



HERMISTON SAFETY ACTION PLAN

November 2024 - Draft



Acknowledgments

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The City thanks all members of the public who participated in outreach events and provided feedback on the Plan throughout the development process.

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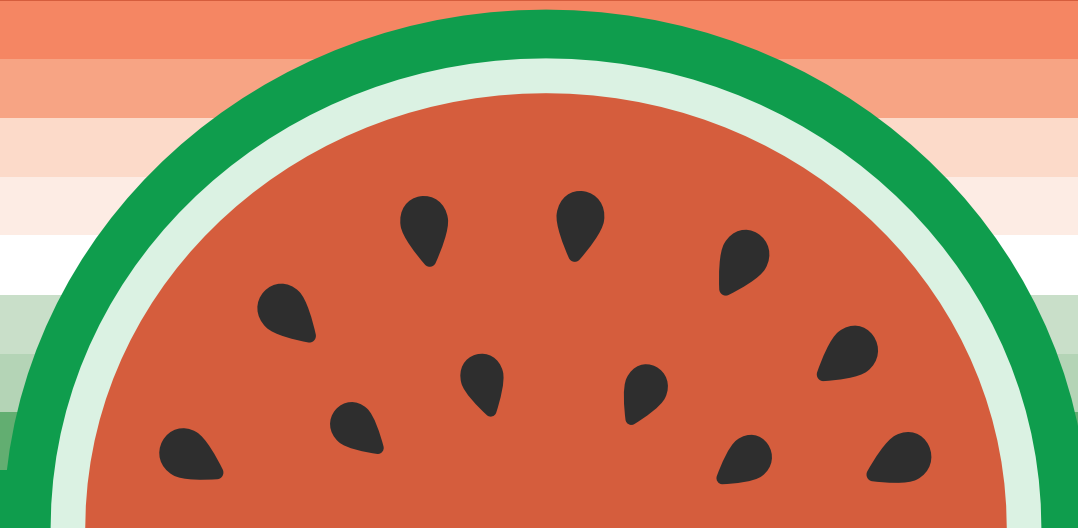
Resolution

The City of Hermiston believes that people should be able to travel by any means, not only in vehicles, within Hermiston without losing their life or becoming seriously injured. Therefore, the City is prioritizing transportation safety for all users on the City's transportation network. This Safety Action Plan lays out a path forward to implement this priority.

Guided by the Safe System Approach, the City is dedicated to working toward a goal of zero fatal and serious injury crashes. This goal will take time and effort from the City, partner organizations, and the public. Recognizing this, the City has set **an interim target of a 50% reduction in fatal and serious injury crashes by 2045.**

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Executive Summary

The City of Hermiston believes that people should be able to travel by any means, not only in vehicles, within Hermiston without losing their life or becoming seriously injured. Therefore, the City is prioritizing transportation safety for all users on the City's transportation network. This Safety Action Plan lays out a path forward to implement this priority.

Guided by the Safe System Approach, the City is dedicated to working toward a goal of zero fatal and serious injury crashes. This goal will take time and effort from the City, partner organizations, and the public. Recognizing this, the City has set an **interim target of a 50% reduction in fatal and serious injury crashes by 2045**.

Safety challenges in Hermiston

Between 2018 and 2022, **556 crashes** resulted in a fatality or injury.



8

people were killed



35

people were seriously injured

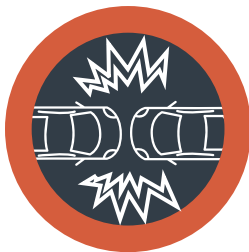


788

people sustained minor injuries

Our safety emphasis areas

This Plan identifies five safety emphasis areas, which were selected based on crash data and community member insights. Focusing treatments on these areas is likely to have the greatest effect on reducing fatal and serious injury crashes.



AT INTERSECTIONS

62% of Hermiston's fatal and serious injury crashes took place at **intersections**.



TURNING MOVEMENT, ANGLE, AND REAR-END CRASHES

Turning movement, angle, and rear-end crashes make up 63% of the fatal/serious injury crashes



SEATBELT USE

In Hermiston, vehicle occupants involved in a fatal or serious injury crash were **less likely to be wearing a seatbelt (18%)**



INVOLVING PEDESTRIANS AND BICYCLISTS

10% of fatal or serious injury crashes in Hermiston involved a **pedestrian**, and 8% involved a **bicyclist**.



INVOLVING AN IMPAIRED PERSON

23% of fatal or serious injury crashes in Hermiston involved an impaired person.

Implementation

In addition to the emphasis areas, the plan identifies a High-injury Network (HIN) where safety treatments may be most effective at meeting the City’s goal. For addressing the HIN and emphasis areas, the plan identifies:

- Project concepts at 6 locations
- 27 engineering countermeasures ranging from major intersection modifications to enhanced pedestrian crossing treatments.
- 11 non-engineering strategies

Community Engagement

Community feedback played an essential role in creating this Plan. Two phases of engagement, were used to collect responses from community members on various elements of the Plan. From high school football games to weekend farmers’ markets to webpages, we talked to more than 170 community members in all, including adults, teens, and children.



5 in-person events



1 month of online survey



170

COMMUNITY MEMBERS



The Executive Summary is an overview of the Hermiston Safety Action Plan. Each section of the Safety Action Plan is described in greater detail in the subsequent sections.

Hermiston is growing—our streets need to keep up

Hermiston is the largest and fastest-growing city in eastern Oregon. People today come to Hermiston for its education, opportunity, and affordability—but they stay because it’s a sweet place to live.

Our City has made great strides in upgrading our roads to keep pace with this growth. But the truth is we have more work to do. Between 2018 and 2022 alone, there were **8 fatalities** and **35 serious injuries** on Hermiston roadways. We believe that even one fatality or serious injury is unacceptable. As Hermiston continues to grow, so will the need for safety improvements that protect all roadway users.

From 2018 to 2022, there were



8 DEATHS



35 SERIOUS INJURIES

831 TOTAL INJURIES

I was sitting at a stop sign and was hit in the side by a semitruck.



This Plan will shape roadway safety in Hermiston into the future

This Safety Action Plan is tactical in focus. Through identifying and evaluating high-severity crashes in Hermiston, this Plan proposes policies, projects, enforcement, education, and other actions to reduce these crashes for all people in Hermiston, whether they are walking, driving, biking, riding transit, or rolling.

It is also a visionary document, in that it asks us to consider what the future of our community will be. Hermiston is projected to lead growth in Umatilla County through at least 2035; the transportation values we emphasize now will set the tone for the future of our city.

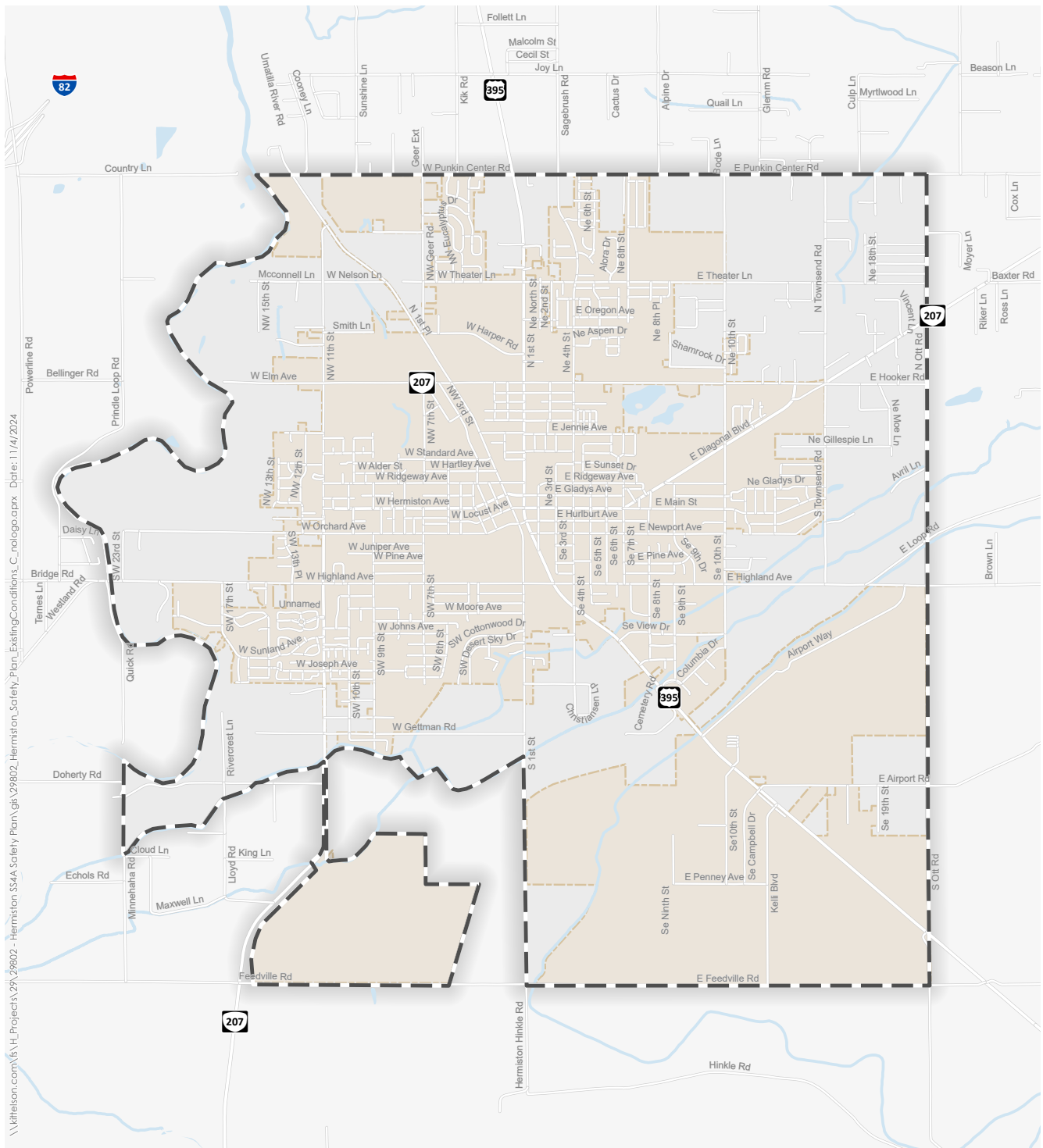
This Plan envisions a Hermiston where we all can get where we are going safely. Families can comfortably bike to the park; our children can walk to school; drivers can travel to Hermiston from neighboring areas; and freight can be delivered. A Hermiston where everyone can safely and independently move around is the sweetest Hermiston and is worth working for.

WHAT AREA DOES THIS PLAN COVER?

This Plan studies the area within the City of Hermiston’s **Urban Growth Boundary (UGB)** in **Figure 1**. This area is projected to absorb most (54%) of Umatilla County’s population growth by 2035.

Roads within Hermiston’s UGB are maintained by three authorities:

- The City of Hermiston
- Umatilla County
- Oregon Department of Transportation (ODOT)





-  Urban Growth Boundary (Study Area)
-  Hermiston City Limits



Figure 1
Study Area

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This Plan builds on Hermiston's ongoing safety efforts

This Plan furthers several planning initiatives in Hermiston. Together, these efforts can comprehensively improve transportation for everyone in Hermiston.



Hermiston Transportation System Plan (TSP): The TSP sets a goal for promoting “a balanced, well-integrated transportation system which provides safe, convenient and efficient access, and facilitates the movement of people and goods.” The TSP provides implementation guidance and a 20-year Capital Improvement Plan (CIP). It is about to be updated and this Plan will be incorporated into the updated TSP.



Hermiston 2040 Community Vision & Action Plan: This plan guides decisions to improve the City for current residents and prepare for the anticipated 5,800 new residents over the next 20 years. One of the priority areas identified by the community is creating an “Attractive and Safe Community”.



ODOT state-level plans: ODOT has invested extensively in safety. This Plan takes the findings of the following plans and applies it to Hermiston's local network:

- ODOT Transportation Safety Action Plan
- ODOT Intersection Safety Implementation Plan
- ODOT Bicycle and Pedestrian Safety Implementation Plan

Hermiston already has policies and practices in place to make the transportation system safer. This Plan complements and adds to these existing practices. These practices include:

- Setting 25 mph as the default design speed for Hermiston roadways.
- Using crash data to inform traffic enforcement operations.
- Prioritizing and addressing gaps in the sidewalk network.
- Requiring residential and commercial developments to provide walking space along their frontages.
- Adding a Traffic Enforcement Officer to Hermiston's police department.



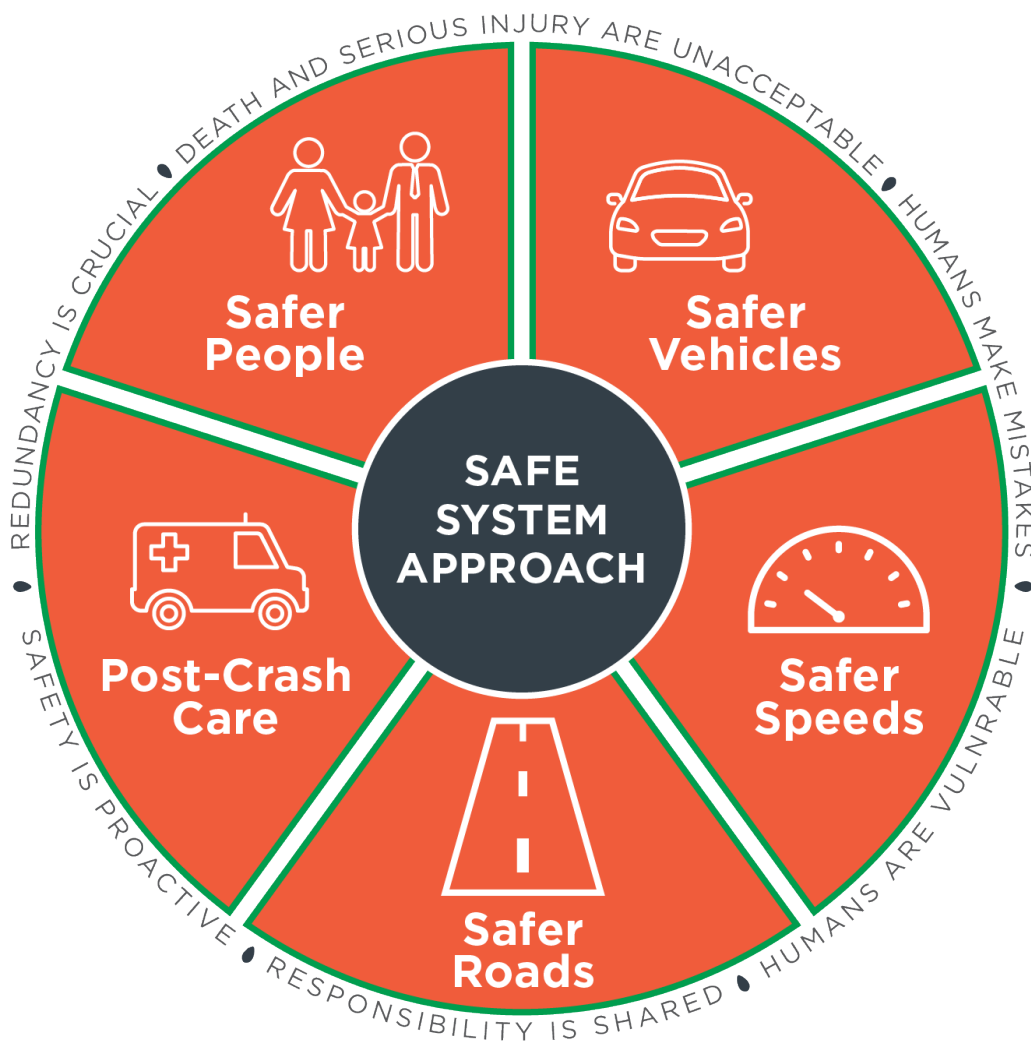
This Plan follows the Safe System Approach

The Safe System Approach aims to eliminate roadway fatalities and serious injuries by accepting that road users are human beings, and that human beings make mistakes. The approach is grounded in six principles (written around the perimeter of the wheel in **Figure 2**) and five elements (found in the center slices of the wheel).

Unlike traditional “reactive” safety approaches, which solely focus on locations where a crash has occurred, the Safe System Approach layers multiple “proactive” and redundant measures to reduce the opportunities for mistakes to occur and minimize the consequences of human error when it does happen. Many of the safety improvements identified in this document work in tandem with one another to form this layered, proactive protection.



Figure 2. Principles and Elements of the Safe System Approach, courtesy FHWA



Without Hermiston residents, this Plan wouldn't exist

No one knows Hermiston's streets better than those who travel on them every day. Throughout the development of this Safety Action Plan, Hermiston residents provided invaluable insights that informed the recommendations. Feedback gathered through community engagement is documented in Appendix C. Public engagement occurred in two phases:

PHASE 1 gathered input on existing conditions and concerns around transportation safety and identified possible locations and ideas for improvements. The phase included the following events:

- May 10-May 31, 2024: Public feedback opportunity through online survey and interactive story map.
- May 11, 2024: Public outreach event at the Spring Bazaar.
- May 11, 2024: Public outreach event at the Hermiston Teen Adventure Skatepark ribbon-cutting ceremony.
- May 11, 2024: Public outreach event at the Hermiston Food Pod.

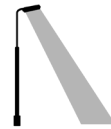
We connected with more than 100 residents in this phase, including adults, children, and teens.

PHASE 2 gathered input on the identified emphasis areas and proposed countermeasures. The phase included the following events:

- September 26, 2024: Public outreach event at the Hermiston Farmers' Market.
- September 27, 2024: Public outreach event at the Hermiston High School football game.
- October 7-October 21, 2024: Public feedback opportunity through online survey and story map.

Around 70 responses were collected from these activities.

The changes Hermiston residents want:



Improved lighting throughout the roadway network



Initiatives to address unsafe driver behavior (such as speeding, impaired and distracted driving, and disregarding traffic control devices)



Visible and clear traffic control at intersections



Comprehensive walking and biking network, especially providing access to schools

What Hermiston residents said about the proposed projects and strategies:



The proposed projects will increase transportation safety at the proposed locations.



In particular, there was strong support for proposed strategies along Orchard Avenue and US 395.



Mixed feedback on roundabout implementation.



What We Heard

“PEOPLE RUN LIGHTS AT PUNKIN CENTER ROAD.”

“My dog got hit on 11th Street recently. We are devastated. It should be 25 mph from Minnehaha to Old River Road. There should be nice lights to fully illuminate that entire stretch.”

“Someone blew a stop sign coming out of Walmart and made a right-hand turn, hitting my car on 395. Too many people don't pay attention to those in the turn lane.”

“I WAS IN A CRASH IN HERMISTON AT ELM ST AND 11TH ST BACK WHEN IT WAS A 3-WAY STOP....TURNED OUT HE WAS DRUNK.”

“My uncle was killed in a crash on Old River Road several years ago when a drunk driver was speeding and crossed over the median and hit him head on.”



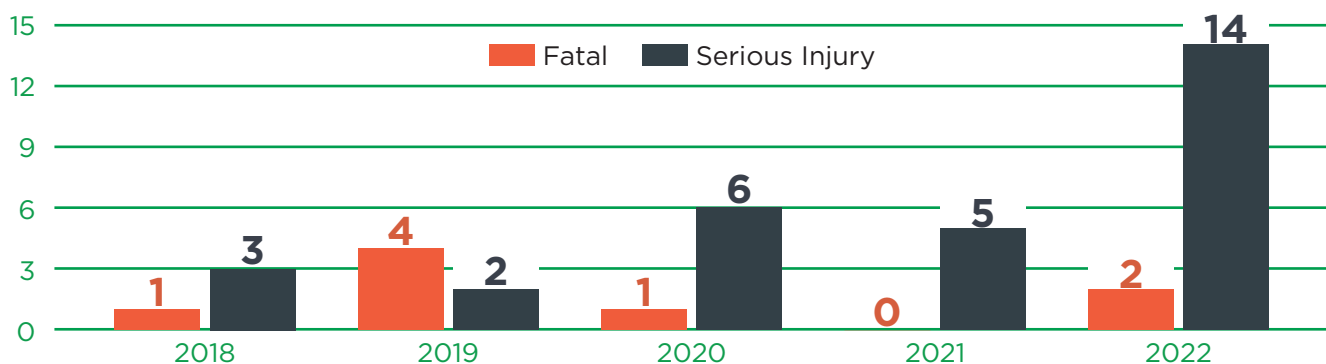
As Hermiston grows, will fatal and serious injury crashes continue to increase?

As more houses are built, new schools are opened, and businesses are drawn in, the number of people walking, biking, rolling, and driving on our streets will also increase. If we continue to build and operate our transportation network in the same manner, we can expect the number of crashes in Hermiston to also increase. By understanding the patterns in where and why crashes occur in Hermiston, we can begin to build and operate our transportation network differently, to reduce the odds of fatal and serious injury crashes occurring. The **existing conditions analysis** provides a basis for understanding what needs to change in Hermiston's present to secure its future. The analysis is further documented in the Existing Conditions Memo, in Appendix A.

The most recent crash data, which tracks crashes in Hermiston from 2018 to 2022, reveals that except for 2021, the number of annual fatal or serious injury crashes has increased every year, with a dramatic increase in 2022.



Figure 3. Fatal and serious injury crashes in Hermiston, 2018-2022



The number of fatal and serious injury crashes in 2022 was more than double the number of these crashes in any other year.

Crash trends in Hermiston



62% of Hermiston's fatal and serious injury crashes took place at **intersections**. This percentage is larger than the percentages of fatal and serious injury intersection crashes in Oregon (36%) or in ODOT Region 5 (17%).*



10% of fatal or serious injury crashes in Hermiston involved a **pedestrian**, and 8% involved a **bicyclist**.



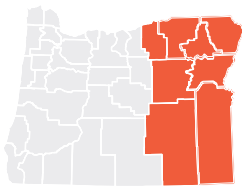
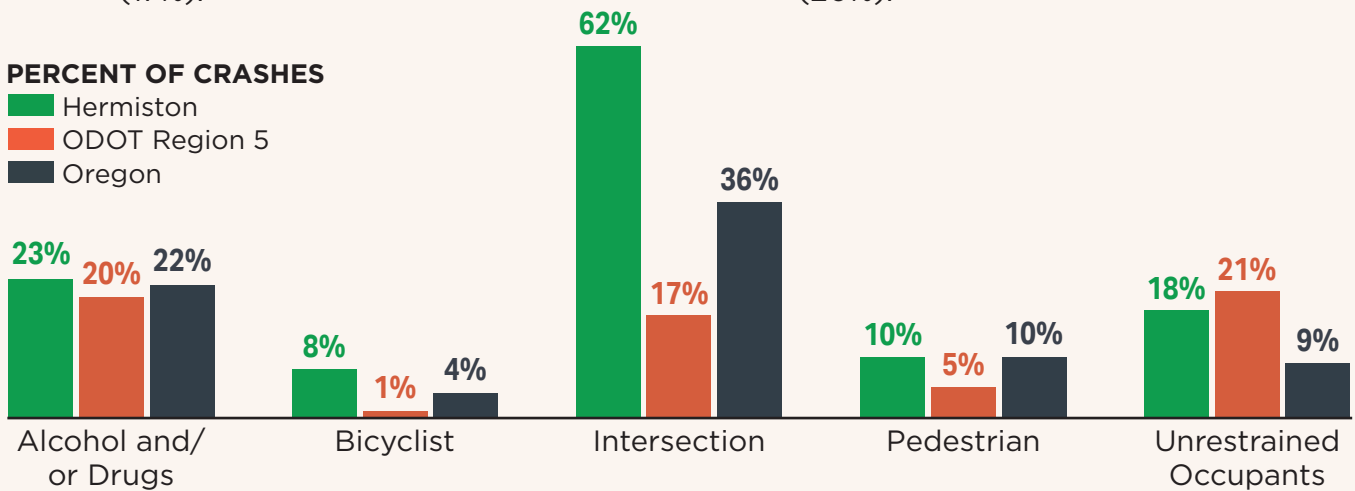
Rates of **impairment** in fatal and serious injury crashes (24%) in Hermiston are higher than in Oregon as a whole (22%) and in the several counties that compose ODOT Region 5 (20%).



In Hermiston, vehicle occupants involved in a fatal or serious injury crash were **less likely to be wearing a seatbelt (18%)** compared to Oregon as a whole (9%).

PERCENT OF CRASHES

■ Hermiston
■ ODOT Region 5
■ Oregon



ODOT Region 5 covers eastern Oregon, including Morrow, Umatilla, Union, Wallowa, Grant, Baker, Harney, and Malheur counties.

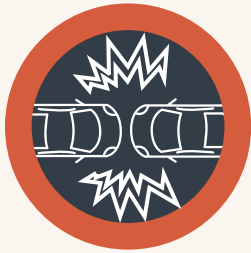
When alcohol or drug use contributes to a crash, that crash is more likely to result in fatality or serious injury.

Crashes involving pedestrians or bicyclists are disproportionately likely to result in a fatality or serious injury. In Hermiston, pedestrian and bicyclist crashes are higher at both intersections and segments than in the region or state.

* Crashes in urban areas, such as Hermiston, tend to be more common at intersections, possibly due to the density of intersections being higher than in rural areas, which make up most of the state and ODOT Region 5.

Hermiston's emphasis areas

Emphasis areas are crash and behavioral trends that disproportionately contribute to fatalities and serious injuries in Hermiston. The five emphasis areas below were developed after reviewing Hermiston's crash data, travel patterns, and incorporating community feedback:



AT INTERSECTIONS



TURNING MOVEMENT, ANGLE, AND REAR-END CRASHES



SEATBELT USE



INVOLVING PEDESTRIANS AND BICYCLISTS



INVOLVING AN IMPAIRED PERSON

By focusing on implementing treatments, policies, and programs to correct these trends, the City can make meaningful headway toward reducing fatal and serious injury crashes.

Identifying a High-Injury Network

A High-Injury Network (HIN) highlights key locations that would most benefit from safety enhancements. Our HIN was identified using a two-pronged approach. First, we used the most up-to-date (2018-2022), site-specific crash data to identify the areas within Hermiston's roadway network that have the highest concentration of fatal and serious injury crashes. These locations can be prioritized for treatments to reduce the likelihood of future crashes.

But crash data can only reveal so much about safety. While this data forms the backbone of our HIN, it doesn't capture locations that residents consider to be unsafe despite not having a crash history. It is important to identify these locations to implement countermeasures before a crash occurs. Additionally, while crash data can tell us **where** crashes occur, it doesn't always reveal **why**. That's why we paired our **site-specific analysis** with a **systemic analysis** to develop a comprehensive HIN that reflects where safety investments may have the greatest return in terms of reduced fatal and serious injury crashes. Our systemic analysis uses research from ODOT to identify roadway and intersection characteristics correlated with having more fatal and serious injury crashes.



SITE-SPECIFIC ANALYSIS— IDENTIFYING THE HIGHEST RISKS FOR THE HIGHEST REWARDS

To identify Hermiston’s HIN, each segment and intersection within the study area was assigned a **crash severity score**. Because the goal of this Plan is to eliminate roadway fatalities and serious injuries, the crashes resulting in a fatality or serious injury were weighted heavily, with scores of 100. A minor or possible injury crash was assigned a score of 10. These weighting factors are also used by ODOT.

The HIN in this Plan identifies and targets the roadway segments and intersections within the Study Area with the highest annual crash severity scores. The segments are detailed below, in **Table 1** and mapped onto the study area in **Figure 4**. The annual Crash Severity Score per half mile has been reported, since this score takes into account the varying lengths of the segments. The intersections are detailed in **Table 2** and mapped onto the study area in **Figure 5**.

In summary, the following roadways and intersections in Hermiston were identified as recently having a greater number of crashes resulting in an injury or fatality:

- U.S. 395, north of Hermiston Avenue to the UGB, including intersections at:
 - U.S. 395 & Punkin Center Road
 - U.S. 395 & Hermiston Avenue/Gladys Avenue
 - U.S. 395 & OR 207 (Elm Avenue)
- OR 207 (11th Street), between Joseph Avenue and Elm Avenue
- Orchard Avenue, between OR 207 (11th Street) and US 395
- W Highland Avenue, west of OR 207 (11th Street) to the UGB

CRASH SEVERITY SCORES: HOW THEY WORK

$$(1 \text{ Fatal} * 100) + (1 \text{ Serious} * 100) + (2 \text{ Minor} * 10) = 220$$



Table 1. Top Hermiston Roadway Segments by Crash Severity Score

| Rank | Segment | Jurisdiction | Annual Crash Severity Score per Half Mile | FSI Crashes* | Injury Crashes | Social Equity Index** |
|------|---|------------------------|---|--------------|----------------|-----------------------|
| 1 | US 395 from June Ave to Punkin Center Rd | ODOT | 63 | 5 | 39 | High |
| 2 | Orchard Ave from OR 207 (11th St) to 4th St | City | 25 | 1 | 9 | High |
| 3 | OR 207 (11th St) from Joseph Ave to Elm Ave | ODOT | 25 | 1 | 27 | High |
| 4 | Feedville Rd from 1st St to 9th St | City | 22 | 1 | 1 | Med/High |
| 5 | OR 207 (Diagonal Blvd) from Townsend Rd to Ott Rd | ODOT | 22 | 1 | 3 | Med/High |
| 6 | Highland Ave from 23rd St to 14th Pl | City / Umatilla County | 20 | 1 | 5 | High |
| 7 | US 395 from SE View Dr to June Ave | ODOT | 18 | 0 | 20 | Med/High |
| 8 | Townsend Rd from Magpie Ln to Punkin Center Rd | Umatilla County | 15 | 1 | 1 | Low/Med |
| 9 | US 395 from Ott Rd to Airport Rd | ODOT | 13 | 1 | 3 | Med/High |

Table 2. Top Hermiston Intersections by Crash Severity Score

| Rank | Intersection | Jurisdiction | Annual Crash Severity Score | FSI Crashes* | Injury Crashes | Social Equity Index** |
|------|----------------------------------|-----------------|-----------------------------|--------------|----------------|-----------------------|
| 1 | US 395 & E Punkin Center Rd | ODOT | 64 | 2 | 12 | High |
| 2 | US 395 & E Gladys Ave | ODOT | 58 | 2 | 9 | Med/High |
| 3 | US 395 & E Elm Ave | ODOT | 56 | 1 | 18 | Med/High |
| 4 | US 395 & E Main St | ODOT | 40 | 1 | 10 | Med/High |
| 5 | OR 207 (W Elm Ave) & N 1st Pl | ODOT | 40 | 1 | 10 | Med/High |
| 6 | US 395 & E Theater Ln | ODOT | 32 | 1 | 6 | Med/High |
| 7 | OR 207 (11th St) & W Orchard Ave | ODOT | 30 | 1 | 5 | High |
| 8 | US 395 & Kelli Blvd | ODOT | 28 | 1 | 4 | Med/High |
| 9 | N 1st Pl & W Harper Rd | City | 28 | 1 | 4 | High |
| 10 | SW 17th St & W Highland Ave | Umatilla County | 28 | 1 | 4 | High |
| 11 | US 395 & W Harper Rd | ODOT | 26 | 1 | 3 | Med/High |

*FSI (Fatal or Serious Injury)

**SEI (Social Equity Index): The SEI is used by ODOT to identify areas that may have been historically disadvantaged. The Safety Action Plan seeks to invest in transportation safety equitably throughout Hermiston.

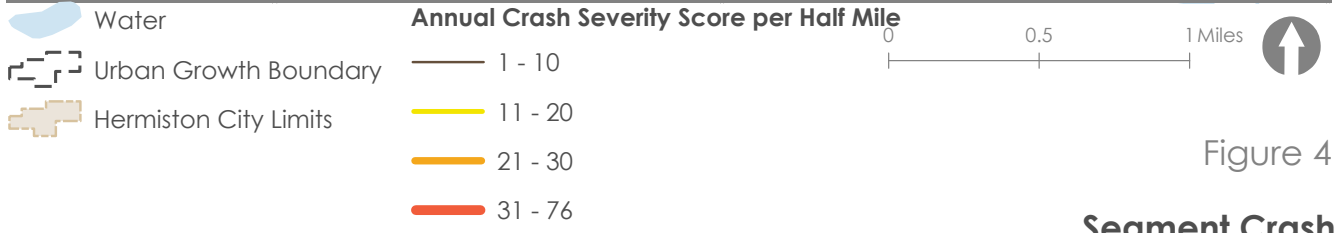
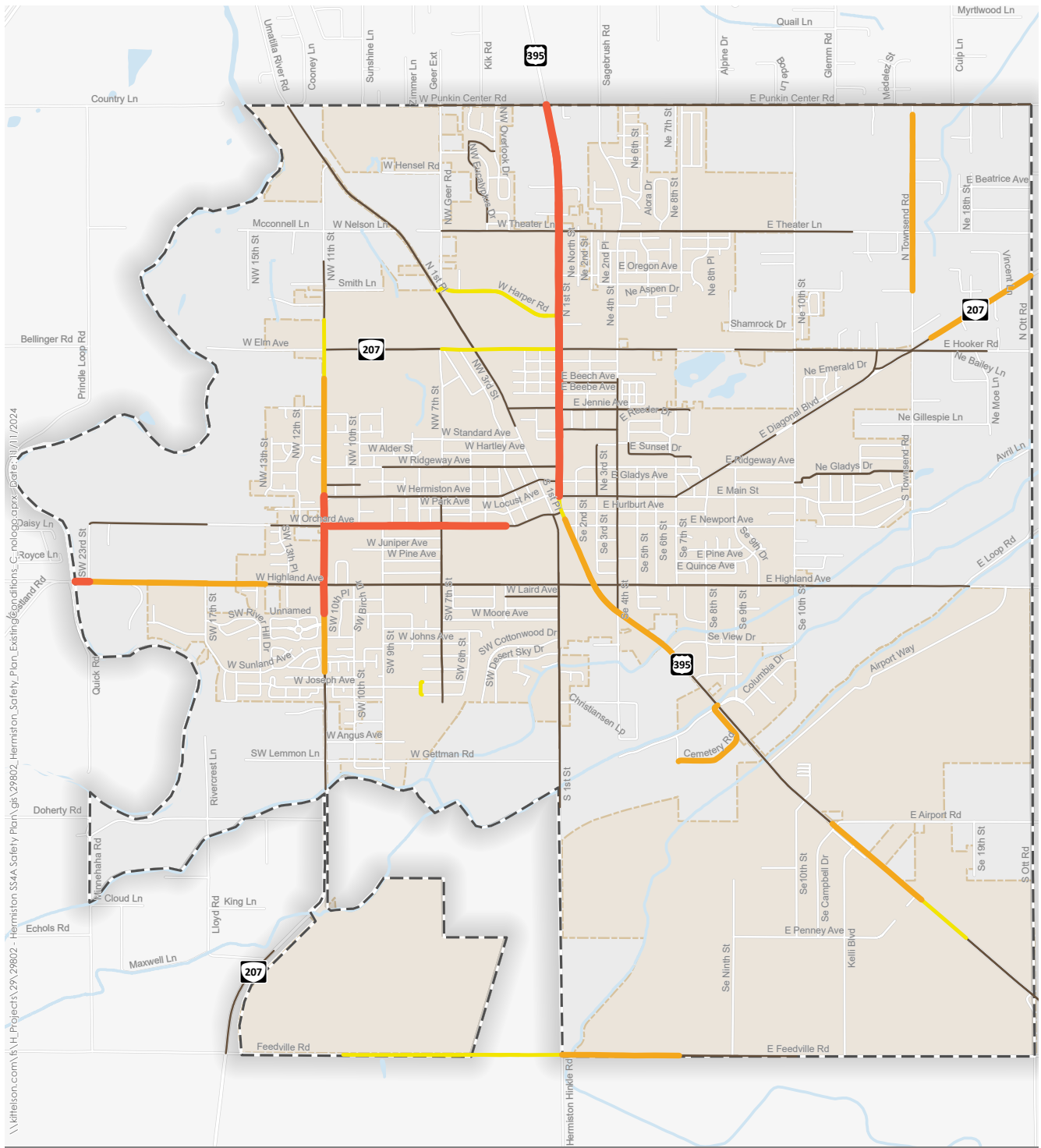


Figure 4

Segment Crash Severity Analysis

Data Source: ODOT Crash Data (2018 to 2022)

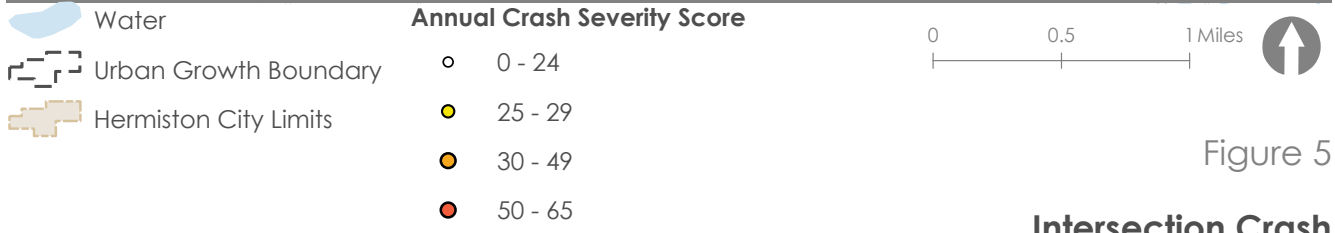
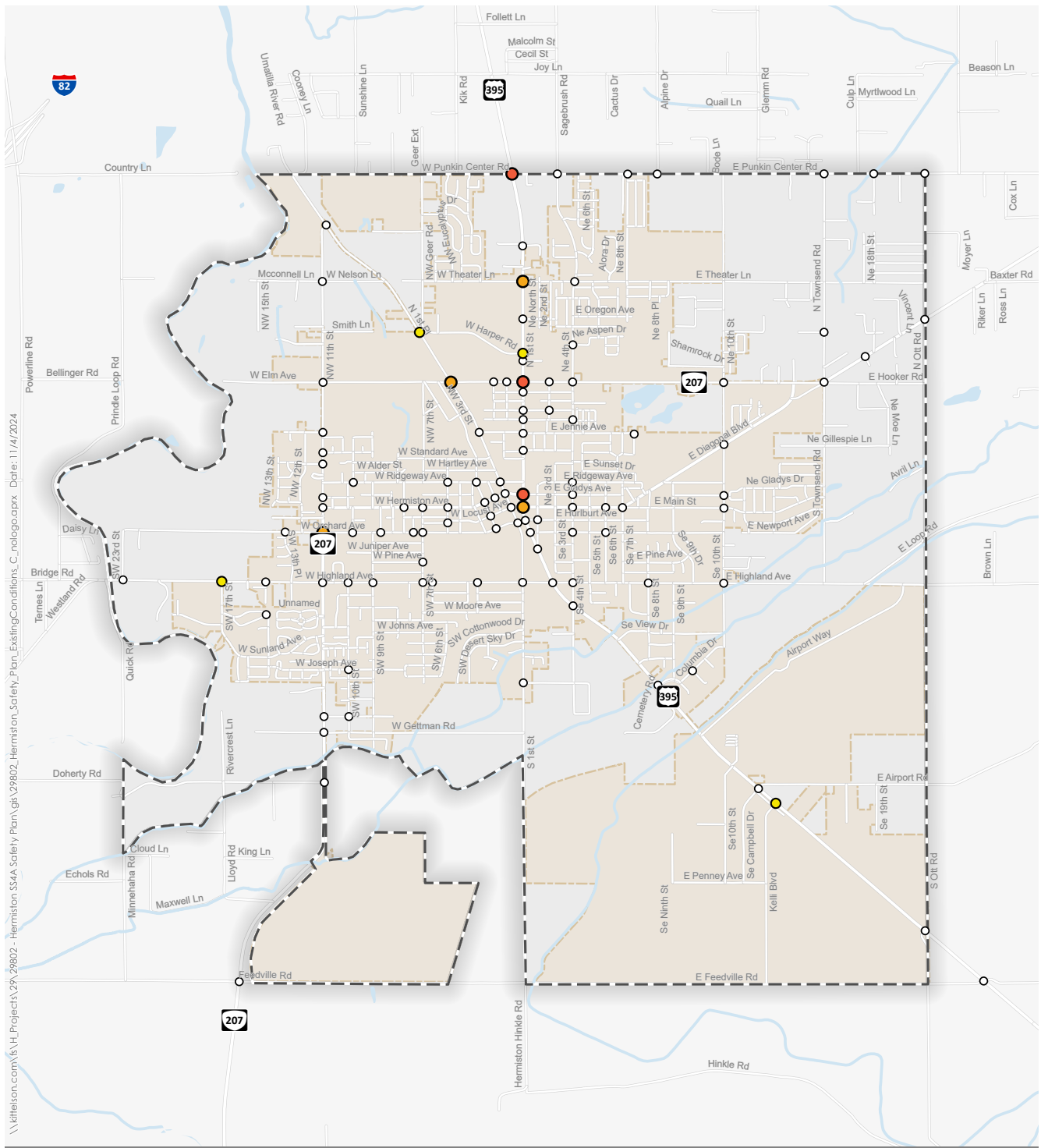


Figure 5

Intersection Crash Severity Analysis

Data Source: ODOT Crash Data (2018 to 2022)

SYSTEMIC ANALYSIS—ADDRESSING CRASHES BEFORE THEY OCCUR

Crash data can tell us where crashes happened and their severities. But these trends don't capture a full picture of **what** about a location makes a severe crash likely to occur. Further, the most severe crashes don't happen at the same locations year after year. When mapped over time, the locations can sometimes seem random.

To comprehensively identify where Hermiston should prioritize safety investments, we complemented our site-specific analysis with a **systemic analysis**. The systemic analysis is based

on the philosophy that while the locations of low-frequency, high-severity crashes can seem random, the underlying contributing factors and location characteristics are more predictable. Systemic analysis involves finding the common characteristics among sites with a crash history and then identifying which roadways in Hermiston have similar characteristics.

The full systemic analysis was comprised of the three sub-analyses described below. Each of these analyses focuses on identifying characteristics associated with different types of crashes. Combined, these analyses support building a safer system for all road users.

Intersections and turning crashes

In alignment with ODOT's 2023 Oregon Intersection Safety Implementation Plan Update, intersections were scored based on the presence of different characteristics that are correlated with intersection crashes. These characteristics include:

- Posted speed of 35 mph or greater
- Traffic volume of 10,000 or greater per day
- Presence of turn lanes or more than three through lanes on the approaches
- ODOT's Social Equity Index

Pedestrian and bicycle crashes

In alignment with ODOT's 2020 Oregon Statewide Pedestrian and Bicycle Plan, segments were scored based on the presence of different characteristics that are correlated with pedestrian and bicycle crashes. These characteristics include:

- Functionally classified as an arterial
- Four or more lanes
- High-access density
- Posted speed of 35 mph or greater
- Within 1 mile of a school
- High population over Age 64
- Lack of bike lane

Roadway Characteristics

This part of the systemic analysis identified which roadway characteristics contributed to a higher proportion of injury crashes compared to the proportion of the network they were present on, specifically in Hermiston. The analysis found that roadways with the following characteristics were more likely to have more crashes:

- Posted speed of 30 mph or greater
- Two-way left turn lane
- Surrounding commercial land uses

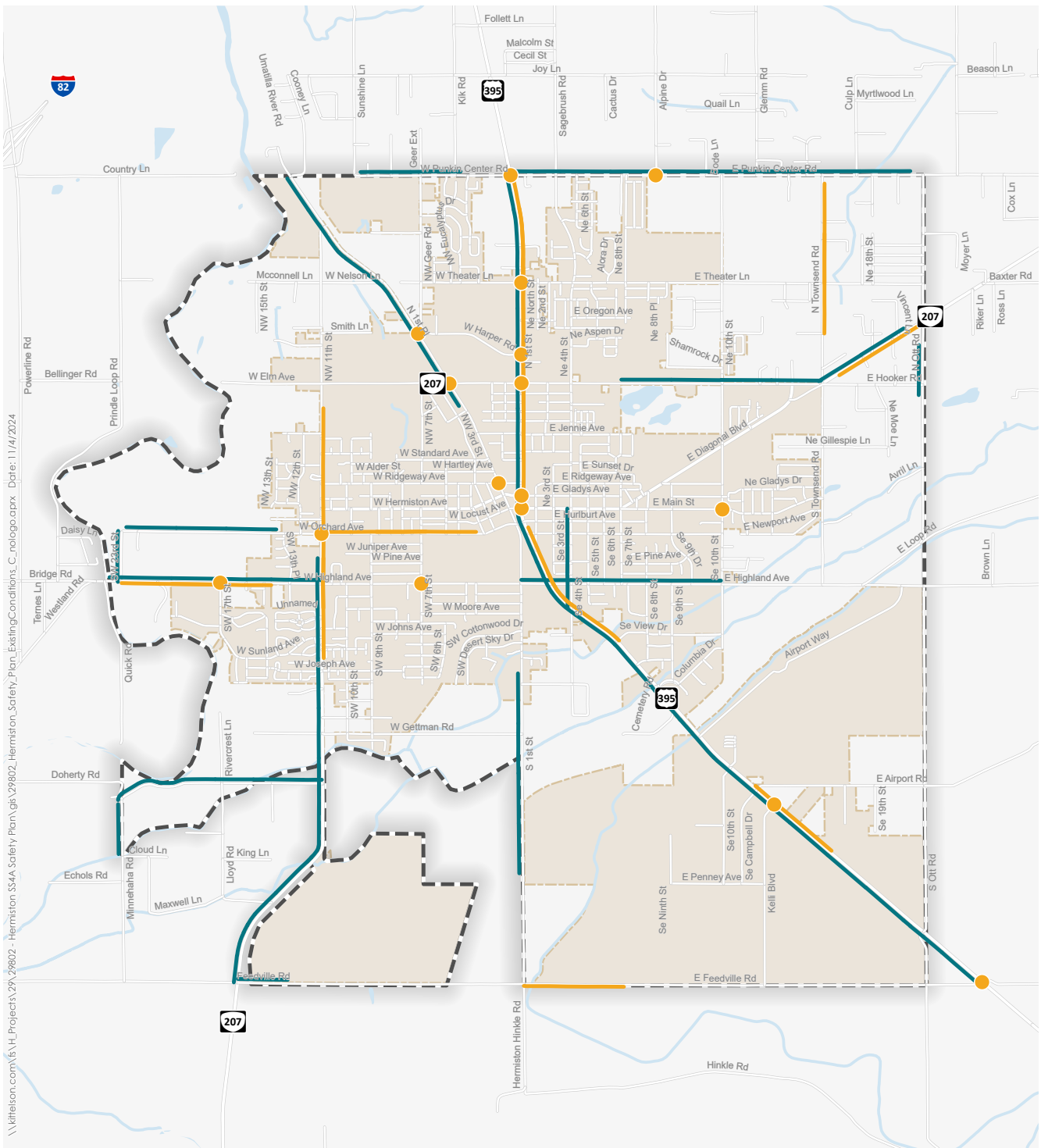
Hermiston's High-Injury Network




The High-Injury Network highlights key locations that would most benefit from safety enhancements. The findings from the **site-specific analysis** and **systemic analysis** were used to identify the High-Injury Network in Hermiston, as seen in **Figure 6**.

Roadway safety for all

ODOT's Social Equity Index (SEI) can help us understand how crashes may be impacting historically underserved communities in the State. The SEI uses demographic data from the American Community Survey. ODOT has found that areas in Oregon with a higher SEI (meaning area residents were generally more disadvantaged) experience a higher rate of injuries. Crashes in Hermiston are overlaid with the ODOT SEI in **Figure 7**.

Hermiston is no different. In Hermiston, high crash segments are more common in areas that rank high on ODOT's Social Equity Index, after accounting for the distribution of roadway miles throughout Hermiston. This disproportionate distribution of crashes as it relates to ODOT's Social Equity Index is shown in **Figure 7**.



-  Urban Growth Boundary
-  Water
-  Hermiston City Limits




-  Int. with Highest Crash Rate
-  Seg. with Highest Crash Rate
-  Int./Seg. with Systemic Characteristics



Figure 6
High Injury Network

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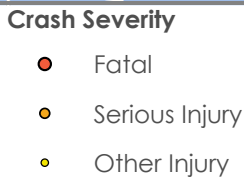
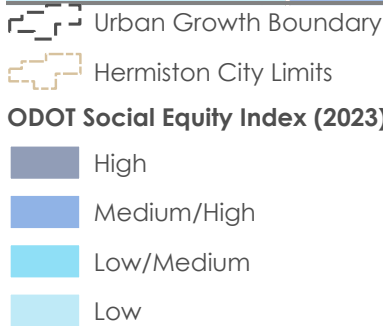
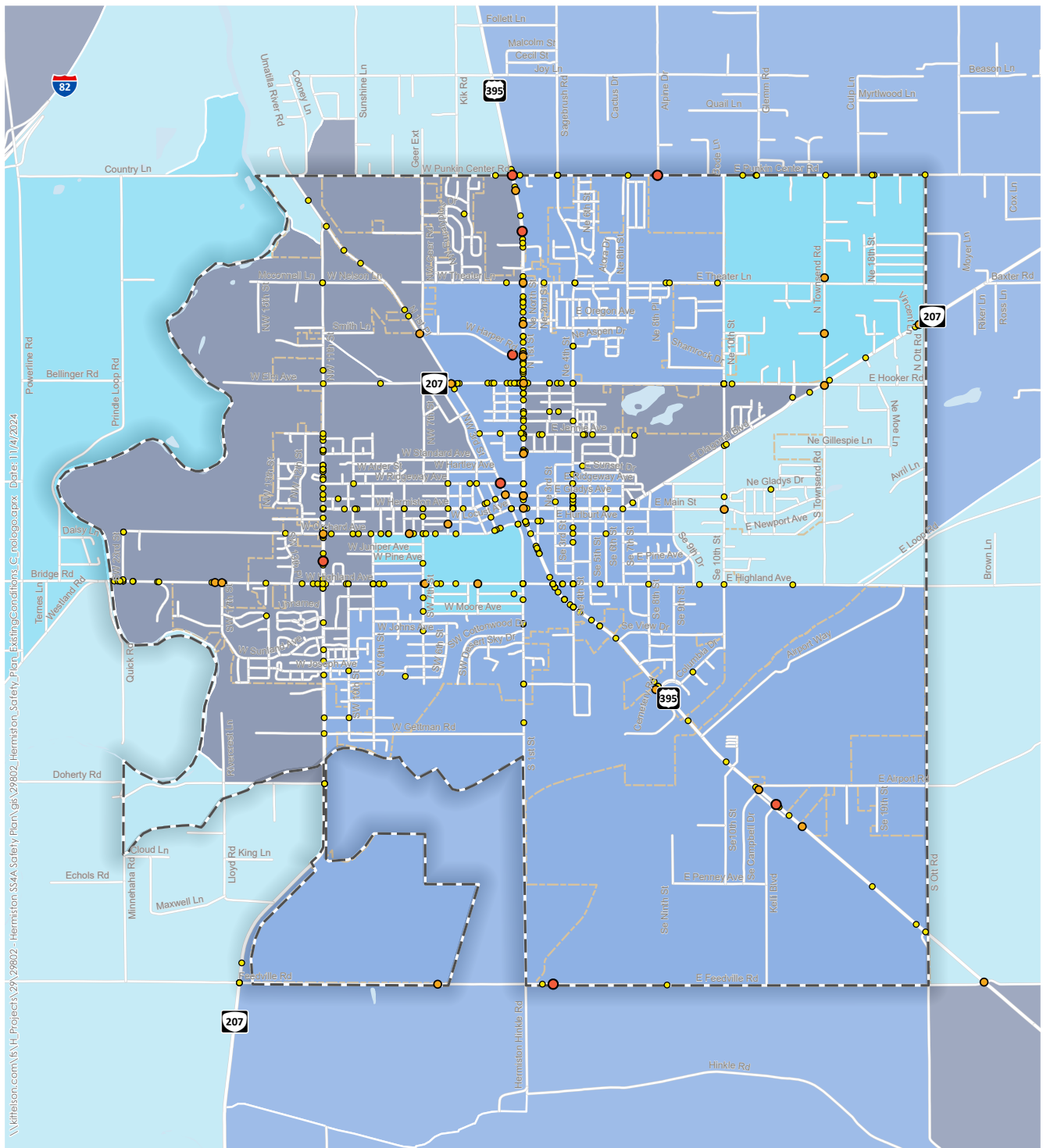


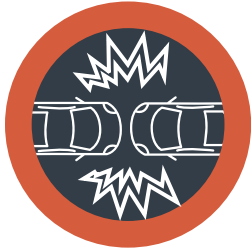
Figure 7

Crashes by ODOT Social Equity Index Category

Data Source: ODOT

Priority changes for a safer Hermiston

This section lists the infrastructure and non-engineering countermeasures that have been selected to address Hermiston’s safety emphasis areas and HIN locations:



AT INTERSECTIONS



TURNING MOVEMENT, ANGLE, AND REAR-END CRASHES



SEATBELT USE



INVOLVING PEDESTRIANS AND BICYCLISTS



INVOLVING AN IMPAIRED PERSON

Recommendations are organized by which Safe System Approach element they ultimately advance within Hermiston’s roadway network.

We grow together

Countermeasures are designed to improve safety systemically in Hermiston. They are intended to be implemented in partnership between a range of agencies, including multiple departments within the City of Hermiston. This Plan’s core public agency implementation partners include:

- **Hermiston Public Works**
- **Hermiston Community Development**
- **Hermiston Police Department**
- **Umatilla County Fire District #1**
- **Umatilla County**
- **Oregon Department of Transportation**
- **Kayak Transit**



Engineering countermeasures

Engineering countermeasures focus on designing, building, and operating transportation infrastructure to reduce the occurrence of human error and the severity of consequences from error.

The Safe System Approach organizes engineering countermeasures based on their ability to create “Safer Roads” or “Safer Speeds.” Safer Roads strategies focus on items such as the design of the roadway and intersection control. Safer Speeds strategies focus on design elements related to the speed drivers travel along the roadway.

This section identifies and briefly describes the key countermeasures that address Hermiston’s emphasis areas. These tools form the City’s **strategy toolbox**. A more comprehensive list of engineering countermeasures is included in the Strategy Development Memo, in Appendix B.

SAFER ROADS

Countermeasures that can reduce turning conflicts at intersections include:

- **Protected only left turns at signalized intersections.** The left-turn movement gets a green arrow while other movements have a red light. This eliminates the need for drivers to identify a gap in oncoming vehicles.
- **No right turn on red.** This restricts right turn movements that could conflict with people crossing the street or vehicles travelling through on a green light.
- **Roundabouts.** Roundabouts reduce the number of intersection conflict points and promote slower speeds than most other intersection control types. As a result, they can reduce the number and severity of crashes. They can also reduce traffic delay.
- **Dedicated turn lanes.** At intersections, left- and right-turn lanes provide a space outside the flow of faster moving through traffic for turning vehicles to slow, and if necessary, stop before turning. Conversely, turn lanes can also increase crossing distances and exposure for crosswalk users.

Countermeasures that can reduce red light running at signalized intersections include:

- **Adjust timing of yellow change intervals.** The time duration that a traffic signal remains yellow can influence red light running behavior.
- **Red light running cameras.** These cameras record red light running events and can be used to fine red-light runners. This frees up enforcement resources. The ultimate goal of these programs is red light compliance.

Countermeasures that can increase road user awareness include:

- **Lighting.** Enhanced lighting improves visibility for all road users.
- **Advance warning signs.** This signage alerts drivers of upcoming traffic or roadway conditions. Examples include warnings signs for upcoming intersections and pedestrian crossings.
- **Left-turn traffic-calming.** Managing left-turning vehicle speeds and paths reduces the likelihood of high-severity conflicts with pedestrians and other vehicles. Examples of left-turn traffic-calming treatments include hardened centerlines and left-turn wedges.
- **Green painted bike lanes.** Green paint increases awareness of the presence of bike lanes.
- **High-visibility crosswalks.** Increasing crosswalk visibility makes it easier for drivers to locate crossing facilities. Examples of ways to enhance crosswalk visibility include using high-visibility patterns (like ladder markings), using reflective paint, and implementing beacons that are activated by pedestrians waiting to cross, such as rectangular rapid flashing beacons and pedestrian hybrid beacons.
- **Raised crosswalks.** Raising the crosswalk increases the prominence of the pedestrian in the driver’s view, helps to manage vehicle speeds, and allows pedestrians to cross on a level grade with the sidewalk.

Countermeasures that separate road users include:

- **Dedicated walking and biking infrastructure.** Providing pedestrian and bicyclist facilities separates these more vulnerable road users from the vehicle travel way. Examples of these facilities include sidewalks, separated bike lanes, and shared-use paths.
- **Roadway striping.** Providing striping to delineate spaces with different purposes can reduce the likelihood of road users encroaching on spaces not intended for their use. Examples of this include centerline striping and parking lane striping.
- **Protected intersections for bicyclists.** This type of intersection design provides separate crossings for bicyclists. The crossings are buffered from vehicle travel lanes, typically with vertical infrastructure. The bike crosswalks (“crossbikes”) run parallel to the traditional crosswalk.
- **Leading pedestrian interval.** This signal timing strategy begins the walk phase prior to allowing vehicle movements that conflict with the crosswalk. This gives pedestrians time to make themselves seen in the crosswalk.

Countermeasures that enhance crossings include:

- **High-visibility crosswalks.** Increasing crosswalk visibility makes it easier for drivers to locate crossing facilities. Examples of ways to enhance crosswalk visibility include using high-visibility patterns (like ladder markings), using reflective paint, and implementing beacons that are activated by pedestrians waiting to cross, such as rectangular rapid flashing beacons and pedestrian hybrid beacons.
- **Reduce crossing distance.** This reduces the time spent by people crossing in the roadway. Examples of ways to reduce crossing distance include providing refuge islands, implementing curb extensions, and realigning crosswalks to shorten them.
- **Advance warning signs.** This signage alerts drivers of upcoming traffic or roadway conditions. Examples include warnings signs for upcoming intersections and pedestrian crossings.

SAFER SPEEDS

Countermeasures that can reduce operating speeds include:

- **Turning speed calming.** Examples of ways to calm turn speeds include hardened centerlines, left-turn wedges, and reducing the curb-return radius.
- **Curb extensions.** Also known as bulb outs, this treatment extends the curb line out into the roadway to narrow the roadway, which can also increase the visibility of people crossing.
- **Dynamic speed display/feedback signs.** These alert drivers of their operating speed and/or alert them when they are exceeding the posted speed limit.
- **Vertical deflection.** Examples of vertical deflection include speed bumps, raised crosswalks, and raised intersections.
- **Horizontal deflection.** Examples of horizontal deflection include roundabouts, traffic circles, and chicanes.
- **Enclosing or narrowing the roadway.** Examples of treatments that enclose or narrow the roadway include planting street trees, narrowing lanes, and installing median islands.

Countermeasures that can enforce speed compliance include:

- **Speed safety camera(s).** These cameras record speeding events and identify vehicle ownership which can be used to fine speeders.
- **Rest in red timing.** This signal timing technology keeps all traffic signals at an intersection red until a vehicle has approached the intersection and come to a stop. This strategy is often implemented at night when volumes are lower and operating speeds may be higher.

Non-engineering countermeasures

Non-engineering countermeasures complement engineering efforts by using policy, processes, and education to create a culture of roadway safety in Hermiston.

SAFER PEOPLE

- **Publish education campaigns.** Hermiston can publicize education materials from other agencies, like ODOT, that encourage safe behaviors, especially those related to the emphasis areas identified through this Plan, such as impaired driving and seatbelt usage.
- **Implement targeted education programs.** Hermiston can supplement additional targeted education programs, like Driver's Education, and implement new programs, like Safety Town, which teach children safe practices.

POST-CRASH CARE

- **Provide incident management training** to first responders in Hermiston.

SAFER ROADS

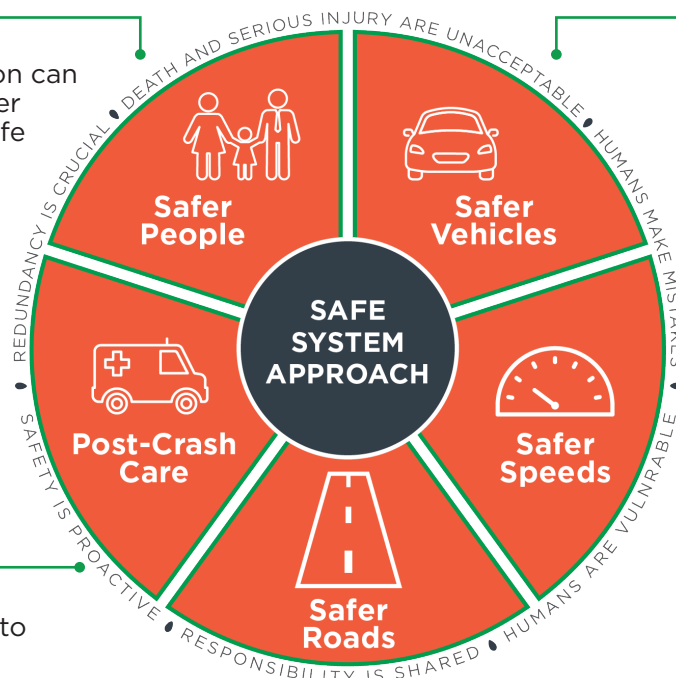
- **Use this Plan's toolbox.** As roads and intersections are newly built or rebuilt, the City can fold countermeasures from the strategy toolbox into implementation.
- **Adopt a Complete Streets policy.** A Complete Streets policy guides the development of the Transportation System Plan and the development of projects to balance the needs of all users.
- **Update roadway cross sections in the Transportation System Plan.** Review typical cross sections for opportunities to include countermeasures from the strategy toolbox. Updating the roadway cross sections gives the City an opportunity to systematically implement countermeasures.
- **Develop a Safe Routes to School Plan** to identify projects and other strategies for areas around schools in Hermiston.

SAFER VEHICLES

- **Consider safety during vehicle procurement.** Hermiston can consider the availability of safety features on vehicles during the procurement process.

SAFER SPEEDS

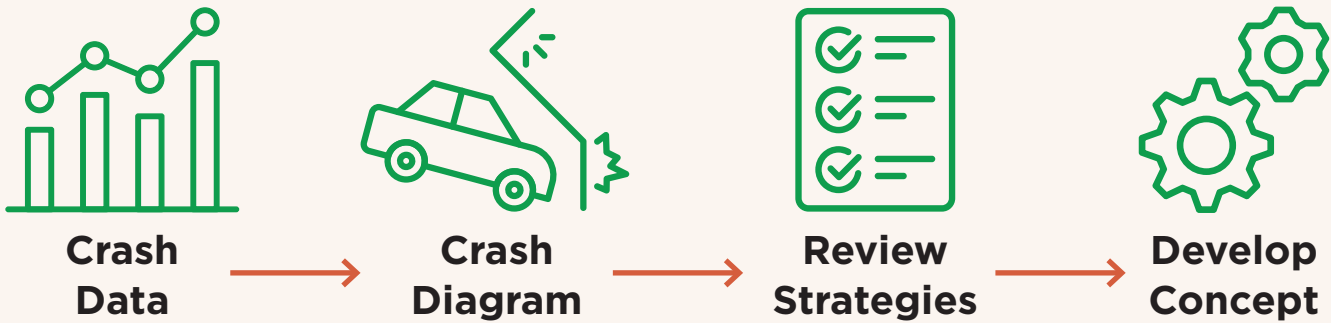
- **Lower posted speed limits.** Many local roads in Hermiston are currently posted at 25 mph. However, several roads entering Hermiston from the surrounding area are posted at higher speeds. Lowering posted speeds is most effective when combined with engineering strategies to create roadways that "self-enforce" speed limits.
- **Develop traffic-calming toolbox.** A traffic-calming toolbox acts as a menu for speed management strategies. The engineering countermeasures documented in this plan can serve as the foundations of this toolbox.
- **Apply targeted enforcement.** The Hermiston Police can continue to apply targeted enforcement and engage in high-visibility enforcement where speeding is a known issue.



Project concepts

The City of Hermiston developed concept designs for six specific locations in Hermiston. These locations were prioritized based upon historical crashes and local knowledge of challenges in Hermiston. The concept designs apply specific countermeasures from the strategy toolbox to address identified crash patterns and site characteristics.

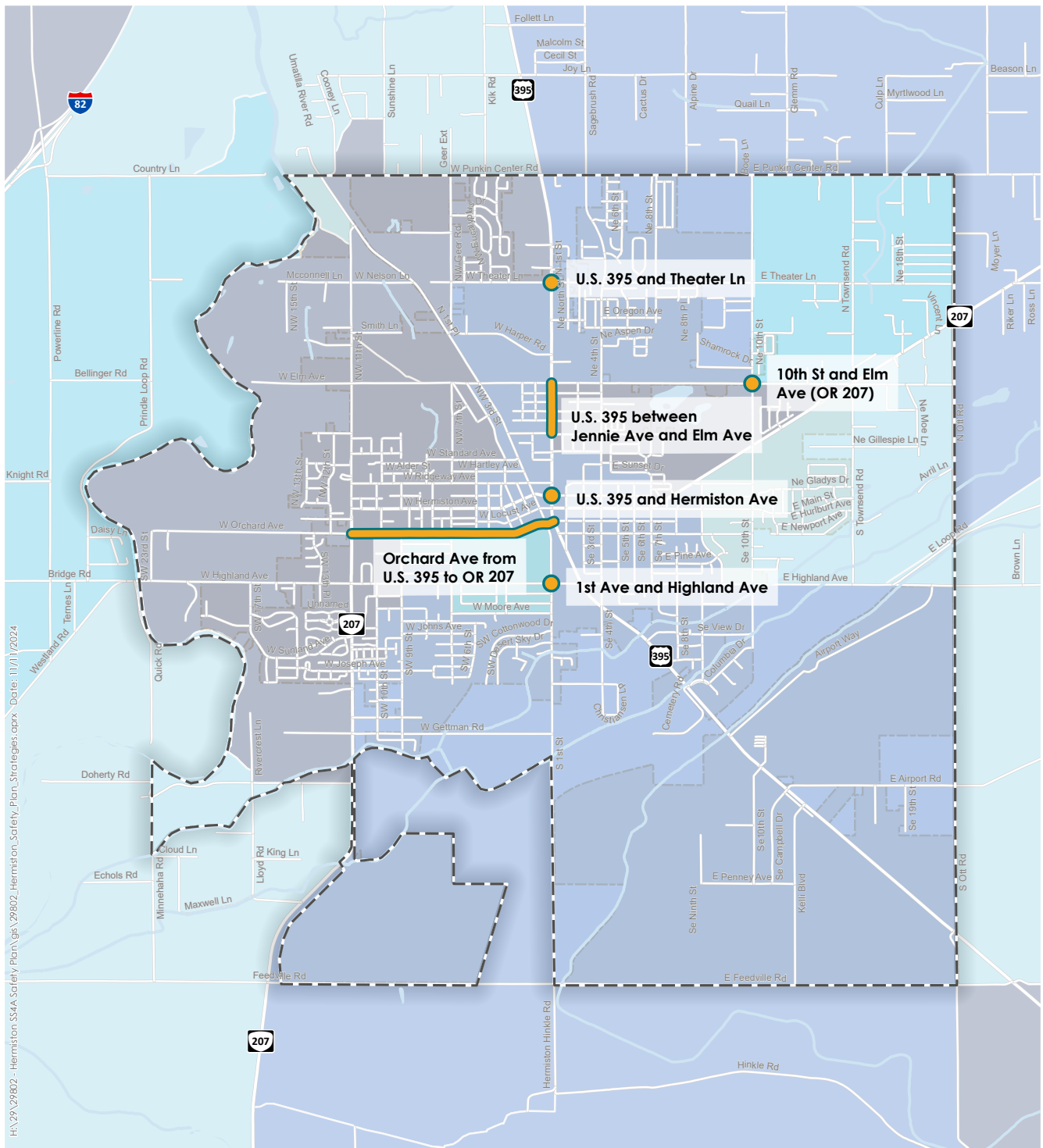
The concept designs were developed through the following process:







The concept designs are summarized in **Table 3**, mapped in **Figure 8**, and subsequently shown individually in **Figures 9 through 14**. The full engineering concept designs and cost estimates are included in the Strategy Development Memo, in Appendix B.





Table 3. Summary of Concept Designs

| Location | Key Characteristics of Concept | Planning Level Cost Estimate |
|--------------------------------------|---|------------------------------|
| Orchard Ave, from OR 207 to U.S. 395 | <ul style="list-style-type: none"> Enhanced crossings through curb extensions and raised crosswalks Speed management through raised crosswalks, curb extensions, and raised intersections Separated bike lanes near West Park Elementary School | \$1,400,000 |
| U.S. 395, from Jennie Ave to Elm Ave | <ul style="list-style-type: none"> Enhanced pedestrian crossing at Cherry Ave Reduced turning conflicts through raised median at Dogwood Ave Reduced conflicts through adjusted signal phasing Reduced left-turning speeds through hardened centerlines | \$420,000 |
| U.S. 395 & Theater Ln | <ul style="list-style-type: none"> Reduced conflicts through adjusted signal phasing Reduced left-turning speeds through hardened centerlines | \$90,000 |
| U.S. 395 & Hermiston Ave | <ul style="list-style-type: none"> Reduced conflicts through adjusted signal phasing Reduced left-turning speeds through hardened centerlines | \$80,000 |
| Highland Ave & 1st St | <ul style="list-style-type: none"> Reduced left-turning speeds through hardened centerlines. Increased awareness through striping and signage New crossing locations | \$460,000 |
| NE Elm Ave & 10th St | <ul style="list-style-type: none"> Speed management through speed feedback sign, increased school zone distance, and reduced posted speed Increased awareness through enhanced signing | \$60,000 |



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-  Hermiston UGB
-  Hermiston City Limits
-  Intersections
-  Corridors

- ODOT Social Equity Index (2023)**
-  High
 -  Medium/High
 -  Low/Medium
 -  Low

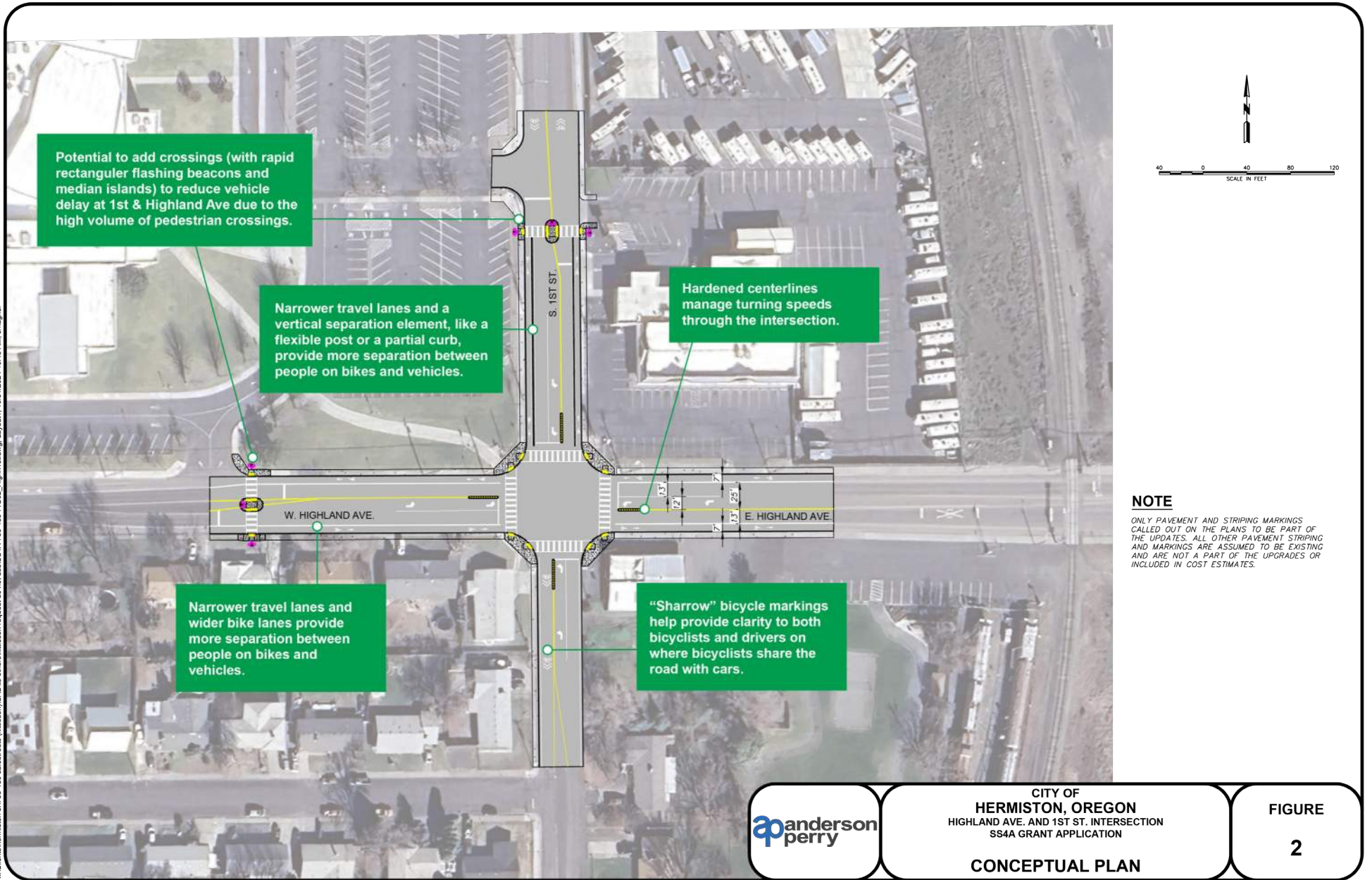
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Figure 8

**Strategy Locations
Hermiston Safety Action Plan**

Figure 9. Design concept for Highland Avenue and 1st Street



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Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

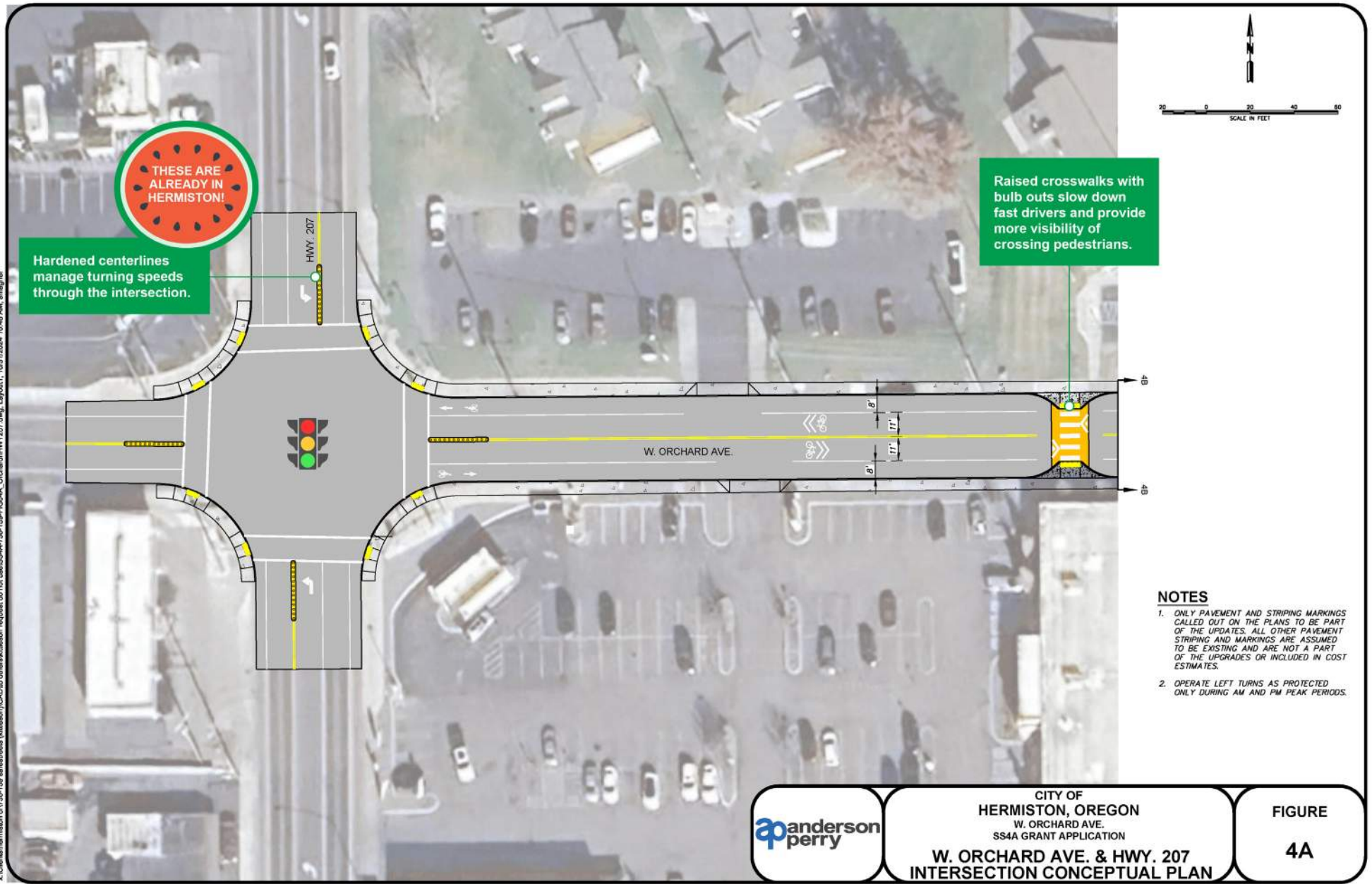


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

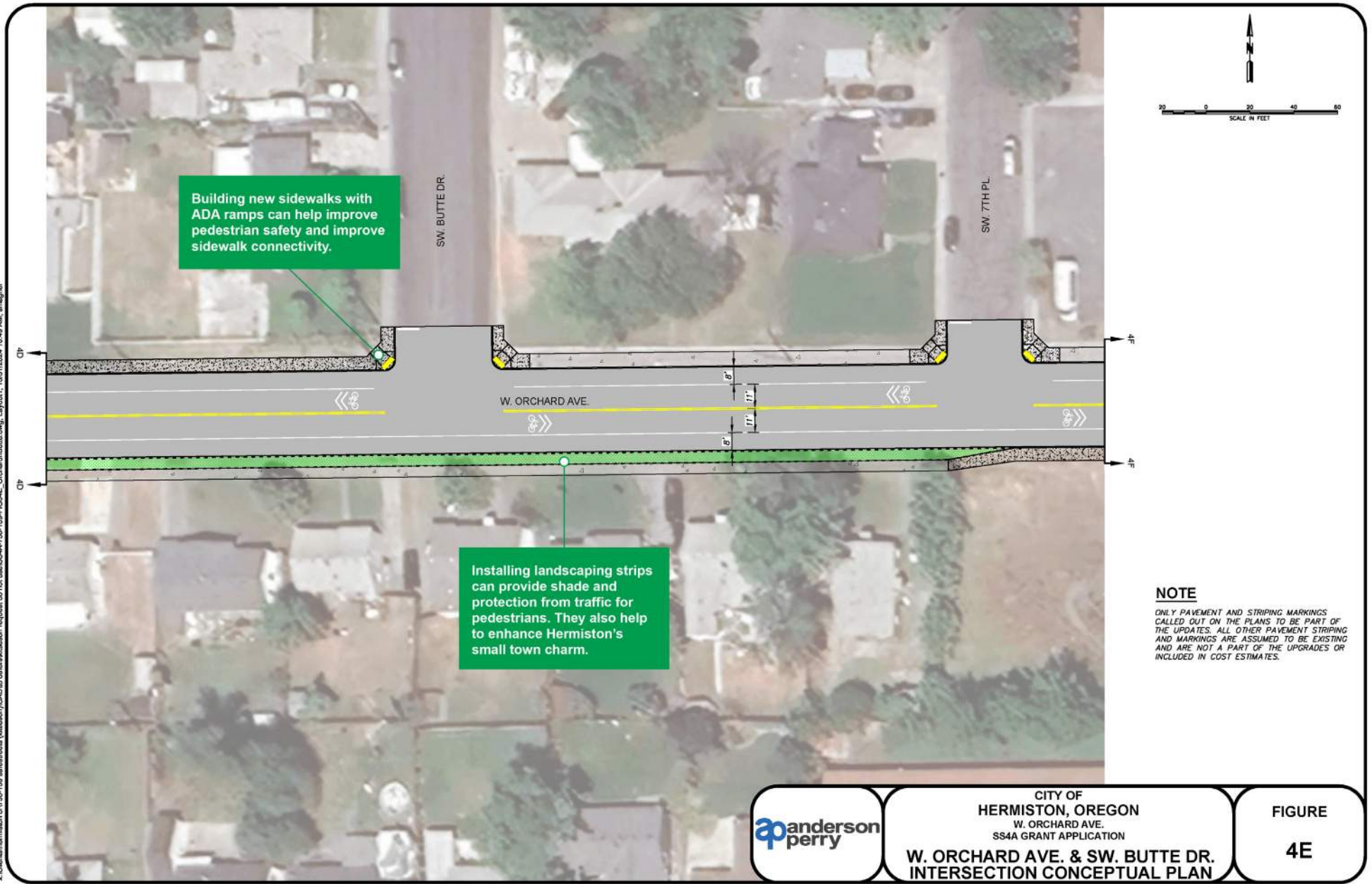


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

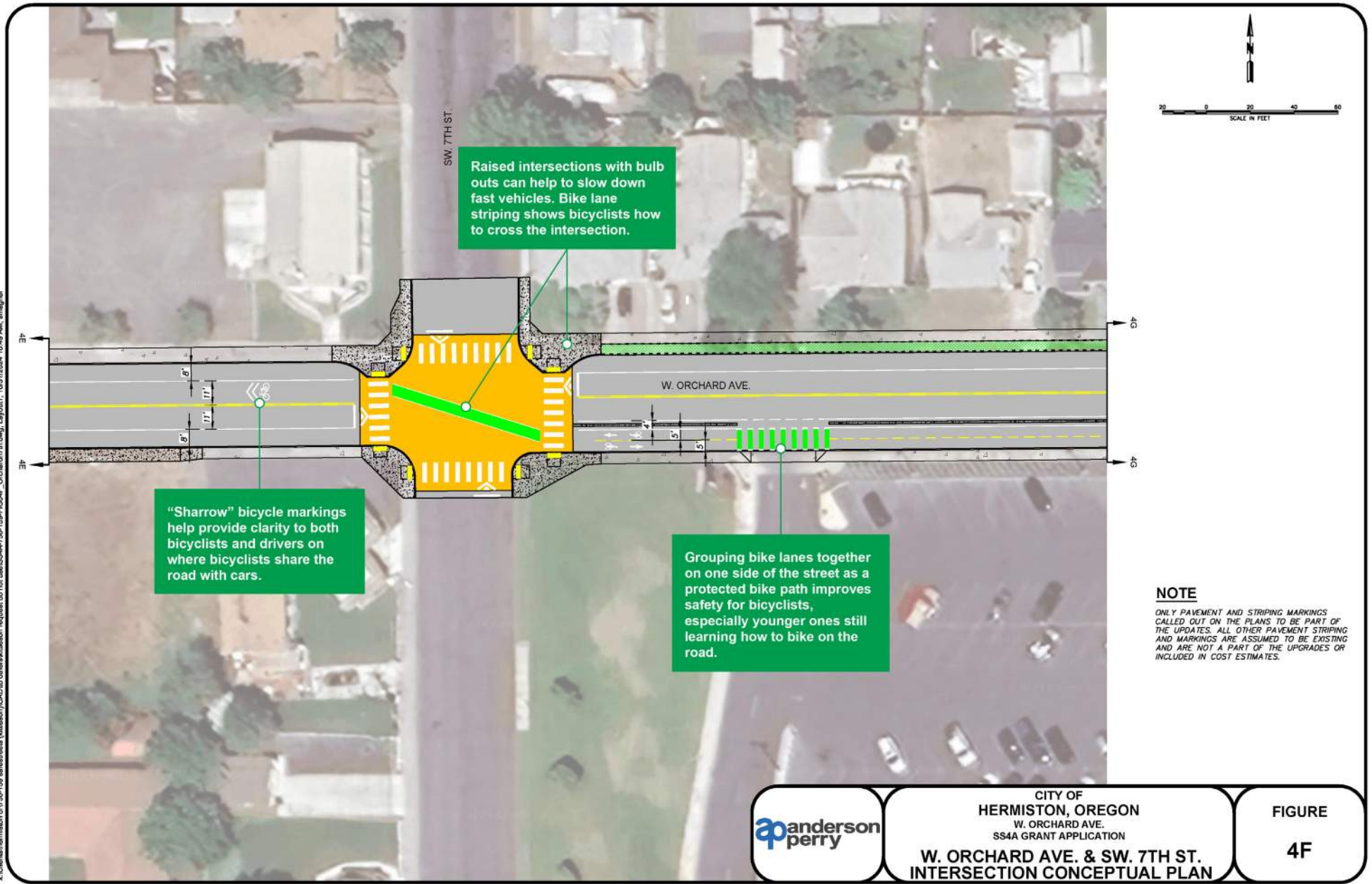


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

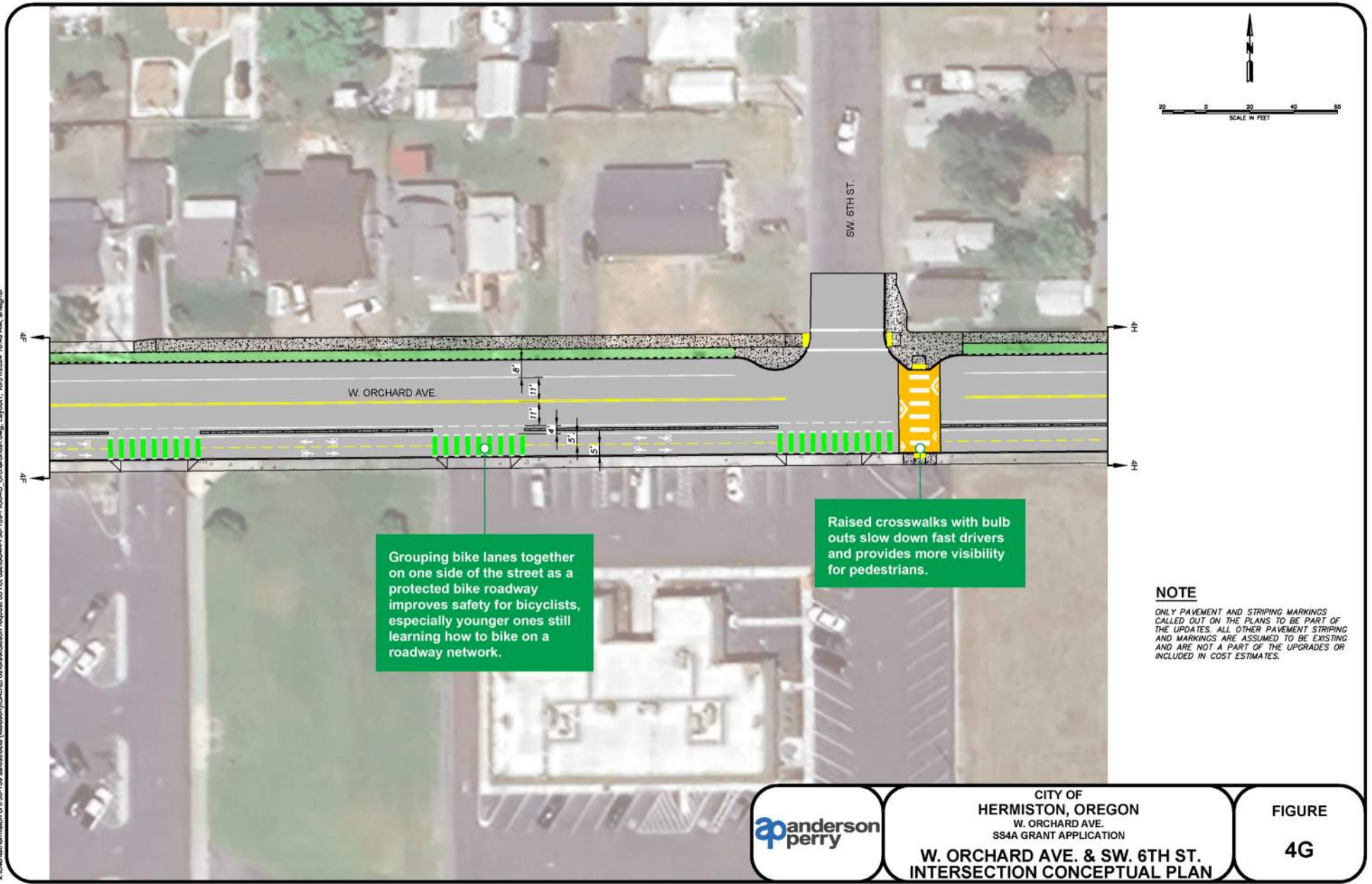


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

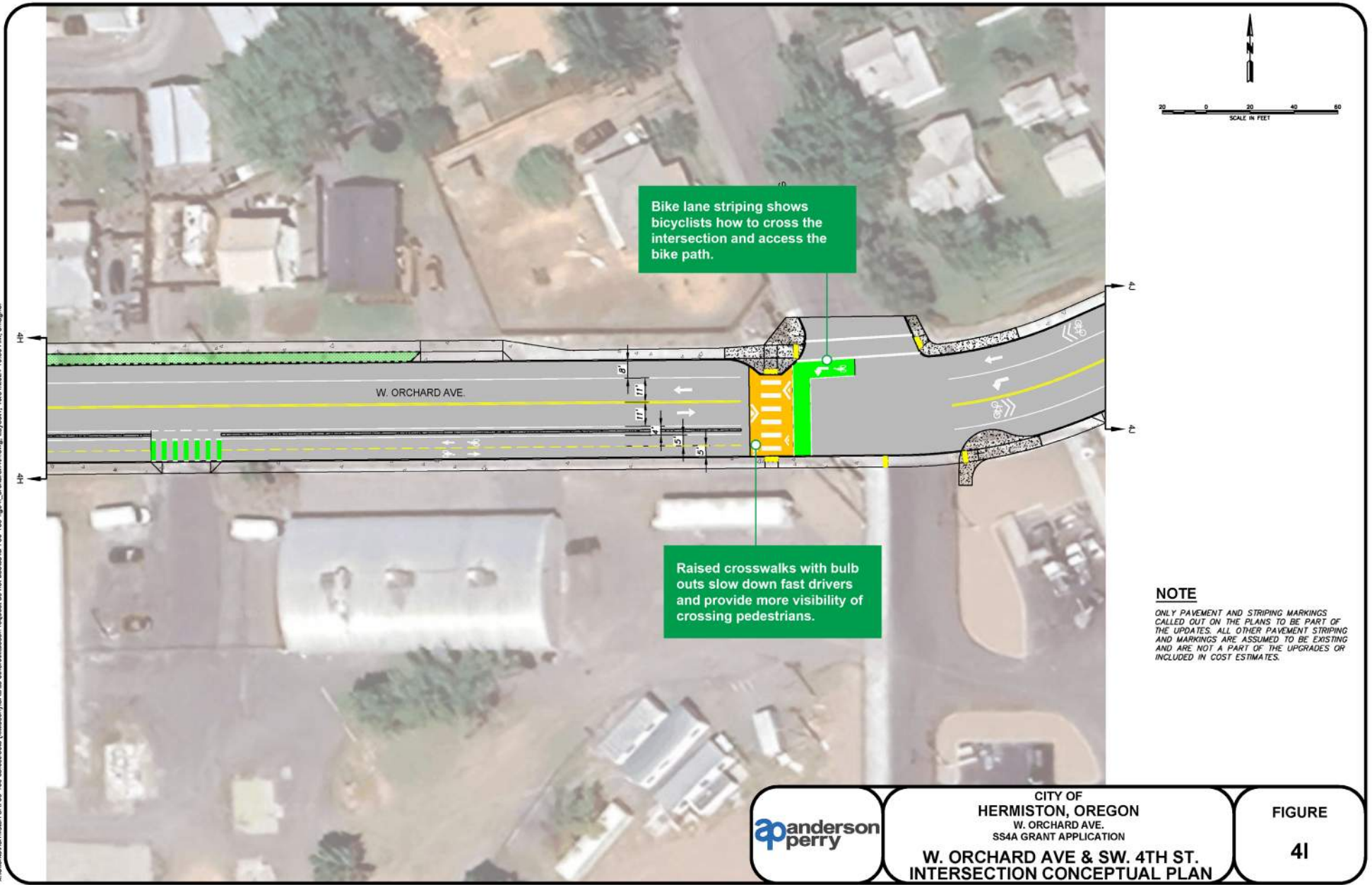


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)

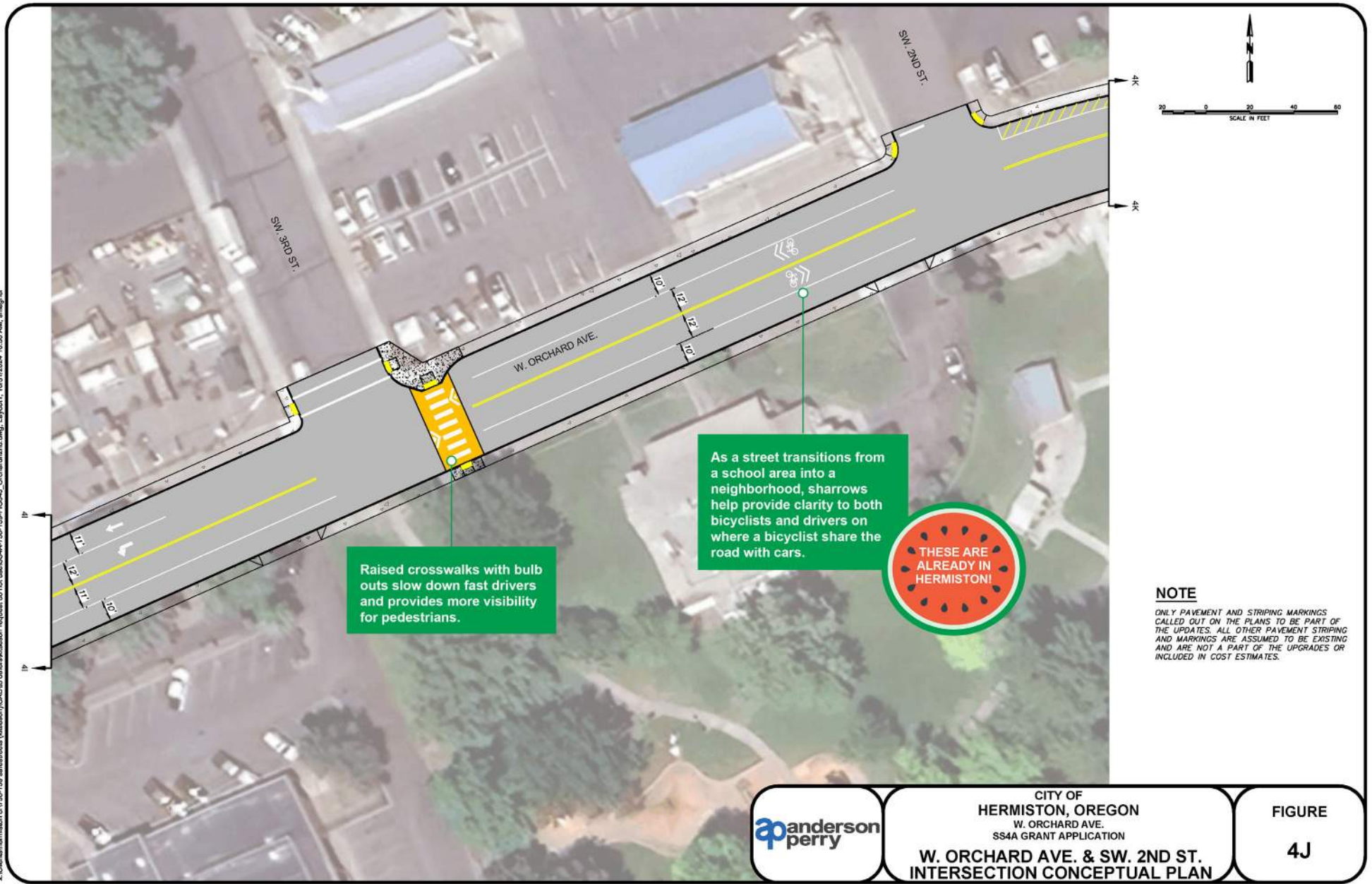
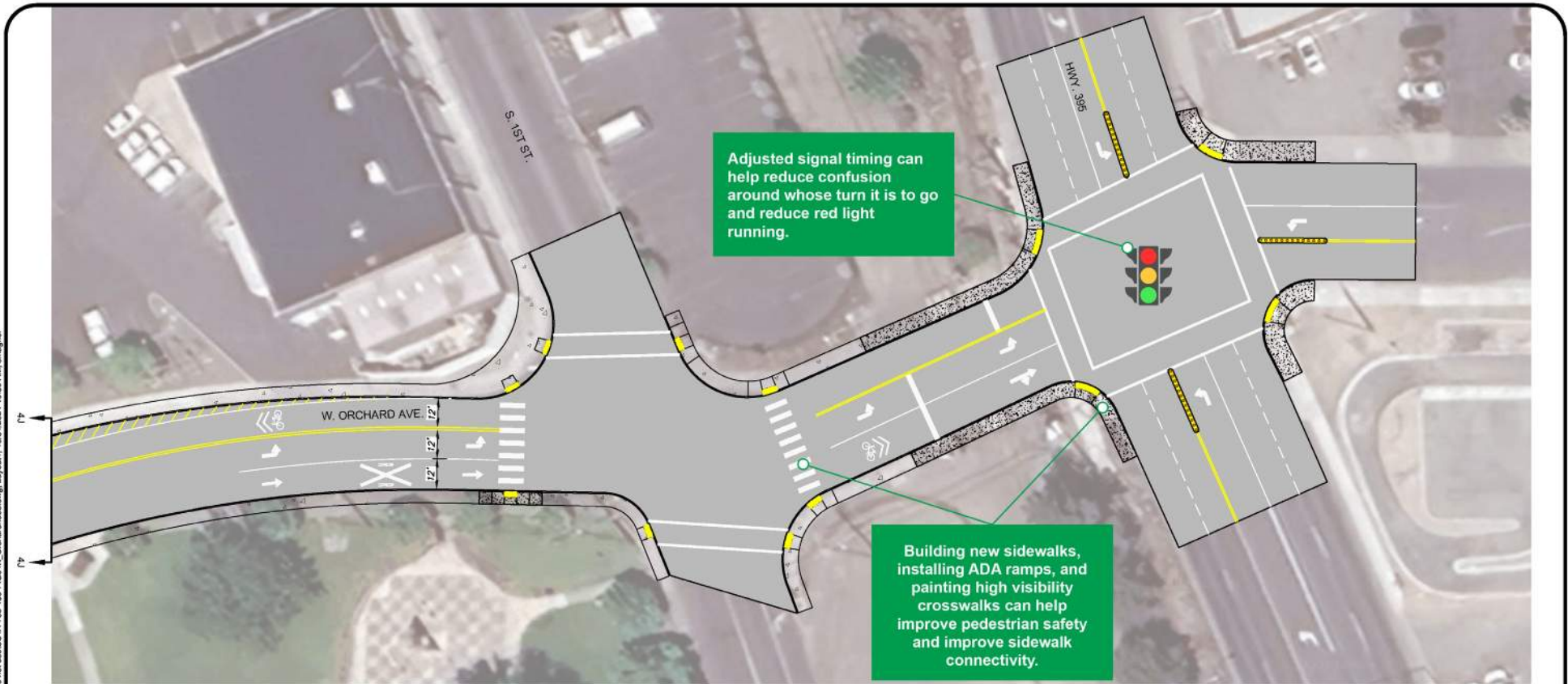


Figure 10. Design concept for Orchard Avenue between OR 207 and US 395 (portion of concept)



SIGNALIZED INTERSECTION NOTES

1. VERIFY YELLOW CHANGE INTERVAL AND ALL RED TIME IN EXISTING SIGNAL TIMING PLAN ALIGNS WITH ODOT GUIDANCE.
2. REPLACE WESTBOUND LEFT TURN SIGNAL WITH A 4 SECTION PERMISSIVE-PROTECTED SIGNAL HEAD.
3. IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI) FOR ALL PEDESTRIAN PHASES.
4. OPERATE LEFT TURNS AS PROTECTED ONLY DURING AM AND PM PEAK PERIODS.



NOTE

ONLY PAVEMENT AND STRIPING MARKINGS CALLED OUT ON THE PLANS TO BE PART OF THE UPDATES. ALL OTHER PAVEMENT STRIPING AND MARKINGS ARE ASSUMED TO BE EXISTING AND ARE NOT A PART OF THE UPGRADES OR INCLUDED IN COST ESTIMATES.

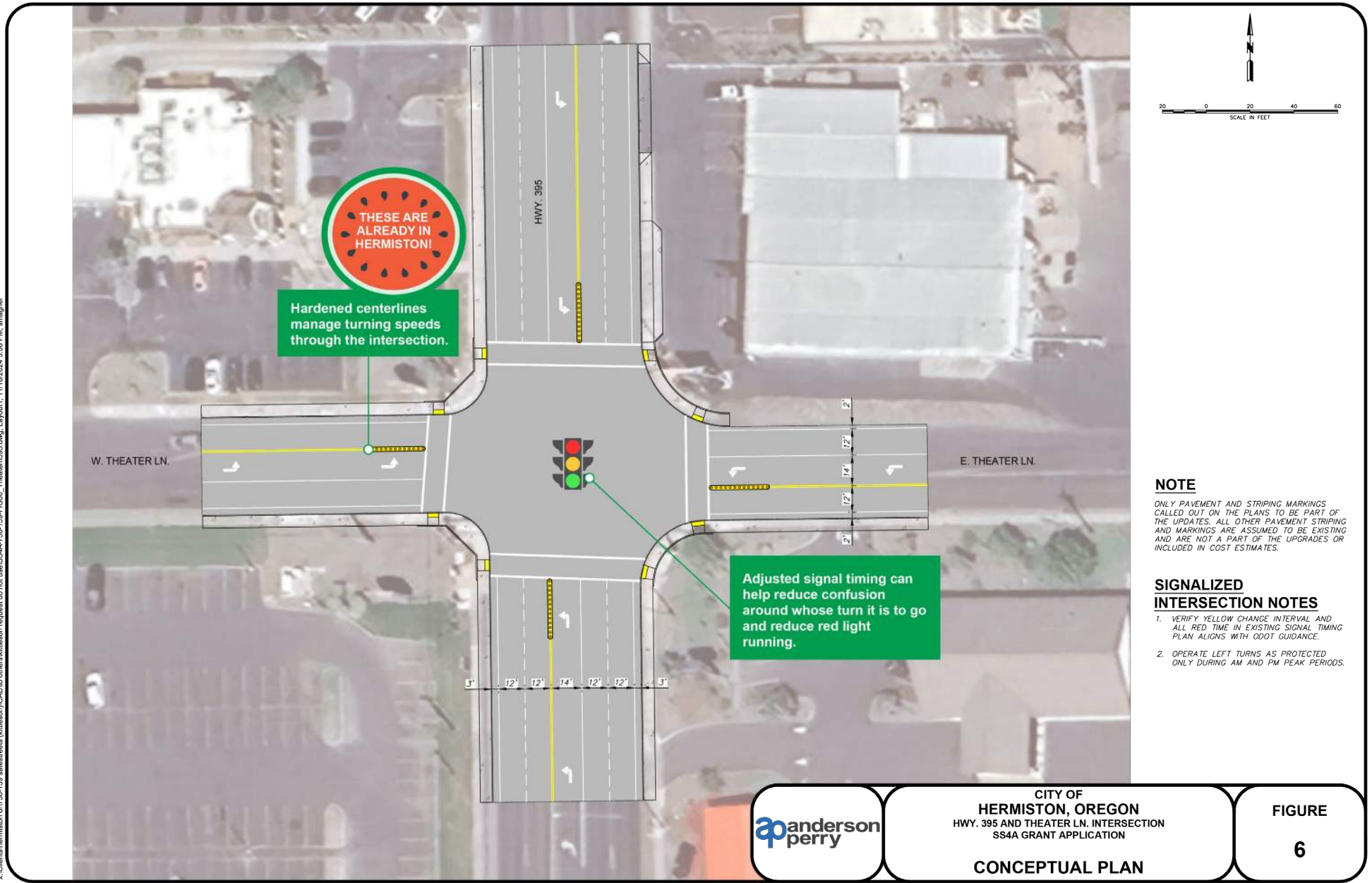
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CITY OF
HERMISTON, OREGON
W. ORCHARD AVE.
SS4A GRANT APPLICATION
**W. ORCHARD AVE. & HWY. 395
INTERSECTION CONCEPTUAL PLAN**

FIGURE
4K

Figure 11. Design concept for US 395 and Theater Lane



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Figure 12. Design concept for US 395 between Jennie Avenue and Elm Avenue

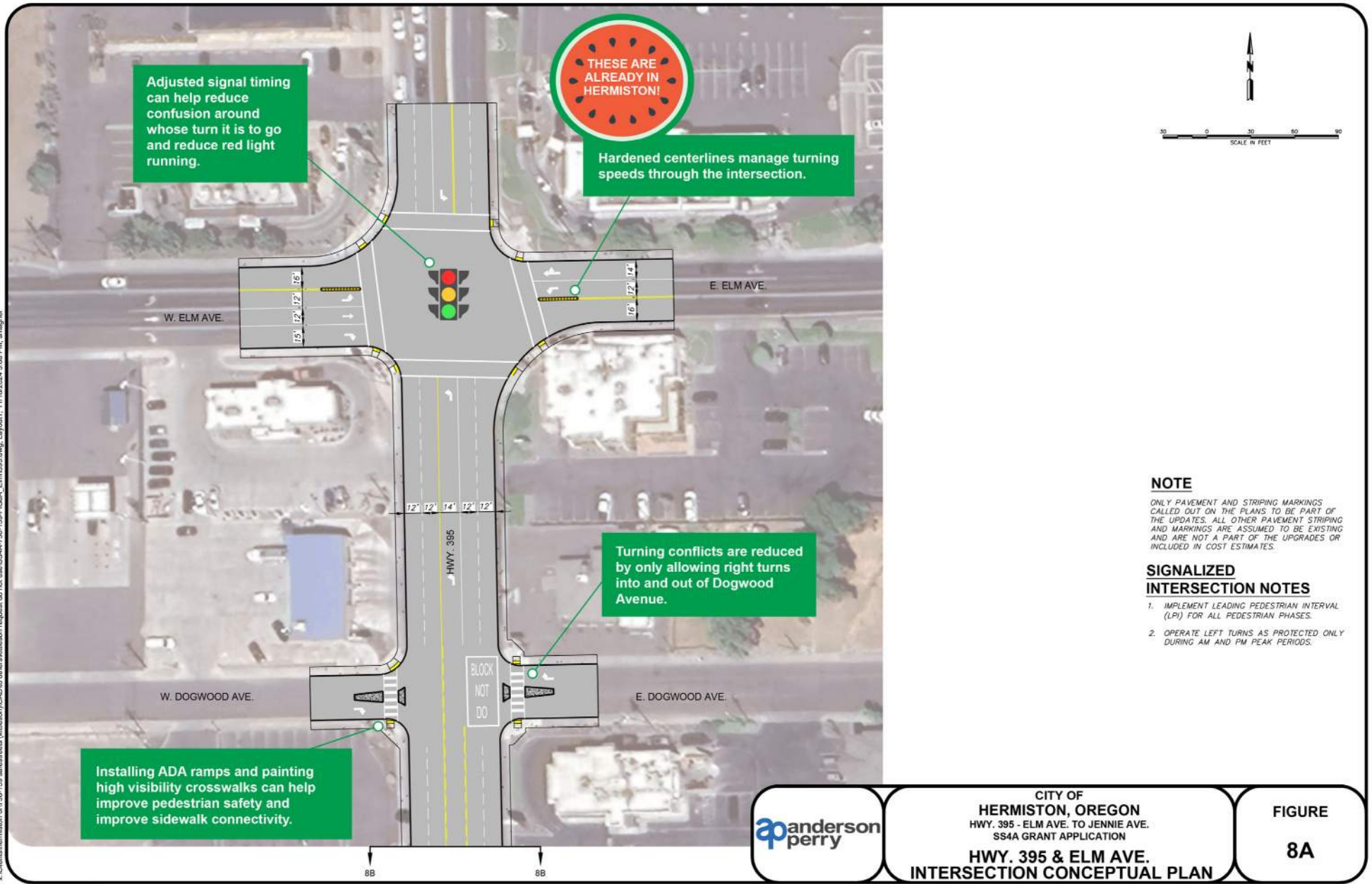


Figure 12. Design concept for US 395 between Jennie Avenue and Elm Avenue

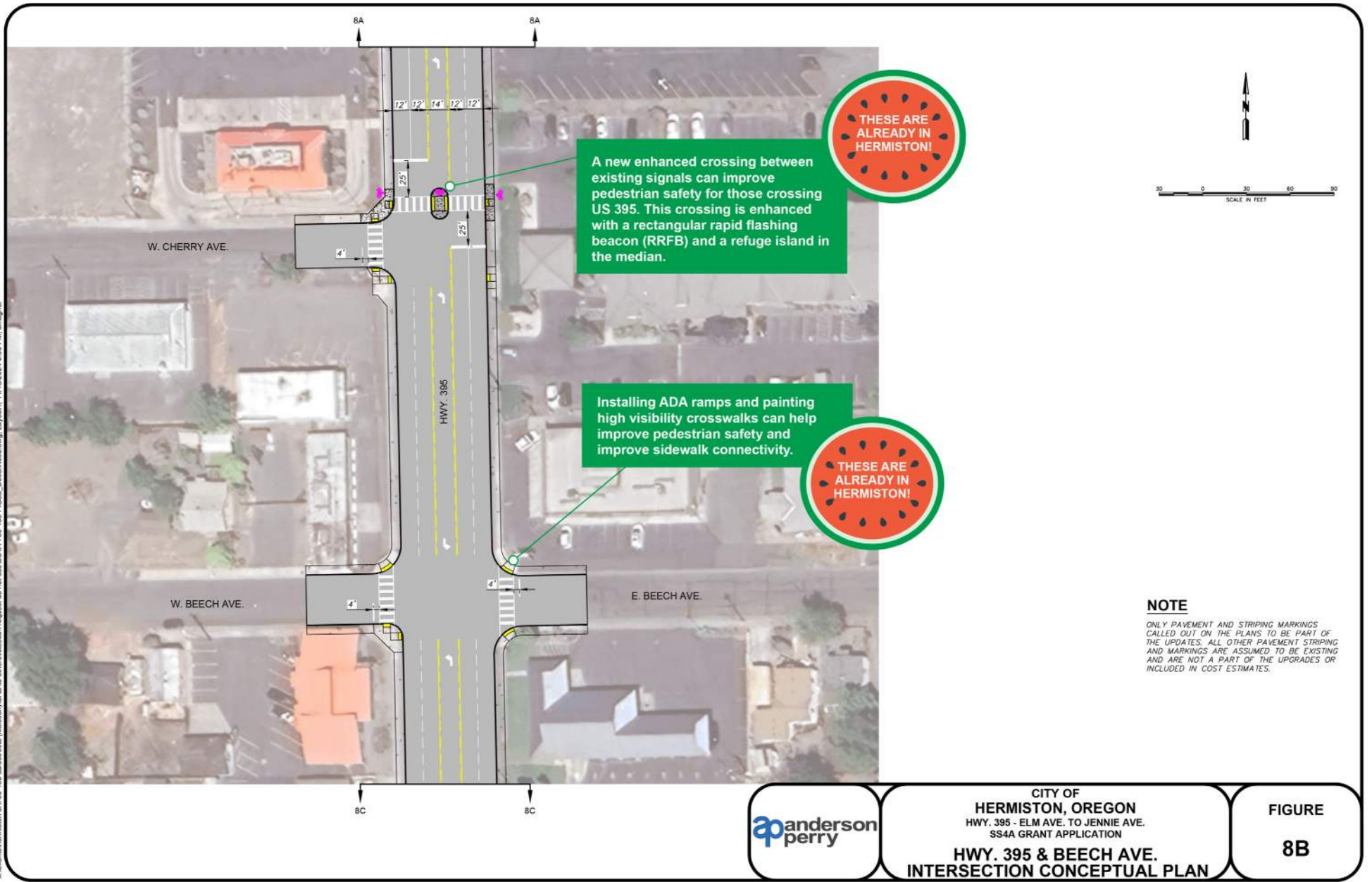
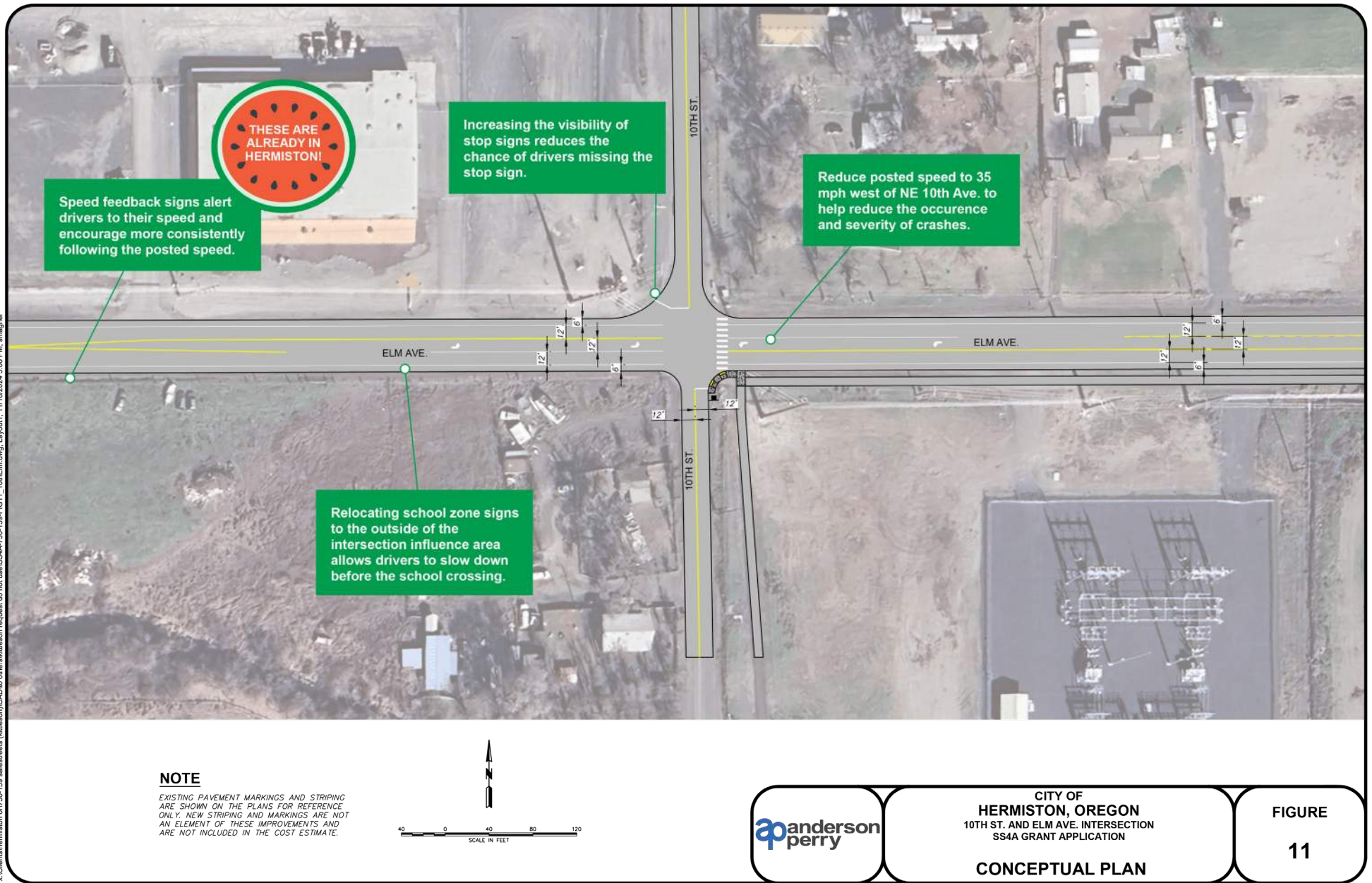


Figure 12. Design concept for US 395 between Jennie Avenue and Elm Avenue



Figure 14. Design concept for OR 207 (Elm Avenue) and 10th Street



Our plan is only as good as our implementation

The Safety Action Plan describes existing safety conditions in our City, identifies emphasis areas that are contributing most to our roadway deaths and serious injuries, and provides a variety of engineering, policy, and other actions that can reduce severe crashes on our roadway network.

The next step is using this Safety Action Plan as a tool to implement these actions.

In the near term, the City of Hermiston should...



Carry safety principles through the development of projects and policies.

As the City of Hermiston develops projects and policies, the City should implement the principles identified through the Safety Action Plan. A few specific examples of policies and projects that can support this Plan's safety principles include:

POLICIES:

- Develop a Safe Routes to School plan.
- Include safety criteria in the Transportation System Plan that prioritize Safety Action Plan aligned projects. Such criteria may favor projects that:
 - Are located on the HIN.
 - Implement a countermeasure from the strategy toolbox.
 - Address an identified emphasis area.

PROJECTS:

- During project development, continue to consider proactive implementation of countermeasures from the strategy toolbox.
- During project prioritization, use Social Equity Index scores to prioritize sites that are more disadvantaged.



Further develop education campaigns.

The City of Hermiston should use social media platforms and the City website to distribute education materials prepared by ODOT and other agencies. Education campaigns should emphasize crash patterns observed in Hermiston, for example targeting impaired driving and seatbelt usage. Additionally, the City should consider developing targeted education programs to educate specific populations, like children, employers, and commercial drivers.



Implement equitable and effective enforcement.

The City of Hermiston should implement automated red light running cameras at high-crash locations and monitor their effectiveness. Law enforcement should continue following established practices for traffic enforcement and continuously educate officers in best practices for traffic enforcement.



Implement prepared concept designs.

Through the development of the Safety Action Plan, alternative concepts were prepared for six locations. These concepts should be included in the Transportation System Plan and then programmed for design and construction.



Continue to coordinate with ODOT.

Collaborate with ODOT to implement identified countermeasures at priority locations on State Highways and continue to work with ODOT to identify other opportunities on State Highways, such as monitoring the planned roundabout at the U.S. 395/Punkin Center Road intersection and using lessons learned from it to install roundabouts at other locations on and off State Highways.



Monitor progress.

Several performance measures are provided in this section (see **Performance metrics**). The City may also consider implementing a community feedback system for safety concerns. The action items in this plan should also be reviewed periodically to assess performance and identify next steps.

Once these near-term actions are complete, the City should assess the Plan and the identified medium to long-term items in the Strategy Development Memo, in Appendix B, to determine whether to continue moving forward with those actions or to update the Plan and develop and prioritize new actions.

Performance metrics

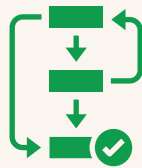
Performance metrics help the City assess the progress it is making toward its long-term vision and interim target, as well as to evaluate the extent to which it is implementing the Plan. Three categories of performance metrics will help Hermiston track the effectiveness of its interventions:



Action-based measures

focus on the actions taken by the City and its partners to support this Plan's strategies.

- Number of safety projects implemented.
- Actions from this plan that have been completed (and level of progress made on those that are in-process).



Outcome-based measures

track changes in the number of fatal and serious injury crashes.

- Number of fatalities.
- Number of serious injuries.
- Number of fatal and serious injury crashes by each emphasis area.
- Number of all injury crashes by each emphasis area.



Site-based measures focus on changes resulting from a particular project.

These should be responsive to project goals. For example, a project intending to manage operating speeds should include performance measures related to operating speed, like the 85th or 50th percentile speeds.

Table 4. FSI Crash Performance Measure

| Performance Measure | Baseline (2013 – 2021 Average) | Current Values* | 2045 Goal |
|--|--------------------------------|-----------------|-----------|
| Fatal and Serious Injury (FSI) Crashes | 6 | | 3 |

Table 4. FSI Emphasis Area Crash Performance Measures

| Performance Measure | Baseline (2018 – 2021 Average) | Current Values* |
|---|--------------------------------|-----------------|
| FSI Crashes Involving Impairment | 2 | |
| FSI Pedestrian and Bicyclist Crashes | 1 | |
| FSI Intersection Crashes | 4 | |
| FSI Turning Movement, Angle, and Rear-End Crashes | 4 | |
| FSI Crashes Involving an Unbelted Occupant | 1 | |

Table 4. All Injury Emphasis Area Crash Performance Measures

| Performance Measure | Baseline (2018 – 2021 Average) | Current Values* |
|--|--------------------------------|-----------------|
| Injury Crashes Involving Impairment | 8 | |
| Injury Pedestrian and Bicyclist Crashes | 6 | |
| Injury Intersection Crashes | 64 | |
| Injury Turning Movement, Angle, and Rear-End Crashes | 87 | |
| Injury Crashes Involving an Unbelted Occupant | 6 | |

*Current values should be a 3-5 year rolling average.

Further funding

Some key funding sources for the City to consider in implementing the near-term actions include:

The **Infrastructure Investment and Jobs Act (IIJA)**, also known as the **Bipartisan Infrastructure Law (BIL)**, established the Safe Streets and Roads for All (SS4A) program. This program funded the development of this Safety Action Plan. Since this Plan meets all the requirements set forth in the [SS4A Self-Certification Eligibility checklist](#), it can be used to apply for further funding to support [Planning and Demonstration Activities](#) and [Implementation](#).

The **All Roads Transportation Safety (ARTS) Program** aims to address safety on all public roads in Oregon through the implementation of countermeasures on the ODOT-approved countermeasure list. The ODOT ARTS program is the implementation of the Highway Safety Improvement Program (HSIP) in Oregon. Many of the countermeasures identified in the strategy toolbox can be funded by the ARTS program for implementation at crash hotspots and locations within systemic focus areas.

The **Oregon Safe Routes to School (SRTS)** provides funding for two main purposes: construction and education and technical assistance.

A Hermiston for generations to come

Future generations will benefit from the choices we make today. As Hermiston continues to grow, the choices we make next will determine how we live in our shared community. By implementing the strategies and recommendations outlined in this plan, Hermiston can realize a community with zero fatal and serious injury crashes, enhanced mobility, and healthy transportation options for people walking, driving, biking, and rolling.

Hermiston is already a sweet place to live. This Safety Action Plan provides the foundations for improving roadway safety and ensuring that Hermiston stays sweet long into the future.



