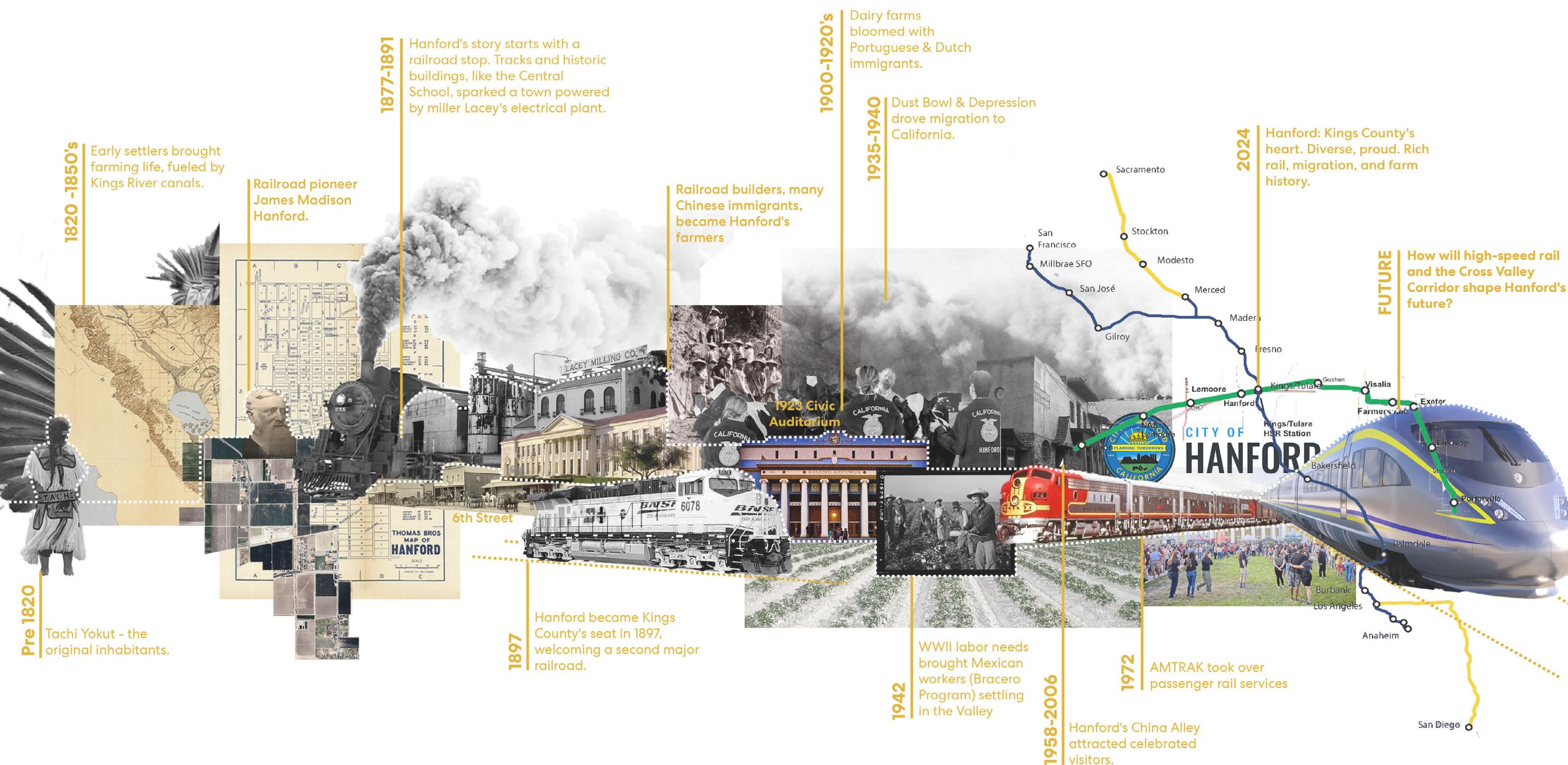
From its founding as a railroad town, Hanford has always been a place shaped by the lines that connected it to the wider world.

This connectivity made Hanford a nexus of migration and cultural exchange. Waves of settlers, including Portuguese, Dutch, Midwesterners, Mexican laborers, and Chinese immigrants were drawn by the railroad's promise of opportunity and the Central Valley's attractive agricultural possibilities. This legacy of communities, forged through connectivity, offers a unique foundation for Hanford's next chapter.

Today, as rail infrastructure once again defines the future, Hanford has a unique once-in-a-century opportunity to harness the investment of California High-Speed Rail and the Cross Valley Corridor to create a signature transit oriented community - one that reflects the aspirations of residents, while positioning Hanford as a model of responsible development for the Central Valley.

To this end, the City is not waiting for trains to arrive before taking action. They are proactively advancing a strategic planning effort to establish a roadmap for sustainable long-term growth, direct targeted infrastructure investment, and prepare for the eventual annexation of land surrounding the Kings-Tulare Station. This vision is designed to enhance quality of life, stimulate economic prosperity, and ensure Hanford flourishes for generations to come.

Now is the moment for our community to come together in shaping this future regional intermodal gateway, securing the benefits of this transformative investment for all residents, and redefining Hanford's role as a major hub at the heart of the Central Valley.



## A Pivotal Crossroads

Hanford is positioned at the intersection of two major California transportation investments: the California High-Speed Rail and the Cross Valley Corridor, both slated to stop at the Kings-Tulare Station, three miles east of Downtown. While many details of these projects remain uncertain, one fact is clear — they are moving forward. By serving as a proactive partner, Hanford can harness these investments as powerful catalysts for positive change, aligning them with the City's values and opportunities to overcome long-standing challenges and shape a more prosperous future.

This Plan serves as a vision plan to guide future development around the High-Speed Rail station and along Lacey Boulevard. It focuses on addressing community needs, shaping future land uses, and expanding access to jobs, housing, retail, entertainment, arts, cultural amenities, and open spaces. A key priority is strengthening connections between the future station and Downtown through active transportation and enhanced bus services along Lacey Boulevard.

### California High-Speed Rail (CAHSR)

The Kings-Tulare Station is one of 24 stations planned as part of the CAHSR system, which will ultimately span 800 miles, connecting San Diego in the south to Sacramento in the north. The CAHSR rail line is identified in purple on the corresponding map. In Phase 1, the Kings-Tulare Station is currently

under construction as part of the Initial Operating Segment in the Central Valley between Merced to Bakersfield.

### Cross Valley Corridor (CVC)

The CVC is a proposed 60-mile regional transit line that will link towns across the Central Valley from east to west along the historic San Joaquin Valley Railroad freight corridor. Initial phases call for express bus service operating between Naval Air Station Lemoore in Kings County and the Lindsay Transit Center in Tulare County, with long-term plans to introduce passenger rail service extending from Huron to Porterville. At the heart of the corridor is the future Kings-Tulare High-Speed Rail Station, envisioned as a vital hub connecting Kings and Tulare counties to the broader San Joaquin Valley and California's statewide rail network.



## The Plan's Focus Areas

The geographic scope of this planning effort is defined by three key components: Lacey Boulevard, the Cross Valley Corridor, and approximately 1,000 acres of unincorporated land surrounding the Kings-Tulare Station.

## **East Lacey Boulevard**

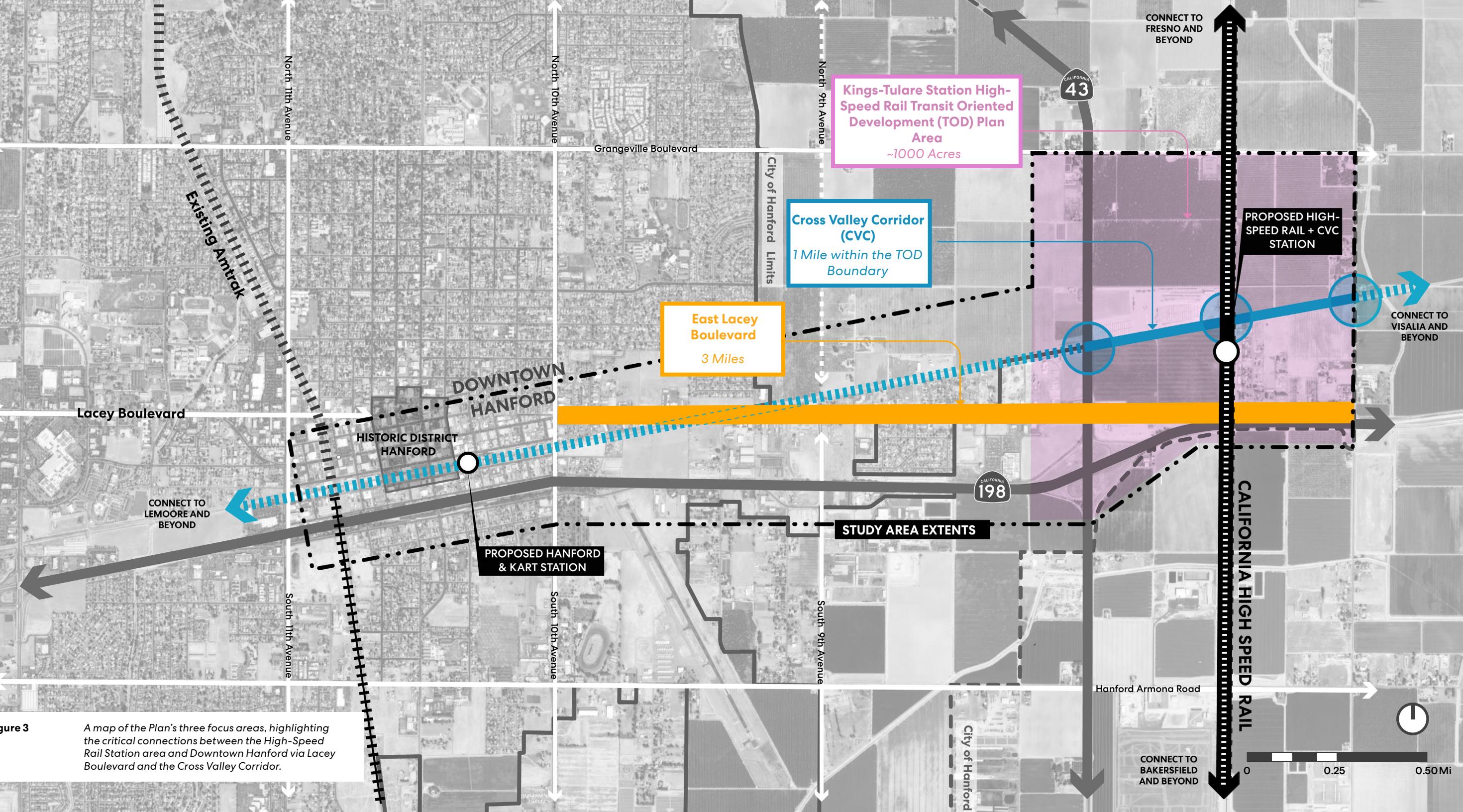
The Plan encompasses a three-mile section of Lacey Boulevard, linking North 10th Avenue to State Route 43. The Plan includes conceptual design sections to re-imagine the public right-of-way with safer walking and biking connections, enhanced transit access, street trees, and green infrastructure.

## **Cross Valley Corridor (CVC)**

The Plan includes a one-mile section of the rail corridor within the Transit-Oriented Development Plan Area, connecting the future Downtown Hanford CVC and KART Station to the Kings-Tulare High-Speed Rail Station. Conceptual sections and intersection improvements at key points are designed to advance planning and enable seamless multimodal connections between Downtown Hanford and high-speed rail service.

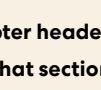
## **High-Speed Transit Oriented Development (HTOD) Plan Area**

an's primary focus is to establish a long-term planning framework for approximately 1,000 acres of agricultural land surrounding the High-Speed Rail station. This area is defined by Greenville Boulevard to the north, 7th Avenue to the east, agricultural land located about 1,300 feet west of State Route 43 to the west, and agricultural land directly south of State Route 198 to the south. The intersecting alignments of High-Speed Rail and the Cross Valley Corridor create four distinct quadrants, forming the foundation for a transit-oriented development plan area that will support future growth and investment.



## A Reader's Guide

Before delving into the Plan, this guide clarifies what each chapter covers, the intended audience, how the document should be used, and the value it provides.



Click on any chapter header to jump directly to that section.



This Plan serves as a foundation for City staff, government partners, and the community at large to work together in bringing the vision to life.

### 01 Introduction

Explains why the City is undertaking this planning effort, outlines the Plan's geographic focus areas, and provides guidance on how to navigate the document.

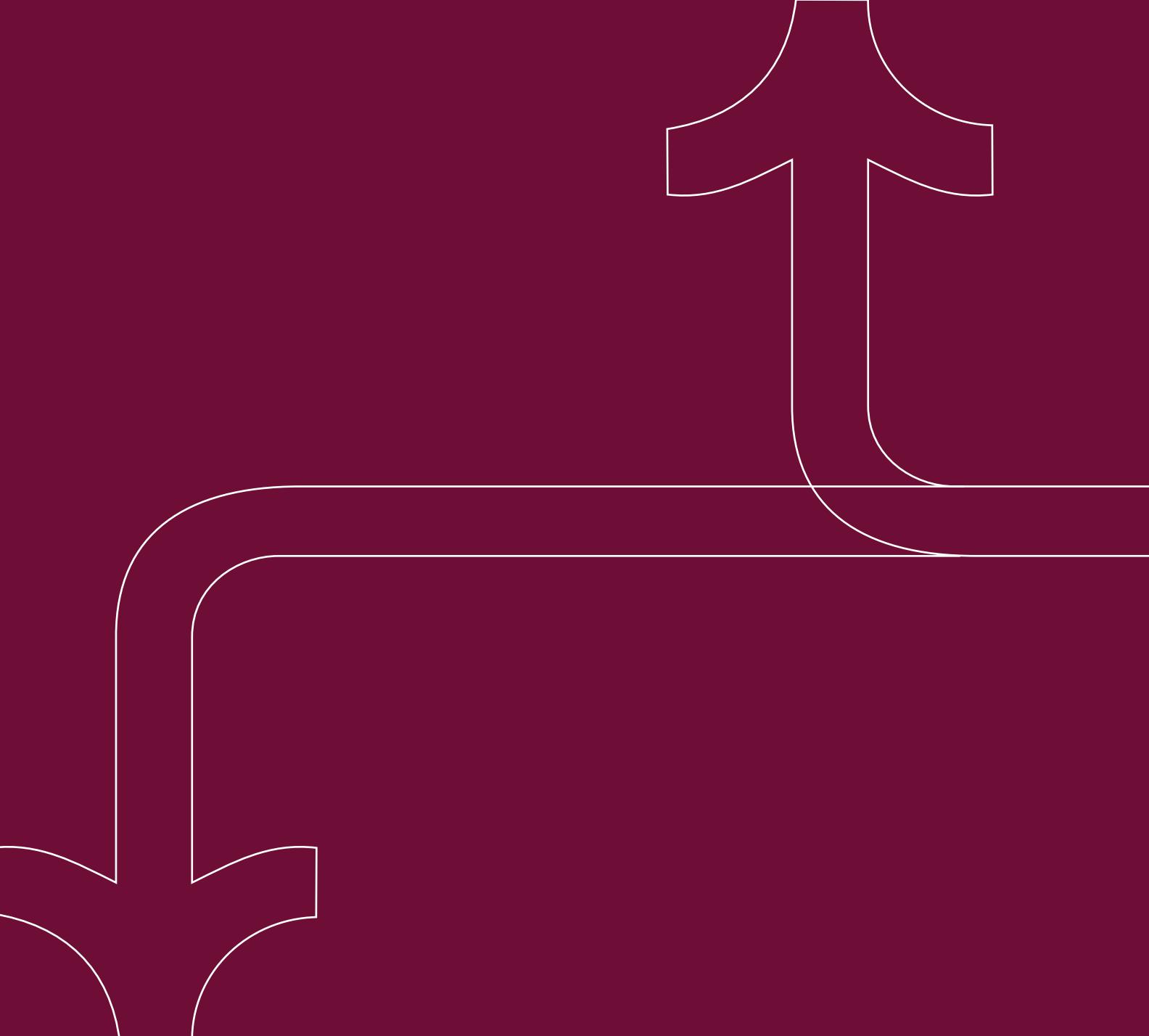
### 02 Opportunity

Summarizes the long-term vision for the transit-oriented development (TOD) plan area around the station. Highlights key design recommendations and describes how they will deliver tangible benefits for Hanford.

### 05 Planning Framework

Provides a step-by-step overview of the TOD's horizontal infrastructure, including the strategic placement of parks and open spaces and the rationale behind the street grid.

01 Introduction	02 Opportunity	03 Process	04 Context	05 Planning Framework	06 Neighborhoods & Districts	07 Implementation	AA Appendix
<p>Explains why the City is undertaking this planning effort, outlines the Plan's geographic focus areas, and provides guidance on how to navigate the document.</p>	<p>Summarizes the long-term vision for the transit-oriented development (TOD) plan area around the station. Highlights key design recommendations and describes how they will deliver tangible benefits for Hanford.</p>	<p>Details how community engagement and interdisciplinary coordination shaped the development of the Plan.</p>	<p>Presents ecological, demographic, and market conditions that form the foundation for context-specific design recommendations.</p>	<p>Provides a step-by-step overview of the TOD's horizontal infrastructure, including the strategic placement of parks and open spaces and the rationale behind the street grid.</p>	<p>Focuses on proposed land uses within the TOD area, specifying where housing, commercial, industrial, and institutional development may occur, as well as the scale of buildings permitted.</p>	<p>Outlines public financing strategies to support long-term growth and infrastructure around the station. Identifies priority capital projects such as a separated multi-use path along the CVC rail corridor and intersection improvements.</p>	<p>Includes technical memoranda such as the Kings-Tulare High-Speed Rail Station Area Plan Conceptual Public Facilities Financing Plan; the Kings-Tulare High-Speed Rail Station Equity and Displacement Analysis; the Cross Valley Corridor Plan Project Description Memo; the Environmental Constraints Analysis; and the Cross Valley Corridor Infrastructure Summary Memo.</p>
<p><b>Who Is This For?</b></p>	<p><b>How to Use It?</b></p>	<p><b>How Will You Benefit?</b></p>	<td><p>City Staff and Elected Officials</p></td> <td><p>Use this Plan to guide infrastructure investments, align capital projects with long-term goals, and shape development that reflects the community's vision and priorities.</p></td> <td><p>Coordinate public investments and infrastructure upgrades. Align growth with climate, equity, and livability goals. Foster attractive, walkable, and connected neighborhoods. Provide clarity and consistency in decision-making. Encourage collaboration across public and private sectors.</p></td>	<p>City Staff and Elected Officials</p>	<p>Use this Plan to guide infrastructure investments, align capital projects with long-term goals, and shape development that reflects the community's vision and priorities.</p>	<p>Coordinate public investments and infrastructure upgrades. Align growth with climate, equity, and livability goals. Foster attractive, walkable, and connected neighborhoods. Provide clarity and consistency in decision-making. Encourage collaboration across public and private sectors.</p>	
<p>Residents, Business Owners, and Civic Organizations</p>	<p>Use this Plan to understand how the neighborhood is evolving, advocate for improvements, and participate in shaping public spaces that are inclusive, safe, and vibrant.</p>	<p>Better public spaces that support daily life. Safer, more walkable streets and access to local amenities. A stronger voice in shaping the district's future. Advocating for better connections to Downtown and the rest of the city.</p>	<p>Developers</p>	<p>Use this Plan to align development proposals with community goals, streamline entitlement processes, and unlock long-term value through context-sensitive, future-ready design.</p>	<p>A predictable path to approvals and investment. Design strategies that add long-term value. A shared vision that supports both business and community outcomes.</p>		

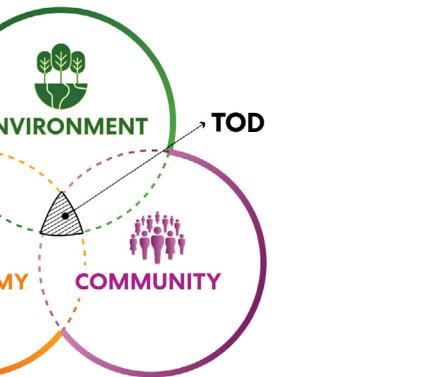


# 02 Opportunity

This chapter outlines the Plan's goals, presents design recommendations addressing the environment, community, and economy, and concludes with the long term urban design vision.

## The Three Design Lenses

The Plan's recommendations are aligned with three lenses: Environment, Community, and Economy for a healthy, thriving Transit Oriented Development.



LENSES			
	Environment	Community	Economy
NEEDS	<b>Protect Natural Resources</b> Conserve water, protect air quality, and create natural habitats to ensure a healthy environment.	<b>Enhance Quality of Life</b> Create vibrant public spaces, cultural amenities, and recreational opportunities to improve the overall well-being of residents.	<b>Promote Economic Development</b> Improve transportation infrastructure, support local businesses, and attract new investment to stimulate economic growth.
	<b>Promote Sustainable Development</b> Implement strategies to reduce greenhouse gas emissions, minimize environmental impact, and enhance community resilience to climate change.	<b>Promote Social Equity</b> Ensure equitable access to the benefits of the project for all community members, including housing, transportation, and economic opportunities.	<b>Diversify the Economy</b> Explore opportunities to diversify the local economy, including agriculture, agri-tourism, manufacturing, technology etc.

LENSES			
	Environment	Community	Economy
GOALS	<b>Climate Resiliency</b> Enhancing and celebrating natural local and regional features to create a new paradigm for all living things.	<b>Healthy Communities</b> Leveraging existing and proposed transit routes to make low carbon modes of transit an easy choice for a healthier lifestyle.	<b>Equitable Development</b> Co-create a future that has an equitable outcome, providing access to opportunities and choices for upward mobility for all.

## Environment Design Strategies

The Plan champions design strategies that enhance and celebrate nature, strengthen human and environmental health, and prepare Hanford for potential future shocks and stressors.

### A Climate Responsive Street Grid

Inspired by the walkable blocks of historic Downtown, the grid is strategically shifted to enhance airflow and maximize shading, optimizing comfort in Hanford's hot, dry climate.

### Groundwater Recharge and Bioretention Zones

The Plan designates strategic areas as groundwater recharge zones to maximize aquifer recharge. These green basins filter runoff, support native plant communities, and create opportunities for residents to connect with nature.

### Green Streets and Alleyways

The redesign of major boulevards—such as Grangeville Boulevard, Lacey Boulevard, and Florinda Avenue—transforms them into green streets featuring dense canopy trees and integrated stormwater planters. Similar to Downtown, green alleyways weave through the mid-block, capturing breezes, creating space for community and connectivity.

### Pocket Parks and Forests

The Plan ensures that community park spaces are located within a 10-minute walk of every new residential development in the TOD. These include pocket parks, offering family-friendly spaces for play and social interaction, as well as Miyawaki Forests—compact, native forests that help cool the block, enrich biodiversity, and improve air quality.

### Florinda Avenue's Green Canopy of Oaks

Florinda Avenue, stretching from the future Heroe's Park to the High-Speed Rail Station, is redesigned with a wide planter strip lined with continuous native oak trees. This landscape strategy improves soil quality, supports biodiversity, and provides shade for pedestrians and cyclists.

### Closed Loop Infrastructure

The Plan offers a roadmap for the City to establish a self-sustaining system that reduces waste, reuses resources, and strengthens resilience by transforming outputs, such as wastewater, energy, and materials, into inputs that serve the community.

### Agricultural Regeneration

Aligned with natural topographic contours, the Plan preserves acres of land as agricultural bands for small-scale farming operations, helping to maximize water capture, improve soil health, and sustain local food production.



Figure 4

Apricot Lane Farms is a certified organic and biodynamic farm that uses regenerative methods of farming to grow over 200 varieties of fruits and vegetables in Moorpark, California.

# Community Mobility Design Strategies

The Plan leverages the existing and proposed transit routes to make low carbon modes of transit an easy choice for a healthier lifestyle.

## Wide Sidewalks and Protected Bike Lanes

The TOD Plan builds on the recommend facilities proposed in the citywide Active Transportation Plan (ATP) to deliver a comprehensive network of wide, comfortable, complete network of sidewalks and protected, low-stress bicycle facilities that connects Downtown to the TOD in a safe, intuitive environment for all ages and abilities.

## Multi-Modal Boulevards

Major corridors including Lacey Boulevard, Florinda Avenue, Grangeville Boulevard, and 7th and 9th Avenues are reimagined as multi-modal boulevards designed to accommodate all forms of travel. Features include generous sidewalks with landscaped planting strips for large shade trees, protected bike lanes, and the preservation of two-way vehicular traffic.

## Cross Valley Corridor (CVC) Bus Rapid Transit

In coordination with ongoing planning for the CVC, the TOD Plan illustrates a potential configuration that integrates high-capacity transit and active transportation. The proposal features a dedicated, two-way bus rapid transit lane connecting Downtown to the Station, ensuring efficient and reliable service.

## The Loop Road

Within the ~1000-acre TOD site, an internal boulevard is essential to weave together the neighborhoods surrounding the Station. The Plan introduces a tree-lined, multi-modal Loop Road that serves as the District's central spine, designed to accommodate walking, biking, truck movement, and private vehicles.



Figure 5

A vibrant multi-use path in Burswood Park, Perth, designed for people of all ages and abilities to bike, walk, roll, and enjoy the outdoors together.

## Economy Design Strategies

The Plan establishes a diverse mix of uses to support future population growth, offering healthy and attainable housing options, attracting employers, expanding vocational training for Hanford residents, and introducing unique shops and services that complement—rather than compete with—the Downtown core.

### Housing Next to Parks, Shops, and Transit

The Plan provides a diverse range of housing choices to support residents at every stage of life, including Hanford's workforce, families, and seniors. These homes are thoughtfully connected to park spaces, community gardens, and green paseos, fostering healthy lifestyles and offering comfort during the summer months.

### Neighborhood Serving Shops

Major boulevards and parcels near the High-Speed Rail Station are envisioned to accommodate a diverse mix of neighborhood-serving ground-floor uses. These shops will provide residents, employees, and commuters with convenient access to everyday needs, including farm-to-table restaurants, locally owned small businesses, childcare facilities, and other daily amenities.

### Center for Learning and Workforce Training

Located just north of the CAHSR and CVC Station, this institutional center is easily accessible to students, faculty, and employees from across the region.

Envisioned as a hub for learning, innovation, and agriculture, it builds on the Valley's agricultural heritage while preparing residents for a changing future.

### New Jobs and Economic Opportunities

The southeastern quadrant of the District is designated as a dedicated employment zone, strategically planned to support ag-tech, light industrial, food processing, research, fabrication, and small logistics businesses. This employment hub builds on Hanford's agricultural strengths, fostering innovation, diversification, and long-term economic growth while creating new opportunities for the local workforce.

### Agricultural Bands

Following the site's natural drainage contours, the agricultural bands function as multi-purpose landscapes that physically and programmatically link the Production & Innovation zone with the Institutional center.

### Outdoor Community Spaces

The Plan envisions outdoor spaces that not only support environmental health but also prioritize people and community. These areas are designed as welcoming places where families can gather, children can play, local farmers can sell fresh produce, and workers and students can collaborate. They serve as vibrant extensions of daily life that strengthen social connections and Hanford pride.

They provide space for demonstration crops, teaching orchards, and hands-on learning in regenerative farming practices. By tying directly to local industry, the bands prepare the next generation of growers, makers, and agricultural innovators while reinforcing Hanford's agricultural identity.



**Figure 6**

A flourishing community garden at Mariposa Phase IV for Denver Housing Authority in Denver, Colorado.

## The Vision

A climate-responsive, resilient, and connected Transit Oriented Development, this planning framework pioneers a new paradigm of community, environmental, and economic vitality in the Central Valley.



# 03 Process

This chapter details how community engagement and interdisciplinary coordination shaped the development of the Plan.

## Process Overview

Partner and community engagement took place between Spring 2024 and Fall 2025.

### Engagement Approach

With a goal to engage a diverse range of partners and community members to form and refine a shared vision for the future of Hanford. Our approach was to include the community in key project moments to maximize the impact of their voices without creating outreach fatigue. Engagement strategies used included upkeep of a project webpage on the City's website, forming and facilitating a **Partners Working Group (PWG)**, and hosting **community workshops** where people already gather. These activities allowed us to capture feedback from people who live in, work in, and visit Hanford and incorporate their feedback and ideas into the development of this plan.

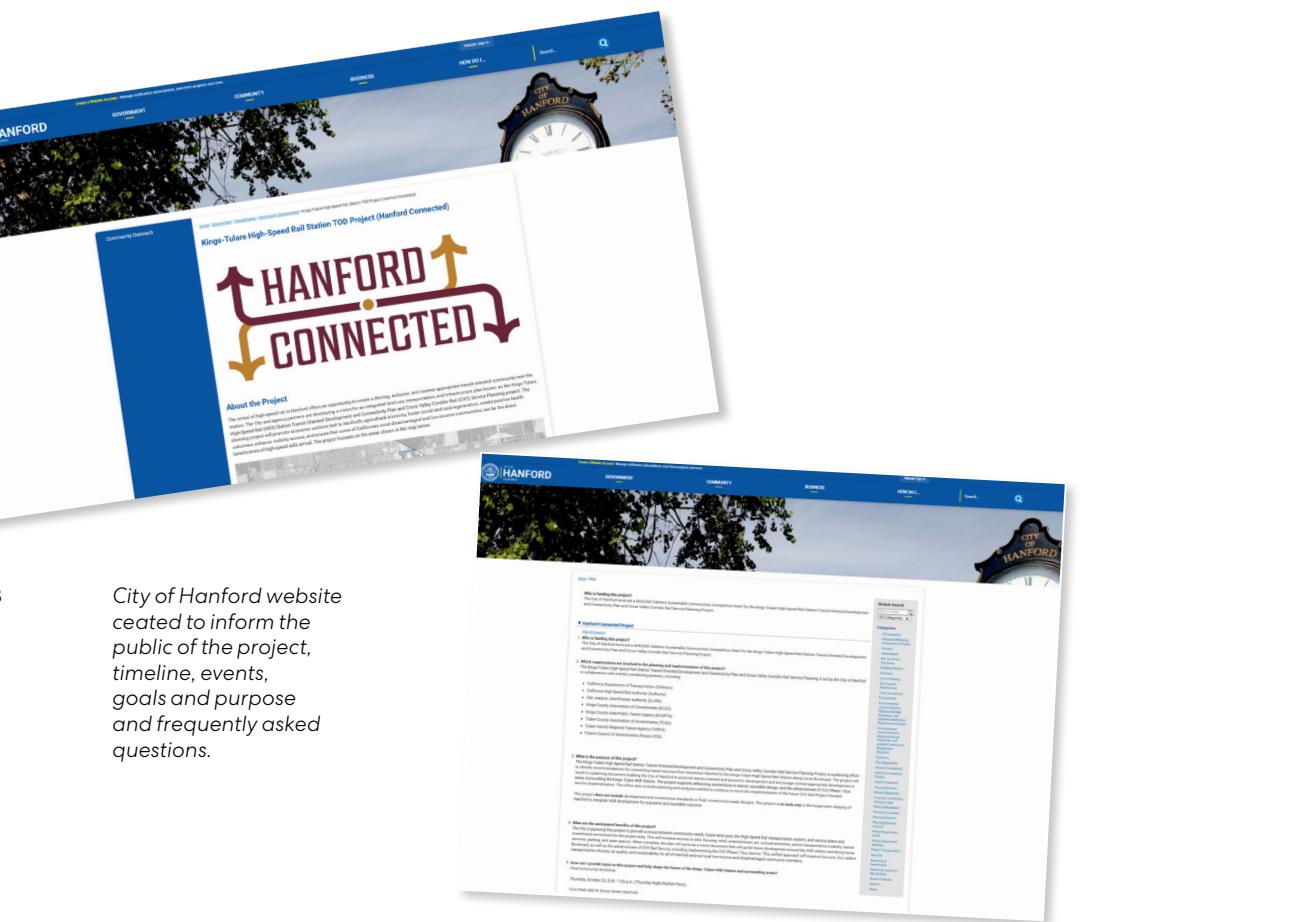
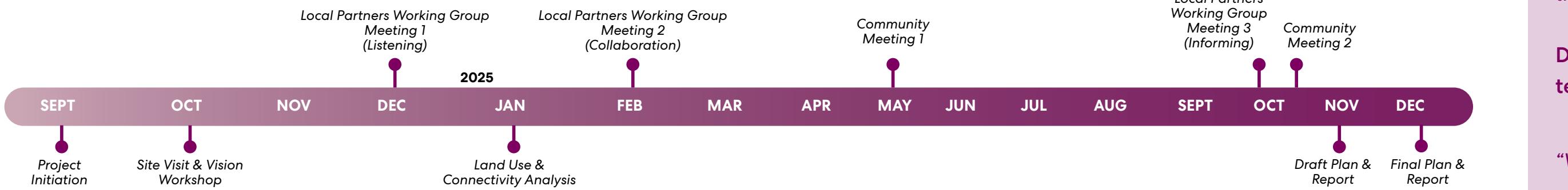


Figure 8

## Partners Working Group

Rich dialogue and input from the partners informed this process and the outcome.

### Listening, Collaborating, Informing

Early in the project, the project team formed a PWG that invited key representatives from state, regional, and local agencies and organizations to play an important role in this long-term effort. These included, but are not limited to, various City of Hanford departments, Caltrans District 6, Kings County, the California High-Speed Rail authority, Kings Area Regional Transit (KART) and others. The PWG met three times throughout the project to provide critical oversight and feedback on early findings and proposed design concepts.

## What We Heard

**Spatial moves must support economic opportunity and reinforce Hanford's identity.**

*"The foliage looked nice, but we have temperatures over 100 degree in the summer. We need to use more drought tolerant plants."*

**Ideal Location for Production & Innovation was voted 'South of the HSR Station.'**

*"Community members have expressed that they don't want the focus to be on a second city"*

**An 'equal mix of residential and employment land uses,' was a top priority for majority of partners.**

*"I support the visionary document and planning work for the future while demonstrating how it plays out over time."*

**Desire to see how the short-term downtown focus and long-term station area build-out complement one another.**

*"Welcome New Tourists, New Visitors and New Residents"*

## Community Workshops

To shape the development of this plan, the project team hosted two pop-up style workshops at the City's pre-existing and popular Thursday Night Market.

### Engagement

The Thursday Night Market gave the project visibility and allowed the project team to engage with a large, diverse group of community members who may not have attended a traditional, standalone public meeting. At each event, we located our booths next to the California High-Speed Rail Authority, a key partner on this project, so rail-focused questions and concerns could more easily be addressed by appropriate staff.

At each event, the project team used a set of visually rich presentation boards to share key project information and collect input on the draft design approach (workshop 1) and draft concepts (workshop 2). Input from the interactive boards and in-depth discussions with community members was crucial for refining the concepts presented in subsequent chapters of this document.

## What We Heard

**Preserve our city's family-friendly, small-town feel!"**

**"Lets make Hanford more business-friendly!"**

**"We need more trails, bike lanes, and bike rental options!"**

**"Hanford has so much potential!"**

**"The train is the future, and you can't stop the future!"**

**Jobs, Jobs, Jobs! Including entry level!"**

**"Cross Valley Corridor bus rapid transit will help me get to Lemoore Naval Air Station!"**

**"More trees! Help increase natural habitats!"**



**Figure 9**

Photos from the community workshops held at the Thursday Night Market in the City of Hanford in May and October 2025.

# 04 Context

This chapter presents ecological, demographic, and market conditions that form the foundation for context-specific design recommendations.

## Learning from the Land

Understanding Hanford's land, water, climate, and habitat systems ensures this project responds thoughtfully to a changing landscape.

### Water

Hanford sits within the southern San Joaquin Basin, between two major river systems fed by Sierra Nevada snowmelt and runoff from the Coastal Ranges. While these rivers once supported wetlands and seasonal floodplains across the Tulare Basin, decades of channelization and groundwater pumping have depleted water availability. This context makes groundwater recharge, stormwater capture, and nature-based infiltration strategies essential for long-term resilience.

### Climate

The Hanford area experiences some of the hottest and driest conditions in the Central Valley, with low rainfall, intense summer heat, and high solar exposure. During winter, dense Tule fog settles into the valley, trapping emissions and particulate matter and worsening air quality. These climate realities shape how streets, buildings, and public spaces must be designed to support shade, comfort and cooling year-round.

### Wind

Prevailing winds move from the northwest across the site, carrying dust,

agricultural emissions, and wildfire smoke during certain seasons. These wind patterns help determine how the TOD's street grid and open-space system can improve air movement, comfort, and localized air quality through orientation, planting, and cooling strategies.

### Habitat

Rising soil salinity and alkalinity pose growing threats to agricultural productivity and native ecosystems in the Hanford area. Reintroducing native oak habitat corridors and integrating regenerative agriculture practices can help rebuild soil structure, support groundwater recharge, and enhance biodiversity. These ecological components are foundational to restoring landscape health across the TOD.

### Legend

- California High-Speed Rail (CAHSR)
- Cross Valley Corridor (CVC)
- Natural Waterways
- Constructed Waterways
- Hanford City Limits
- ↗ Water Flow Directions
- Flood Hazard Zone



Figure 10

A regional natural context map highlighting the City of Hanford's relationship to historic and current waterways, wind patterns, tule fog, and the broader Tulare Basin.

## Groundwater Challenges

Hanford's groundwater tells the story of a landscape under pressure. Learning where it flows, where it recharges, and where it is depleted helps guide strategies that restore aquifers and protect the city's future.

### Groundwater Depth and Flow

Groundwater in the Tulare Lake Sub basin generally flows east to west, moving from the Sierra foothills toward the valley floor. Shallow aquifers near Hanford provide the strongest recharge potential, especially where historic drainage channels and surface runoff naturally converge. Deeper aquifers are more depleted and recharge slowly due to limited surface connection and continued extraction. These patterns help pinpoint where the TOD can most effectively support groundwater recharge recovery through green infrastructure, stormwater capture, and infiltration-focused open space.

### Groundwater Well Conditions

Well data across Hanford shows a mix of declining and stable groundwater levels, reflecting both regional overdraft and localized recharge potential. High temperatures, low rainfall, and heavy reliance on pumping place consistent pressure on the aquifer. This illustrates the consequences of continuing on today's trajectory. The TOD aims to take pressure off the current practice and introduce closed-loop infrastructure to relieve and replenish the existing system.)

### Groundwater Subsidence

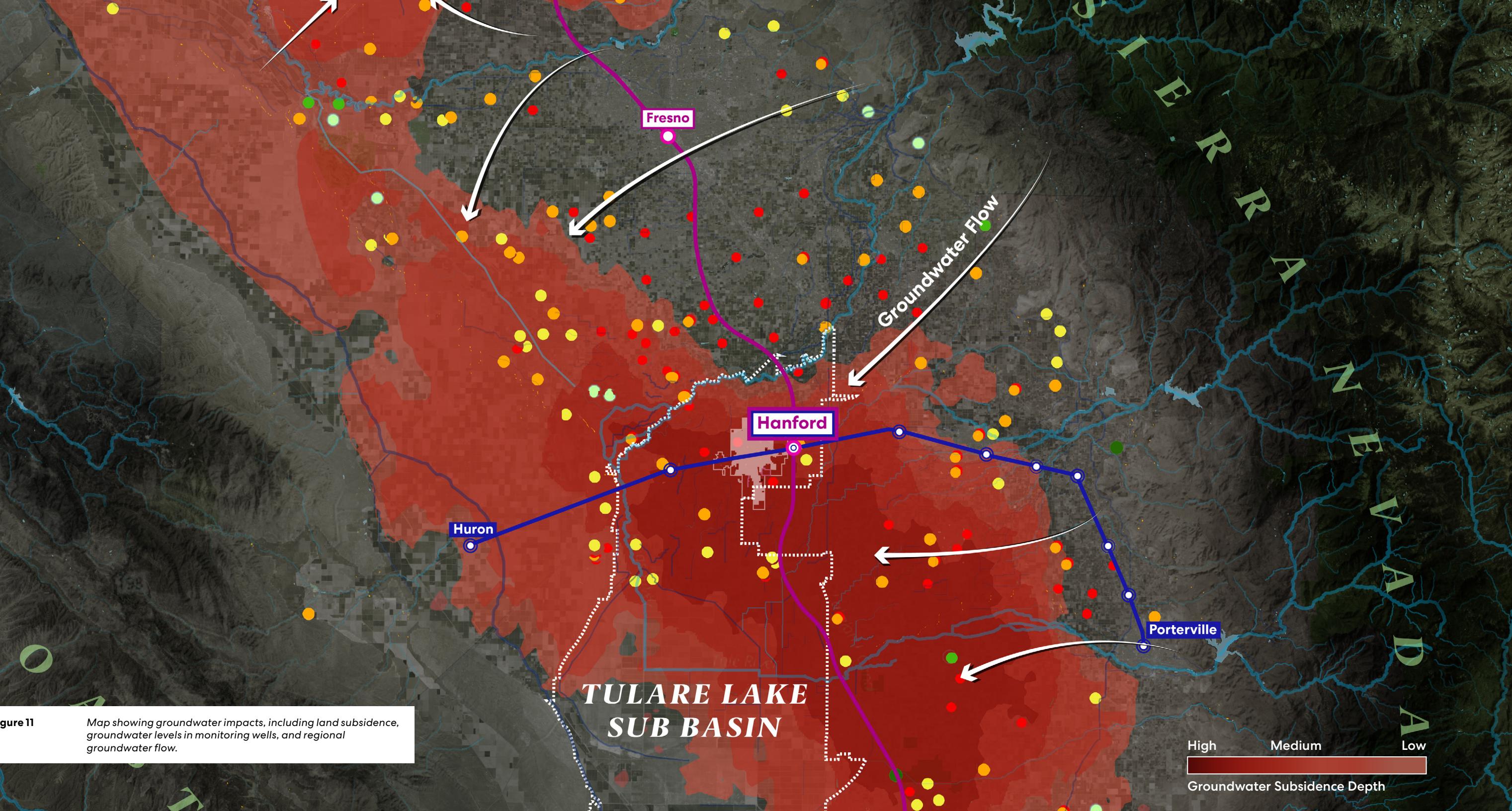
Long-term groundwater pumping has contributed to 3 to 5.5 feet of gradual land subsidence across parts of the Tulare Lake Subbasin. Highlighting where the groundwater system is under stress and understanding these subsidence trends helps identify where recharge, conservation, and climate-responsive land-use strategies can strengthen long-term water reliability for the community.

#### Legend

- California High-Speed Rail (CAHSR)
- Cross Valley Corridor (CVC)
- Natural Waterways
- Constructed Waterways
- Hanford City Limits
- Groundwater Flow Directions

#### Groundwater Level Conditions

- All Time High
- Above Normal
- Normal
- Below Normal
- All Time Low



## Understanding Demographics

Understanding who lives in Hanford today, its families, workers, and cultural communities, helps shape a place that reflects local needs, strengthens mobility choices, and supports a healthy, connected future.

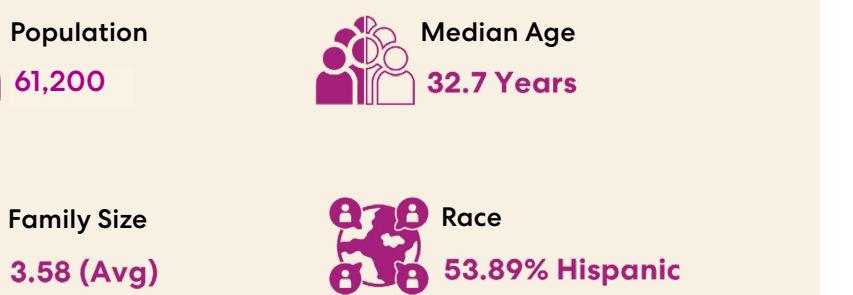
### People and Demographics

Hanford is home to approximately **61,200 residents**, with a median age of **32.7** and an average household size of **3.58**. A quarter of the population is under age 15, reflecting a young community with growing mobility, education, and service needs. The city's strong Hispanic community; representing over half of residents; contributes to a vibrant cultural identity and reinforces the importance of inclusive public spaces, family-oriented amenities, and accessible transportation options.

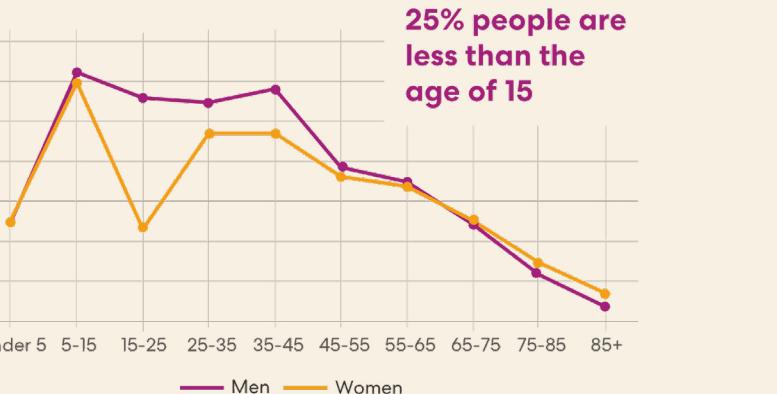
### Health

Residents in Hanford and Kings County experience several public-health challenges shaped by regional air patterns, agricultural dust, wildfire smoke, and limited shade and active-mobility infrastructure. Higher asthma rates, Valley Fever exposure, and elevated obesity rates signal the need for a built environment that supports cleaner air, safer walking and rolling routes, and climate-responsive design. Improving access to parks, shade, everyday services, and sustainable transportation can directly enhance long-term community health.

## Community Snapshot



### People and Age



### Commuting



Figure 12

A high-level synthesis of Hanford's demographics and travel patterns in 2025.

## Existing Market Conditions

Hanford's economy is anchored in agriculture but increasingly shaped by education, healthcare, logistics, and regional mobility, creating a foundation for new industries and a more resilient, diversified future.

### Jobs

Though historically agricultural, Hanford's job market now includes strong employment in healthcare, education, public administration, food packaging, and dairy farming equipments and supplements. This blend offers stability while also chartering a path into emerging sectors such as ag-tech, food systems, clean-energy manufacturing, and supply-chain services. Improved regional mobility from High-Speed Rail and the Cross Valley Corridor will expand access to jobs within Hanford and across the Valley, strengthening long-term economic resilience.

### Emerging Opportunities

As agriculture evolves, the region is well-positioned to expand value-added industries that includes food processing, packaging, logistics, ag-tech and dairy farming equipments and supplements. This blend offers stability while also chartering a path into emerging sectors such as ag-tech, food systems, clean-energy manufacturing, and supply-chain services. Improved regional mobility from High-Speed Rail and the Cross Valley Corridor will expand access to jobs within Hanford and across the Valley, strengthening long-term economic resilience.

### Agricultural Trends

Kings County remains one of California's most productive agricultural regions, producing high-value dairy, cotton, walnut, pistachio, and specialty vegetable crops. Yet limited water supplies and shifting markets drive the need to transition toward less water-intensive crops and more sustainable practices. Trends that will shape future farmland around Hanford and underscore the need for water-smart, climate-ready planning within the TOD.

## Economy Snapshot

### Major Industries in Hanford

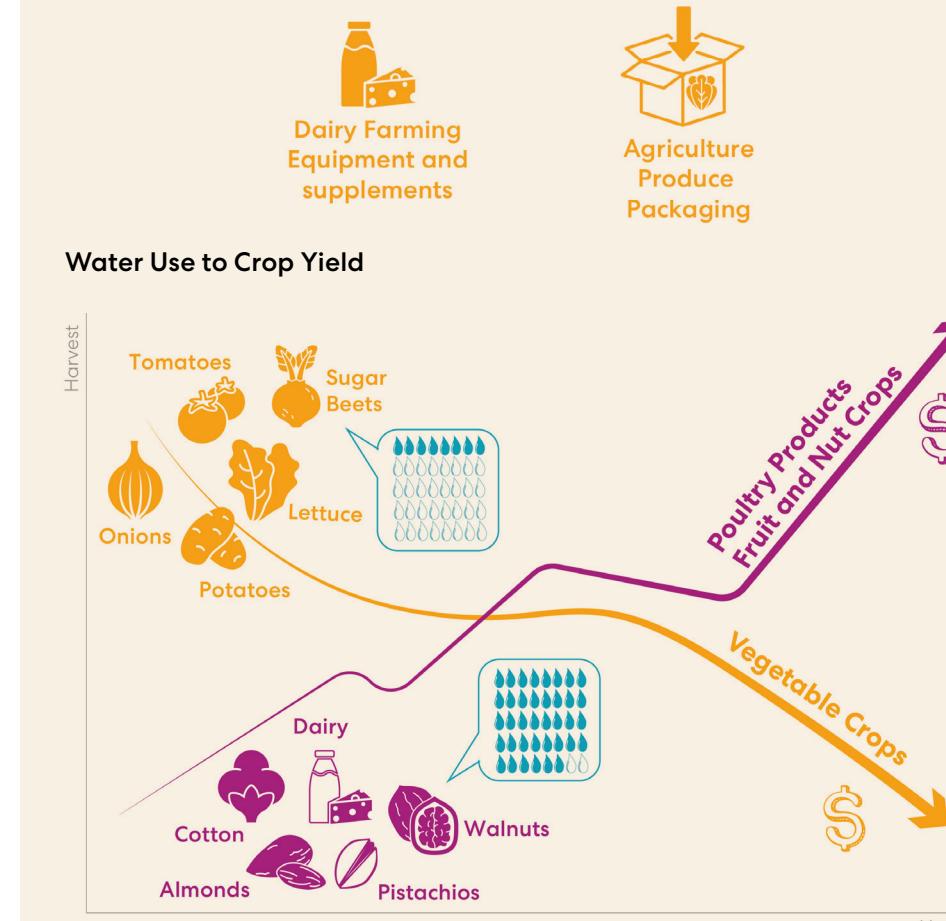
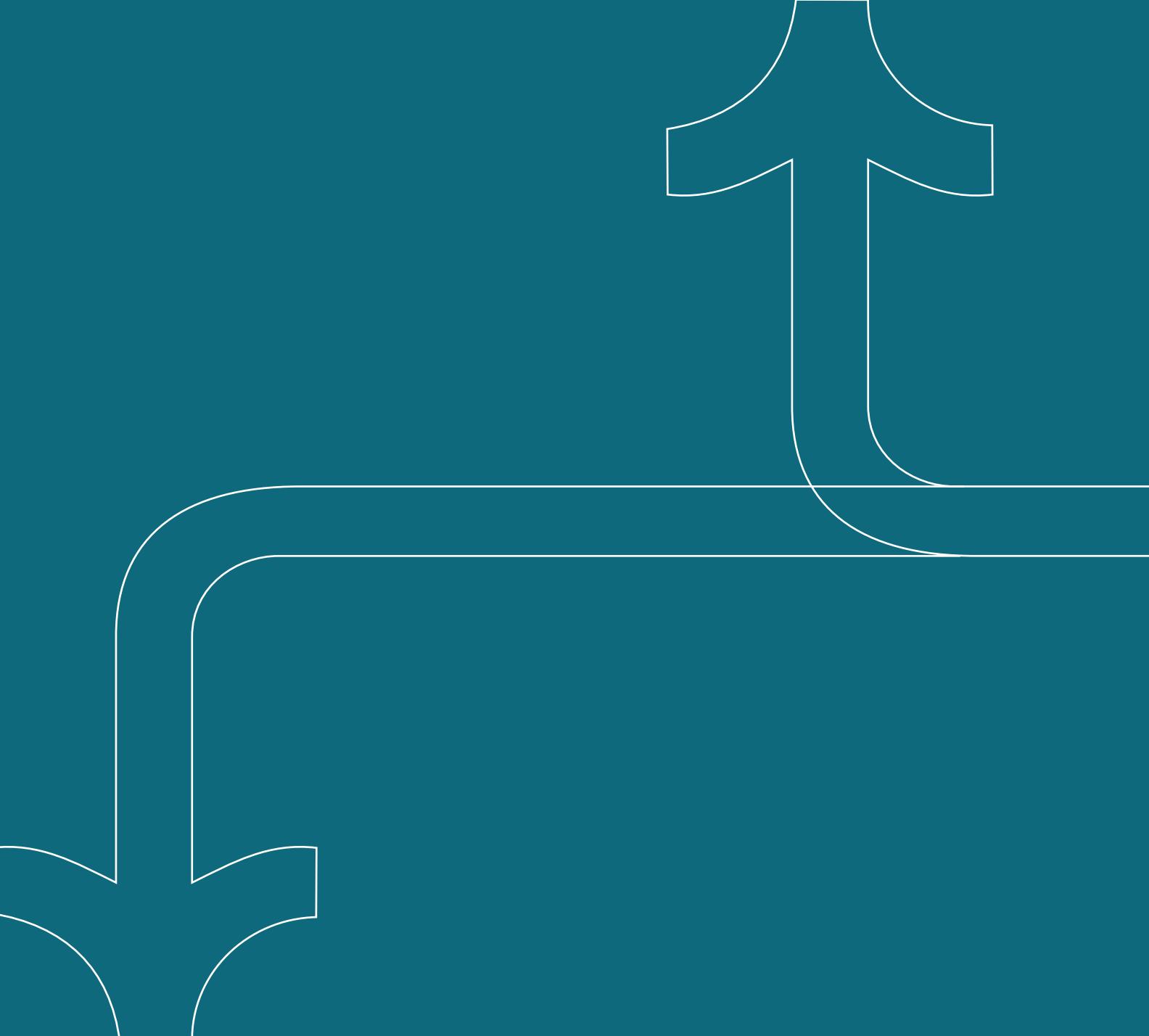


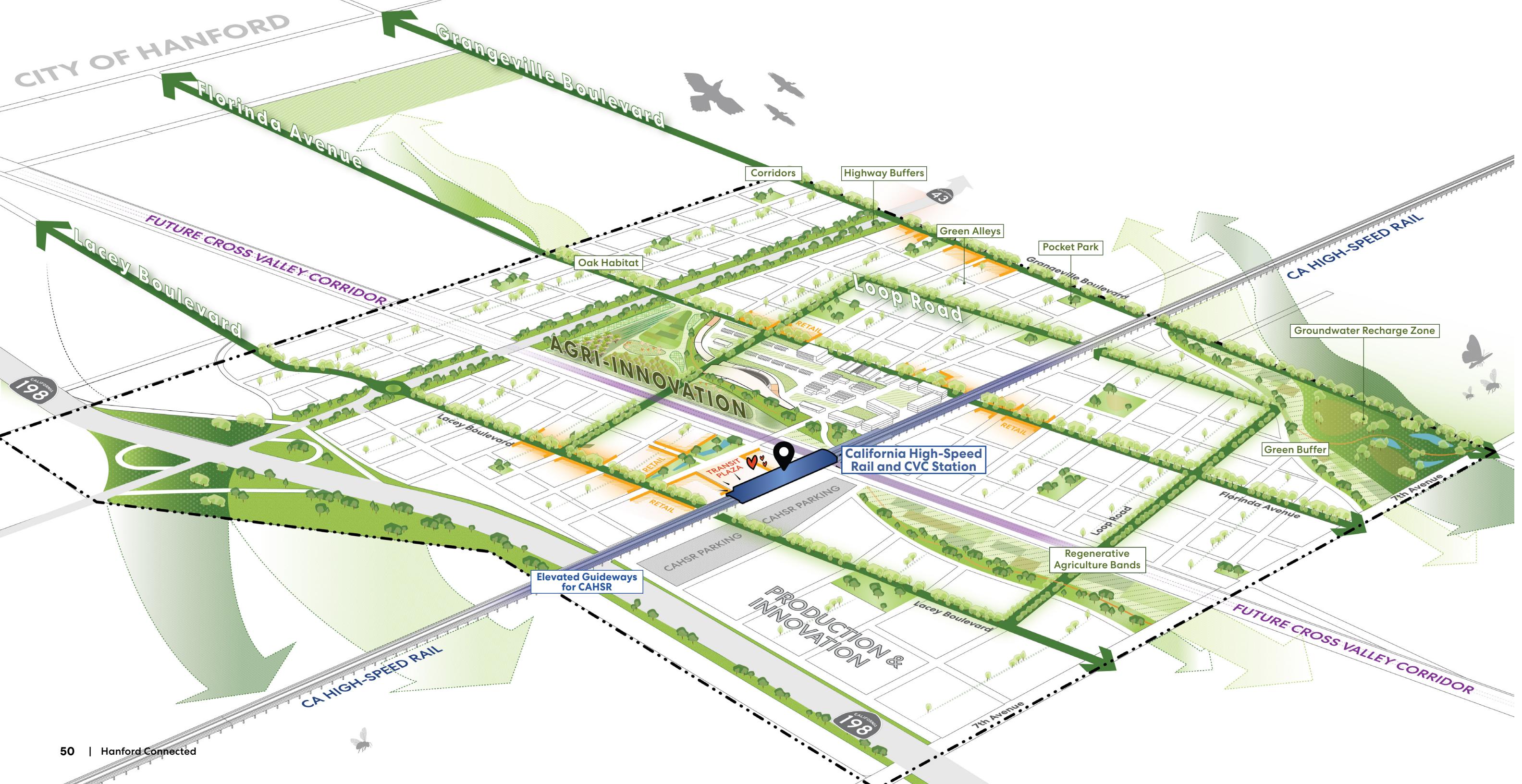
Figure 13

A high-level snapshot of Hanford's industry anchors and agricultural trends in 2025.



# 05 Planning Framework

This chapter introduces the planning framework for the TOD, describing how climate-responsive design, integrated mobility, and a connected open-space network guide Hanford toward a resilient and regenerative future.



## The Planning Framework

A foundation for a responsible future physical environment that translates the bold vision into an implementable plan.

Grounded in climate-responsive design, it weaves together diverse land uses, multimodal mobility choices, ecological systems, and resource-efficient infrastructure to shape a resilient and connected community centered around the future Kings-Tulare High Speed Rail Station.

An intentional, integrated open-space approach ties together human and environmental health, honoring Hanford's agricultural heritage while highlighting the future of regenerative farming in California.

Together, this planning framework offers a blueprint for a new, resilient way of living in Hanford.

## Our Approach

We use our three reinforcing lenses to understand Hanford's needs and guide decision making.

### A Multi-Lens Framework

These lenses are used together to reveal how Hanford's physical, social, and economic conditions intersect around the future station. By reading the city through these three lenses, this analysis identifies where environmental systems can be strengthened, where gaps in daily mobility and open space can be expanded, and where emerging economic activity already anchors new opportunities.

The following opportunity maps highlight the corridors, districts, and open-space connections that reveal itself, pointing to places where targeted investment can deliver the greatest benefit for Hanford's residents, businesses, and long-term climate resilience.

**Environment - A lens that reads land, water, climate, and habitat to guide resilient, nature-led development.**

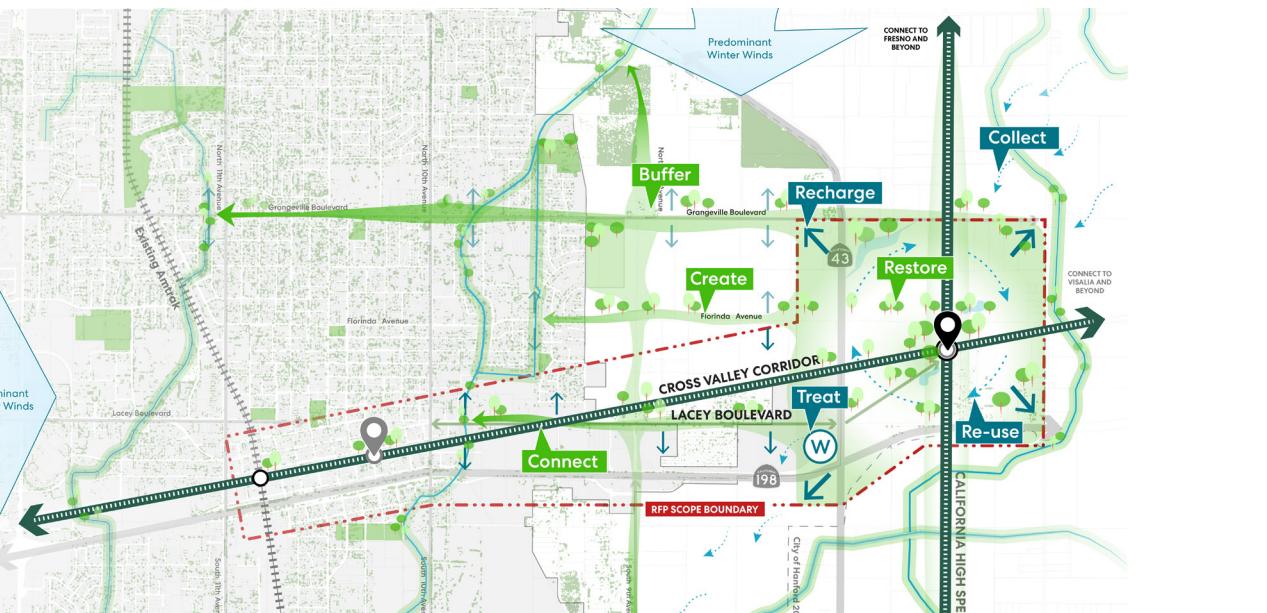


Figure 14

Map illustrating how existing blue and green infrastructure can be strengthened to create an integrated open-space framework with potential for water collection, treatment and recharge.



Figure 15

Map highlighting pathways of connectivity from the TOD site to the existing community of Hanford, showcasing a range of alternative transportation choices from walking, biking and easy public transit access along Lacey Boulevard and Cross Valley Corridor.

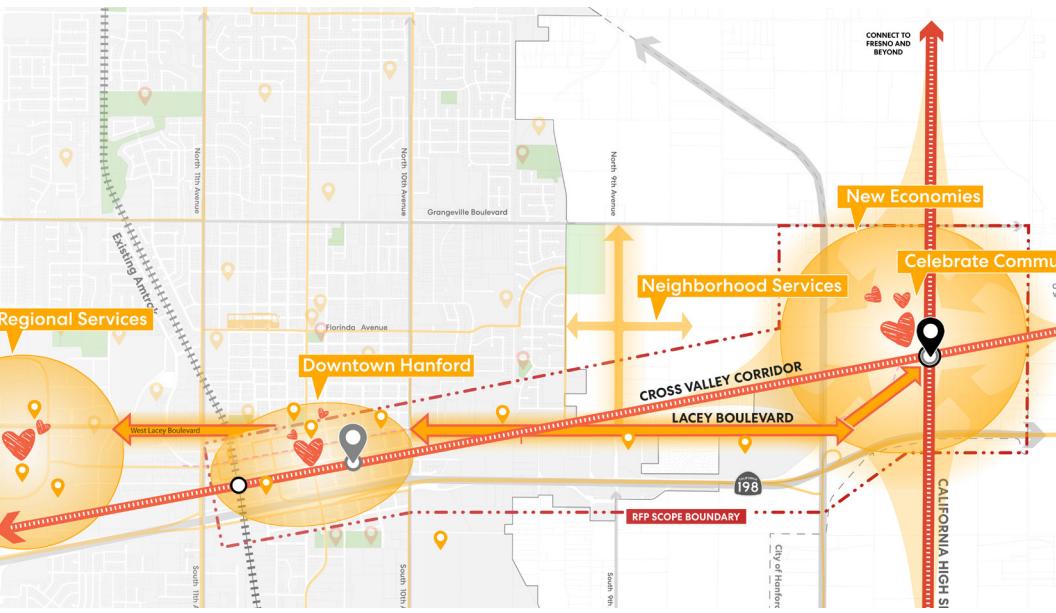


Figure 16

Maps identifying activity nodes across Hanford and showing how the TOD introduces supportive new economies and neighborhood amenities that compliment and preserve the city's historic downtown and its local businesses.

**Community - A lens focused on stitching together how people live, move, gather, and access daily needs to create connected, healthy neighborhoods.**

## Working with the Climate

Understanding the site's natural systems establishes the environmental foundation for the TOD. Wind patterns, solar exposure, and drainage conditions shape how comfort, shade, and water management can be supported in future design decisions, especially as Hanford experiences hotter summers and growing pressure on groundwater resources.

### Wind

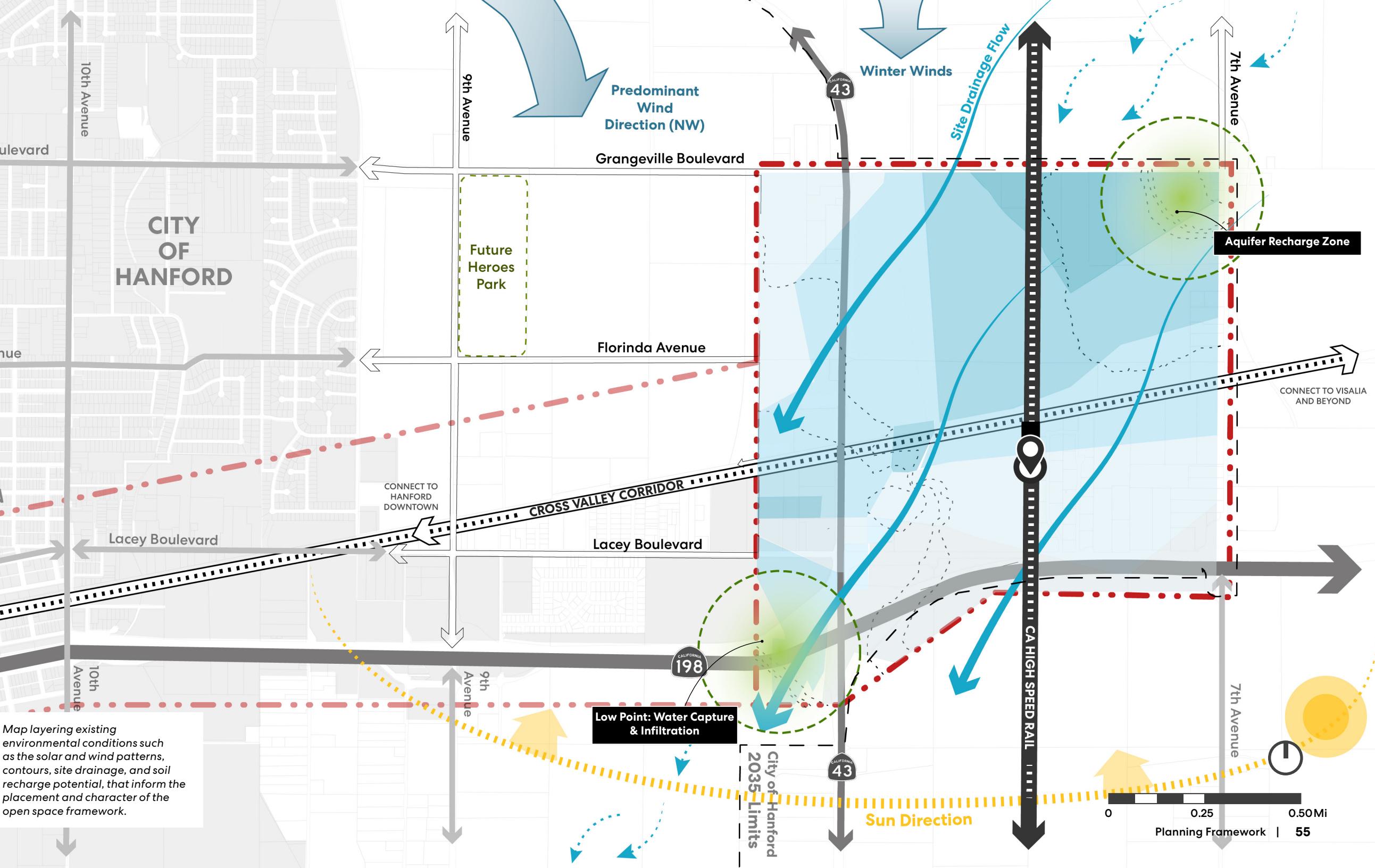
The site receives consistent westerly winds in summer and cooler northerly winds in winter, creating a predominant wind from the North-West year round. These seasonal patterns informed the planning framework, orienting streets and open-space corridors to create parks, plazas, and promenades that have improved air quality, are naturally cooler, and inviting for the community to connect, gather, and live an active lifestyle within the TOD.

### Hydrology

Surface drainage patterns help shape the proposed location of open spaces and vegetated corridors. Areas with higher groundwater recharge potential, identified through the California DWR AEM Surficial Recharge Map, particularly in the northeast portion of the site, have been prioritized as an aquifer recharge zone for maximum infiltration. Similarly, the natural low point in the southwest corner offers opportunities for water collection and infiltration. Together, these naturally occurring recharge zones function as valuable habitats and play a defining role in structuring the open space network.

### Solar

Hanford's high solar exposure and long summer days mean shading and orientation significantly influence comfort in public spaces. Understanding how the sun moves across the site, especially in relation to east-west streets helped identify where shade, planting, and heat-mitigation strategies may be most effective in the planning framework.



## A Healthy Street Grid

Working with the site's natural systems helps shape a neighborhood that stays cooler, more comfortable, and more resilient in Hanford's hot-dry climate.

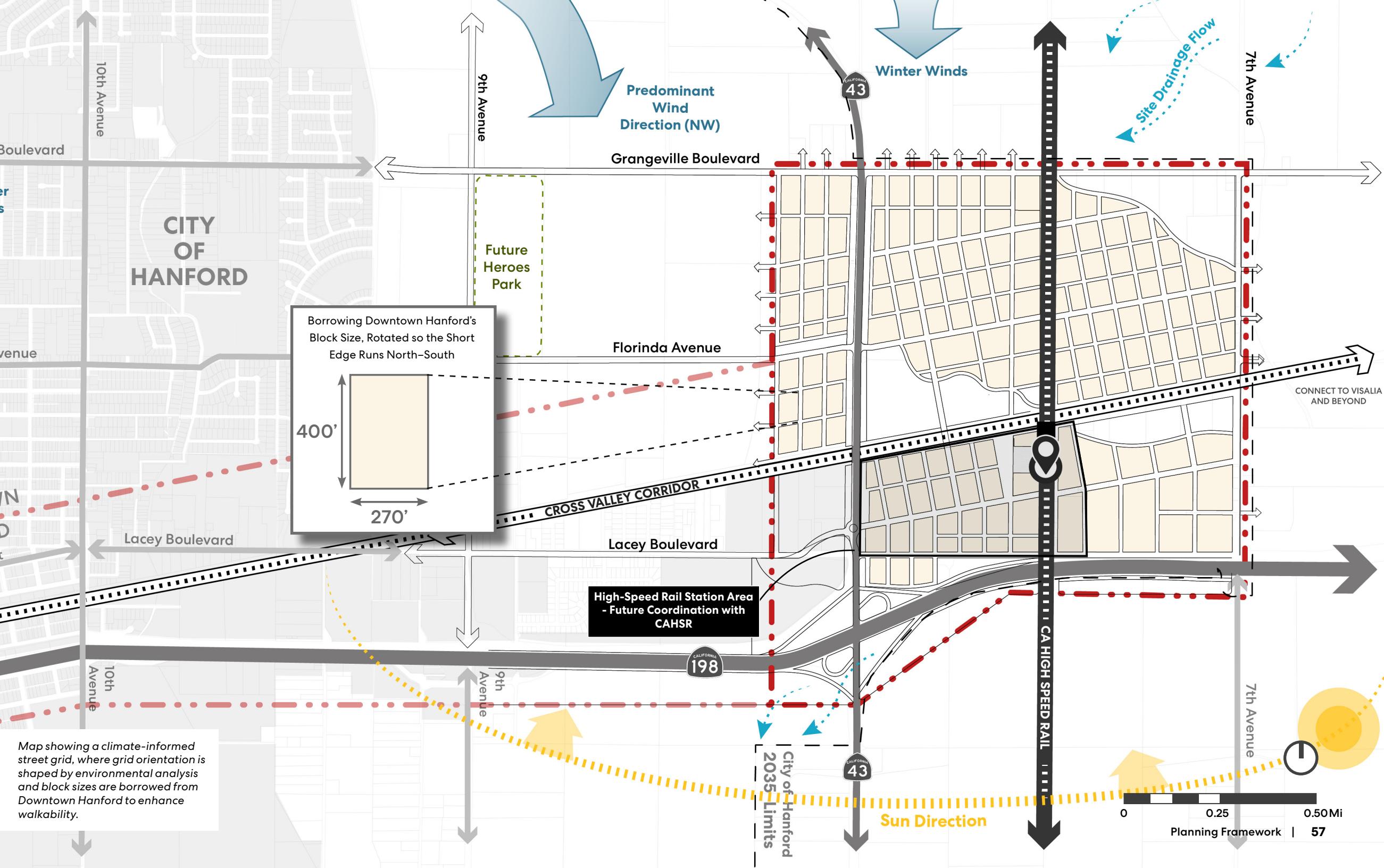
### Street Grid Orientation

The diagonal grid is shaped directly by the site's environmental conditions rather than a conventional east-west layout. By rotating the grid to sit between prevailing northwest winds and the arc of the hottest summer sun, streets receive more consistent shade across the day. This orientation also improves natural ventilation: air can move diagonally across blocks, cooling public spaces and reducing heat buildup. The result is a street network that works with Hanford's climate, staying cooler and more comfortable.

### Bikeable, Walkable, Rollable

To reinforce local identity, the framework adopts the familiar **400' x 270' block size** from Downtown Hanford, then rotates it so the shorter edge fronts the hottest side of the street. This reduces the length of sun-exposed walking distances, increases crossing frequency, and creates more opportunities for self-shading between buildings. Compact blocks also shape a fine-grained, human-scaled network that supports biking, rolling, and local trips to parks, work, and transit.

Combined, the diagonal grid and Hanford-scaled blocks deliver a climate-informed street system that feels locally grounded, highly walkable, and designed for everyday comfort in a hot-dry Central Valley environment.



## Open Space Framework

By responding to Hanford's natural systems, the framework delivers cooler, healthier places to live, for all living things.

### The Ecological Matrix

The Hanford TOD Open Space Network centers on an Ecological Matrix of **Hubs**, **Patches**, and **Corridors**, shaped by local soils, drainage, wind, and agricultural conditions. Hubs are placed where cooling, groundwater recharge and community life are most needed, Corridors follow natural flow paths and key mobility routes, and smaller Patches are woven into neighborhoods. Together, these elements create a resilient open-space system that supports daily life, biodiversity, and Hanford's agricultural identity.

#### Hubs

Hubs are the district's largest open spaces, often **10+ acres**, located where shade, cooling, and habitat have the strongest impact. They anchor recreation, groundwater recharge, and community programs, with room for a range of uses.

#### Patches

Patches are **0.5-2 acres** green spaces embedded within residential blocks and near key destinations. They provide shade, seating and biodiversity pockets, as everyday neighborhood touchpoints.

#### Corridors

Corridors follow major site connections, creating continuous green routes for walking, biking, habitat, and stormwater. They add shade, native planting, and stormwater infrastructure while linking hubs and patches into a unified system.

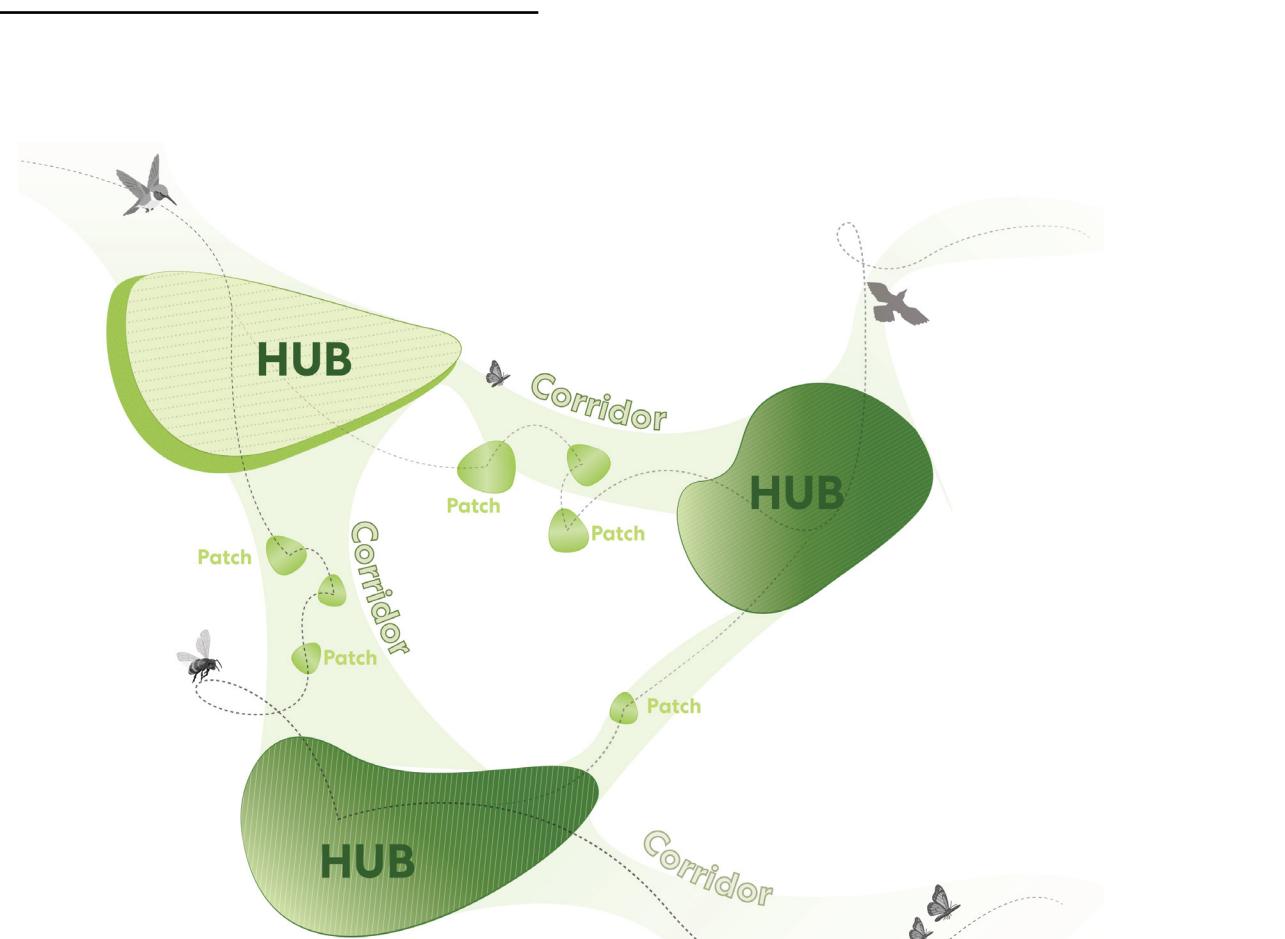


Figure 19

Illustrating the concept of the ecological matrix and highlighting the relationships between hubs, patches, and corridors.

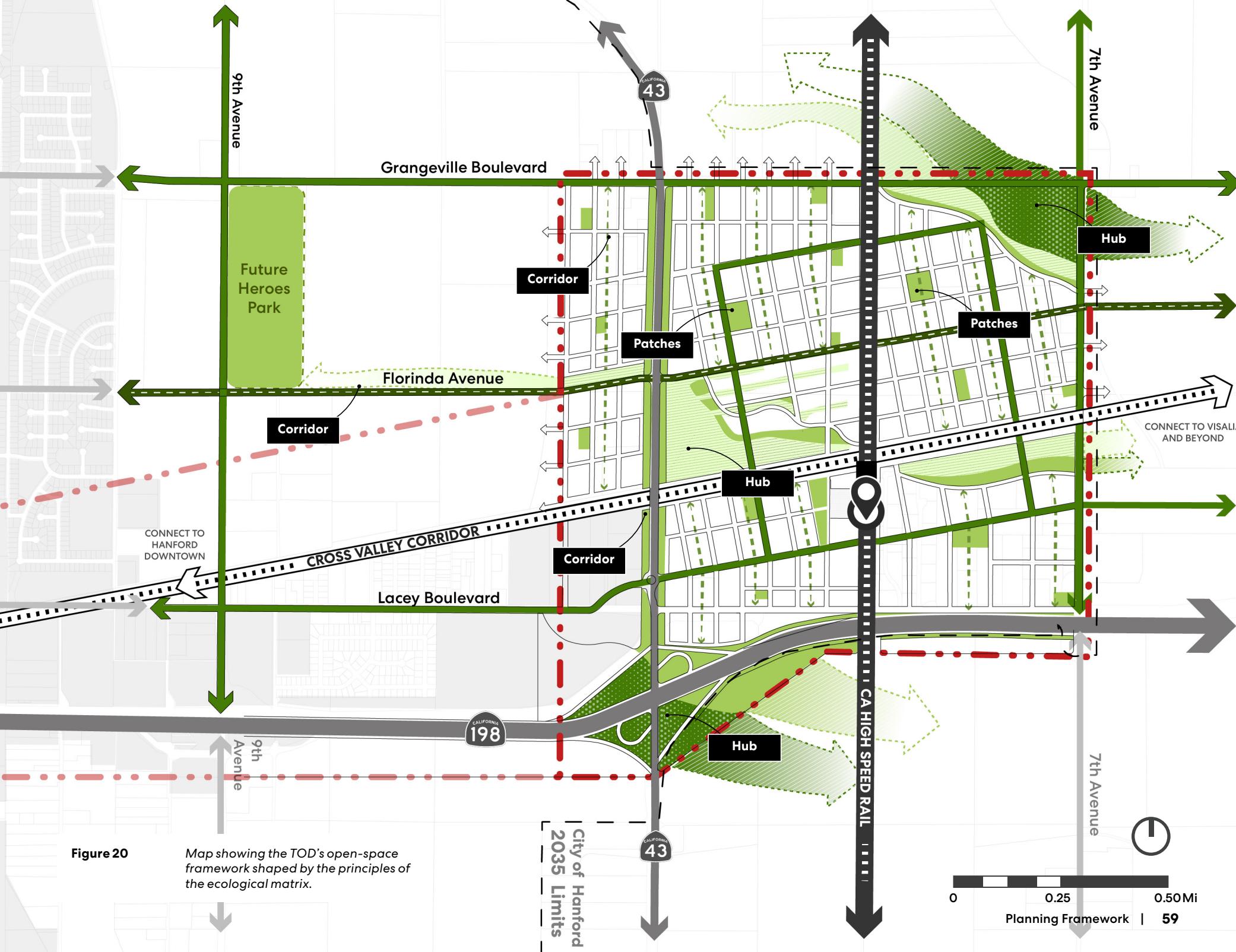


Figure 20

Map showing the TOD's open-space framework shaped by the principles of the ecological matrix.

# Open Space Framework

## Hubs

The TOD's two largest hubs, each over 10 acres, are placed in the northeast corner and southwest low point, where soils absorb the most water. Their location allows them to act as major recharge areas while providing expansive open spaces that anchor the ecological network and offer opportunity for agriculture regeneration uses, while also buffering nearby homes.

## Regenerative Agriculture Bands

The regenerative agriculture bands follow natural topographic contours, using a keyline-inspired strategy that slows, spreads, and absorbs runoff as it moves from northeast to southwest. Because these bands are contour-based rather than parcel-based, the system can expand seamlessly beyond the TOD boundary, reflected in the map's extended green areas and create a guide to be able to expand across future development. Within the TOD, the bands improve soil health, support sustainable food production, and create a vegetated buffer that reintroduces agricultural identity while reducing particulate pollution from surrounding roadways.

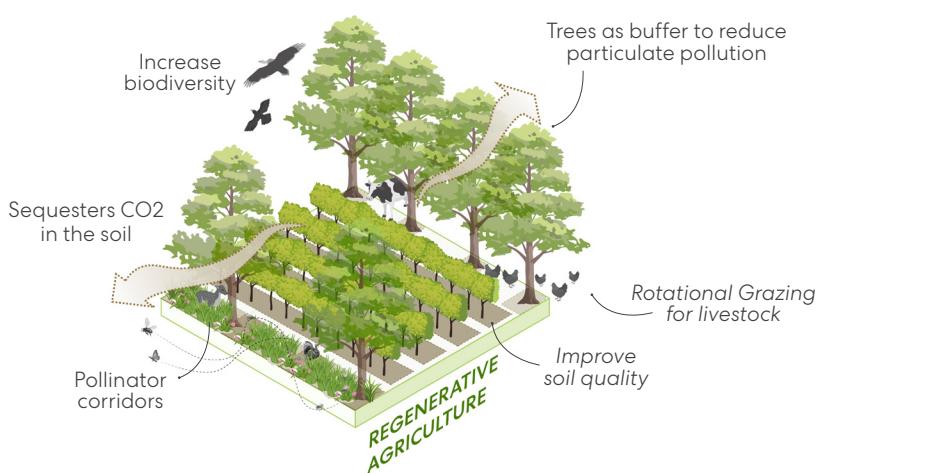


Figure 21 Regenerative Agriculture

## Groundwater Recharge Zones

Groundwater recharge zones occupy the site's highest-performing infiltration soils, including the northeast recharge hotspot identified through Kings County AEM data and the southwestern low point. These hubs are designed as large surface areas that absorb, filter, and store stormwater, strengthening long-term water resilience for the community. Native planting systems, shaded paths, and habitat features keep these areas ecological and accessible, while their pairing with highway-buffer landscapes uses prevailing winds to reduce noise, humidify dry winds, clean particulate pollution, and cool the air for nearby neighborhoods.

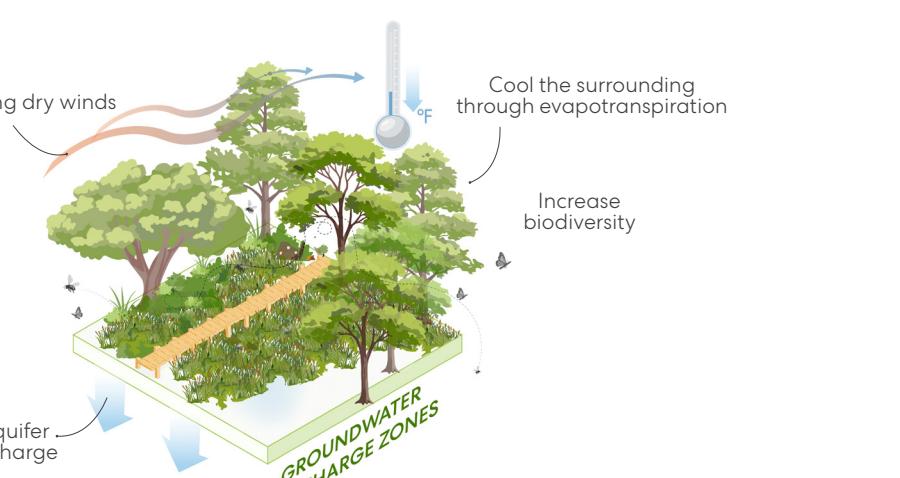


Figure 22 Groundwater Recharge Zones

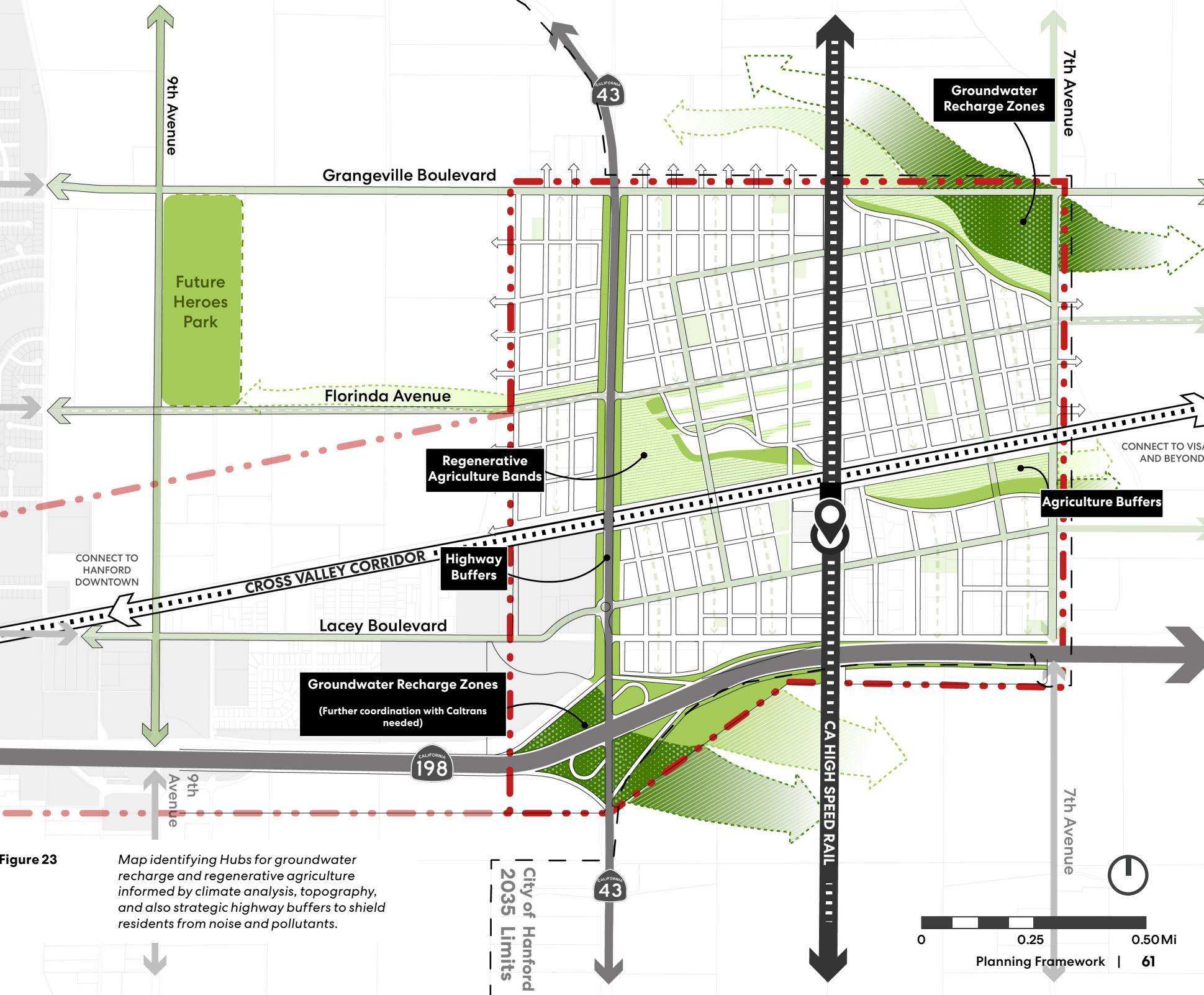


Figure 23

Map identifying Hubs for groundwater recharge and regenerative agriculture informed by climate analysis, topography, and also strategic highway buffers to shield residents from noise and pollutants.

# Open Space Framework

## Patches

Small open spaces between 0.5–5 acres are woven throughout the TOD to support neighborhood livability, biodiversity, cooling, and daily access to nature. Each contributing differently to the ecological matrix while strengthening comfort and identity in Hanford's climate.

## Pocket Park

Pocket parks offer shaded retreats embedded within residential blocks, an essential amenity in Hanford's climate. Their tree canopy, seating, and play areas cool nearby homes and paseos, strengthen walkability, and provide families everyday access to nature. By capturing small amounts of runoff and linking to nearby corridors, they support the neighborhood's ecological network.

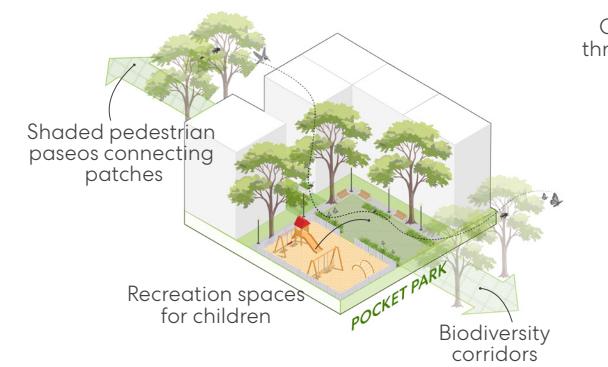


Figure 24 Pocket Park

## Miyawaki Forest

Miyawaki forests create fast-growing native woodland pockets that deliver shade and biodiversity in a compact footprint. Their dense planting structure performs well in Hanford's heat, cooling surrounding homes and paseos through evapotranspiration. Once established, they become distinct neighborhood anchors that reinforce identity and comfort.

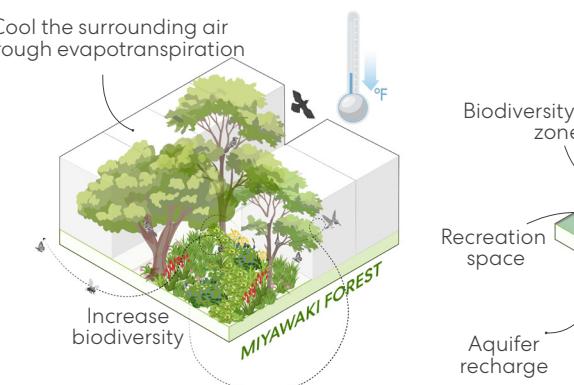


Figure 25 Miyawaki Forest

## Bioretention Zones

Bioretention zones filter runoff before it enters Hanford's groundwater system, using native vegetation and shallow basins suited for long dry periods. These patches provide cooling, habitat, and small recreation edges while functioning as decentralized water infrastructure that complements the larger recharge hubs.

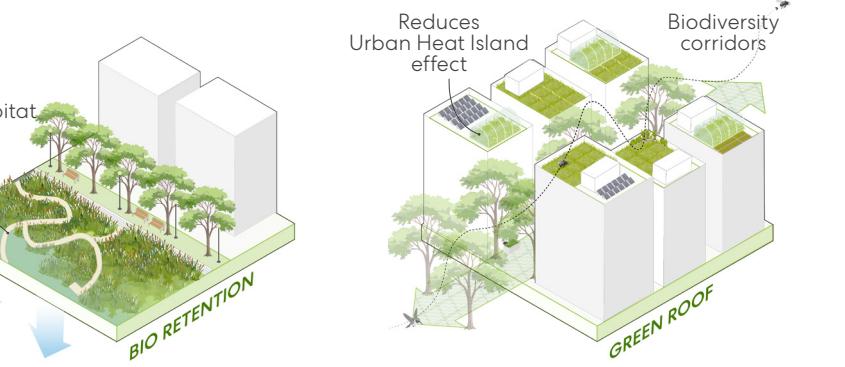


Figure 26 Bio-Retention

## Green Roofs

Green roofs extend the ecological matrix onto mixed-use and multifamily buildings, reducing heat gain, lowering energy demand, and supporting pollinator habitat. These elevated landscapes echo the region's agricultural heritage and work with ground-level patches to enhance neighborhood cooling and resilience.

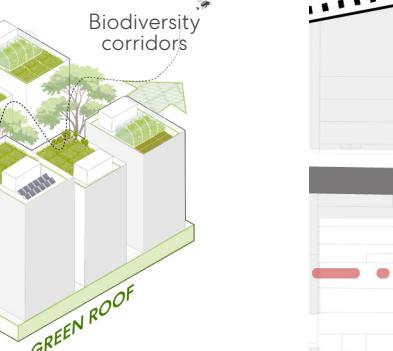


Figure 27 Green Roof

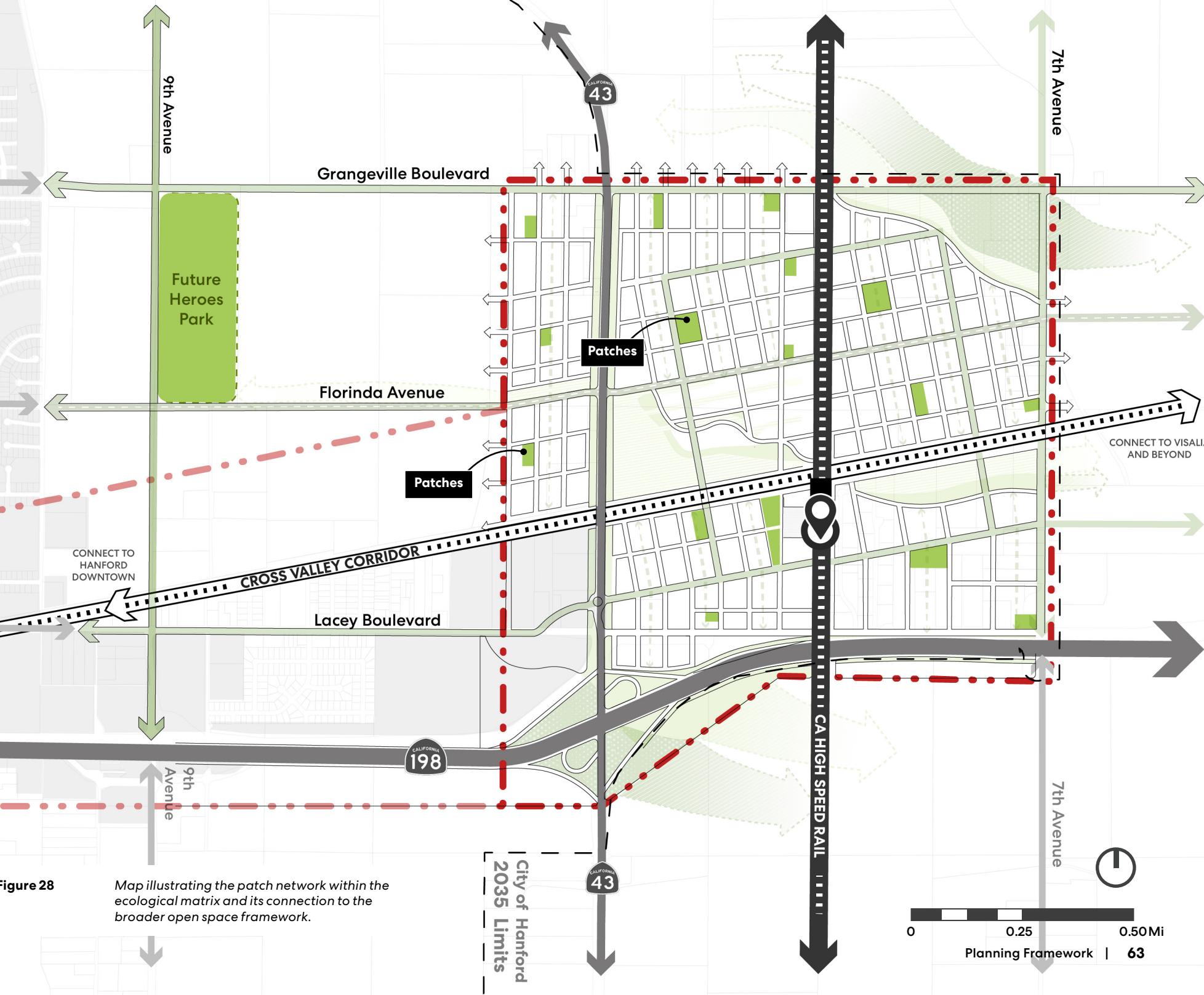


Figure 28

Map illustrating the patch network within the ecological matrix and its connection to the broader open space framework.

# Open Space Framework

## Corridors

Major east-west and north-south streets double as the TOD's green corridors, stitching planting, shade, passive cooling, and stormwater systems directly into Hanford's block structure. These routes follow both mobility desire lines and environmental flow paths, creating comfortable, shaded, and ecologically connected streets that support everyday walking, biking, and habitat movement.

## Green Streets

Grangeville Boulevard, Lacey Boulevard, Florinda Avenue, and Loop Road serve as the backbone of the corridor network. Their wide rights-of-way allow for stormwater planters, generous shade canopies, protected bike lanes, and comfortable pedestrian zones—transforming Hanford's principal arterials into cool, green mobility spines that create comfortable connections from neighborhoods to the station and downtown.



Figure 29 Green Streets

## Green Alleys

Running north-south through the grid, these alleys become micro-corridors that capture breezes, introduce planting into the center of residential blocks, and provide opportunities for community gardens, shared backyards, and small seating or recreation spaces. They help cool parts of the neighborhood while also providing a more porous built form.

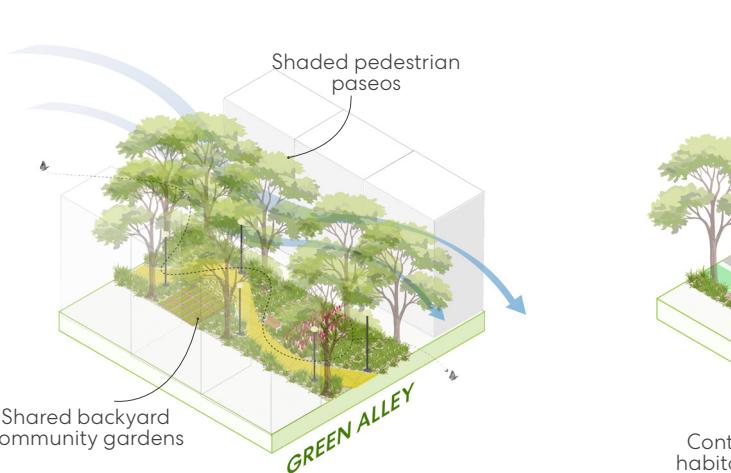


Figure 30 Green Alleys

## Oak Habitat

Along Florinda Avenue, a continuous oak habitat corridor restores a native plant system historically found in the Valley. This linear grove improves soils, shades pathways, and supports biodiversity while creating a unique identity for the TOD. It also links directly to the future Heroes Park, forming a long habitat corridor that ties Hanford's green spaces together.

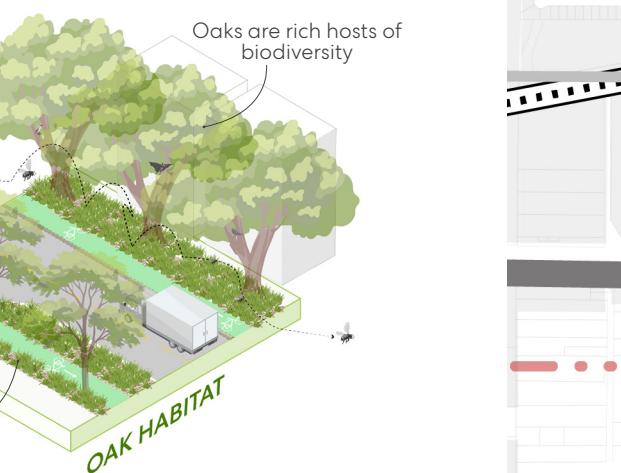


Figure 31 Oak Habitat along Florinda Avenue

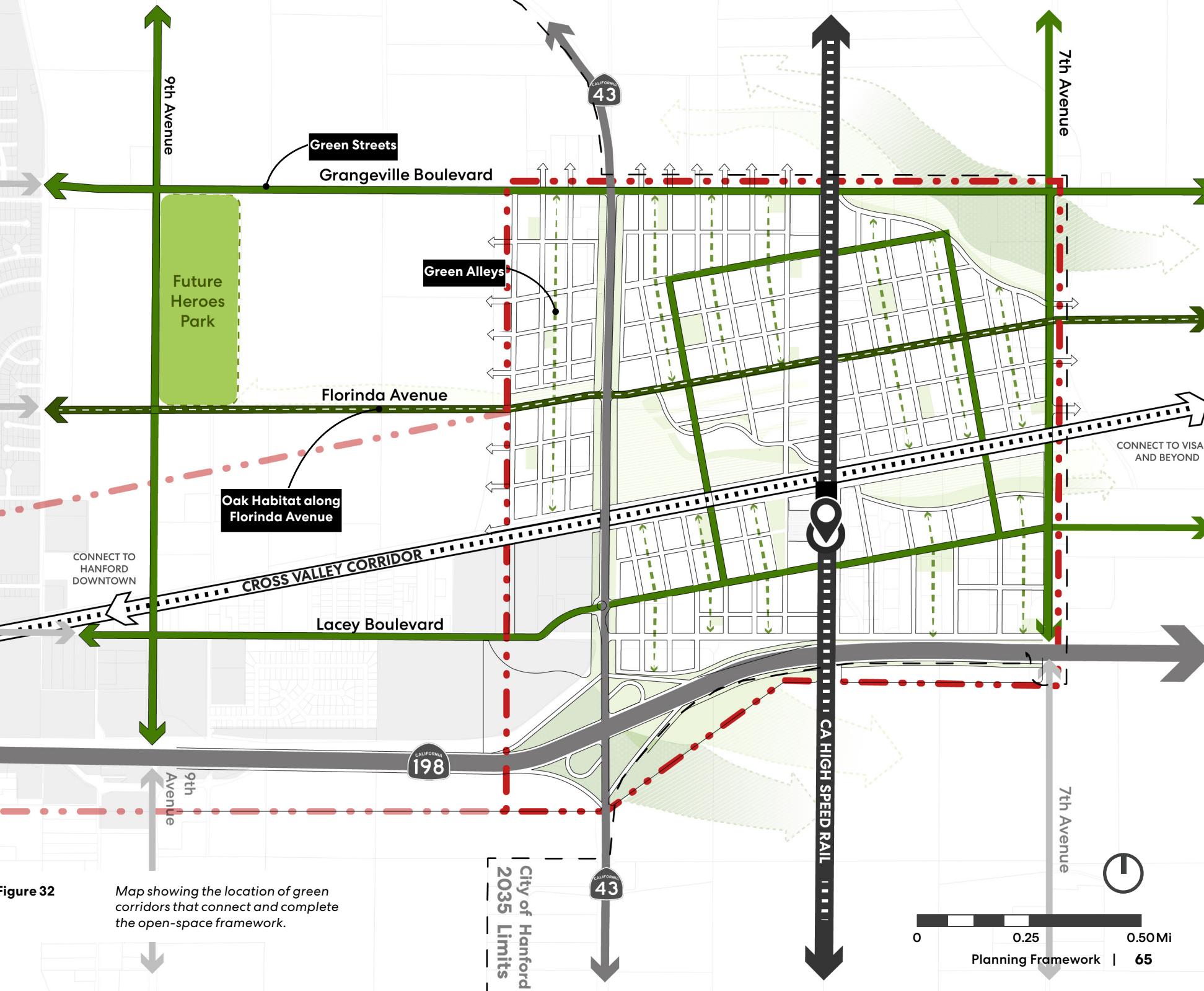


Figure 32

Map showing the location of green corridors that connect and complete the open-space framework.

City of Hanford  
2035 Limits

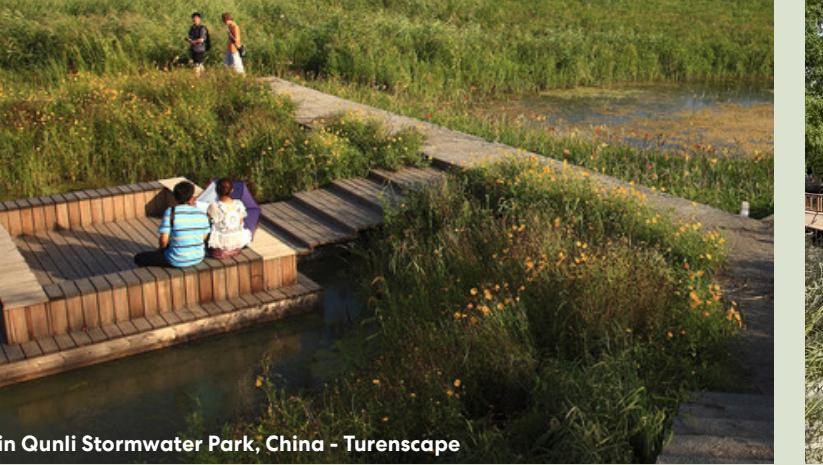
## HUBS →



Apricot Lane Farm, Moorpark, California



Five Rivers Metropark



Harbin Qunli Stormwater Park, China - Turenscape



Forest Park in St. Louis, Missouri

## PATCHES ←



Garden Village, Berkeley, California, U.S.A - Stanley Saitowitz | Natoma Architects Inc.



Heritage Forest, Chelsea, U.K - SUG Forests



Pogo Park, Richmond, California, U.S.A - Elm Playlot / KQED, Nancy Deville



Tanner Springs Park, Portland, Oregon, U.S.A - DreselL Consulting

## CORRIDORS →



Town Branch Commons, Lexington, Kentucky, U.S.A - SCAPE



Moorpark, California, U.S.A



Sjokanten Park, Stavanger, Norway - A-Lab



Historic Highlands, Pasadena, California - Carol Mørset

## Closed Loop Infrastructure

The Kings-Tulare High-Speed Rail Station TOD is an opportunity to design an infrastructure system that honors Hanford's deep relationship with elements of the natural environment and lays the groundwork for a new paradigm of ecological responsiveness that strengthens the community's bond with environmental health and fosters a sense of connection to nature.

Grounded in the sensibility of water as a precious resource, the diagram illustrates a vision for an integrated, closed-loop infrastructure system for the Kings-Tulare High-Speed Rail Station TOD. It is designed to mirror natural cycles, weaving together water, energy, agriculture, and waste streams into a regenerative urban ecosystem. This systems thinking is embedded in the proposed TOD planning framework, with regenerative agriculture bands and groundwater-recharge zones to bioretention landscapes, bioswale-lined streets, oak habitats, and the ambient energy loop envisioned along the Loop Road.

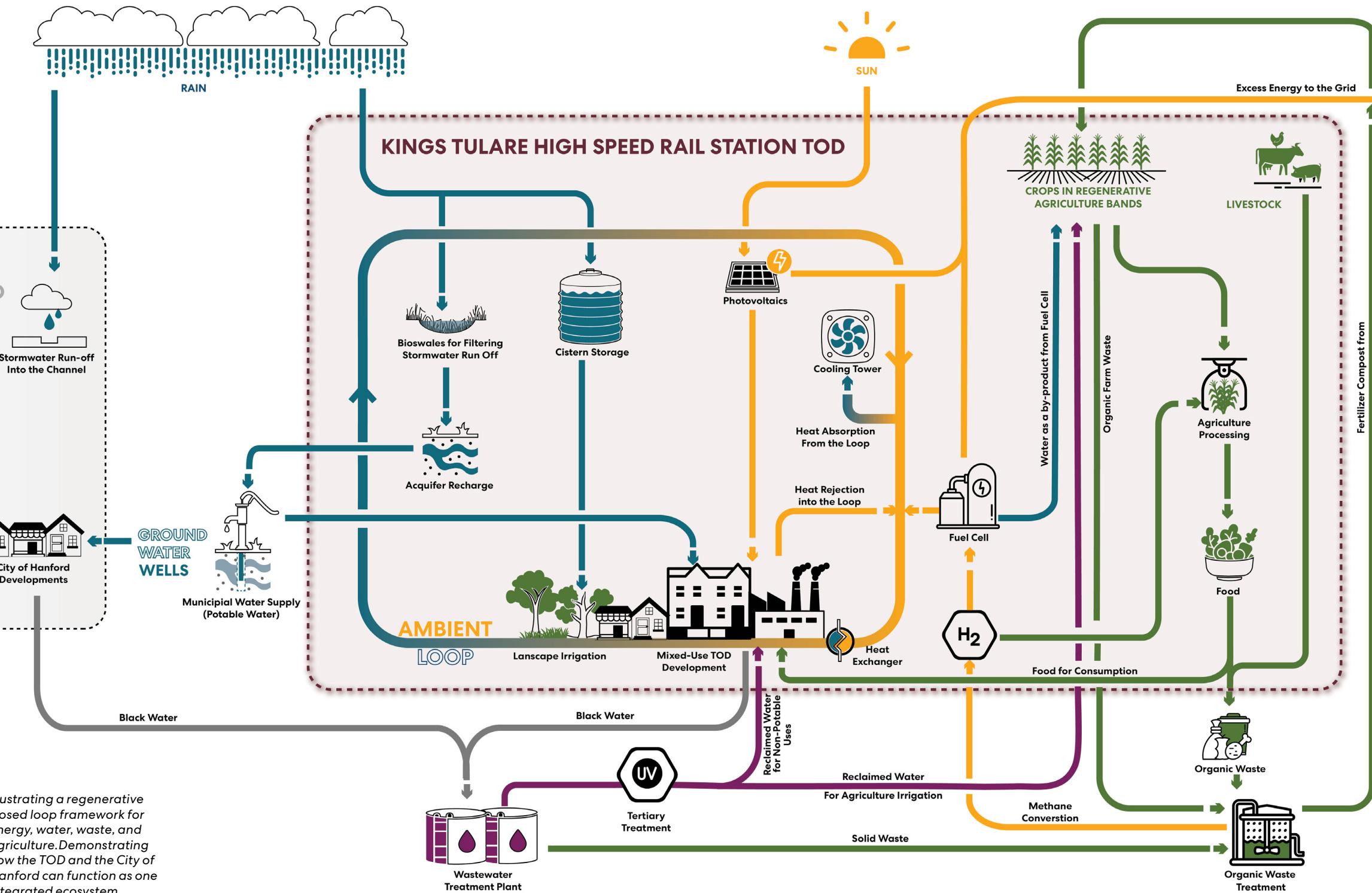
**Water** - Rainfall is captured through rainwater harvesting systems, stored in cisterns, or directed into a network of bioswales that naturally filter runoff and recharge the aquifer, strengthening the region's long-term water resilience. Additionally, wastewater reclaimed from the existing wastewater treatment plant after tertiary treatment and UV purification is reused for agricultural irrigation, street trees, and landscape areas within the TOD. This integrated approach creates a closed loop water cycle that minimizes waste and reduces dependence on groundwater pumping.

**Energy** - At the heart of the district, an ambient energy loop along the Loop Road connects buildings, using heat exchangers, cooling towers, and photovoltaic solar panels to balance energy across the development. Excess heat is absorbed or rejected through the loop, improving efficiency, while solar power feeds

local electrical demand. A fuel cell system produces clean hydrogen ( $H_2$ ) and additional energy, further diversifying the district's renewable energy sources.

**Agriculture** - The region's agricultural economy is celebrated and fully integrated into the loop as a demonstration of sustainable farming possibilities. Crops in the regenerative agriculture bands in the TOD receive reclaimed irrigation water and, in turn, produce food that supports local consumption. Livestock and agriculture generate organic by-products, which are collected for organic waste treatment. Methane produced from this process is converted into useful energy, while solid waste is reintegrated into the system as fertilizer or soil amendments. Any excess renewable energy generated is sent back to the grid.

Together, the TOD operates as a living system—where water is reused, energy is renewable, waste becomes a resource, and agriculture and urban life are interdependent. This regenerative model not only reduces environmental impact but also strengthens economic and community resilience, establishing Hanford's Kings-Tulare High-Speed Rail Station TOD Plan Area as a blueprint for sustainable development.



## Street Network

A connected, human-scaled street network makes it easy for residents, visitors, and future High-Speed Rail riders to move comfortably through the TOD and to the existing city fabric on foot, bike, transit, and car.

### Hanford Connected

The TOD's street network builds on Hanford's existing fabric, extending familiar neighborhood routes and introducing new east-west and north-south connections that link directly to the High-Speed Rail station area and neighborhoods of the TOD.

Each street is designed for safe, multimodal movement, offering shaded sidewalks, crossings, and clear routes for walking, rolling, biking, and transit. This network forms the backbone of everyday mobility, tying together neighborhoods, parks, the station, and Downtown.

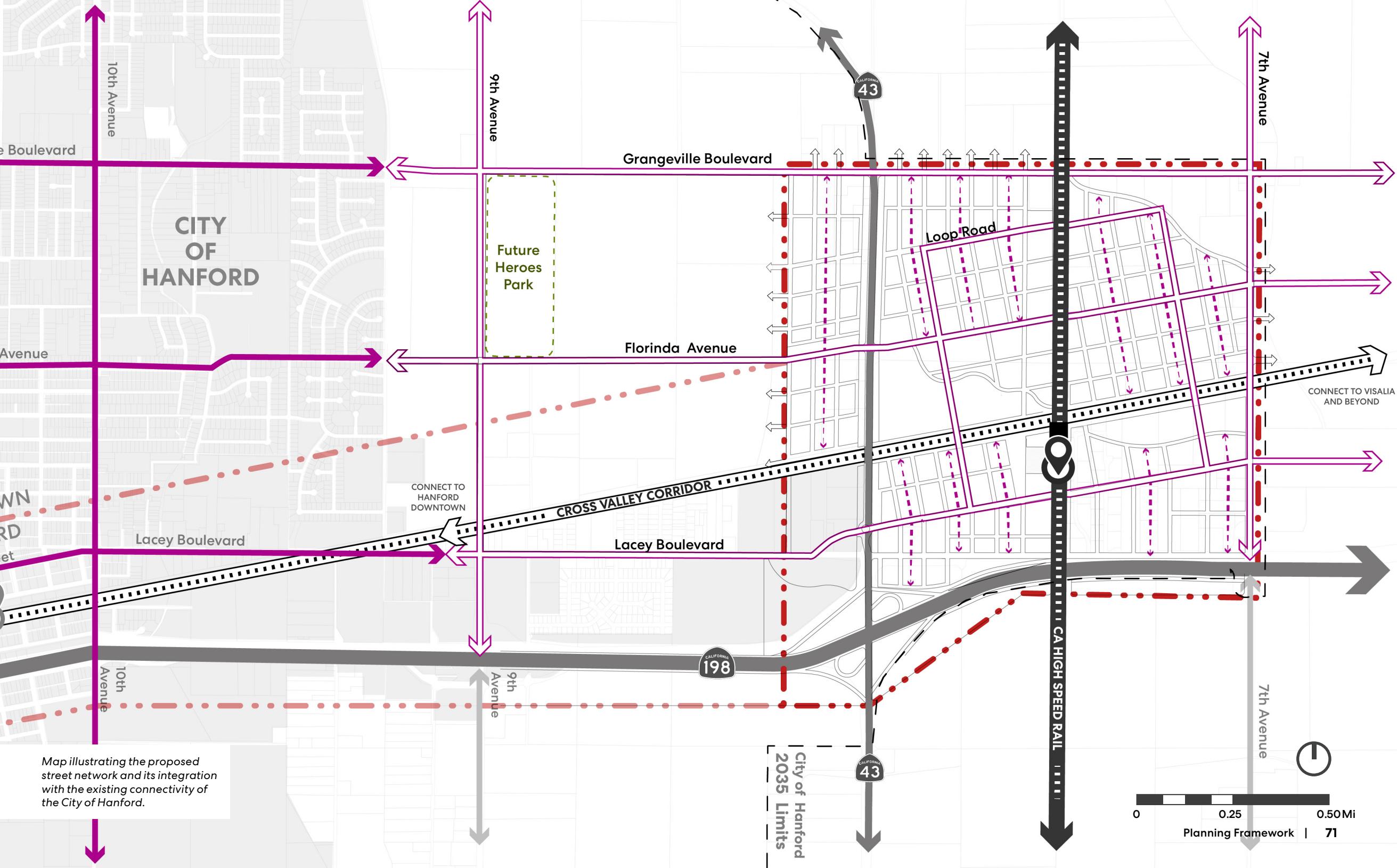
### Boulevards & Local Streets

Two primary street types organize the street network.

**Boulevards**, including Lacey Boulevard, Grangeville Boulevard, Florinda Avenue, and Loop Road; carry higher volumes of people and activity, with wider rights-of-way, protected bike lanes, and a robust tree canopy that make long-distance travel between neighborhoods and the station comfortable in Hanford's hot climate.

**Local Streets** weave through residential blocks, providing slow-speed, shaded, walkable routes that connect homes to parks, schools, and neighborhood amenities, and purposely place trees on sunnier street edges to create a comfortable pedestrian experience as well as provide shade for adjacent buildings.

Together, these street types create a legible multimodal network that supports daily life, future transit, and development growth.



## Bike Network

Aligned with Hanford's Active Transportation Plan, the bike network provides continuous, protected, and intuitive routes for everyday biking.

### Prioritizing Active Transportation

Building on Hanford's Active Transportation Plan, the TOD bike network provides shaded, low-stress routes connecting neighborhoods to the High-Speed Rail station, Downtown, parks, and key destinations. At-grade crossings along the CVC corridor ensure safe, legible north-south movement (see Chapter 07 - Implementation for details).

### Class I - Shared Use Path

Fully separated, high-comfort paths for walking, rolling, and biking along the CVC corridor, Highway 43\*, and major open-space hubs, offering shaded, car-free connections.

\*The Highway 43 shared-use path will require continued coordination with Caltrans.



Figure 35 Class I Shared Use Path

### Class III - Bike Route

Low-speed local streets forming continuous, easy-to-navigate neighborhood connections, enhanced with shade for riders of all ages and abilities. These bikeways share right of way with slow vehicular traffic.

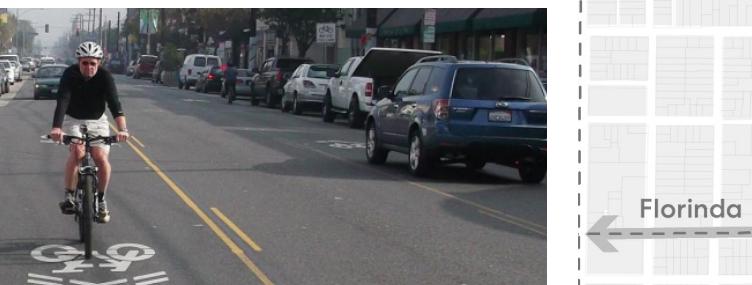


Figure 36 Class III Bike Route

### Class IV - Separated Bikeway

Fully separated, high-comfort lanes on major boulevards (Lacey, Florinda, Grangeville, Loop Road), supporting higher-volume travel, direct transit connections, and wide planted zones for shade, safety, and visibility.



Figure 37 Class IV Separated Bikeway

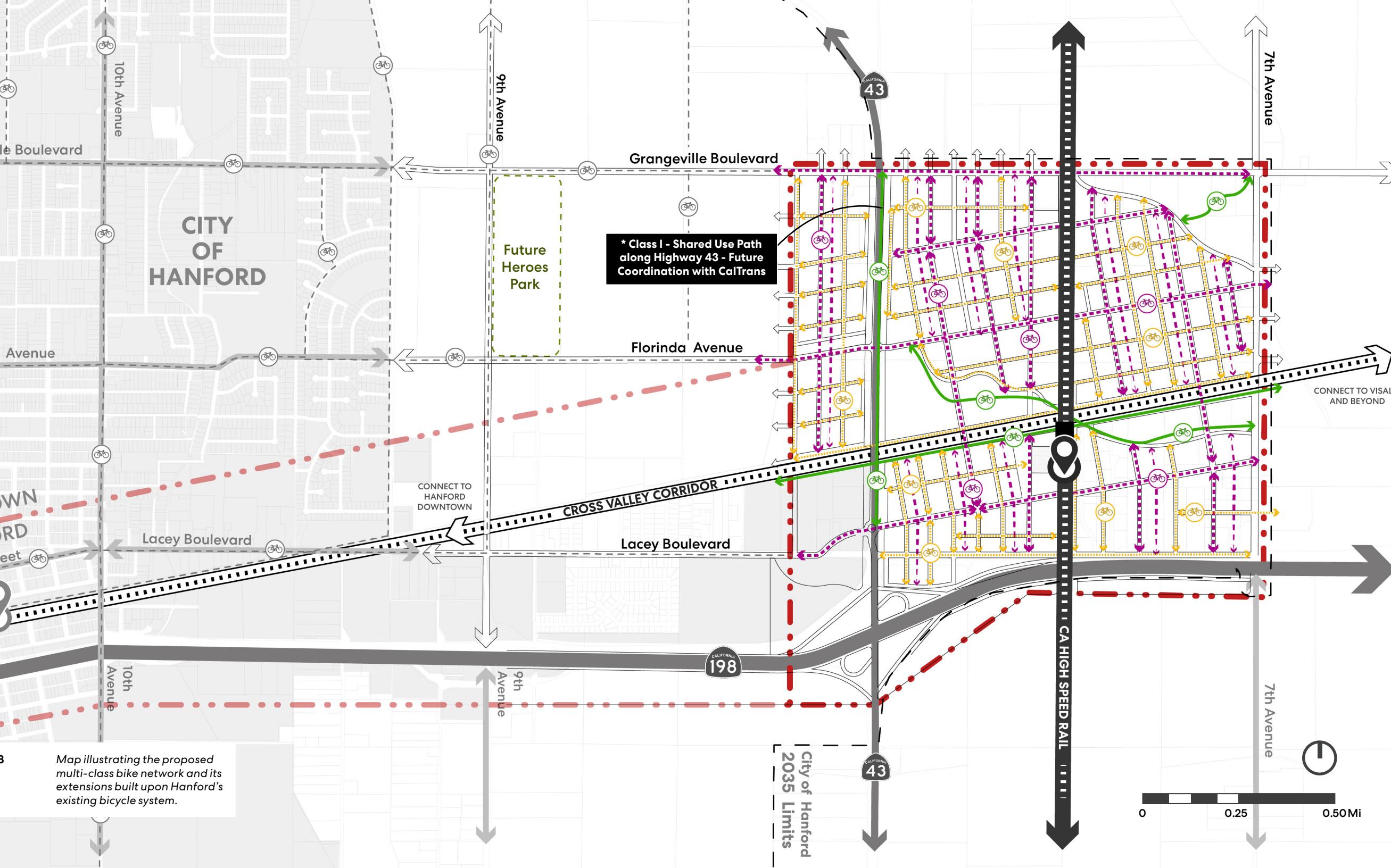


Figure 38

Map illustrating the proposed multi-class bike network and its extensions built upon Hanford's existing bicycle system.

City of Hanford  
2035 Limits

0 0.25 0.50 MI

# Boulevards

## Lacey Boulevard & Loop Road

These boulevards function as the TOD's major multimodal connectors, shaping the arrival experience from the High-Speed Rail station and linking seamlessly to Downtown Hanford and neighborhoods throughout the TOD.

### Lacey Boulevard

Lacey Boulevard defines the **primary east-west spine** of the TOD, setting the tone for Hanford's identity as a walkable, shaded, climate-responsive Central Valley city. Its generous **80-foot** right-of-way accommodates wide clear walkways, protected bike lanes, planted medians, and transit-supportive travel lanes.

The boulevard's canopy trees and landscape buffers are designed to continuous shade that makes walking and rolling comfortable throughout the day and doubles as stormwater infrastructure.

As the main boulevard to the High-Speed Rail station, Lacey Boulevard acts as an inviting gateway, providing a dignified arrival sequence framed by greenery, active frontages, and safe multimodal access. Lacey Boulevard moves visitors and residents reliably while offering a comfortable, legible and distinctive experience.



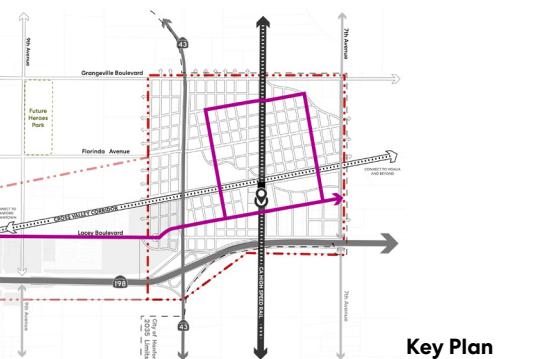
Figure 39

Class I Shared Use Path with planted pathway along street edge.



Figure 40

A lively street with shade, seating and dedicated bike lanes.



Key Plan



Figure 41

Conceptual Section of Lacey Boulevard and Loop Road

# Boulevards

## Florinda Avenue

Imagined as a neighborhood boulevard that doubles as a continuous native oak habitat corridor.

### Florinda Avenue

Florinda Avenue is designed as a shaded, walkable neighborhood boulevard that also serves as a key **80-foot ecological spine** within the TOD. Its right-of-way accommodates wide walkways, protected bike lanes, and generous planting zones, with a North street side zone dedicated to native oaks, to create large areas of shade and habitat.

Acting both as a mobility and habitat connector, Florinda strengthens neighborhood identity while linking residents to Heroes Park, nearby patches, the TOD and the broader street network. The corridor's native oak plantings recall the region's historical landscapes, cools the TOD, filters air, supports groundwater recharge, and local biodiversity. These qualities establish Florinda as a green, climate-resilient backbone for the surrounding neighborhoods.



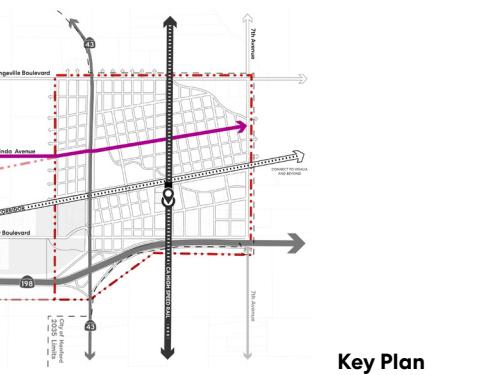
Figure 42

Shared Use Path with stormwater infrastructure adjacent.



Figure 43

Oak canopy showing extensive shading.



Key Plan



Figure 44

Conceptual Section of Florinda Avenue

# Boulevards

# Grangeville Boulevard

Serving as a regional boulevard that supports high-capacity transit, commercial uses, and safe active mobility.

## An East-West Boulevard

Grangeville Boulevard functions as **secondary regional connector, an east-west mobility spine** designed to serve residents, commuters, and future transit riders. Its **80-foot right-of-way** balances high-capacity travel with a safe, comfortable public realm, featuring separated bicycle lanes, wide pedestrian zones, and generous planting that prioritizes stormwater medians due to its prime location in the aquifer recharge zone.

As a key secondary link between the High-Speed Rail station and the northern part of the existing city fabric, Grangeville supports transit-ready development for future potential growth and commercial activity along its edge. Creating a cooler, more comfortable environment for walking and biking while visually stitching the TOD into the broader city - establishing Grangeville as an essential, future-ready boulevard.



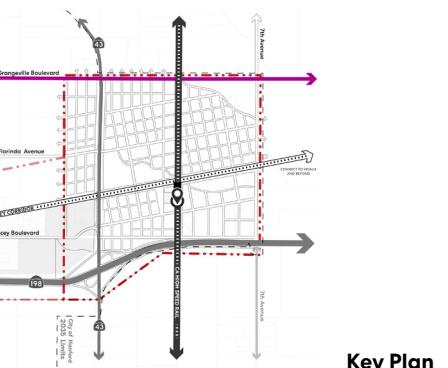
**Figure 45**

Multi-modal street with robust planting for groundwater recharge. **Fig**

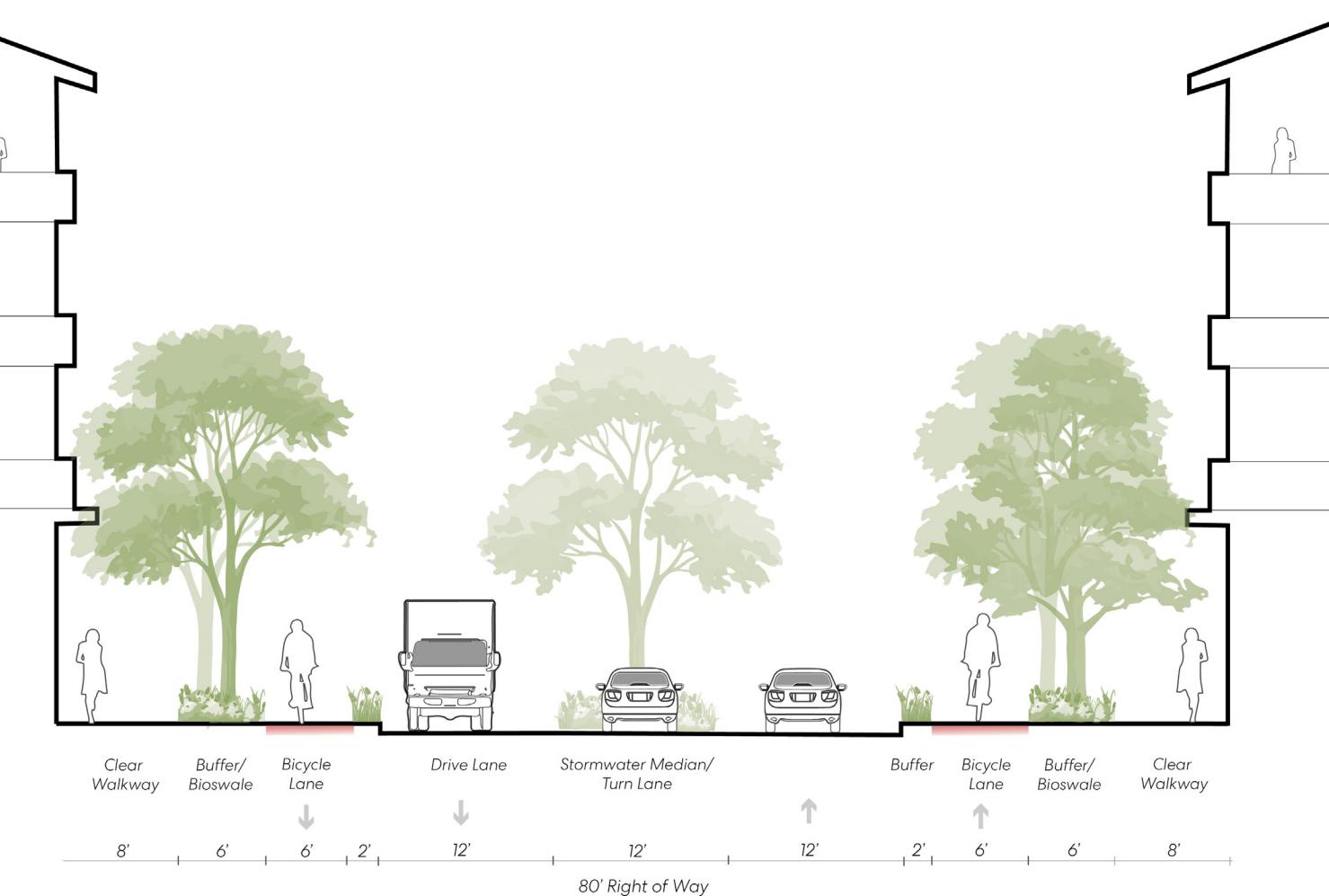


### Comments

businesses with generous pedestrian walkways.



## Key Plan



### Conceptual Section of Grangeville Boulevard

## Boulevards

### 7th Avenue

Serving as a major north-south connector that provides controlled truck access from Highway 198 and establishes a strong buffered edge for future development.

#### A North-South Boulevard

7th Avenue functions as a north-south boulevard located at the TOD's most eastern edge. Designed to safely manage truck movements while establishing a clear transition between Production and Innovation uses, current existing farmland, and future development sites. Its wide right-of-way and turn-lane capacity support freight access from the highway, reducing truck circulation within the TOD's residential and mixed-use districts.

Generous planting buffers create a green, more comfortable edge condition that softens adjacency from the street and the future Production and Innovation parcels delineated in the 'Neighborhoods & Districts' chapter, while also working with prevailing winds to disperse dust and particulate pollution, improving air quality for nearby homes.



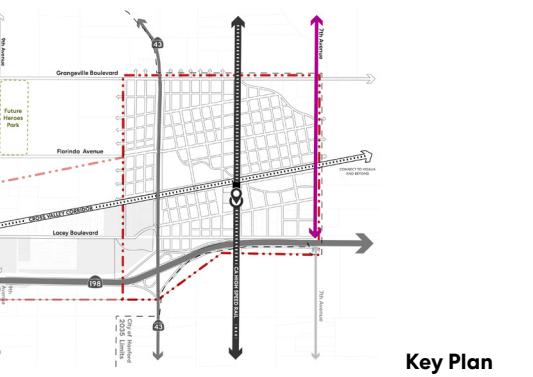
Figure 48

Generous green buffer with travel lanes in an industrial zone.



Figure 49

Clear pathways alongside a truck traffic street.



Key Plan

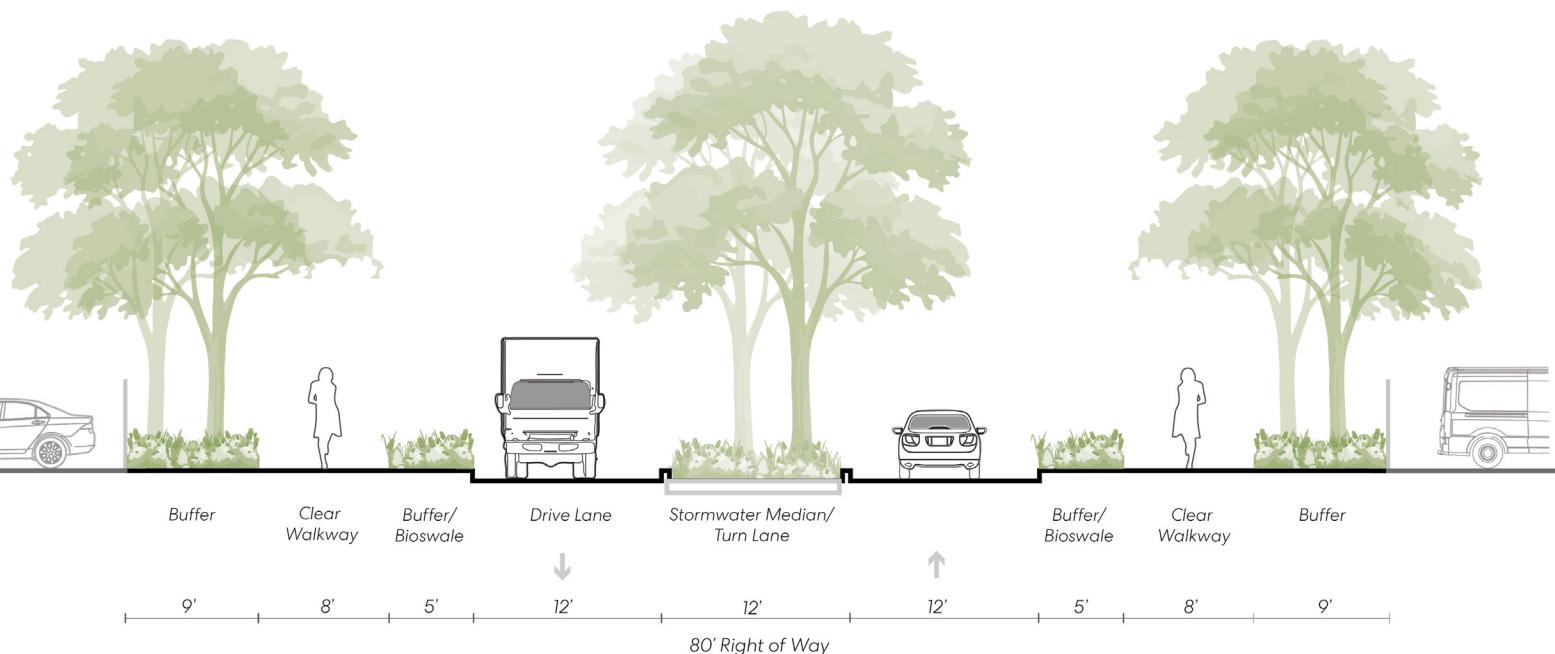


Figure 50

Conceptual Section of 7th Avenue

## Boulevards

### 9th Avenue

A new north-south connector that manages highway traffic while extending a shaded linear park linking neighborhoods to Heroes Park.

### 9th Avenue

Envisioned as a new, **110-foot high-functioning connector** created in tandem with the planned Highway 198 interchange. Its extended alignment provides a direct route for vehicles entering and exiting the highway, easing pressure on neighborhood streets. Despite its regional role, the boulevard is designed with a strong ecological and community character; a continuous linear park runs along its length, creating a green thread that ties neighborhoods to Heroes Park.

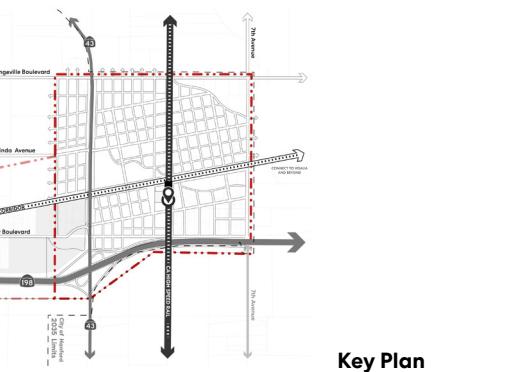
Shaded walkways, protected two way bike facilities, and native planting support comfortable, climate-responsive travel, while generous buffers soften the impact of increased traffic. As both a major movement corridor and a habitat-supporting green edge, 9th Avenue balances city wide access needs with a distinctive identity.



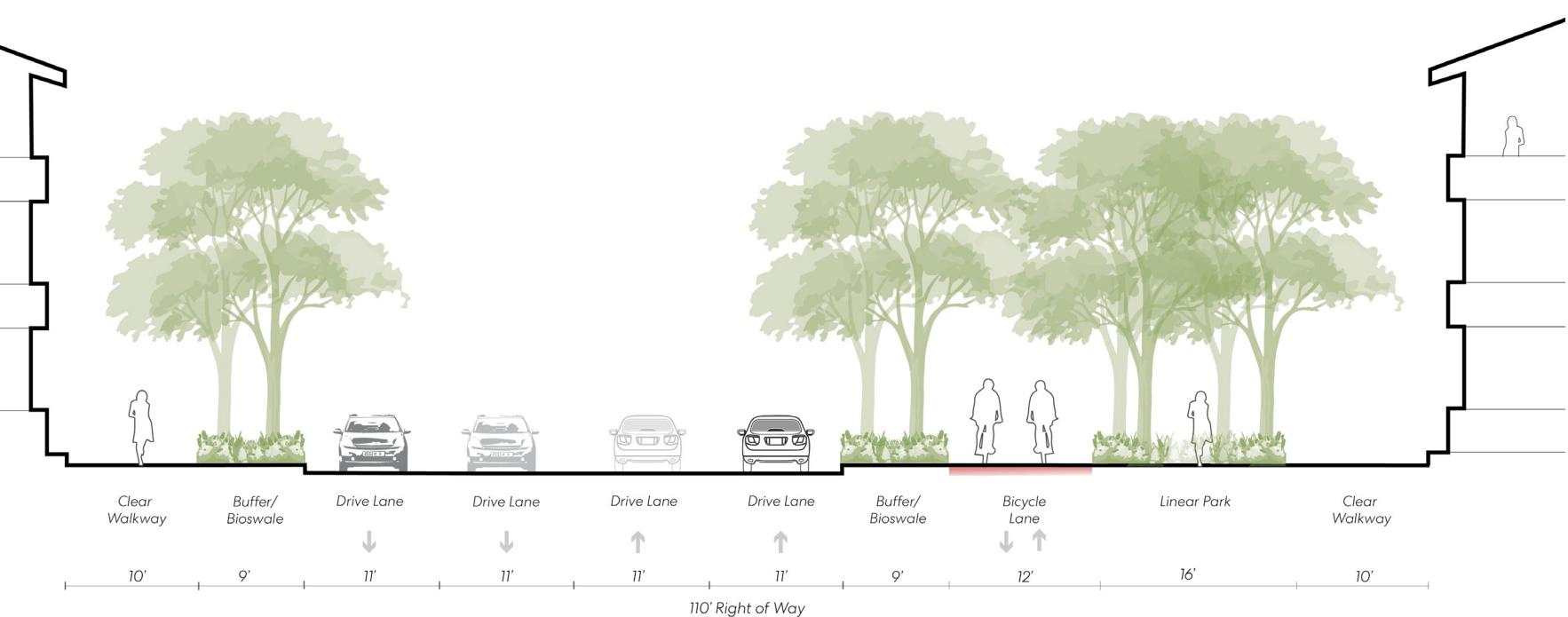
**Figure 51** Linear Park alongside a road edge.



**Figure 52** Generous walkway and planted buffer along a busy road.



**Key Plan**



**Figure 53** Conceptual Section of 9th Avenue

## Local Streets

Within the TOD, local streets form the fine-grain network that supports everyday movement, short walking trips, and neighborhood-scale comfort. Designed to complement the broader boulevard system, they reinforce Hanford's climate-responsive urban character with shade, planting, and safe active mobility on every block.

## Local North-South Streets

**The 60-feet North-south local streets** reinforce the TOD's passive cooling strategy by planting trees on **both sides of the street**, creating a continuous canopy that shades sidewalks and filters prevailing breezes helping draw cooler air through the neighborhood.

As calm, slow-speed streets that connect homes to parks, schools, and key east-west boulevards, these corridors deliver a comfortable walking and biking experience while maintaining the TOD's green, pedestrian-first character.



**Figure 54**

green and drought tolerant native planting.

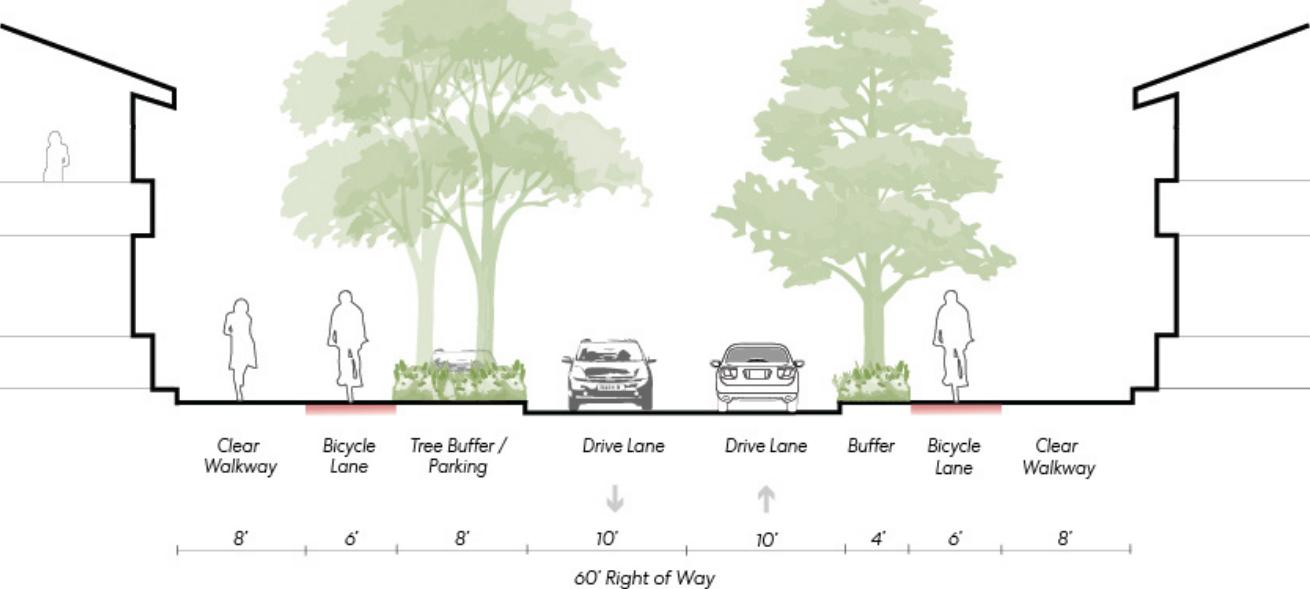
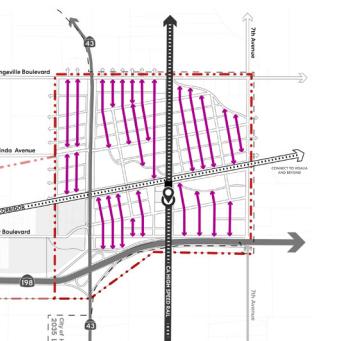
## West Streets

**East-west local streets** despite compact right-of-ways use strategic, **tree placement** to maximize shade during the hottest hours and provide shading through building form.

extend the TOD's ecological and passive-cooling systems at the micro homes, plazas, and mixed-use areas with shaded routes that support activity. Their integrated planting and green infrastructure make them smart connectors that complete the neighborhood network.

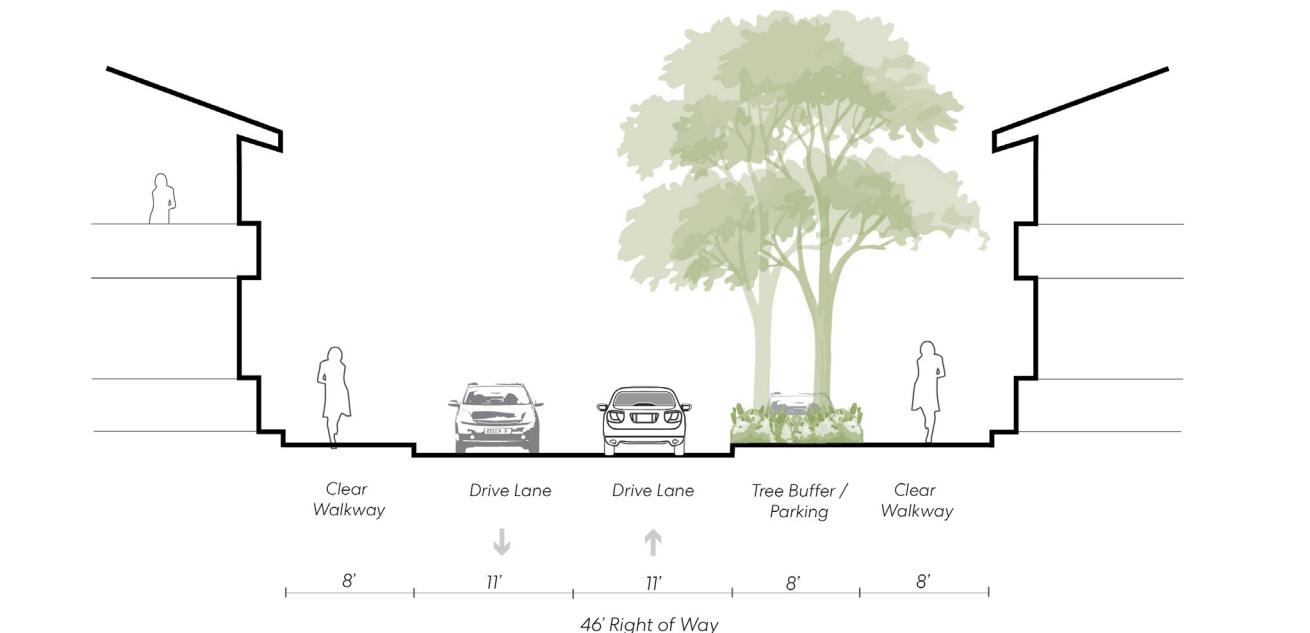
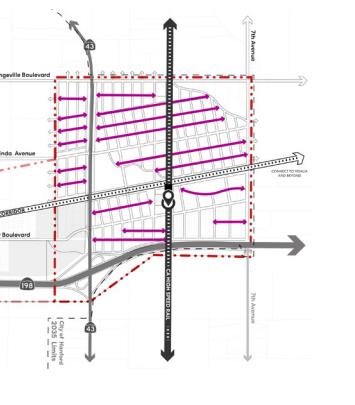


A local street with community farming.



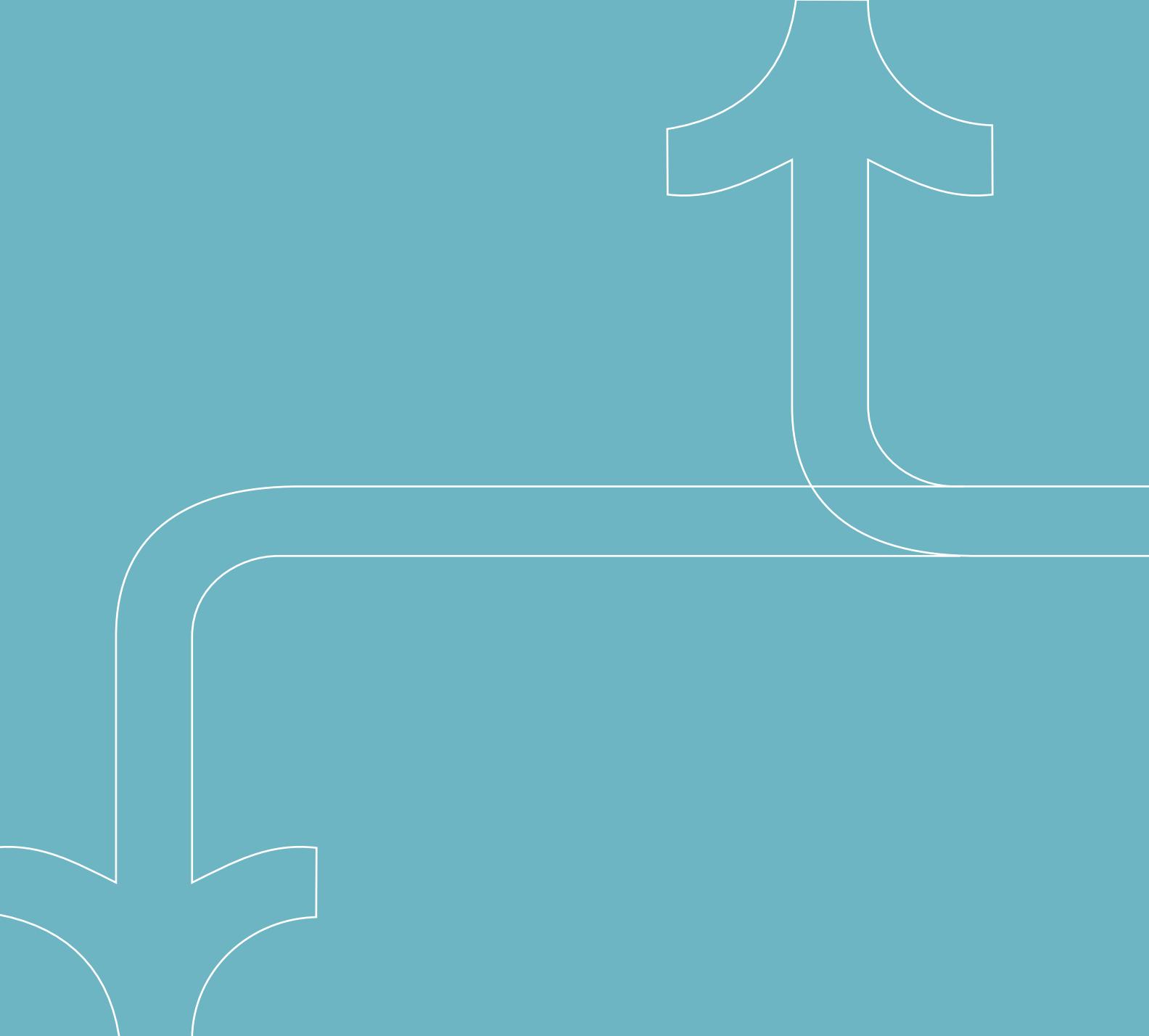
e 56

### Conceptual Section of Local North-South Street



57

### *Conceptual Section of Local East-West Streets*



# 06 Neighborhoods & Districts

This chapter outlines how housing, jobs, social spaces, and open space shape a complete, walkable community around the future station. A mix of residential neighborhoods, an employment district, and an institutional anchor aims to strengthen Hanford's economy, and create a vibrant place to live, work, and gather.

## Land Use

This land use framework is a calibrated mix of uses – homes, jobs, open space, and community facilities balanced into a framework that supports walkability around the future station and grows in harmony with Hanford’s existing neighborhoods.

## Land Use Framework

Organized around four complementary components: Mixed Use Neighborhood concentrated near the future Kings-Tulare High-Speed Rail Station, Residential Neighborhood that transition toward existing Hanford's residential community, a Production and Innovation district that supports local employment and ag-adjacent industries, and an institutional anchor that reflects the region's strengths in education, healthcare, and ag-tech. This arrangement creates a walkable, transit-integrated TOD where daily needs are close by and where new growth strengthens Hanford's established urban fabric.

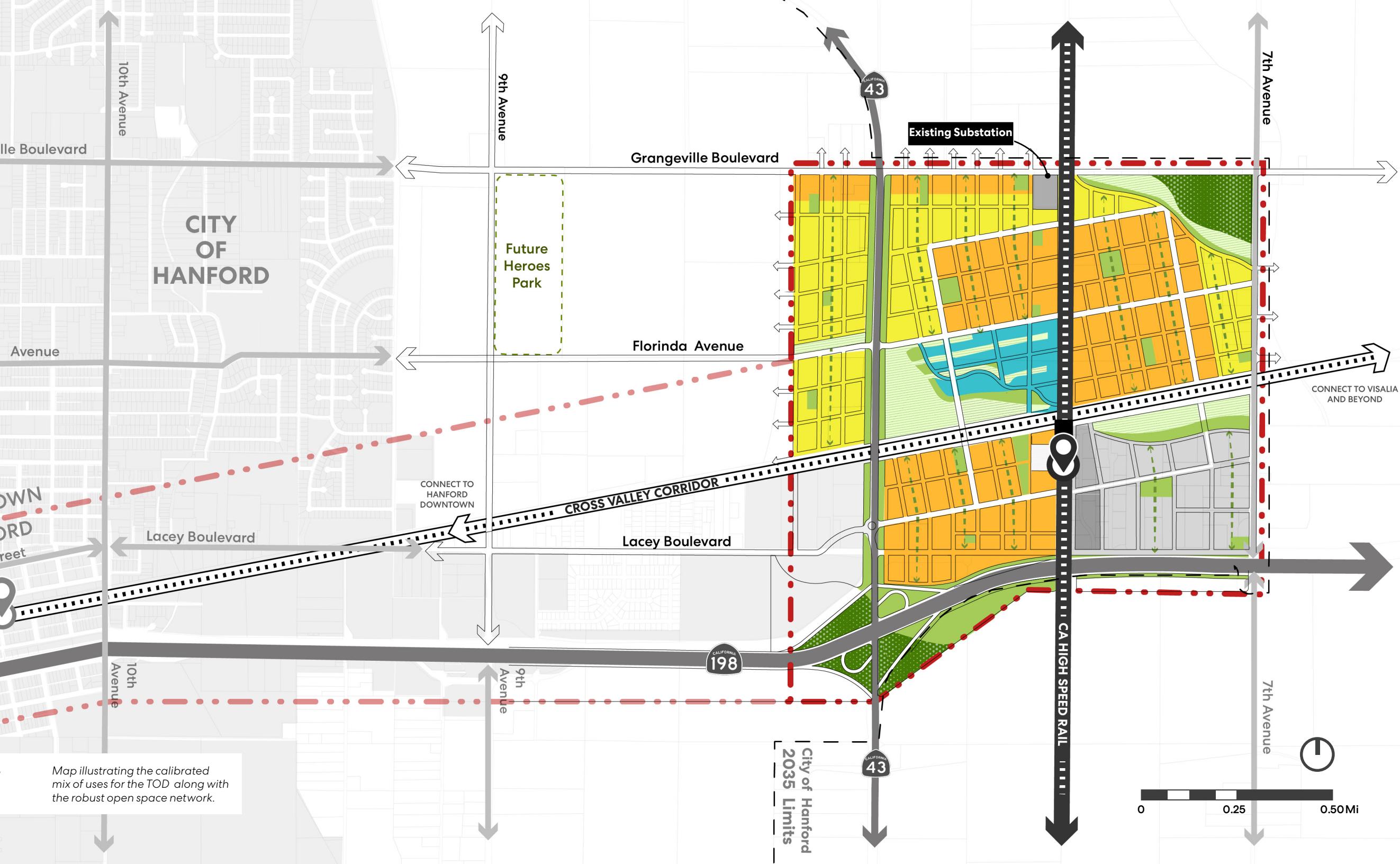
## Integration with Open Space & Agriculture

These land uses are shaped by, and integrated with, the site's open space network. Residential areas sit alongside the ecological matrix of hubs, patches, and corridors—giving residents direct access to shaded recreation and everyday nature. Regenerative cultural bands not only follow the site's natural drainage contours, but support the Production and Innovation district, frame the institutional anchor, and create a community-oriented growing zone near a major regional transit hub, giving it a distinct identity and positioning it as a catalyst for complementary food and culinary enterprises to co-locate.

ether, the land-use and open space network creates a cohesive neighborhood where open space, culture, and development reinforce one another.

## Legend

Label	du/ac	Size (acres)
Mixed Use Neighborhood	>40 du/ac	191 acres
Residential Neighborhood	<40 du/ac	130 acres
Production and Innovation District		60 acres
Institutional District		32 acres
Parking		11 acres
Hubs/Patches/Highway Buffers		294 acres
Agricultural Bands		58 acres



## Mixed Use Neighborhood

This plan concentrates intensity of uses and vibrancy around High-Speed Rail Station.

### Housing

Mixed use neighborhoods form the most active areas of the TOD—positioned closest to the future Kings-Tulare High-Speed Rail Station, adjacent to the Loop Road, and along key east–west corridors. Housing types typologies promote a mix of diverse housing choices for people of all incomes, age-groups, and household sizes. This supports transit ridership and offer attainable homes for Hanford's growing workforce and young families. Buildings are oriented to capture prevailing northwest winds and are arranged to frame shaded paseos and neighborhood green areas.

### Commercial & Neighborhood Services

Major boulevards in the TOD offer opportunities for farm-to-table restaurants, small businesses, childcare, schools and neighborhood-serving retail, uses that bring daily life closer to the station and support both residents and commuters. An integrated open space network provides park frontages and spaces to host community events and farmers-market pop-ups.



Figure 60

Flourishing community gardens within living communities in Mariposa IV, DHA in Denver, CO



Figure 61

Multifamily housing with active ground floor spaces in San Luis Obispo

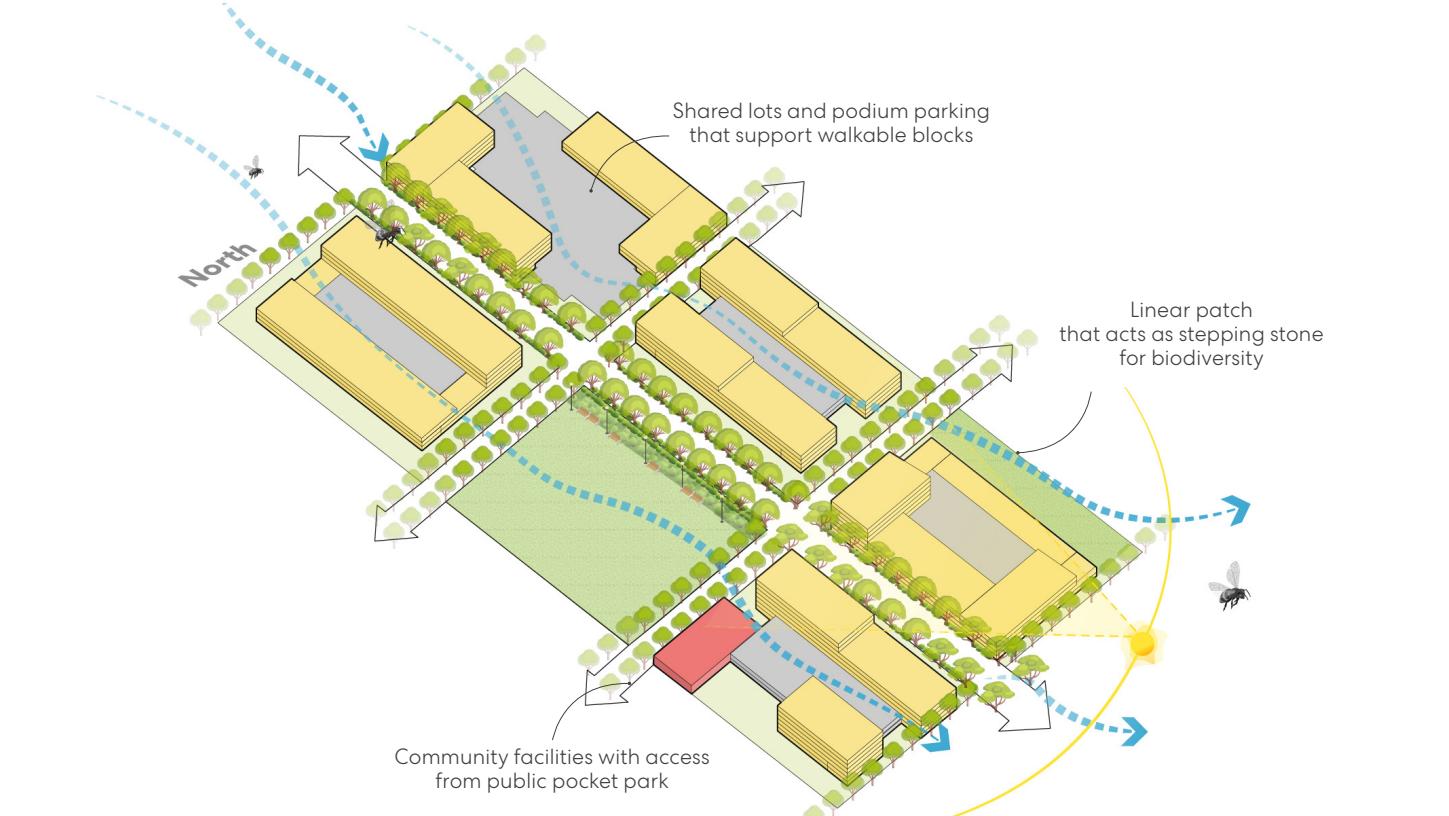


Figure 59

Illustrating an exemplar mixed-use block featuring housing, parking, community amenities, and integrated open spaces.

## Residential Neighborhood

This plan creates communities.

### Housing

Residential neighborhoods line the quieter edges of the TOD, transitioning toward existing residential community west of 10th Avenue and north of Lacey Boulevard. These blocks include townhomes, duplexes, and triplexes that offer more private outdoor space while still maintaining quick connections to parks, green streets, and transit. Green north–south alleys improve airflow, heat mitigation, while preserving Hanford's familiar residential scale.

### Open Space

Neighborhood patches, community gardens, and green alleys are woven throughout, linking households directly to the broader ecological matrix. These spaces provide shade, native planting, biodiversity pockets, and social opportunities—supporting health and comfort in Hanford's hot-dry climate.

Several residential neighborhood blocks connect directly to the major open space hubs and the residential-focused agricultural band—offering hands-on learning, local food production, a stroll through the seed bank forest, and recreational activities, such as trails, sports and wildlife spotting.



Figure 63

Townhomes opening into central courtyard in San Luis Obispo



Figure 64

Townhomes in San Luis Obispo

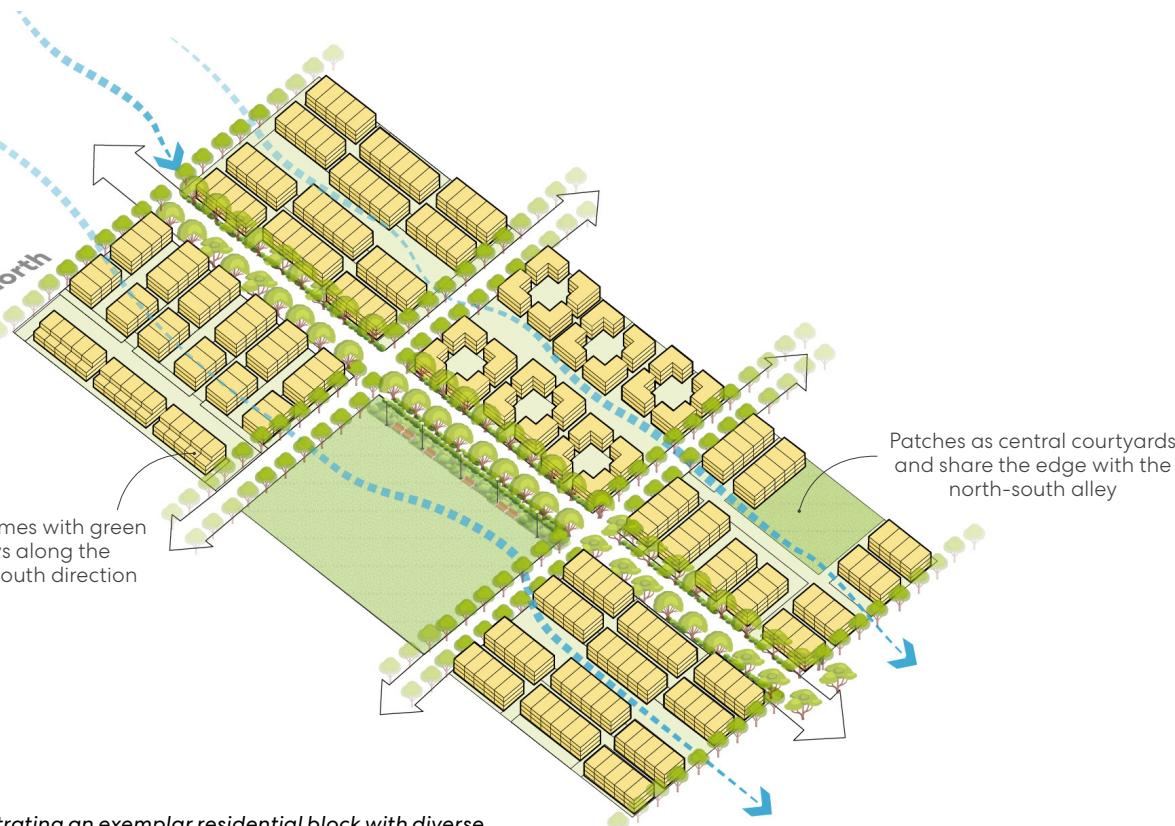


Figure 62

Illustrating an exemplar residential block with diverse townhome typologies opening onto north–south green alleys and courtyards designed to enhance natural wind flow.

## Production and Innovation District

This plan fosters innovation and economic opportunity.

### Uses

The Production and Innovation district creates a dedicated employment zone on the southeastern side of the TOD, positioned between the High-Speed Rail station, Lacey Boulevard, and the Cross Valley Corridor. It supports ag-tech, light industrial, food processing, research, fabrication, and small logistics businesses that build on Hanford's agricultural strengths. Flexible block sizes accommodate a range of business sizes, with walkable streets linking employees to transit, open space, nearby neighborhoods, and the institutional district.

### Open Space

Green pocket parks, shaded breaks, and linear patches weave through the district—improving comfort and connecting workplaces to the broader ecological matrix. These spaces add shade, native planting, and places for rest for workers. Adjacent agricultural bands reinforce the district's identity with areas for demonstration crops, regenerative farming, and hands-on learning tied to local industry.



**Figure 66**

Showing how wide sidewalks and green infrastructure improve walkability in industrial parcels.



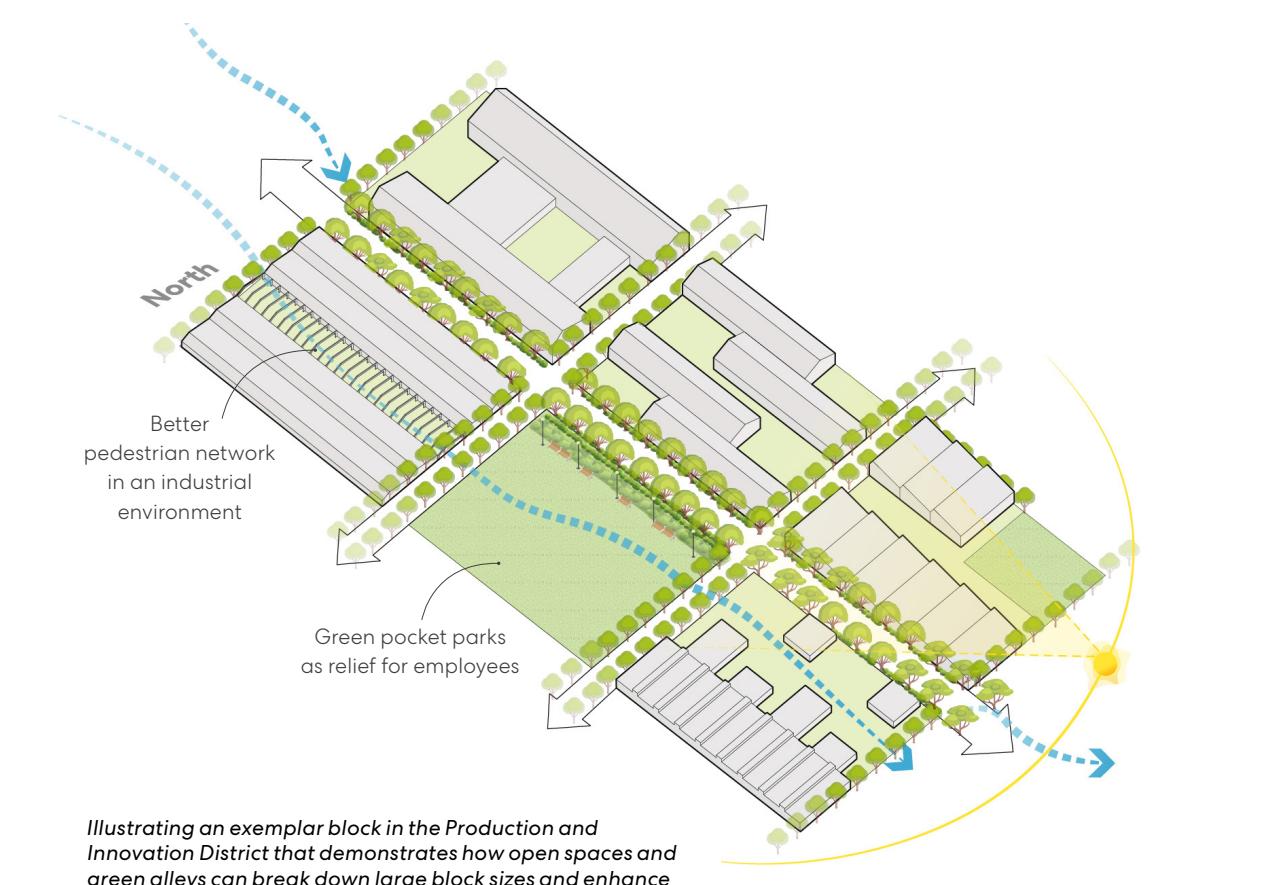
**Figure 67**

Depicting dedicated, segregated active mobility lanes in industrial districts.



**Figure 68**

Demonstration farms within institutions showcasing regenerative agriculture.



**Figure 65**

Illustrating an exemplar block in the Production and Innovation District that demonstrates how open spaces and green alleys can break down large block sizes and enhance walkability.

## Institutional District

Anchored beside the future station, this institutional district becomes Hanford's new center for learning, innovation, and regenerative agriculture demonstration—advancing a complementary future for the city of Hanford.

### Uses

The institutional anchor sits at the heart of the TOD beside the future Kings-Tulare High-Speed Rail Station—becoming a civic landmark for Hanford. Framed as a hub for learning, innovation, and agriculture; it builds on the Valley's agricultural heritage while preparing residents for the future. Whether realized as an ag-tech campus, medical or educational facility, training center, or hybrid innovation hub, it combines vocational training, applied research tied to local crops and soils, greenhouse and demonstration plots, and year-round community programming. Surrounding agricultural bands extend its mission through teaching orchards, regenerative farming zones, and hands-on demonstration areas.

### Jobs

It enables partnerships with local employers and educational institutions, strengthening Hanford's workforce pipeline in agriculture, ag-tech, health, and



Figure 69

Institution with drought tolerant planting.



Figure 70

Agricultural demonstration farms, and educational communal gardens.

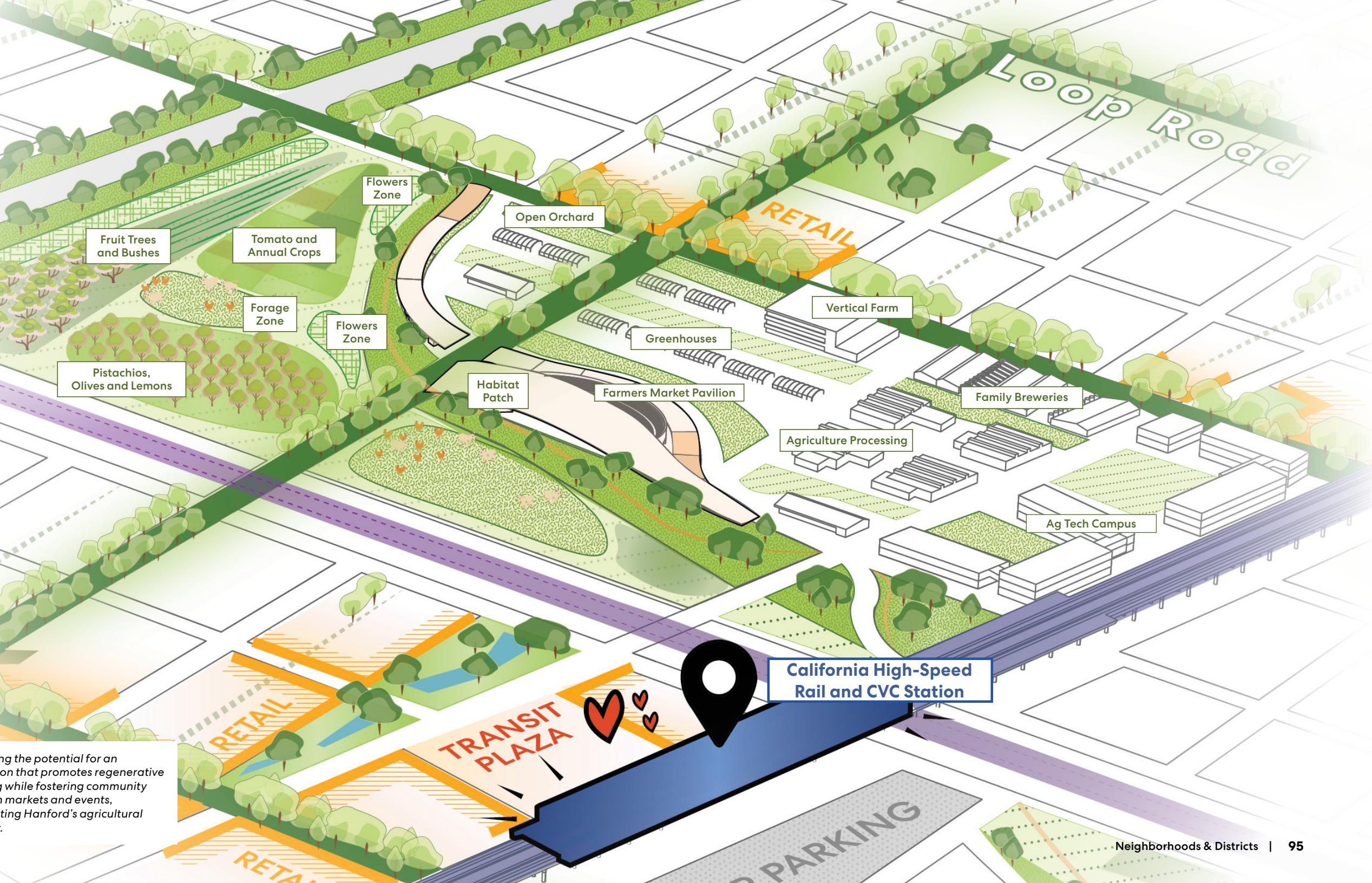
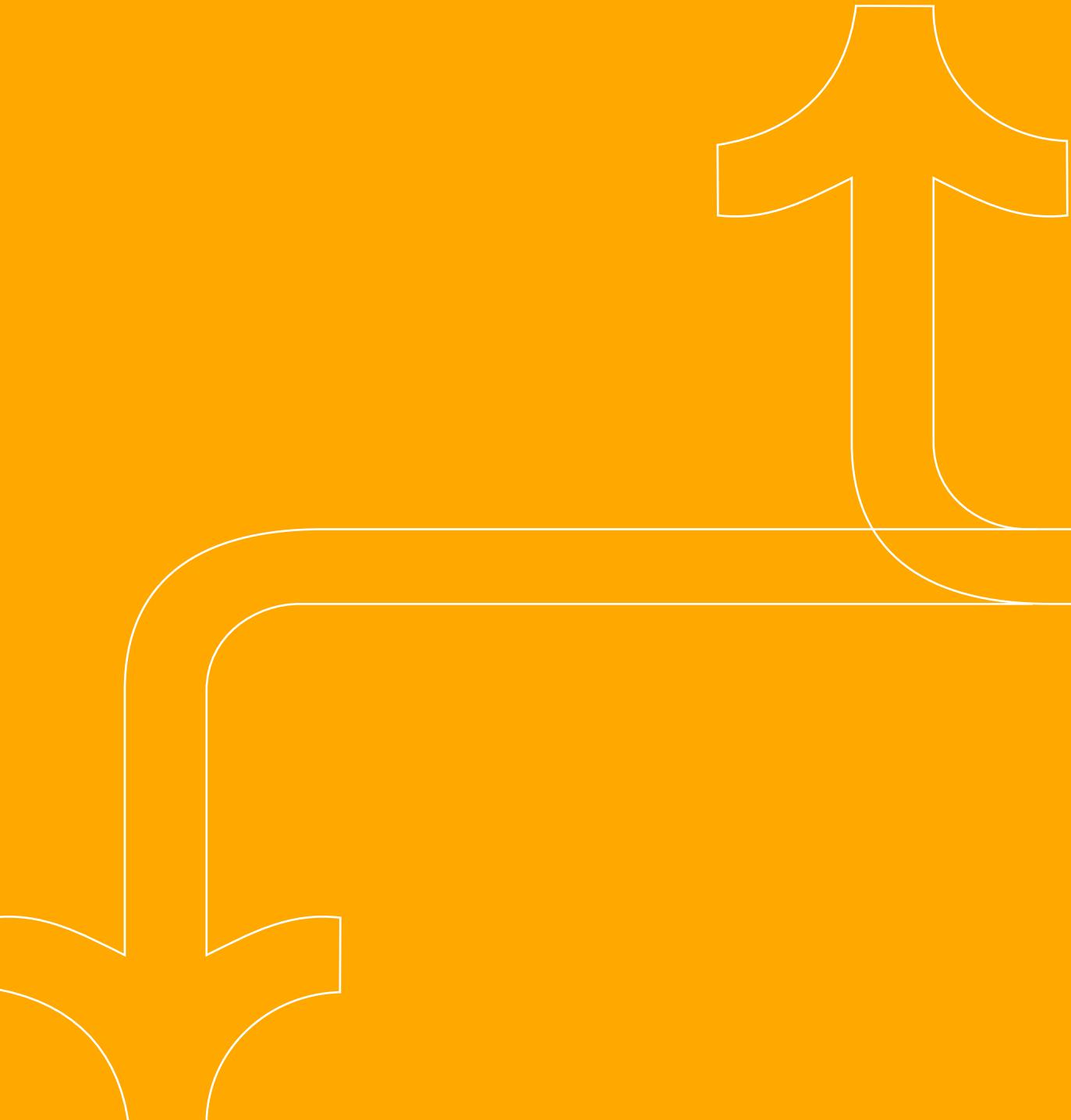


Figure 71

Depicting the potential for an institution that promotes regenerative farming while fostering community through markets and events, celebrating Hanford's agricultural identity.



# 07 **Implementation**

This chapter outlines public financing strategies to support long-term growth and infrastructure around the station. Identifies priority capital projects such as a separated multi-use path along the CVC rail corridor and intersection improvements.

# Public Facilities Financing Plan

A conceptual Public Facilities Financing Plan is intended to test the potential for project feasibility based on the infrastructure requirements to support the proposed densities outlined in Chapters 4.

## Overview

The purpose of this concept financing plan is to support the City and the California High Speed Rail Authority (CHSRA) in the future when they are developing a consistent, defensible, and equitable framework for funding the backbone infrastructure and public facilities for the HSR Station Area.

This document includes methods and assumptions used as industry standards in EPS's work and in comparable jurisdictions. The findings and recommendations contained herein are intended to be used to guide infrastructure and public facilities funding for capital facilities in the Project.

## Data Limitations

Please note the following limitations to this Conceptual Financing Plan:

- Many of the infrastructure cost estimates used in this analysis are planning level estimates and were NOT developed by engineers for the Design Package analyzed herein. The actual costs of infrastructure improvements may vary significantly from what is shown in this document.
- The feasibility of this development has not been analyzed; whether the market demand will be able to support the proposed development. If adequate residential and commercial demand is not sufficient at the time of development, the value that would incentivize a developer to build is not there.
- Detailed phasing analysis will be needed to refine financial planning, given the scale of development and infrastructure needed.

## Approach

To inform this study, EPS conducted a detailed review of the conceptual Station Area Plan land uses developed by Perkins & Will in their Design Package Land Use Plan, developed planning-level costs using data gleaned from prior work and partial information provided by the City's Public Works Department, and estimated values of the land use shown in the Design Package.

The research summarized in this study focuses on several key areas, including:

- Estimating the total Backbone Infrastructure and Public Facilities costs of the Station Area Plan conceptual land use plan.
- Estimating potential Project Value.
- Estimating the potential funding based on existing development impact fees and other City, County, and other agency fees.
- Funding applicable through the formation of an Infrastructure Community Facilities District (CFD).
- Funding applicable from the creation of a future Station Area Impact Fee.

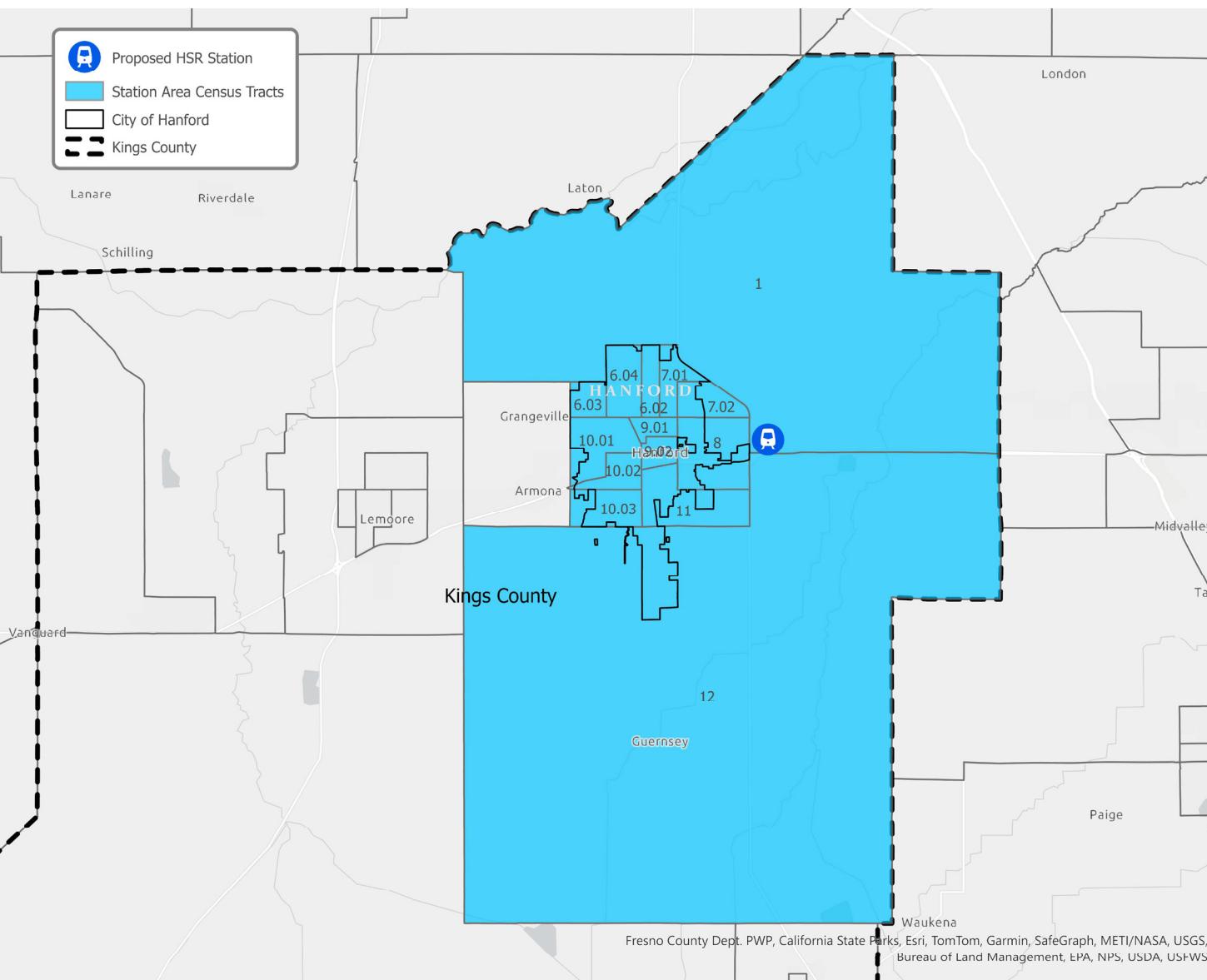


Figure 72

Kings-Tulare HSR Station Area Context Map by Census Tracts

## Development Program

According to the Project Design Package, a mix of residential densities, nonresidential land uses, open space, and agriculture development is planned for the Project. The Design Package describes the land use designations and the maximum allowable development program as shown in Appendix A Table A-1. To estimate the Project value, EPS assumes a buildout of 95 percent of the Design Package as follows:

- 9,263 dwelling units.
- 1.87 million square feet of nonresidential space.
- 305 acres of parks and open space.
- 11 acres of parking.

This Finance Plan assumes the above Project development across approximately 790 acres of the 1,000 total acreage of the station area. The remainder of the acreage will be dedicated for public rights-of-way. Figure 1-1 summarizes the proposed land uses evaluated for the purpose of this Finance Plan.

Land Use Designation	Density Assumptions
<b>Residential (95% Buildout)</b>	
Low Density	130 Acres, 1,853 Units (15 Dwelling Units/Acre)
Medium Density (Mixed Use)	195 Acres, 7,410 Units (40 Dwelling Units/Acre)
<b>Total Residential</b>	<b>325 Acres, 9,263 Units</b>
<b>Non-Residential (95% Buildout)</b>	
Production & Innovation	60 Acres, 596,000 Square Feet at 0.30 FAR
Institutional	32 Acres, 318,000 Square Feet at 0.30 FAR
Commercial (Mixed Use)	58 Acres, 960,000 Square Feet at 0.50 FAR
<b>Total Non-Residential</b>	<b>150 Acres, 1,870,000 Square Feet</b>
<b>Open Space</b>	
Hubs/Open Space/Buffers	260 Acres
Agriculture	45 Acres
<b>Total Open Space</b>	<b>305 Acres</b>
<b>Other</b>	
Parking	11 Acres
HSR Station and Track	n/a
Cross Valley Corridor	n/a
Internal Roads/Bike Lanes	n/a
Existing Power Station	n/a
<b>Total Identified</b>	<b>791 Acres (of 1,000 Acres Total)</b>

Nonresidential building area estimated based on Floor Area Ratios applied to net acreage for each land use. Acreages shown above are gross acreages. Net acreages estimated as 80% of gross acres to account for internal roadways, sidewalks, and utilities.

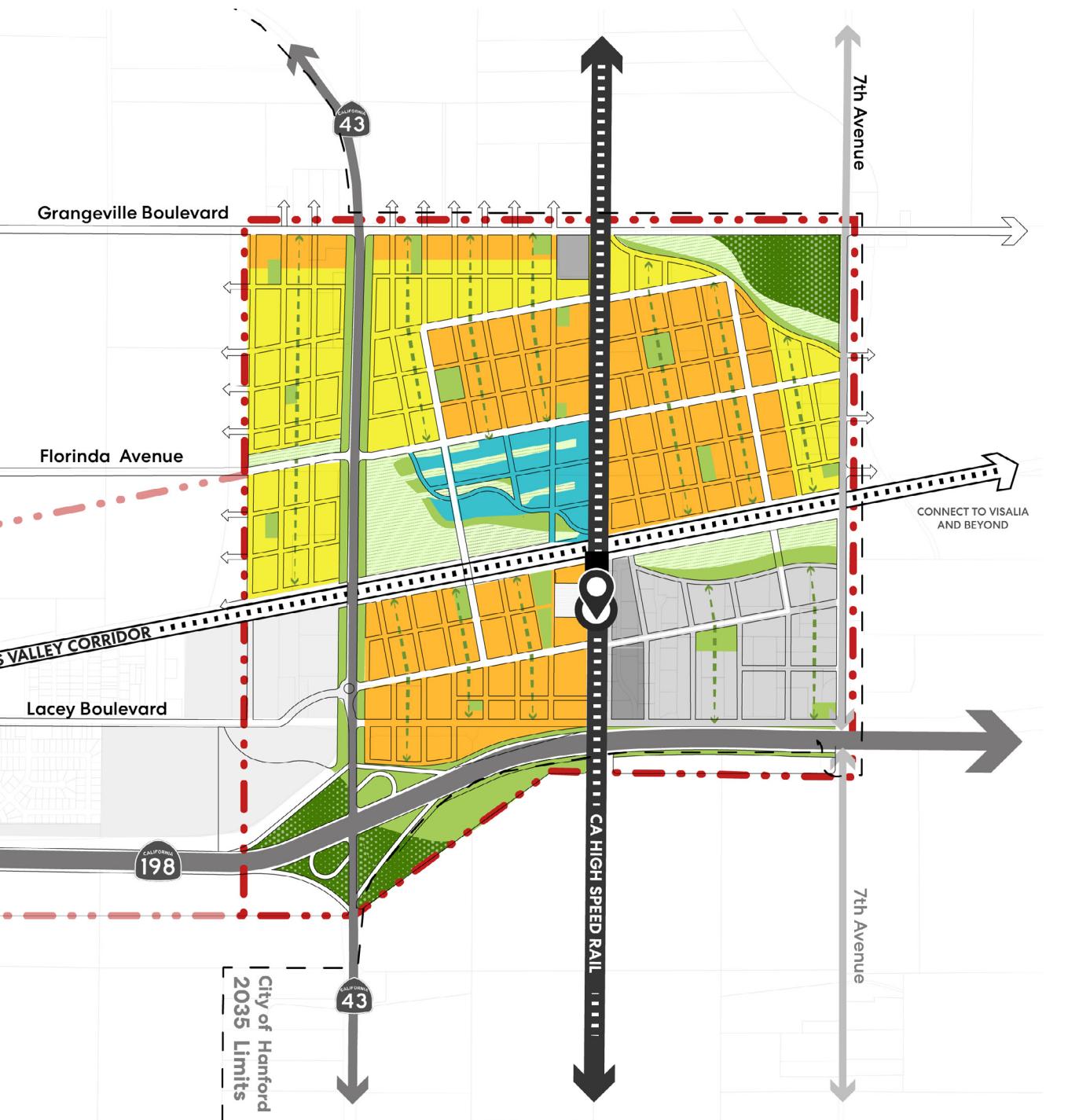


Figure 73 Kings-Tulare HSR Station Area Land Use Designation Map

## Backbone Infrastructure and Public Facilities

### Costs

Currently the Project is in the conceptual stages of planning. Actual land uses, phasing, approval, construction, and buildout of the Project will take many years, and for it to be fully realized, a multitude of phases of development will occur.

Buildout of the Project is assumed to require the following Facilities:

- Roads
- Bike Lanes
- Intersections
- Dry Utilities
- Sewer and Wastewater Treatment Plant (WWTP)
- Water
- Storm Drainage
- Open Space
- Fire Facilities
- Sheriff/Law Enforcement
- Schools
- Other Public Facilities

Where available and noted, the cost estimates for the required Backbone Infrastructure and Public Facilities were estimated by the City's Public Works department based on the City utility master plans. The remaining estimates are high-level planning level estimates developed by EPS based on previous work. Future development phasing for the Station Area must be based on a marketdriven approach coordinated with a phased infrastructure program. It is too early in the Project's planning to provide estimated phasing, as the Project is still in its conceptual stages; any estimated phasing would be too speculative at this time.

### Estimated Costs

As specified above, the estimated backbone infrastructure and public facilities program for the Station Area includes roads, standalone bike lanes, intersections, dry utilities, onsite sewer, water, storm drainage, open space, fire facilities, Sheriff/law enforcement, school, and other public facilities improvements. The total identified cost of these improvements is approximately \$684.0 million, as is shown in **Figure 72**.

Item	Source Table	Estimate Basis [1]	Estimated Cost [3]	
			Total	% of Total
<b>Backbone Infrastructure</b>				
Roads [2]	Table B-1	Linear Feet	\$182.4 M	26.7%
Bike Lanes	Table B-1	Linear Feet	\$144.5 M	21.1%
Intersections	Table B-2	Assumes 20 intersections, 13 signalized	\$214. M	3.1%
Dry Utilities	Table B-3	Linear Feet	\$26.9 M	3.9%
Sewer and WWTP	Table B-4	Linear Feet; Costs from City Sewer Master Plan	\$99. M	14.6%
Water	Table B-5	Linear Feet	\$62.1 M	9.1%
Storm Drainage	Table B-6	Linear Feet	\$48.1 M	7.0%
<b>Estimated Total Backbone Infrastructure</b>			<b>\$582. M</b>	<b>85.6%</b>
<b>Public Facilities</b>				
Open Space	Table B-7	Per Acre	\$39.5 M	5.8%
Fire Facilities	N/A	Visalia Station 56 Cost	\$7. M	1.1%
Sheriff/Law Enforcement	Table B-8	City DIF Revenue	\$154. M	2.3%
School	Table B-8	City DIF Revenue	\$322. M	4.7%
Other Public Facilities	Table B-8	County DIF Revenue	\$40. M	0.6%
<b>Total Public Facilities</b>			<b>\$98. M</b>	<b>14.4%</b>
<b>Estimated Total Cost</b>			<b>\$684. M</b>	<b>100.0%</b>

Source: High-level cost estimates by EPS based on planning-level estimates for infrastructure in other jurisdictions, applied to land use plan.

[1] Estimates based on linear feet use the total LF of roadways included in Perkins & Will's land use plan and apply planning-level unit costs for infrastructure in other jurisdictions. Includes 20% contingency and 10% soft costs.

[2] Includes landscaped median and sidewalks; excludes Right of Way acquisition.

[3] Cost estimates are planning level estimates. Numbers shows above are for estimation purposes only and were not provided or validated by a professional engineer.

Figure 74

Backbone Infrastructure and Public Facilities Cost Estimates Summary (2025 Dollars)

## Conceptual Financing Strategy and Funding Sources

A wide variety of financing techniques are currently and may be available in the future to fund the Station Area Plan, including:

- Project-Based Developer Funding. Funding sources originating from developer payments could include the following subcategories:
- Developer Funding via Payment of Existing and Proposed Fees:

Existing Fee Programs: Project development will be subject to several existing City, County, and other agency development impact fee programs. Other agency fee programs include fees for the school district and the California Farmland Trust Mitigation Fee.

Proposed Fee Programs: Project development would also be subject to a new HSR Station Area Impact Fee Program.

Private Developer Funding. Capital provided by the private developer through debt, equity, or combination of both.

Kings-Tulare HSR Station Area Special Financing District (SFD). Certain facilities could be funded via formation of a Kings-Tulare HSR Station Area SFD, which may take the form of a Mello-Roos CFD. Facilities funded through a CFD or other land-secured financing mechanism may directly overlap with facilities included in the proposed Station Area Impact Fee Program. California High Speed Rail Authority (CHSRA). Funding such as capital, grants or loans, from the CHSRA.

- Other Potential Outside Sources of Funding (Regional, State, and federal). Funding sources, such as grants or loans, from State, federal, or other agencies or institutions for which the City may have to apply.

There is significant uncertainty concerning development of the Project, including the ultimate amount of development that will occur, the sequencing of development, the ultimate improvements that will be constructed, and the availability of many of the funding sources. As a result, the Finance Plan should be updated on an as-needed basis based on updated infrastructure cost estimates, funding, and development information.

## Preliminary Estimated Project Requirements and Funding

Figure 33 shows the proposed funding sources, by Backbone Infrastructure and Public Facilities category, for the full buildout of the conceptual Project. At buildout under the conceptual funding strategy, approximately \$292.6 million is estimated to be funded through land-secured financing (CFD); \$194.6 million is estimated to be funded by existing City, County, and Other Agency fees; \$32.6 million estimated to be contributed by the CHSRA; and \$170.0 million through a new Station Area Plan Impact Fee (including fee program administration).

Item	Estimated Total Cost [1]	Estimated Amount by Funding Source				
		Land-Secured Financing [2]	Existing City/ County Fee Programs	California HSRA (Proposed) (Est. 5% Contribution) [3]	Station Area Impact Fee	Total Funding
<b>Backbone Infrastructure</b>						
Roads, Intersections, and Bike Lanes	\$348.3 M	\$174.1 M	\$48.1 M	\$17.4 M	\$108.6 M	\$348.2 M
Dry Utilities	\$26.9 M	\$13.4 M	-	\$1.3 M	\$12.1 M	\$26.9 M
Sewer	\$99.9 M	\$50.0 M	\$21.3 M	\$5.0 M	\$23.7 M	\$99.9 M
Water	\$62.1 M	\$31.0 M	\$20.3 M	\$3.1 M	\$7.6 M	\$62.1 M
Storm Drainage	\$48.1 M	\$24.0 M	\$21.6 M	\$2.4 M	-	\$48.1 M
<b>Subtotal Backbone Infrastructure</b>	<b>\$585.2 M</b>	<b>\$292.6 M</b>	<b>\$111.3 M</b>	<b>\$29.3 M</b>	<b>\$152.0 M</b>	<b>\$585.2 M</b>
<b>Public Facilities</b>						
Parks and Open Space	\$39.5 M	-	\$27.5 M	\$2.0 M	\$10.0 M	\$39.5 M
Fire Facilities	\$7.7 M	-	\$4.5 M	\$0.4 M	\$2.8 M	\$7.7 M
Sheriff/Law Enforcement	\$15.4 M	-	\$15.4 M	\$0.8 M	-	\$16.1 M
Schools	\$32.2 M	-	\$32.2 M	-	-	\$32.2 M
Other Public Facilities	\$4.0 M	-	\$3.6 M	\$0.2 M	\$0.2 M	\$4.0 M
<b>Total Public Facilities</b>	<b>\$98.8 M</b>	<b>-</b>	<b>\$83.2 M</b>	<b>\$3.3 M</b>	<b>\$13.0 M</b>	<b>\$98.6 M</b>
<b>Subtotal Public Improvements</b>	<b>\$684.0 M</b>	<b>\$292.6 M</b>	<b>\$194.6 M</b>	<b>\$32.6 M</b>	<b>\$165.0 M</b>	<b>\$684.7 M</b>
<b>Station Area Fee Program Administration [4]</b>	<b>\$4.9 M</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$4.9 M</b>	<b>\$4.9 M</b>
<b>Total</b>	<b>\$688.8 M</b>	<b>\$292.6 M</b>	<b>\$194.6 M</b>	<b>\$32.6 M</b>	<b>\$169.9 M</b>	<b>\$689.6 M</b>

Source: EPS.

[1] Not engineer's estimates. Numbers shown above are for estimation purposes only and are not validated by a professional engineer. Costs exclude Right of Way acquisition.

[2] Assumes 50% funding for CFD-funded improvements.

[3] Assumes 5% of total funding from HSRA for all improvements except for schools.

[4] Assumes that fee program administration is assessed as 3% of the portion of the planned Backbone Infrastructure and Public Facilities Improvements funded by the proposed Station Area Fee.

**Figure 75** Estimated Sources and Uses of Funding (2025 Dollars)

## Maintenance Funding

Various existing City/County development impact fee programs may provide more revenue than is needed to fund construction of the Project's Backbone Infrastructure and Public Facilities. If there is a surplus in fee revenue, the City may elect to reserve the surplus to fund ongoing maintenance and repairs of the Project's infrastructure.

## Infrastructure Burden

A high level infrastructure burden test was prepared to examine the potential feasibility of the magnitude of required Backbone Infrastructure and Public Facilities included in the Project in comparison to the estimated value of the Project.<sup>1</sup>

The infrastructure cost burden indicates that the estimated infrastructure costs are approximately 15 percent of the Project's value. For a project to potentially have value to a developer, a typical threshold test for the infrastructure costs ranges between 10 percent and 15 percent of the Project's value. As such, the conceptual Station Area Plan, while considered feasible under this test, is approaching a cost burden that could be considered financially infeasible. Please note that this feasibility threshold may differ depending on a developer's financial criterion, a developer with an interest in seeing the HSR developed may consider a threshold above 15 percent. See Figure 34.

## Conclusion

Myriad other factors will affect the financial feasibility of the Station Area Project development, including: timing; market positioning; valuation; and absorption of all factors into the viability of vertical development; as well as competitive advantages or disadvantages relative to other development projects in the region. This preliminary and high-level infrastructure cost burden comparison offers one metric by which the competitive position and financial feasibility of the Project may be evaluated. A more detailed Public Facilities Financing Plan should be conducted once a concrete land use plan has been reached, utilizing cost estimates developed by professional engineers.

A high level infrastructure burden test was prepared to examine the potential feasibility of the magnitude of required Backbone Infrastructure and Public Facilities included in the Project in comparison to the estimated value of the Project.<sup>1</sup>

The infrastructure cost burden indicates that the estimated infrastructure costs are approximately 15 percent of the Project's value. For a project to potentially have value to a developer, a typical threshold test for the infrastructure costs ranges between 10 percent and 15 percent of the Project's value. As such, the conceptual Station Area Plan, while considered feasible under this test, is approaching a cost burden that could be considered financially infeasible. Please note that this feasibility threshold may differ depending on a developer's financial criterion, a developer with an interest in seeing the HSR developed may consider a threshold above 15 percent. See Figure 34.

Land Use	Estimation Basis	Estimated Value	Total Units / Bldg. Sq. Ft.	Total Estimated Value (Rounded)
<b>Residential</b>	[1]	per Dwelling Unit	95% buildout	
Low Density Residential	Recent Sales	\$480,000	1,853	\$889.0 M
Medium Density Residential (Mixed Use)	Recent Sales	\$390,000	7,410	\$2,890.0 M
<b>Subtotal Residential</b>			<b>9,263</b>	<b>\$3,779.0 M</b>
<b>Nonresidential</b>	[2]	per Bldg. Sq. Ft.	95% buildout	
Production and Innovation	Recent Builds	\$300	595,901	\$179.0 M
Institutional	Recent Builds	\$600	317,814	\$191.0 M
Commercial (Mixed Use)	Current Rents	\$390	960,062	\$374.0 M
<b>Subtotal Nonresidential</b>			<b>1,873,777</b>	<b>\$744.0 M</b>
<b>Estimated Total Development Value</b>				<b>\$4,523.0 M</b>
<b>Estimated Total Infrastructure Value [3]</b>				<b>\$684.0 M</b>
<b>Estimated Infrastructure Costs as % of Development Value</b>				<b>15.1%</b>

Source: The Gregory Group; CoStar; Nonresidential Developers; EPS.

[1] Estimated value for LDR and MDR units based on recent sales in Hanford. Sales data from the Gregory Group. HDR unit values are based on current rents for newly-constructed multifamily projects in Hanford (assumes no vacancy or OPEX). Rent and capitalized value rate from CoStar. Accounting for maturation of the market and significant amenity value in the design package proposed by Perkins & Will, actual unit values may be higher.

[2] Values for Production and Innovation and Institutional uses are based on construction costs of recent projects in Sacramento region. Production and Innovation is valued based on R&D uses, Institutional is valued based on Bio/Life Science uses. Commercial space is valued based on recent retail projects in Bakersfield, as the Bakersfield retail market is more mature than Hanford's and commands higher rents that may be reflective of those achievable once the HSR station is operational in Hanford.

[3] Not engineer's estimates. Numbers shows above are for estimation purposes only and are not validated by a professional engineer. Costs exclude Right of Way acquisition.

Figure 76

Summary of Estimated Infrastructure Burden (2025 Dollars)

<sup>1</sup> The market feasibility of this development has not been analyzed: whether the market demand will be able to support the proposed development. If the demand is not there, the value that would incentivize a developer to build is not there.

# Conceptual Intersection Crossings and CVC Rail Corridor

In coordination with Caltrans District 6 and the San Joaquin Regional Rail Corridor (SJRRRC), the Plan presents planning-level conceptual designs for two major intersections along Highway 43, as well as a conceptual plan for the CVC Corridor.

## Overview

The Plan recognizes that Highway 43 will remain an auto-oriented arterial with fast-moving traffic for the foreseeable future, creating difficult and potentially unsafe crossing conditions for streets designated as active transportation corridors.

To mitigate these challenges, the Plan introduces conceptual designs for two priority intersections—at Florinda Avenue and at the junction with the CVC Bus Rapid Transit and Multi-Use Trail.

These locations are expected to see increased pedestrian and bicycle activity, and the proposed improvements are designed to enhance safety, accessibility, and overall comfort for all users, ensuring that active transportation can coexist with the corridor's vehicular function.

## Action Items

In coordination with Caltrans, the following implementation action items were identified and should be considered during a future design phase of this project. They are categorized by facilities shown in the conceptual designs.

## General

- Refer to Caltrans Complete Streets element toolbox for general use as conceptual designs are refined and for other intersections in the future street grid, especially near the station.
- Incorporate ADA compliant infrastructure into designs, including but not limited to curb ramps, warning features, high-visibility crosswalk markings, and appropriate crossing times.
- Coordinate with Kings Area Regional Transit, which provides local services and commuter connections. If new or modified bus routes are planned in the future, modify concept designs to incorporate transit stop improvements such as seating, shelters, and additional crossing improvements as needed.
- Coordinate with Tulare County Association of Governments and Tulare County Rural Transit Agency for the Cross Valley Express.
- Prepare a traffic study that evaluates operations, safety, and queueing (including interactions with CVC crossings and the roundabout at Highway 43 and Lacey Boulevard); documents warrant evaluation; and further evaluates pedestrian hybrid beacon versus traffic signal alternatives.

## Rectangular Rapid Flash Beacons (RRFB) at Crossings and Bus Stops (General)

- Implement adequate warning signing, striping, additional advanced flashing beacons, and other devices to ensure safe driver compliance to traffic signals.
- Complete a traffic analysis to ensure that there is adequate storage between closely spaced stop controls under heavy pedestrian demand.
- Incorporate leading pedestrian intervals into traffic signals to give pedestrians a head start, especially at wider intersections and locations with heavy foot traffic.

## Fully Signalized Crossings (General)

- Implement adequate warning signing, striping, additional advanced flashing beacons, and other devices to ensure safe driver compliance to the pedestrian hybrid beacon.
- Complete a traffic analysis to ensure that there is adequate storage between closely spaced stop controls under potential heavy pedestrian demand.
- Because leading pedestrian intervals are not possible on for RRFBs, evaluate an alternative approach of installing pedestrian countdowns and a rapid yellow/red onset.

## Highway 43 & Florinda Avenue (Pedestrian Hybrid Beacon)

- At the north end of the intersection, consider relocating the landscaped buffer south of the bike lane.
- Assess additional first and last-mile connections to this intersection, particularly to the east as new streets and the station area get built out.
- Consider repaving the entire intersection when Florinda Avenue is paved.
- Implement adequate warning signing, striping, additional advanced flashing beacons, and other devices to the north and south on Highway 43 to ensure safe driver compliance to the pedestrian hybrid beacon.
- Complete a traffic analysis to ensure that there is adequate storage between closely spaced stop controls under potential heavy pedestrian demand.
- Because leading pedestrian intervals are not possible on for a pedestrian hybrid beacon, evaluate an alternative approach of installing pedestrian countdowns and a rapid yellow/red onset.

## Highway 43 & Cross Valley Corridor (Fully Signalized Crossing)

- In future design phases, the City will be required to evaluate the intersection using the Intersection and Signal Operations Analysis Procedure (ISOA) to ensure consistency with Caltrans policies.
- Implement pre-emption phasing and intersection design features to prevent queueing and idling in “trap zone” between the railroad tracks and stop bar placement.
- When creating a phasing sequence for the intersection and signal timing, consider avoiding scenarios that could lead to conflicts between pedestrians, vehicles, and rail grade crossing.
- Coordinate traffic signal and railroad crossing phasers to reduce driver confusion.
- Add “CLEAR” signing and markings between traffic signals and railroad crossing devices.
- Implement a railroad pre-emption design to ensure coordination between traffic signals, pedestrian phases, and Bus Rapid Transit during railroad pre-emption events.

## Highway 43 and Florinda Avenue Intersection

**PROJECT CHARACTERISTICS**

- Highway 43 is classified as a minor arterial road despite the Highway moniker.
- Highway 43 is a two lane highway with a speed limit of 55 MPH.
- Florinda Ave is a major collector street with associated levels of traffic and a wide right-of-way of 80'-110'. There are no current bike or pedestrian facilities.
- According to the Hanford Active Transportation Plan, Florinda Ave is a prime candidate for a separated bikeway.
- The Hanford Active Transportation Plan also notes that the current Florinda Ave is a Bicycle Level of Stress of 3 out of a possible 4 points; "Involves interaction with moderate speed or multilane traffic, or close proximity to higher speed traffic. A level of stress acceptable to those classified as "enthused and confident."



### RECOMMENDED IMPROVEMENTS

#### 1 HIGH VISIBILITY CROSSWALK

A safe crossing begins with a high visibility crosswalk. Easy to spot by pedestrians and drivers alike, the crosswalk lets users know where the safest place to cross is.

#### 2 PEDESTRIAN HYBRID BEACON

Pedestrian hybrid beacons are designed to allow safe pedestrian and cyclist movement across higher-speed roadways. Just a step below a complete signalization, this signal assigns right-of-way and provides positive stop control.

#### 3 ADVANCE STOP

On a high-speed road like Highway 43, leveraging more distance before a vehicle has to stop is key for a safe crossing. Moving the stop bar back at a minimum of 40 feet from the signal head and 4' minimum from the crosswalk can help drivers slow down when necessary and avoid cars stopping too close to the crosswalk.

#### 4 CROSSING SIGNAGE

Additional crossing signage at this location further reinforces safety as it lets drivers know this is a sensitive area. Retroreflective paint, or tape, can help in a darker condition such as this part of the highway at night.

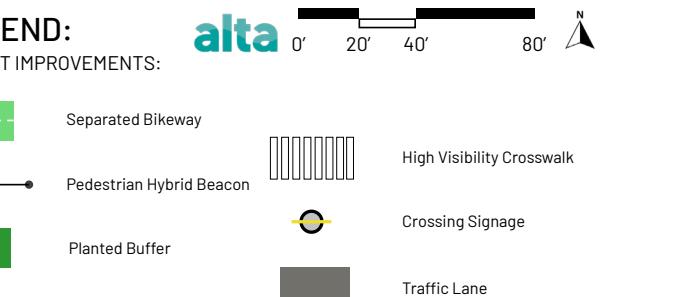
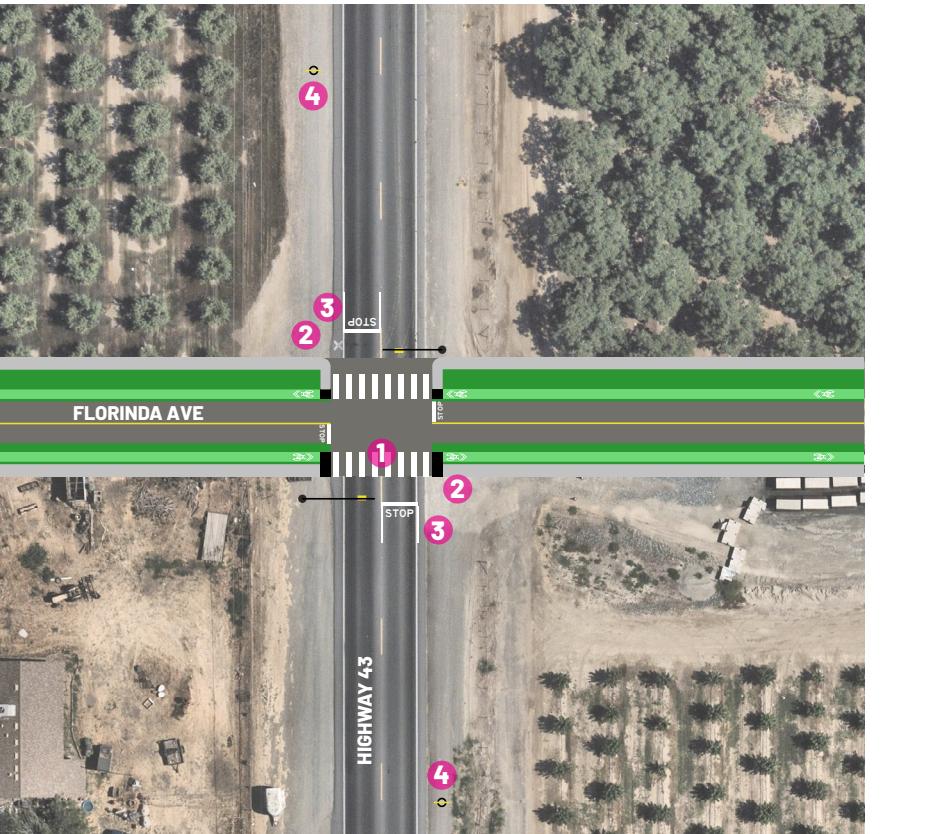


Figure 77

Conceptual design for the intersection of Highway 43 and Florinda Avenue

## Highway 43 and CVC BRT Intersection

**PROJECT CHARACTERISTICS**

- Highway 43 is classified as a minor arterial road despite the Highway moniker.
- Highway 43 is a two lane highway with a speed limit of 55 MPH.
- The Hanford Active Transportation Plan places a Class I Shared-Use trail along the Cross Valley Corridor.
- The Hanford Active Transportation Plan also notes that the Bicycle Level of Stress at this location is a High 4 out of 4 points: "Involves interaction with higher speed traffic or close proximity to high speed traffic. A level of stress acceptable only to those classified as "strong and fearless."
- The available right-of-way along the Cross Valley Corridor is a variable 40'-100' wide, with plenty of room for a shared-use path.
- Introducing a planted buffer along the rail will help distance the trail from the rail, and using fencing along the agricultural land protects the users while other vehicles continue on the maintenance paths.



### RECOMMENDED IMPROVEMENTS

#### 1 HIGH VISIBILITY CROSSWALK

A high visibility crosswalk is an important component of this crossing. Using an advance stop line is necessary to move the vehicular stop before the rail back a few feet to ensure pedestrian traffic while the rail arms stop vehicular traffic.

#### 2 SIGNALIZED CROSSING

Introducing a traffic signal to our rail crossings will ensure that vehicular traffic can come to a stop regardless of pedestrian or train movement. Using a leading pedestrian interval can help direct pedestrians across earlier in the phase.

#### 3 ADVANCE STOP

On a high-speed road like Highway 43, leveraging more distance before a vehicle has to stop is key for a safe crossing. Moving the stop bar back at a minimum of 40 feet from the signal head and 4' minimum from the crosswalk can help drivers slow down when necessary and avoid cars stopping too close to the crosswalk.

#### 4 BUS RAPID TRANSIT

A BRT system comprised of fully prioritized bus lanes that travel on a set corridor from point to point benefits local transit in a big way. Combining the reliability of a light rail system with the simplicity and lower cost of buses, a BRT is a great choice for local travel.

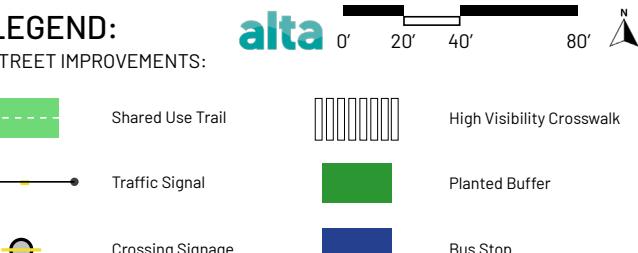
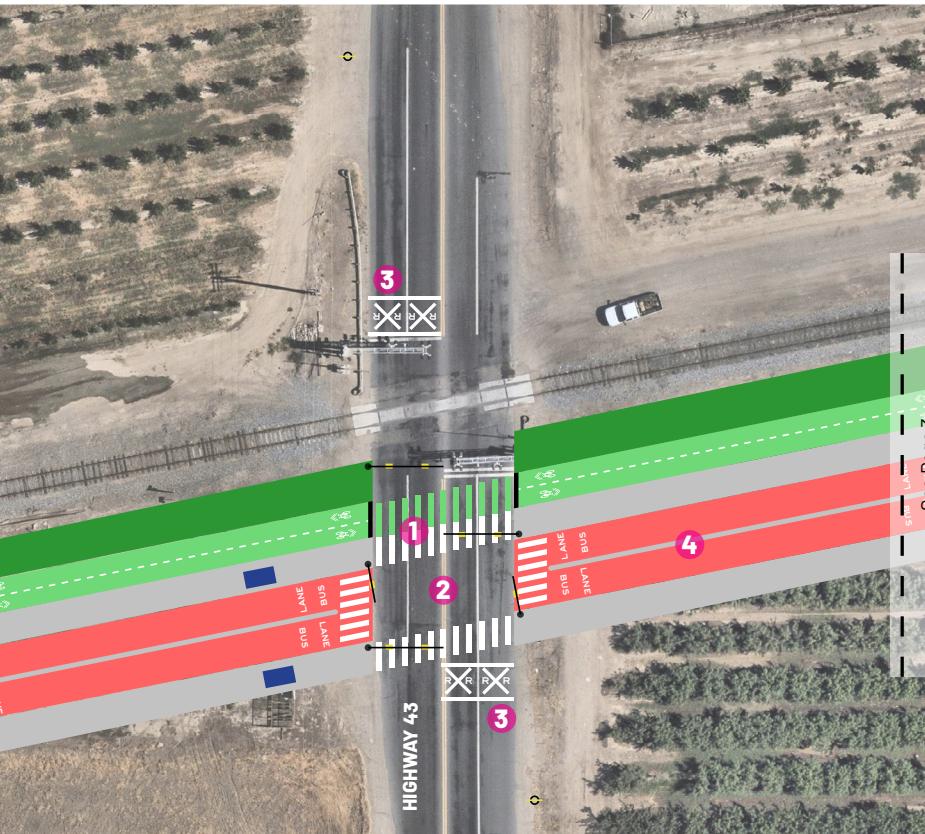
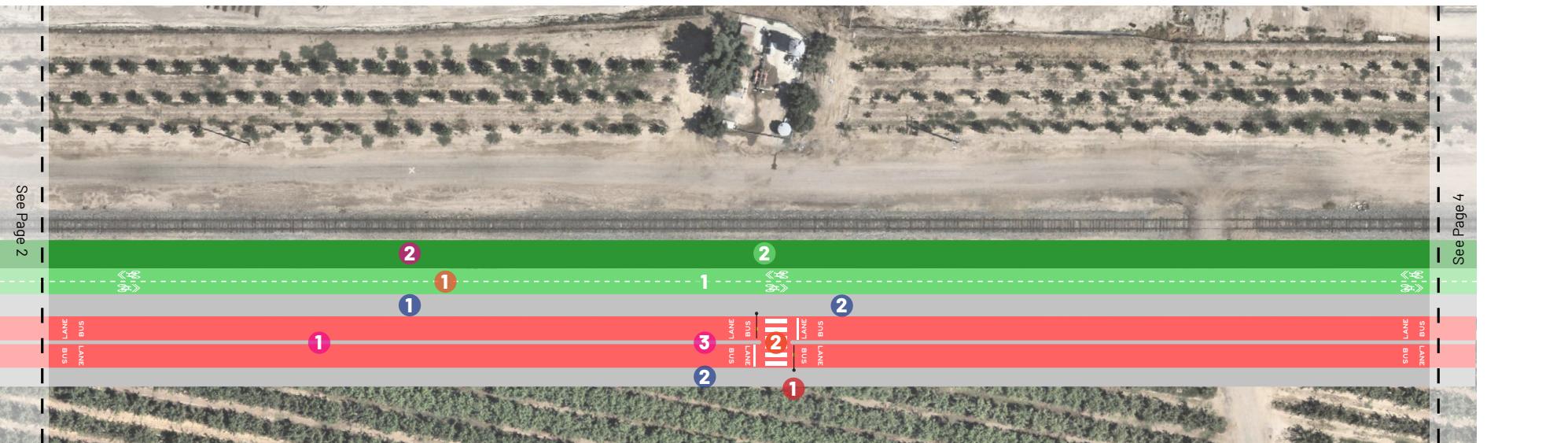


Figure 78

Conceptual design for the intersection of Highway 43 and CVC BRT intersection

## CVC Bus Rapid Transit and Multi-Use Path



### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERNLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



### RECOMMENDATION TOOLKIT

#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

- 1 Bidirectional Trail
- 2 High Visibility Crosswalk

#### SURFACE TREATMENTS

- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Rectangular Rapid Flashing Beacons

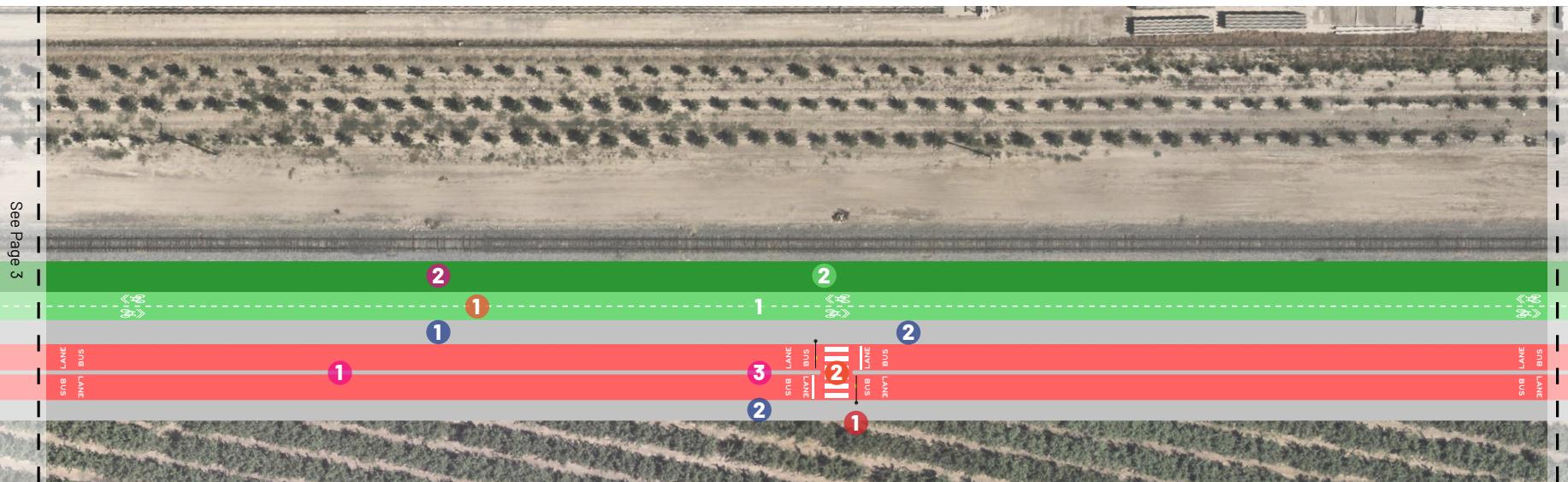


0' 25' 50' 100'



Figure 79

Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 1)



### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERNLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



### RECOMMENDATION TOOLKIT

#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

- 1 Bidirectional Trail
- 2 High Visibility Crosswalk

#### SURFACE TREATMENTS

- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Rectangular Rapid Flashing Beacons

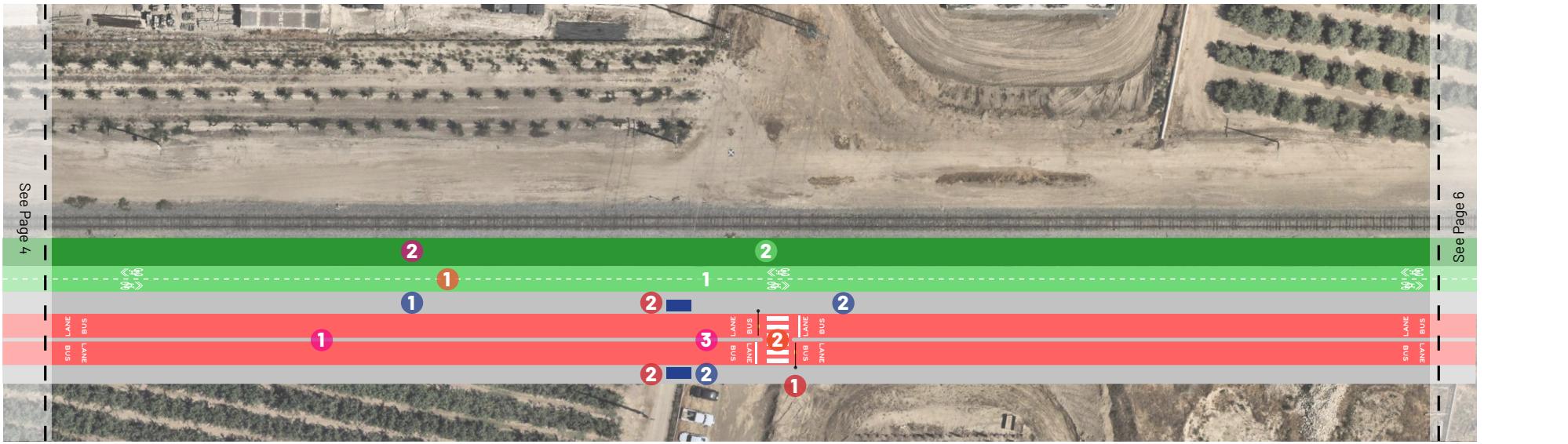


0' 25' 50' 100'



Figure 80

Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 2)

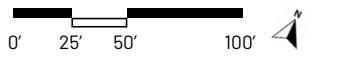


#### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



#### RECOMMENDATION TOOLKIT



#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

- 1 Bidirectional Trail
- 2 High Visibility Crosswalk

#### SURFACE TREATMENTS

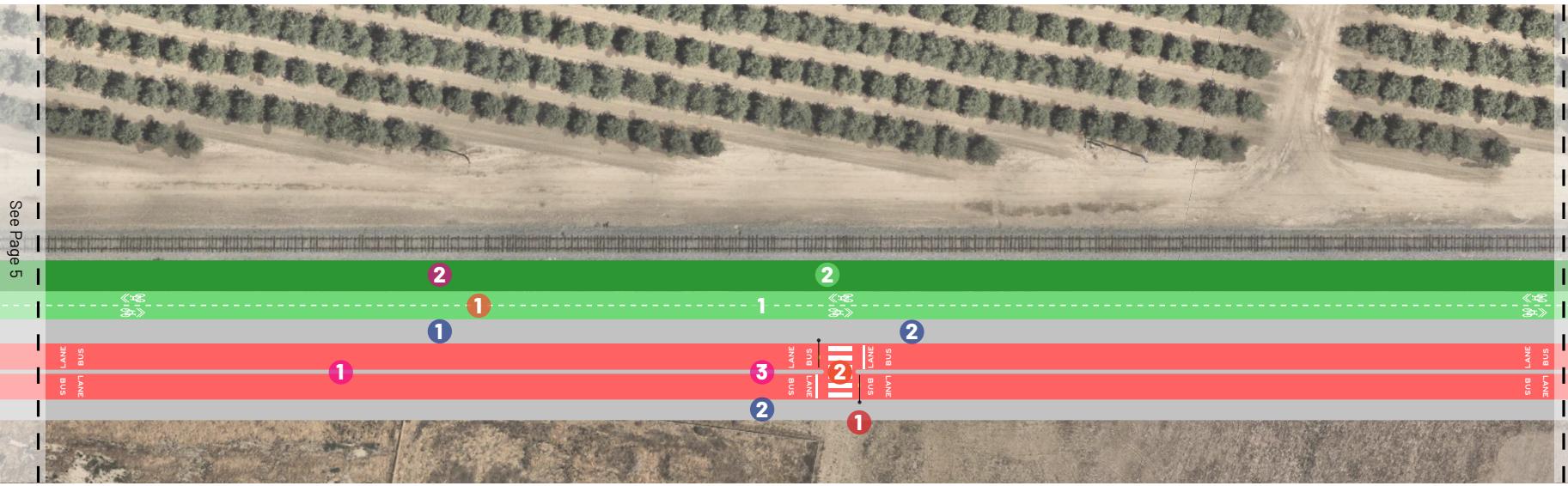
- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Rectangular Rapid Flashing Beacons
- 2 Bus Stop

**Figure 81**

Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 3)

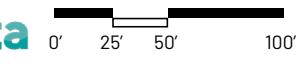


#### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



#### RECOMMENDATION TOOLKIT



#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

- 1 Bidirectional Trail
- 2 High Visibility Crosswalk

#### SURFACE TREATMENTS

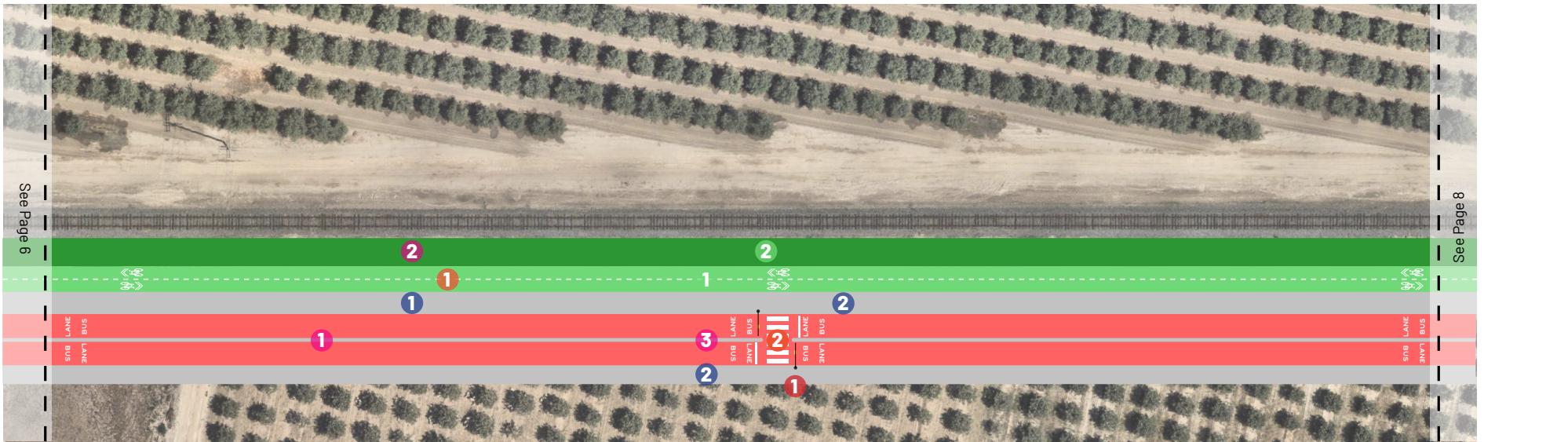
- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Rectangular Rapid Flashing Beacons

**Figure 82**

Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 4)



#### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERNLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



#### RECOMMENDATION TOOLKIT



alta

0' 25' 50' 100'

#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

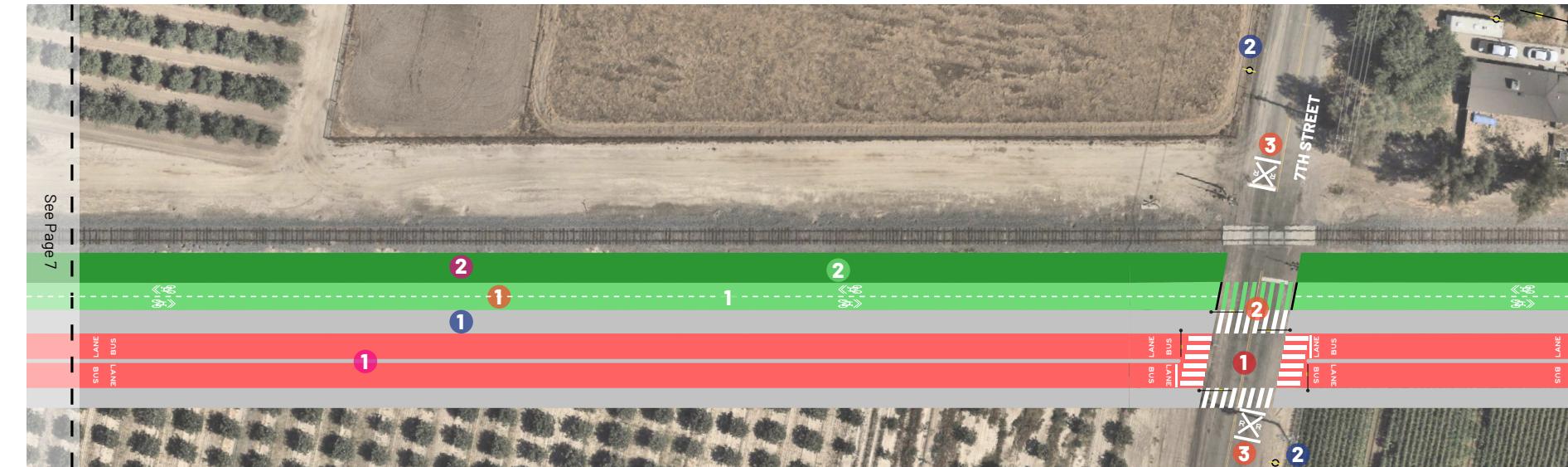
- 1 Bidirectional Trail
- 2 High Visibility Crosswalk

#### SURFACE TREATMENTS

- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Rectangular Rapid Flashing Beacons



#### PRIORITY IMPROVEMENTS

- 1 BUS RAPID TRANSIT AND AMENITIES
- 2 NORTHERNLY EDGE PLANTING
- 3 MID-BLOCK CROSSINGS



#### RECOMMENDATION TOOLKIT



alta

0' 25' 50' 100'

#### SIGNAGE

- 1 Wayfinding Signage
- 2 Crossing Signage

#### STRIPING

- 1 Bidirectional Trail
- 2 High Visibility Crosswalk
- 3 Advance Stop/yield Striping

#### SURFACE TREATMENTS

- 1 Asphalt Shared-Use Trail
- 2 Planted Area

#### AMENITIES

- 1 Signalized Crossing with Leading Ped Signal

Figure 83

Conceptual design for the CVC Bus Rapid Transit and Multi-Use Path (Segment 5)



**Meaningfully connect  
Hanford to its future  
by purposefully  
planning today**

