



Resource Management Agency COUNTY OF TULARE AGENDA ITEM

BOARD OF SUPERVISORS

KUYLER CROCKER
District One

PETE VANDER POEL
District Two

AMY SHUKLIAN
District Three

EDDIE VALERO
District Four

DENNIS TOWNSEND
District Five

AGENDA DATE: October 6, 2020

Public Hearing Required	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Scheduled Public Hearing w/Clerk	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Published Notice Required	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Advertised Published Notice	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Meet & Confer Required	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Electronic file(s) has been sent	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Budget Transfer (Aud 308) attached	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Personnel Resolution attached	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s)	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

CONTACT PERSON: Celeste Perez PHONE: (559) 624-7010

SUBJECT: Authorize the Submission of Six (6) Grant Applications for Cycle 10 of the Highway Safety Improvement Program

REQUEST(S):

That the Board of Supervisors:

1. Authorize the submission of six (6) applications for funding from Cycle 10 of the Highway Safety Improvement Program with an estimated total project cost of \$4,480,800; and
2. Authorize the Resource Management Agency Director, or designee, to sign the grant applications; and
3. Authorize and direct the Resource Management Agency Director, or designee, to act on the County's behalf in all matters pertaining to these applications; and
4. Authorize and direct the Resource Management Agency Director, or designee, to submit Funds Requests and other program-supporting documentation.

SUMMARY:

The Highway Safety Improvement Program (HSIP) is a federal funding source administered by the Federal Highway Administration (FHWA) through the California Department of Transportation (Caltrans) as part of the Moving Ahead for Progress in the Twenty First Century (MAP-21) Act. The total funds available statewide for HSIP Cycle 10 is estimated at \$220 million. Senate Bill 137 allows the exchange of state funds with federal funds. It is expected that State funds will be used for all projects selected for funding in HSIP Cycle 10.

Local agencies are eligible to apply for HSIP grant funding to implement traffic

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collision countermeasures to reduce the frequency and severity of traffic collisions on their maintained roadways. Projects can range from \$100,000 to \$10 million in cost.

Tulare County has been awarded approximately \$11.7 million in HSIP funding for Safety related projects since November 2012 (Cycles 5 through 9).

Projects awarded under previous cycles of the HSIP include the following projects:

- ***Reservation Road Safety Improvement Project (Cycle 5)*** – Guardrail and audible all weather striping improvements - ***Completed***
- ***Various Stop Controlled Intersections (Cycle 5)*** – Signage and striping improvements - ***Completed***
- ***57 Intersection Safety Improvement Project (Cycle 6)*** – Signage, striping and high friction surface treatment improvements - ***Completed***
- ***Avenue 152 Safety Improvements (Cycle 6)*** – Traffic signal, left turn lanes, and rumble strips improvements - ***Completed***
- ***Avenue 146 Corridor Improvement (Cycle 7)*** – Guardrail and rumble strips improvements - ***Completed***
- ***Avenue 328 Corridor Improvement (Cycle 7)*** – Left turn lanes, rumble strips, signage and striping improvements – ***In Design***
- ***Avenue 232 Corridor Improvement (Cycle 7)*** - Left turn lanes, rumble strips, signage and striping improvements – ***In Design***
- ***Drive 134 (Spacer Drive) Corridor Improvement (Cycle 8)*** – Rumble strips, advance flashing beacons, signage and marking improvements - ***Completed***
- ***Avenue 144/Road 96 Roundabout Installation (Cycle 9)*** – Install roundabout at the intersection of Avenue 144 and Road 96 near Tipton, CA – ***In Design***
- ***Install Overhead Red Flashing Beacons (Cycle 9)*** – Install overhead all-way stop flashing beacons at the intersections of Avenue 256/Road 164 and Avenue 240/Road 140 – ***In Design***
- ***East Orange Avenue Pedestrian Crossing Improvements (Cycle 9)*** – Install pedestrian activated rectangular rapid flashing beacons at the school crossing of East Orange Avenue in front of John J. Doyle Elementary School – ***In Design***.

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The two remaining project's from Cycle 7 will be bid out for construction this fiscal year. The Cycle 9 projects are in various stages of design ranging from nearly completed engineering to preliminary design/environmental.

Approximately 75% of the funding for this current cycle (Cycle 10) will be awarded to projects based on a competitive, data driven selection process, primarily based on a benefit/cost analysis in a manner similar to previous HSIP funding cycles. Projects with the highest benefit to cost (B/C) ratio, compared to other competing agencies statewide, will be selected for funding. In this funding allocation method, proposed projects are only successful when a location has a documented history of collisions.

Approximately 25% of the total HSIP funding will be used for projects that have high potential for safety issues, but with no collision history. Thus, B/C ratios are not applicable for this portion of the funding. This "set-aside" results in opening up the criteria for the types of projects that can be submitted for consideration. Each of the set-aside category has a limit for maximum funding per agency. The Cycle 10 set-aside categories include the following:

- Guardrail Upgrades (Up to \$1,000,000 per agency)
- Pedestrian Crossing Enhancements (Up to \$250,000 per agency)
- Installing Edge lines (Up to \$250,000 per agency)
- Set-aside for Tribes (Up to \$250,000 per tribe).

Grant applications are due October 19, 2020. Caltrans expects that the applicants will be notified of successful projects in January of 2021.

The Tulare County Resource Management Agency (RMA) has performed a traffic collision analysis at various locations throughout the County in accordance with the HSIP guidelines and identified the following projects as the highest priority for submission to request HSIP Cycle 10 funding:

Avenue 416 Deceleration Lanes - Project 1

The segment of Avenue 416 from Road 92 (Dinuba City Limits) to Road 120 west of Orosi has been identified as experiencing higher than average collisions. While the collisions are generally spread throughout the corridor, many are concentrated at the very short left-turn pockets that are typically located at quarter-mile intervals. The focus of the selected project is to extend the length of the existing left-turn pockets (24 each) along the segment, excluding the segment through Sultana, which is un-divided. Left-turn pockets will be evaluated, and if appropriate, eliminated, or modified as needed.

A lane that does not provide enough deceleration length and storage space for turning traffic may cause the turn queue to back up into the adjacent through lane. This can contribute to rear-end and sideswipe crashes. Also, when turn lanes are short, and not readily apparent to drivers, it can cause them to make unsafe turns

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over the depressed median. Extending the left turn lanes throughout the corridor will improve the safety and visibility of the left-turn pockets by allowing the majority of deceleration to occur within the limits of the left-turn lanes.

The overall project cost is estimated at approximately \$1,889,000, with a calculated B/C ratio of approximately 5.04. If authorized, this project would require approximately \$188,900 in local match, which would be covered by Road Funds.

Avenue 256/Road 108 Traffic Signal - Project 2

The un-signalized intersection at Avenue 256 & Road 108 was identified as an intersection experiencing higher than average collisions. Based on the identified collisions, and since the intersection meets California Manual on Uniform Traffic Control Devices Warrant 7 "Crash Experience" a traffic signal was identified as the appropriate countermeasure to address crashes. Traffic signals have the potential to reduce the most severe type of crashes (right-angle, left-turn) but will likely cause an increase in rear-end collisions. A reduction in overall injury severity is the largest benefit of a traffic signal installation.

A traffic signal will provide the needed control to improve safety, and efficiently move traffic through the intersection. There is currently left-turn lanes on all approaches, so the signal will operate in a full 8-phase sequence without widening the intersection approaches. Curb ramps will be installed at each corner of the intersection. It is not anticipated that utility relocations, or right of way acquisitions will be required.

The overall project cost is estimated at \$751,000, with a calculated B/C ratio of approximately 5.07. If authorized, this project would be 100% federally funded, with no local match required.

Signalized Intersection Upgrades (Various Locations) – Project 3

Tulare County maintains twenty-three (23) signalized intersections in the unincorporated areas of the County. Collisions were tallied at all of the signalized intersections. The collisions were then evaluated against the countermeasures available for signalized intersections. In an effort to standardize the County's signalized intersections, it was determined that installing flashing beacons as advance warning for signals is the most appropriate countermeasure to implement at existing signalized intersections where they are currently lacking.

This project would include installation of Caltrans Type 15 Flashing Beacon Systems (FBS) in advance of traffic signals at the following intersections:

- Avenue 416/Road 120 (All four approaches)
- Avenue 416/Road 124 (All four approaches)
- Avenue 256/Road 140 (All four approaches)
- Avenue 264/Road 108 (All four approaches)
- Avenue 272/Road 108 (All four approaches)

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- Avenue 328/Road 80 (All four approaches – Upgrade single flashing beacons to double flashing beacons (Caltrans Type 15 FBS).

Advance warning flashing beacons increase driver awareness of an approaching signalized intersection and increase the driver's time to react. Driver awareness of both downstream intersections and traffic control devices is critical to intersection safety. Advance flashing beacons can be used to supplement and call driver attention to intersection control signs. Advance warning beacons can either be hard wired to the signal service or solar powered.

The overall project cost is estimated at approximately \$591,300, with a calculated B/C ratio of approximately 7.78. If authorized, this project would be 100% federally funded, with no local match required.

Earlimart Sutter Avenue Pedestrian Crossing Enhancements – Project 4

This project would utilize the Pedestrian Crossing Enhancements HSIP Set-Aside component to improve the crossing of Sutter Avenue at Earlimart Middle School. This crossing was selected for enhancements based on the existing location and condition of the crosswalk. The following pedestrian crossing enhancements features have been selected for this project:

- Relocating the existing crosswalk along Sutter Avenue to the east leg of the North Spring Road intersection
- Installing Synchronized Flashing Beacons as advance warning devices
- Installing Rectangular Rapid Flashing Beacons (RRFB) at the crosswalk
- Upgrade crosswalk markings
- Installing curb ramps at the new crossing location.

The overall project cost is estimated at approximately \$249,500. If authorized, this project would be 100% federally funded, with no local match required.

Guardrail Upgrades Various Locations – Project 5

This project would utilize the Guardrail Upgrades HSIP Set-Aside component to improve the guard railing and/or end treatments at up to twelve (12) locations throughout the County. The following locations are being considered for this application:

- Road 236 north of Avenue 104 – Replace bridge approach railing
- Road 140/Avenue 272 – Replace bridge approach railing
- Burnett Road/Avenue 152 – Replace railing around radius at southwest corner
- Avenue 144 Tule River Crossing east of Route 43 – Replace bridge approach and departure railing
- Road 196 Yokohl Creek Crossing south of Lort Drive – Replace bridge approach and departure railing
- Road 196 Lane Slough Crossing north of Lort Drive – Replace bridge

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- approach and departure railing
- Road 12 RxR Crossing north of Route 99 – Replace bridge approach railing
- Road 228 Yokohl Creek Crossing south of Yokohl Drive – Replace bridge approach and departure railing.

Each location will be evaluated further to consider environmental constraints, physical constraints, adjacent roadway average daily traffic, right of way and access roads. The overall project cost is estimated at approximately \$750,000. If authorized, this project will be 100 percent federally funded.

Install Edge lines Various Locations – Project 6

This project would utilize the Installing Edge lines HSIP Set-Aside component to update/install edge line striping at selected locations throughout the County. The following locations are being considered for this application:

- Road 100 from Visalia City Limits to 0.50 mile south of Avenue 256 – Install 6-inch Edge lines
- Road 192 from South County Line to Avenue 152 – Upgrade edge lines to 6-inches, restripe centerline.

Additional locations are also being considered for this set-aside, and will be included in the application if deemed feasible. It is the intent that striping work completed under this set aside would be of a more durable type than paint, such as sprayable thermoplastic, with enhanced visibility for wet or night conditions. The maximum project cost for this set aside is \$250,000. If authorized, this project will be 100 percent federally funded.

FISCAL IMPACT/FINANCING:

There is no Net County Cost to the General Fund.

The cost of preparing the preliminary analysis and application submissions are not reimbursable under the HSIP program; however, this cost is budgeted in the current fiscal year Road's Budget.

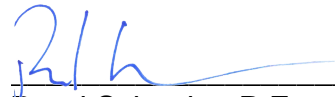
Based on the project's maximum Federal Reimbursement Ratio and the proposed countermeasures being utilized, a local match will be required to cover a percentage of the project's overall cost. If the proposed projects are awarded, a total of \$188,900 will be required as local match. Local Road Funds will be utilized to cover the local match.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

Safety and Security and Economic Well Being – The Board's authorization to submit Highway Safety Improvement Grant applications helps fulfill this initiative by ensuring the safety of all users of the County's roadway system, including pedestrians, bicyclists, motorists, and the mobility impaired population.

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ADMINISTRATIVE SIGN-OFF:



Reed Schenke, P.E.
Director

cc: County Administrative Office

Attachment(s) Attachment A – HSIP Cycle 10 Project Locations Map (Countywide)
Attachment B – HSIP Cycle 10 Individual Project Vicinity Maps

BEFORE THE BOARD OF SUPERVISORS COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF AUTHORIZE THE)
SUBMISSION OF SIX (6) GRANT) Resolution No. _____
APPLICATIONS FOR CYCLE 10 OF THE)
HIGHWAY SAFETY IMPROVEMENT)
PROGRAM)

UPON MOTION OF SUPERVISOR _____, SECONDED BY
SUPERVISOR _____, THE FOLLOWING WAS ADOPTED BY THE
BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD ON OCTOBER 6,
2020, BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST: JASON T. BRITT
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: _____
Deputy Clerk

* * * * *

1. Authorized the submission of six (6) applications for funding from Cycle 10 of the Highway Safety Improvement Program with an estimated total project cost of \$4,480,800; and
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3. Authorized and directed the Resource Management Agency Director, or designee, to act on the County's behalf in all matters pertaining to these applications; and
4. Authorized and directed the Resource Management Agency Director, or designee, to submit Funds Requests and other program-supporting documentation.

Attachment A

HSIP Cycle 10 Project Locations Map (Countywide)



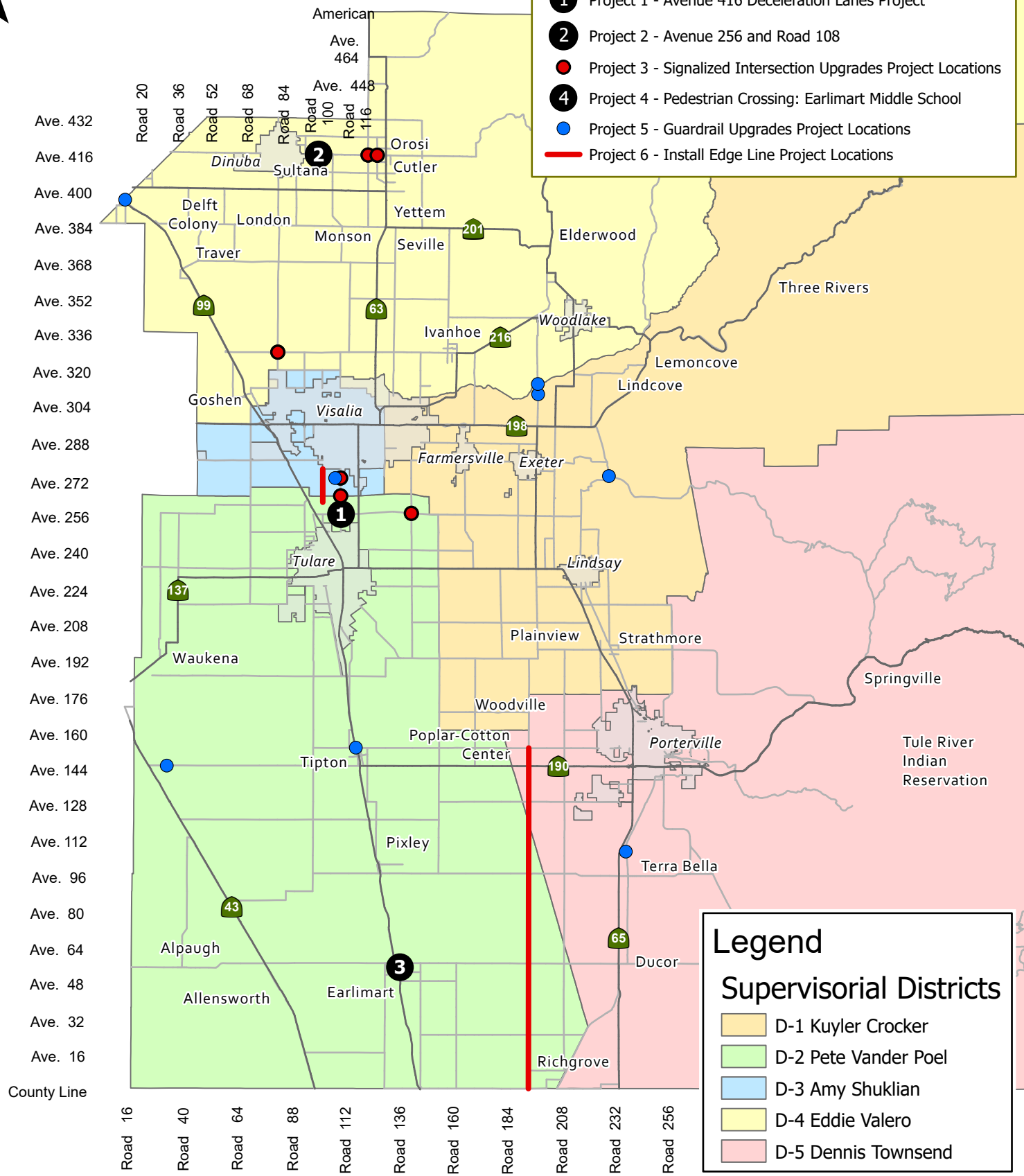
Legend

- ① Project 1 - Avenue 416 Deceleration Lanes Project
- ② Project 2 - Avenue 256 and Road 108
- Project 3 - Signalized Intersection Upgrades Project Locations
- ④ Project 4 - Pedestrian Crossing: Earlimart Middle School
- Project 5 - Guardrail Upgrades Project Locations
- Project 6 - Install Edge Line Project Locations

Legend

Supervisorial Districts

- D-1 Kuyler Crocker
- D-2 Pete Vander Poel
- D-3 Amy Shuklian
- D-4 Eddie Valero
- D-5 Dennis Townsend

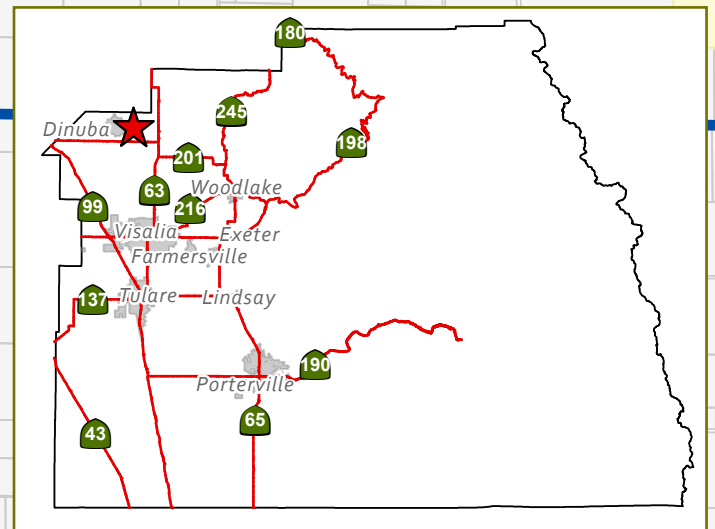
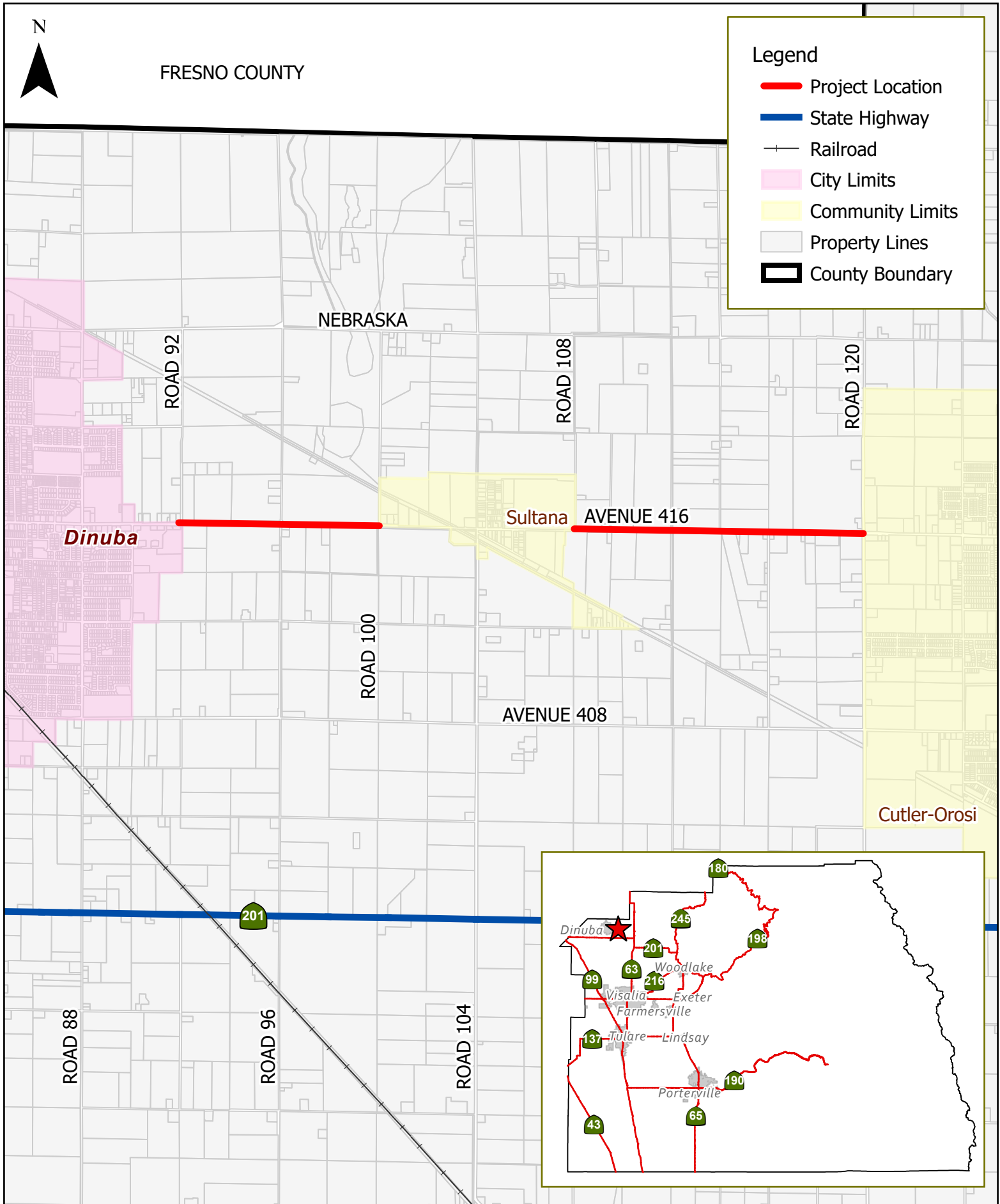


0 2.5 5 10 15 20 Miles

HSIP Cycle 10 Proposed Project Locations
Vicinity Map

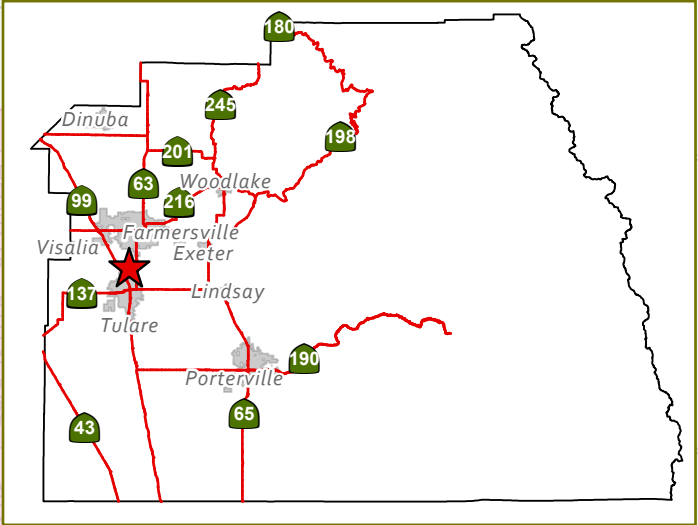
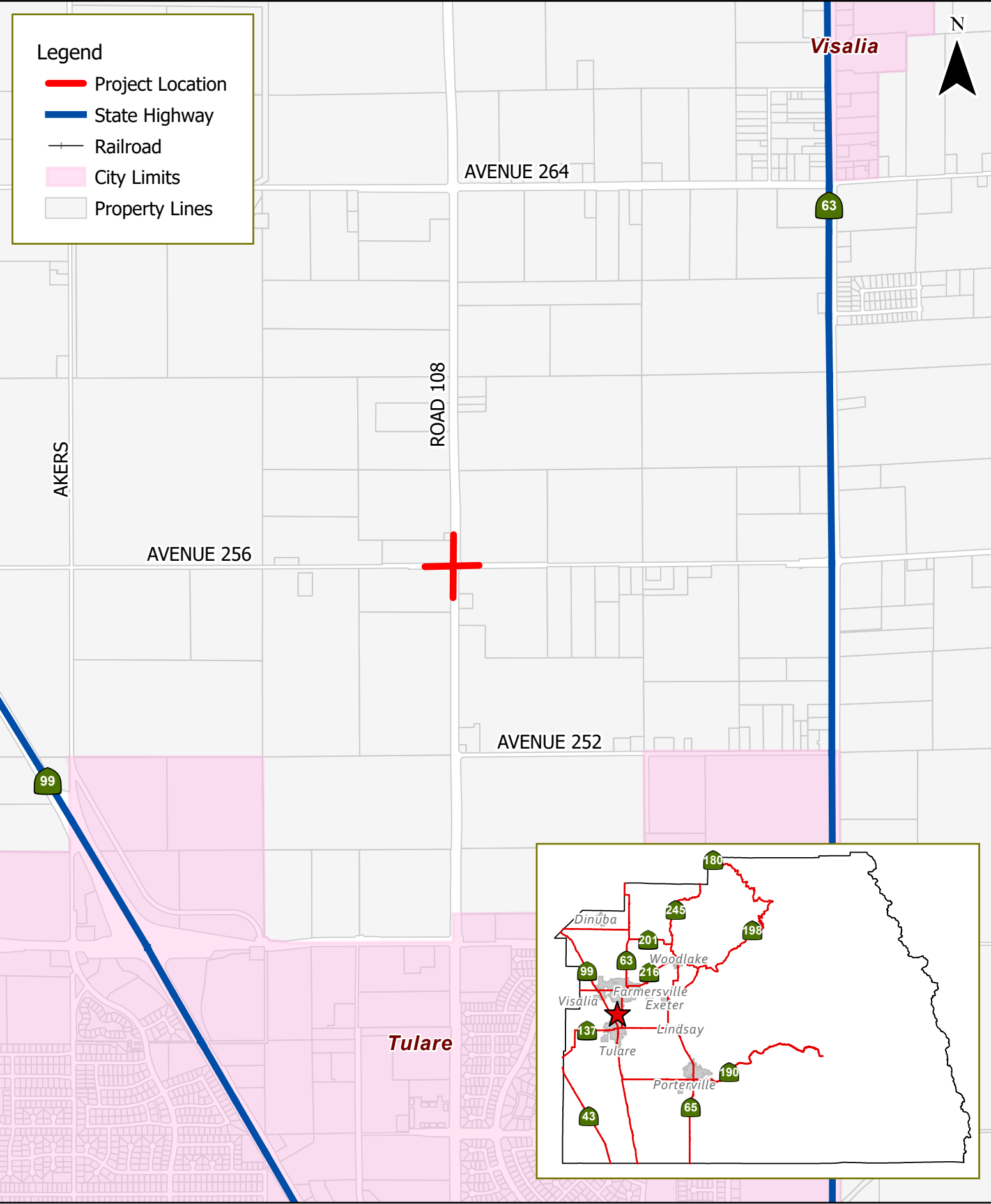
Attachment B

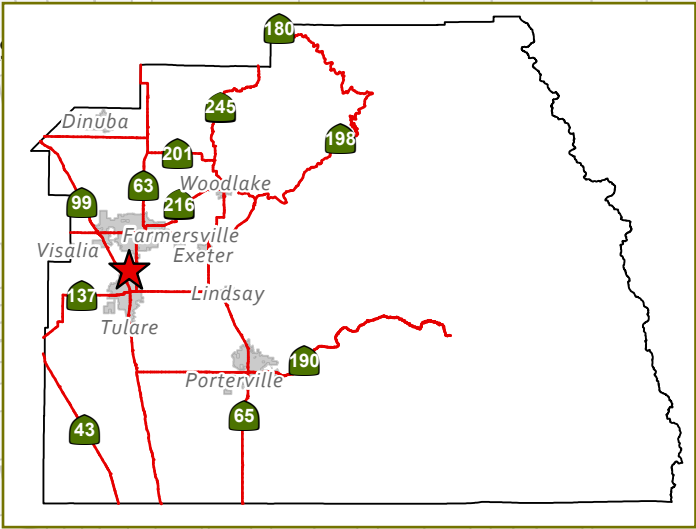
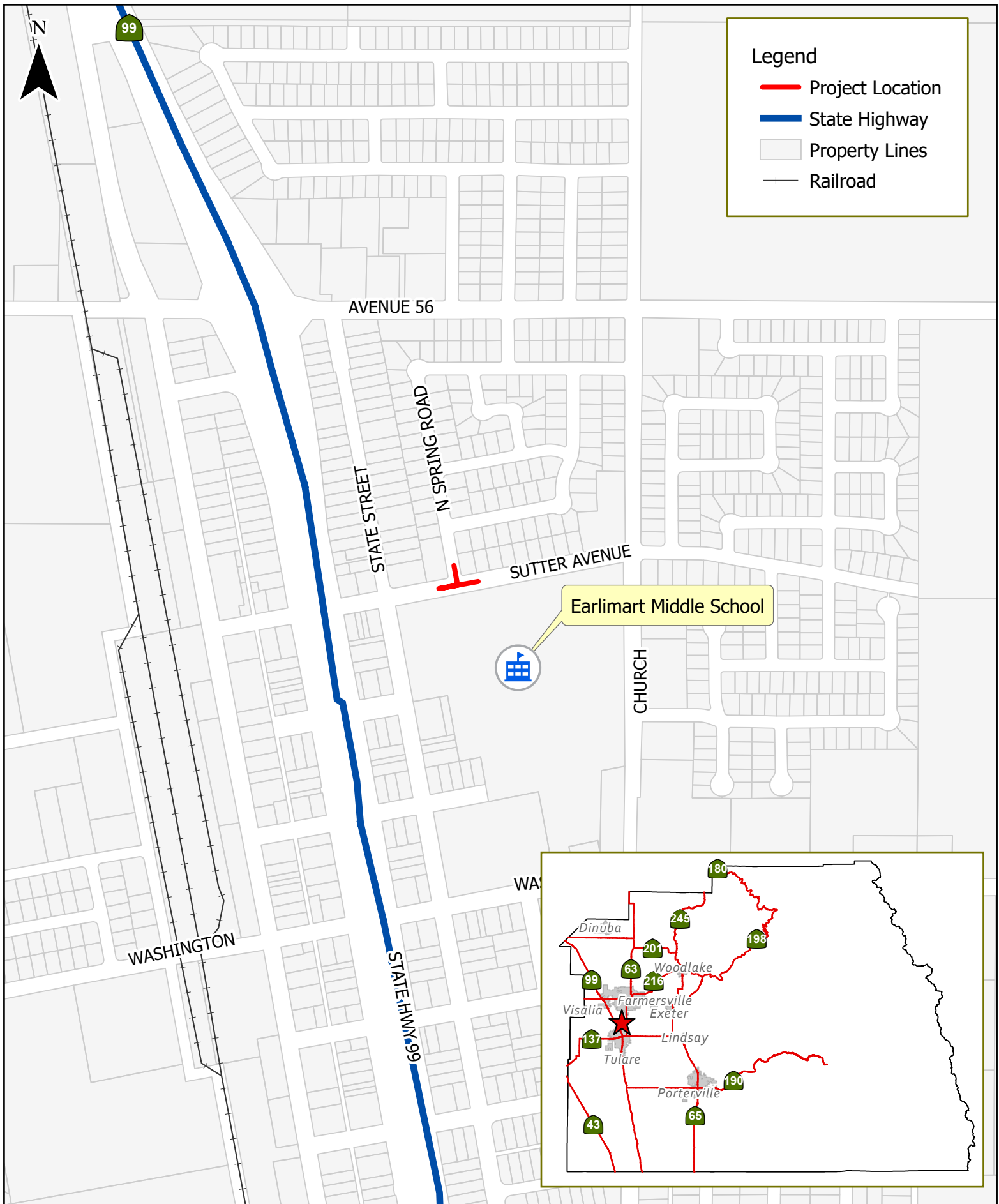
HSIP Cycle 10 Individual Project Vicinity Maps



0 1,000 2,000
Feet

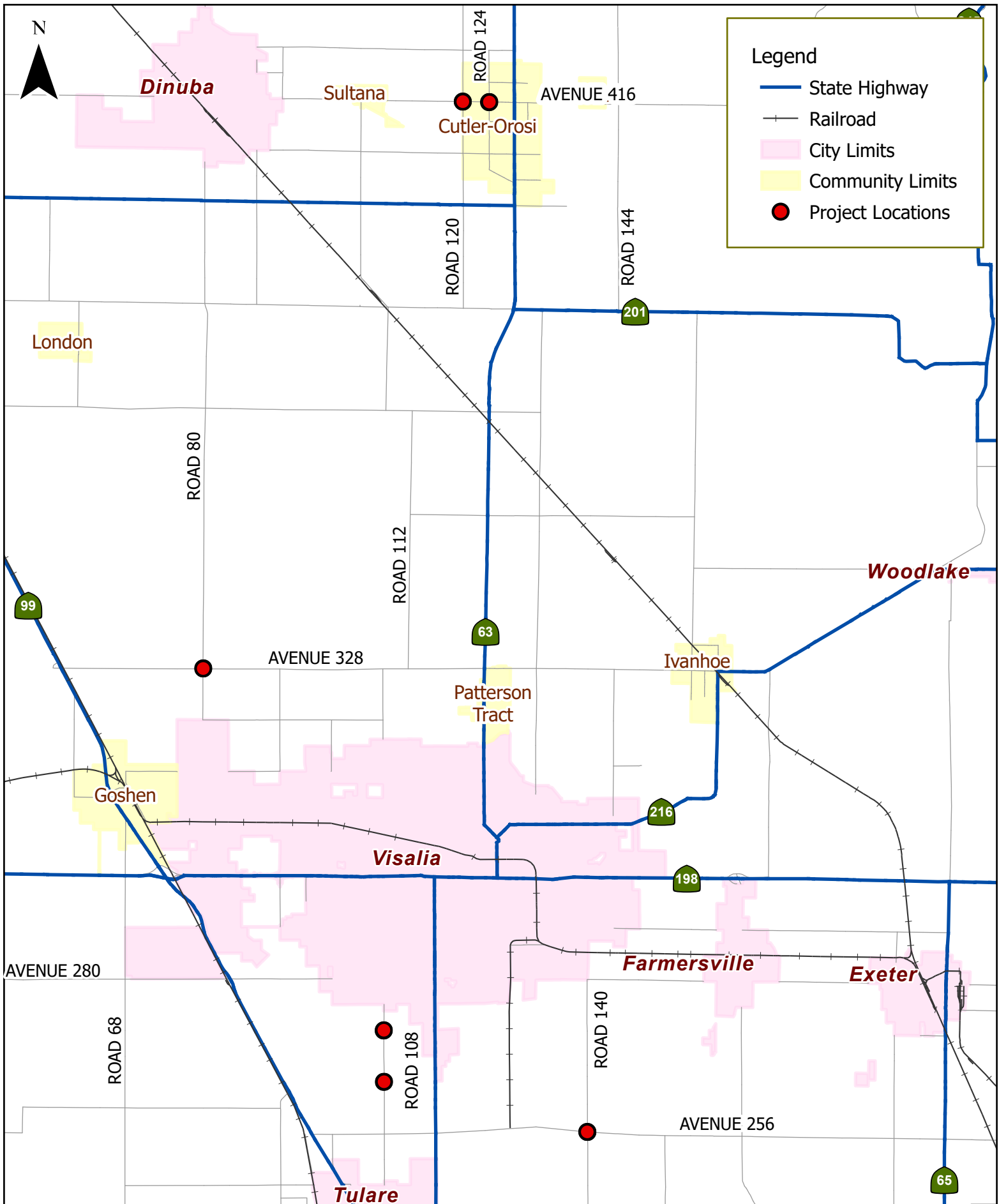
Avenue 416 Deceleration Lanes Improvement Project
Vicinity Map





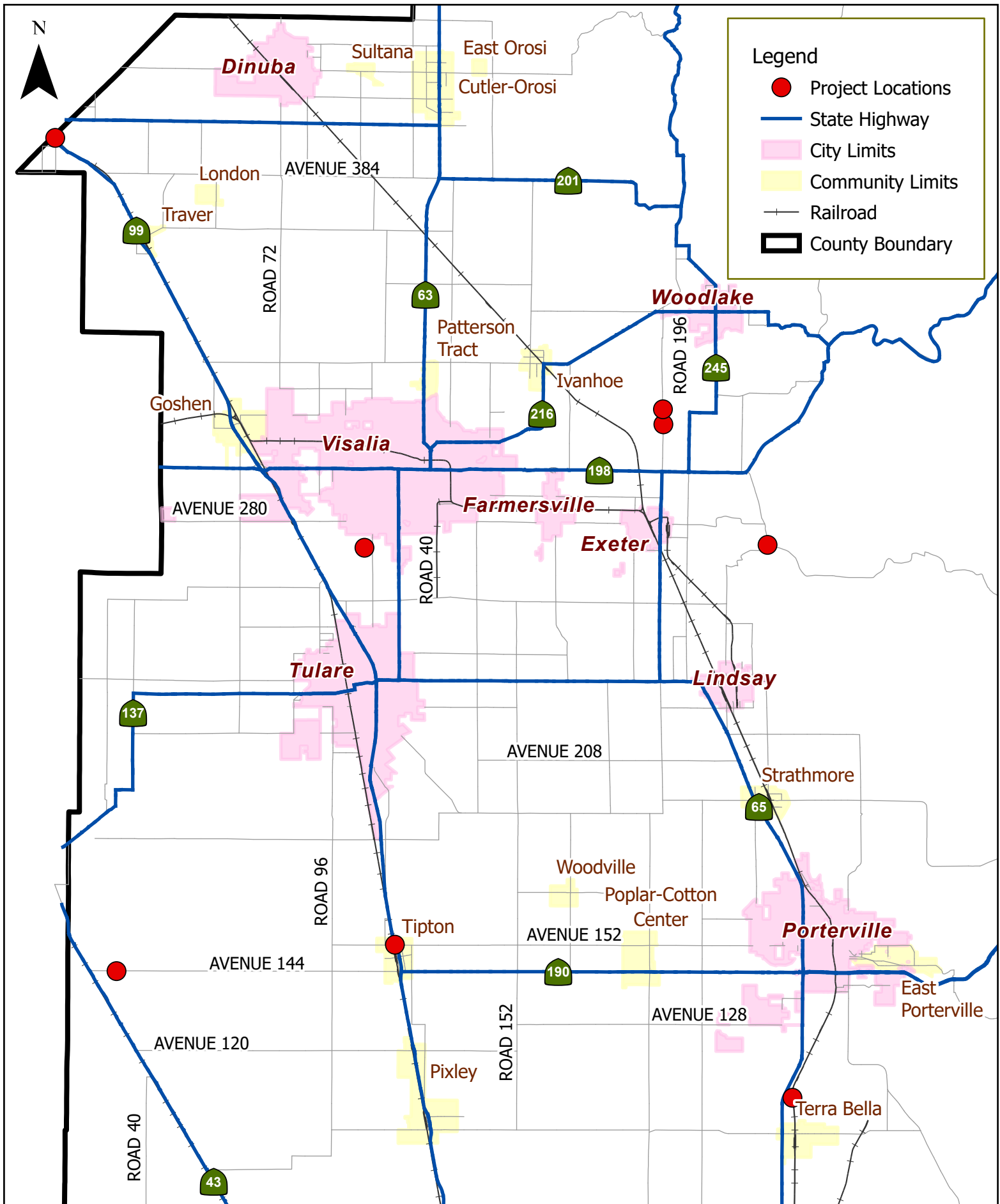
0 1,000 2,000
Feet

Earlimart Sutter Avenue Pedestrian Crossing Improvements
Vicinity Map



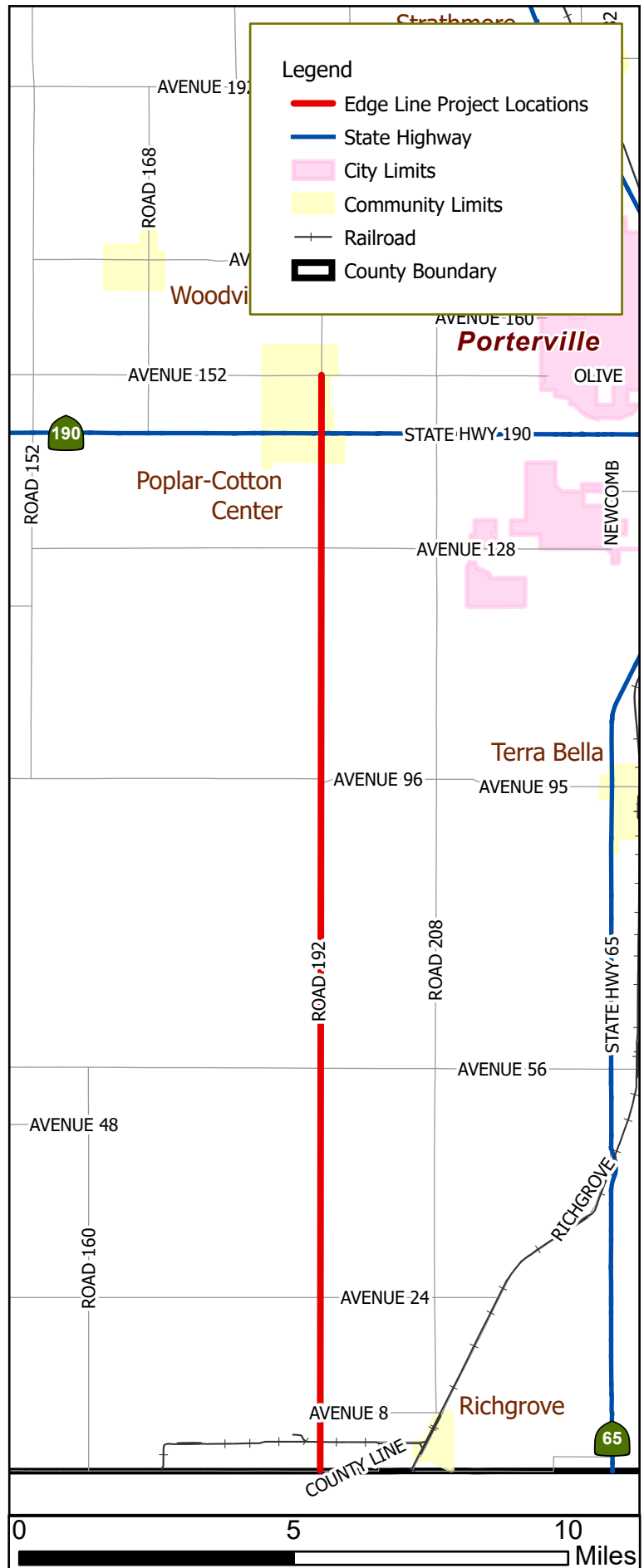
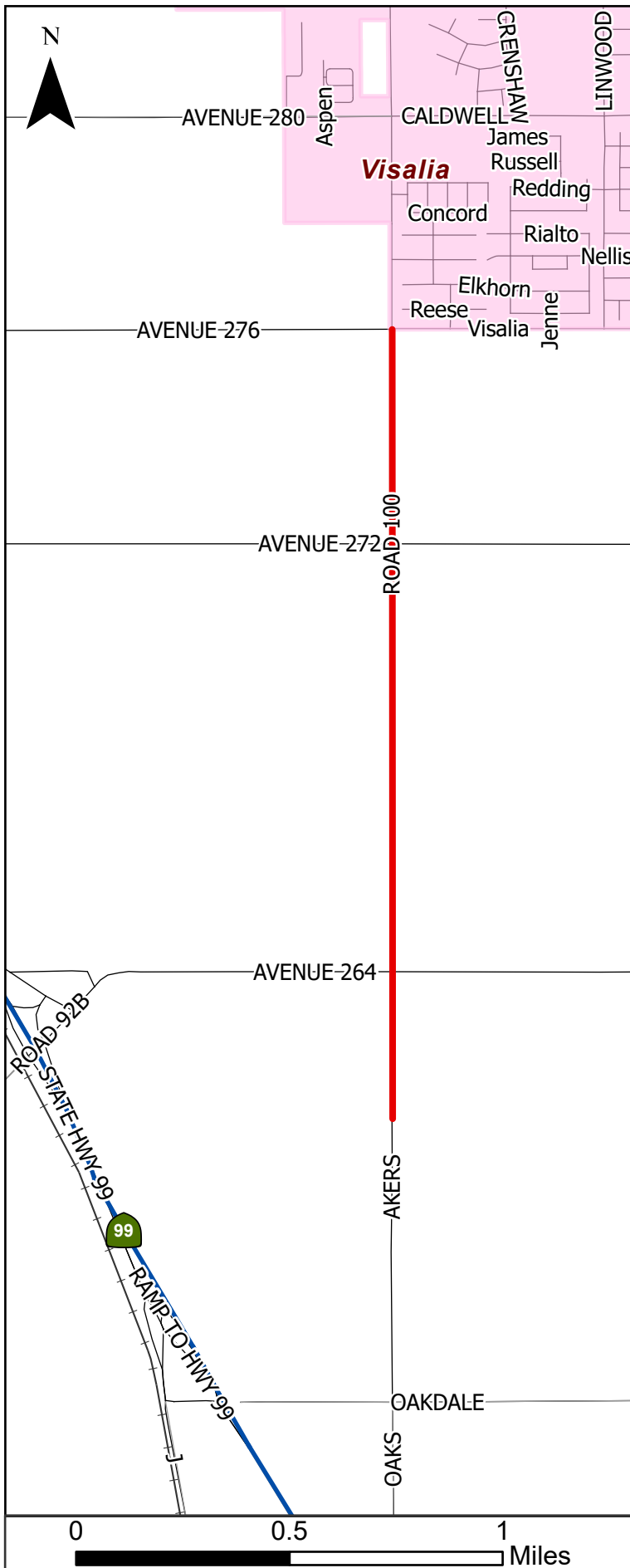
0 2 4
Miles

Signalized Intersection Upgrades (Various Locations)
Vicinity Map



0 4 8
Miles

Guardrail Upgrades Various Locations
Vicinity Map



Edge Line Project Various Locations
Vicinity Map