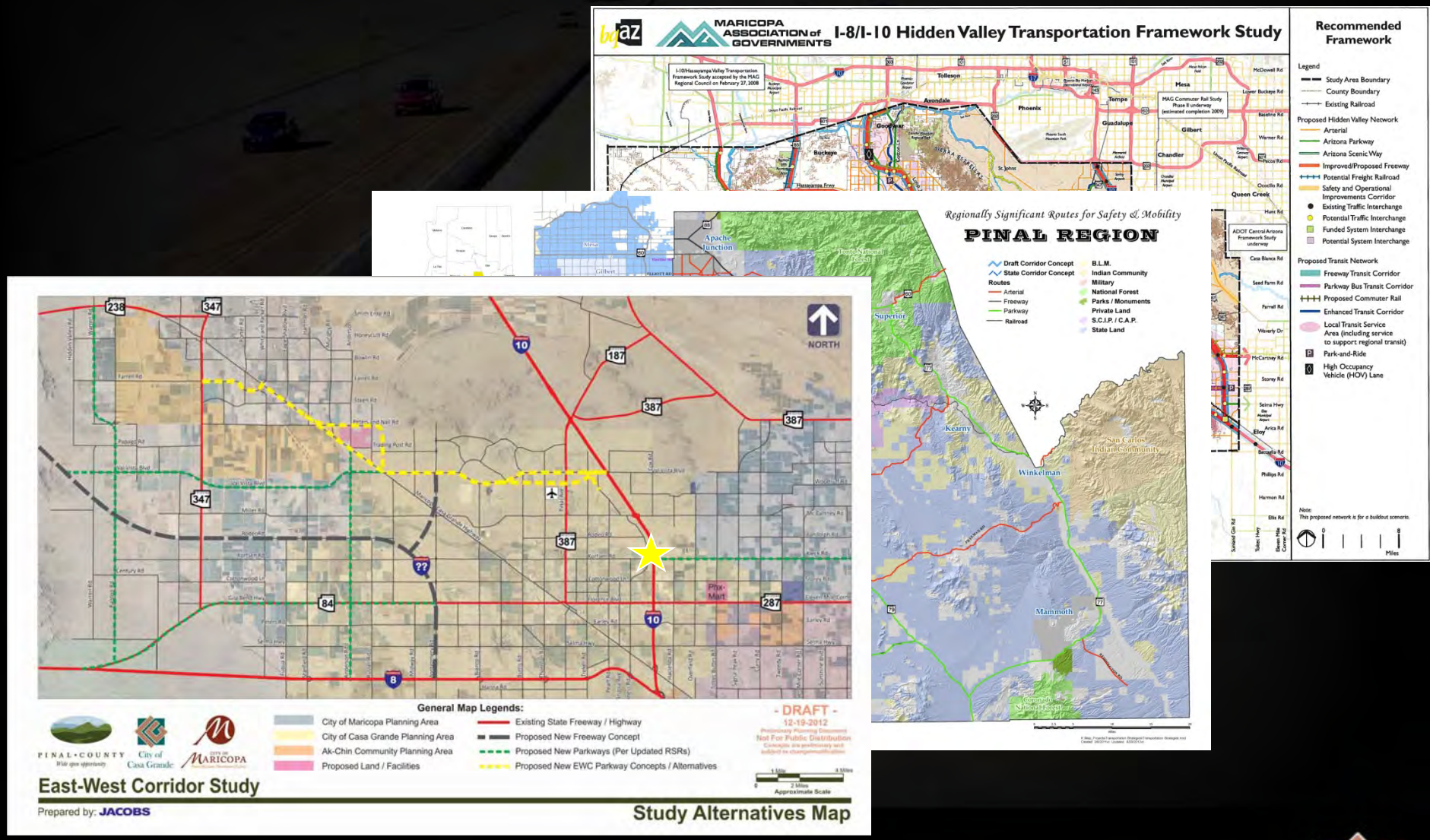
I-10/Kortsen Road Traffic Interchange Project
Public Open House

Wednesday, July 23, 2014, 5:30 PM
City of Casa Grande
Council Chambers
510 E. Florence Blvd.
Casa Grande, AZ 85122

JACOBS

Project Goals and Objectives



I-10/Kortsen Road Traffic Interchange

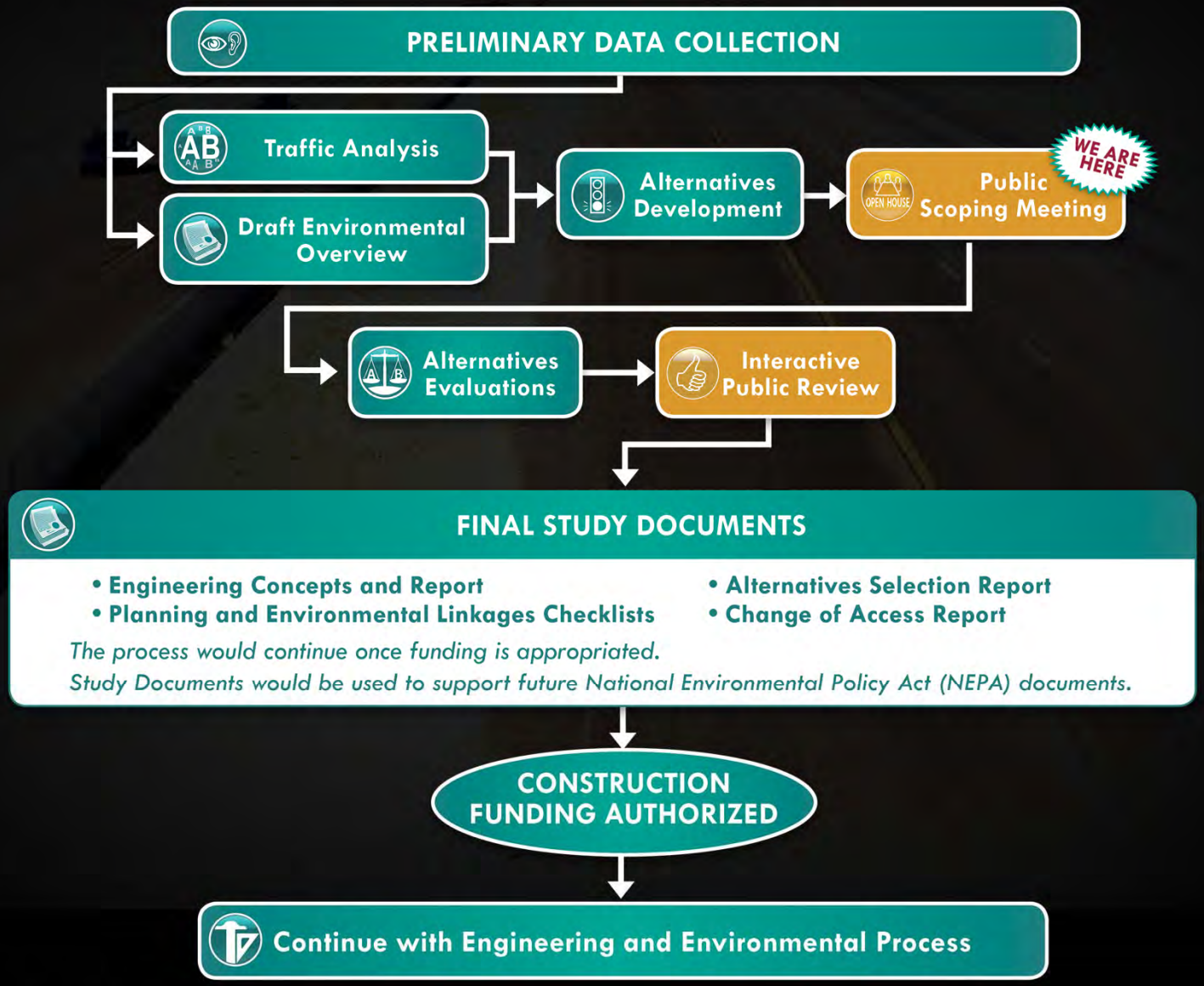
Project Goals and Objectives

The Kortsen traffic interchange will provide:

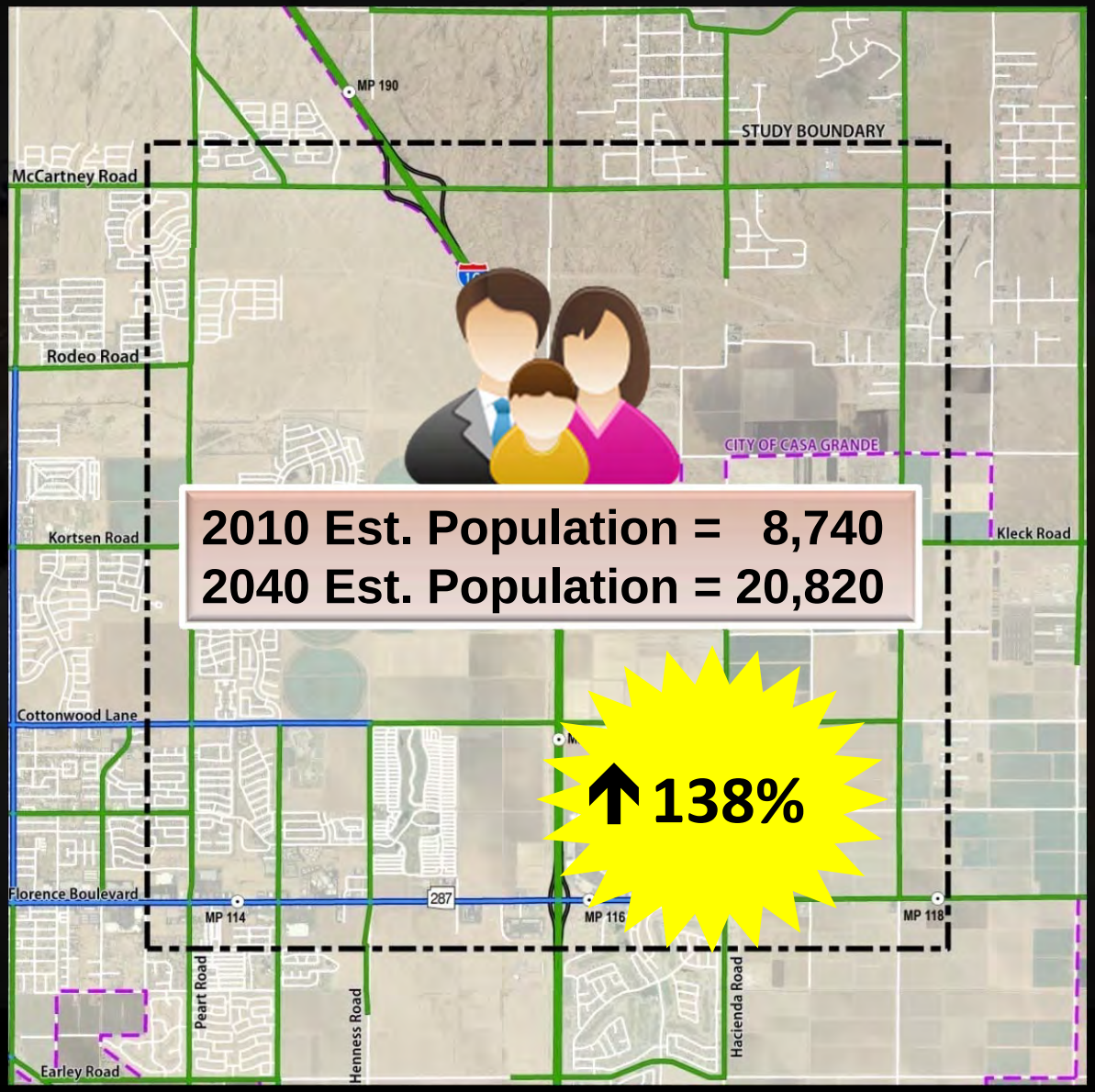
- Linkages between the east/west sides of I-10
- Uncongested local alternative to Florence Blvd.
- Improved access to Central Pinal County
- Smart Growth for transit/multi-modal opportunities

I-10/Kortsen Road Traffic Interchange

Process Overview



Study Area Population Forecast

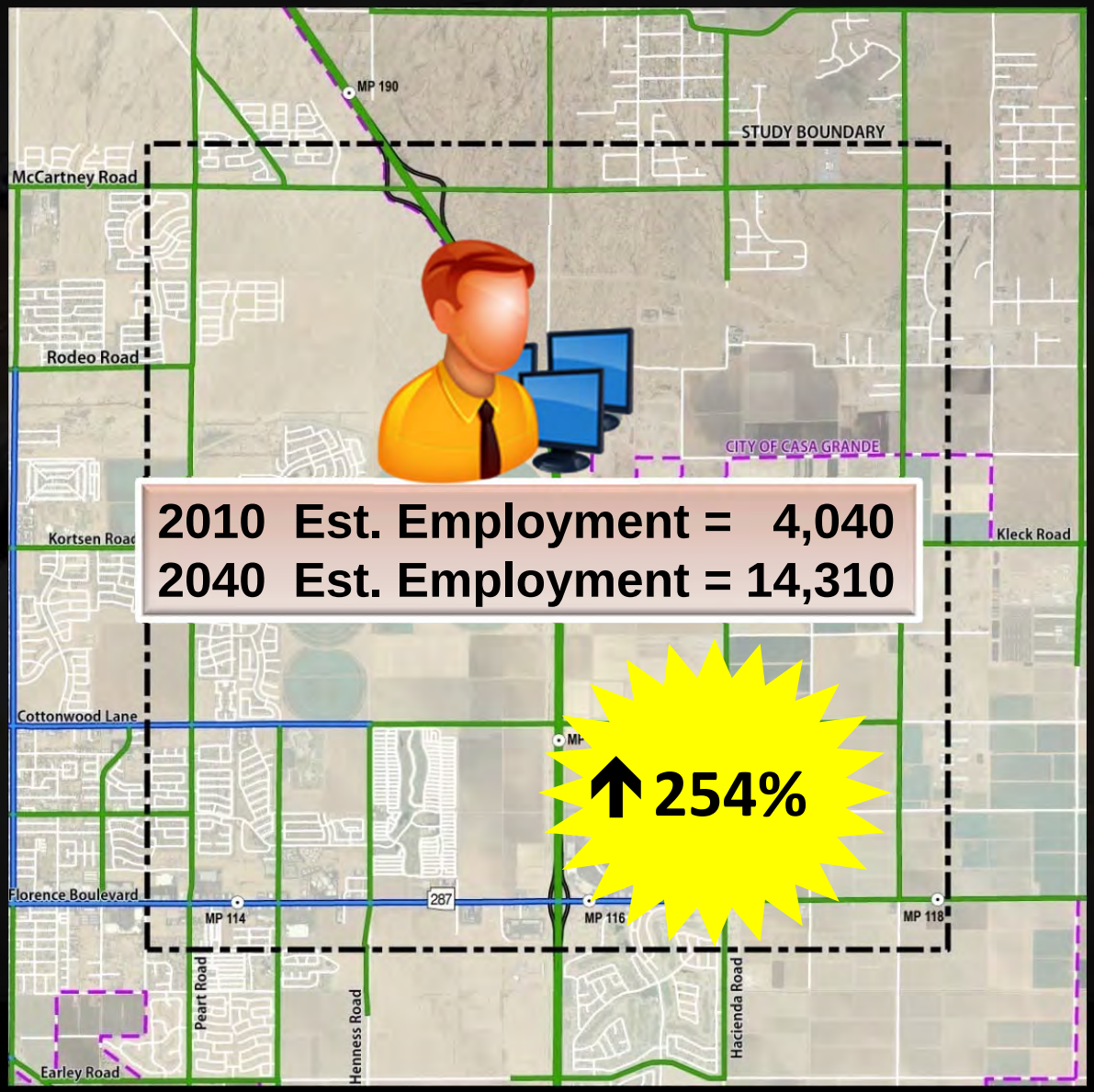


2010 Est. Population = 8,740
2040 Est. Population = 20,820

↑138%

I-10/Kortsen Road Traffic Interchange

Study Area Employment Forecast

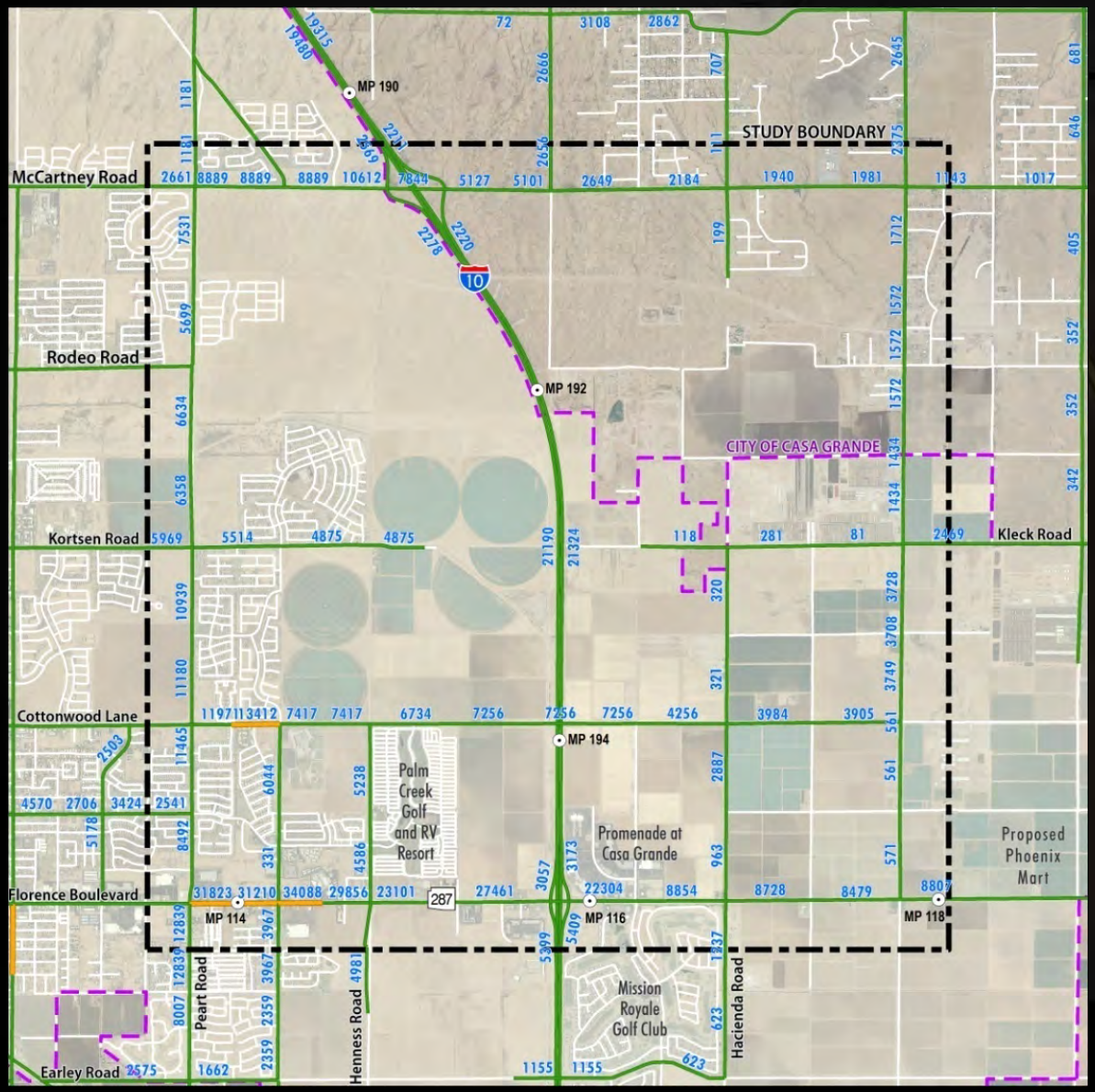


2010 Est. Employment = 4,040
2040 Est. Employment = 14,310

↑ 254%

I-10/Kortsen Road Traffic Interchange

Today's Levels of Congestion



Levels Of Congestion

Low

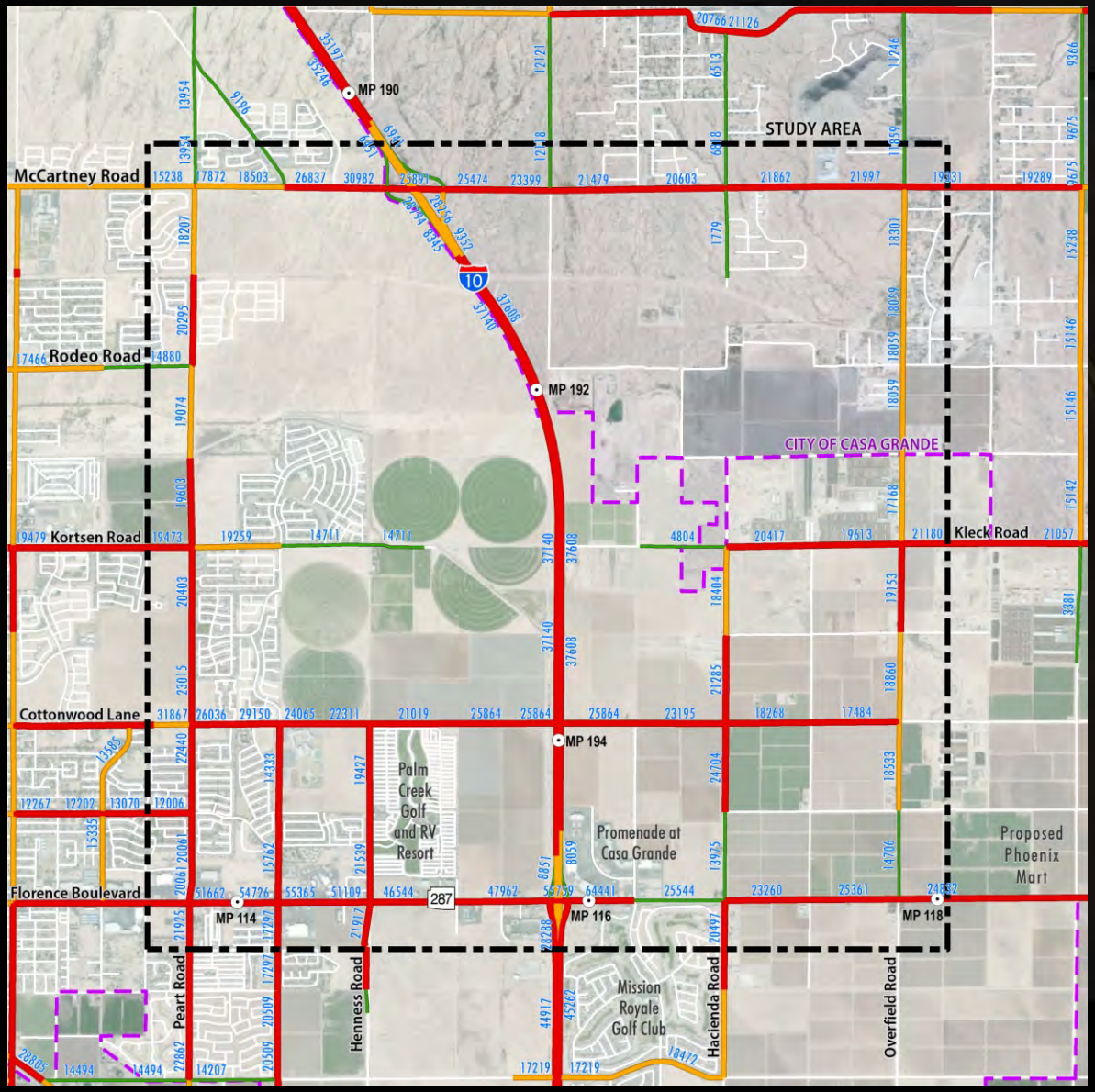
Moderate

High

XXX Traffic Volumes

I-10/Kortsen Road Traffic Interchange

2040 Level of Congestion (No improvements)



Levels Of Congestion

Low

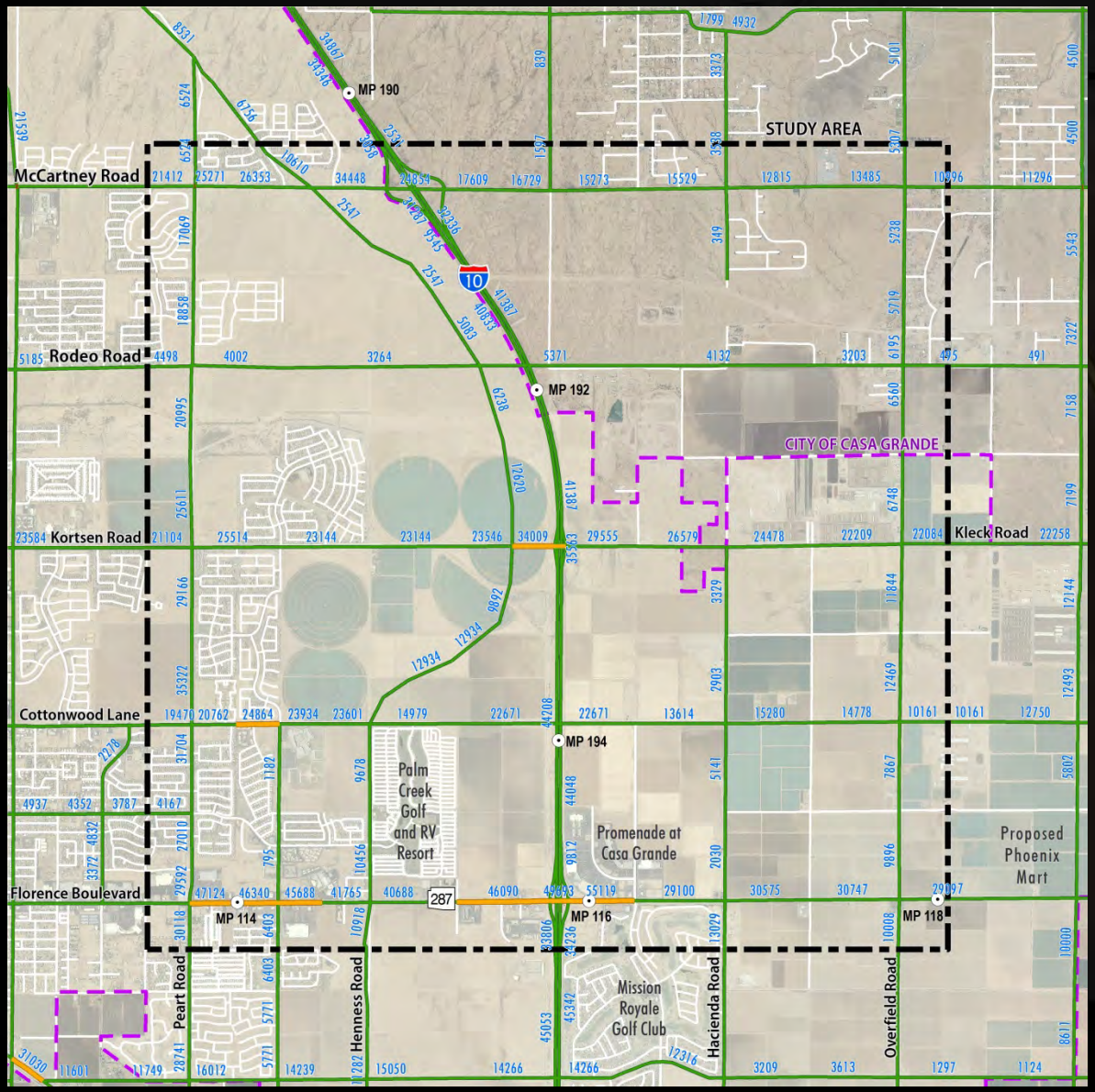
Moderate

High

XXX Traffic Volumes

I-10/Kortsen Road Traffic Interchange

2040 Level of Congestion (with improvements)



Levels Of Congestion

Low

Moderate

High

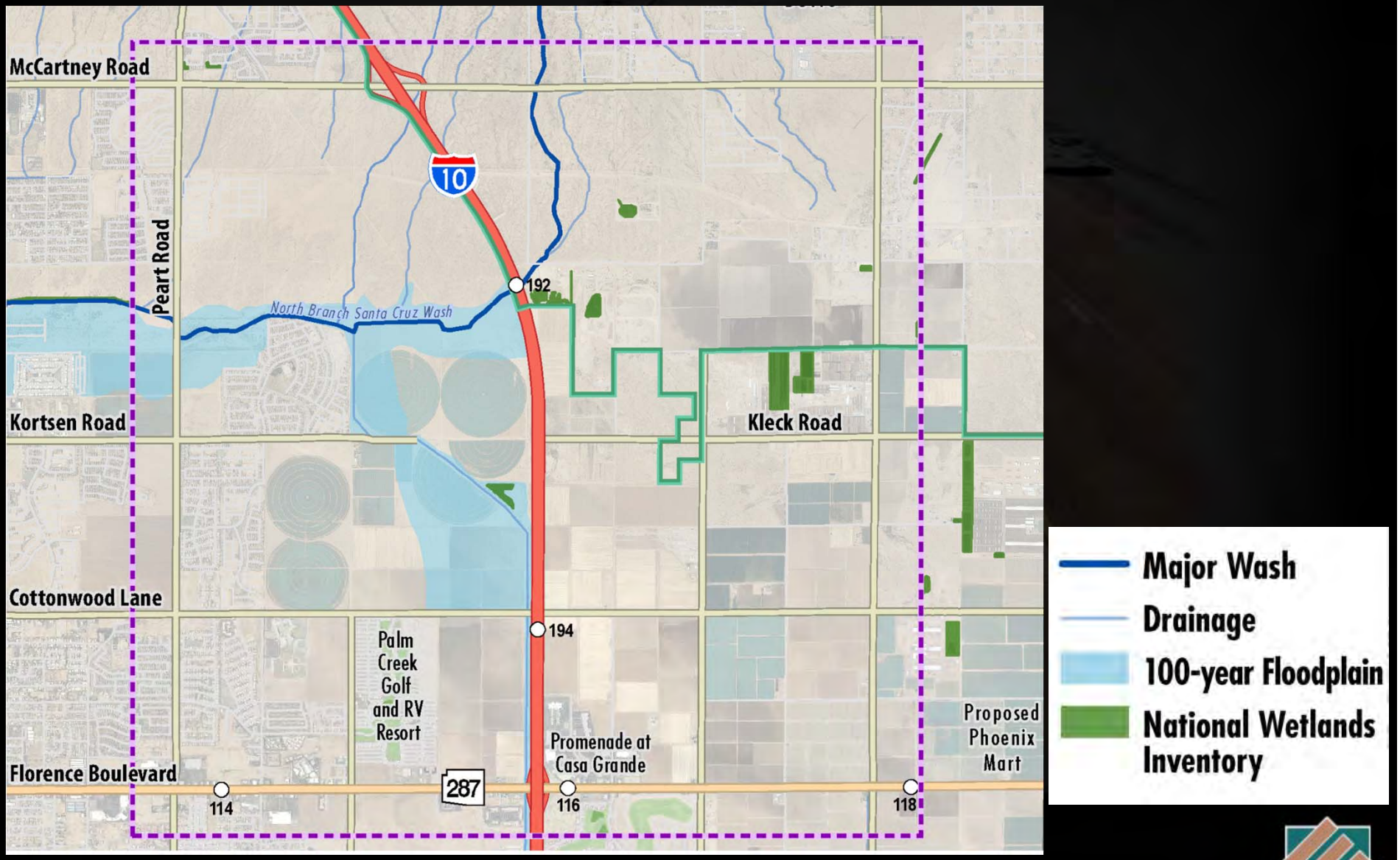
XXX Traffic Volumes

I-10/Kortsen Road Traffic Interchange

Environmental Elements

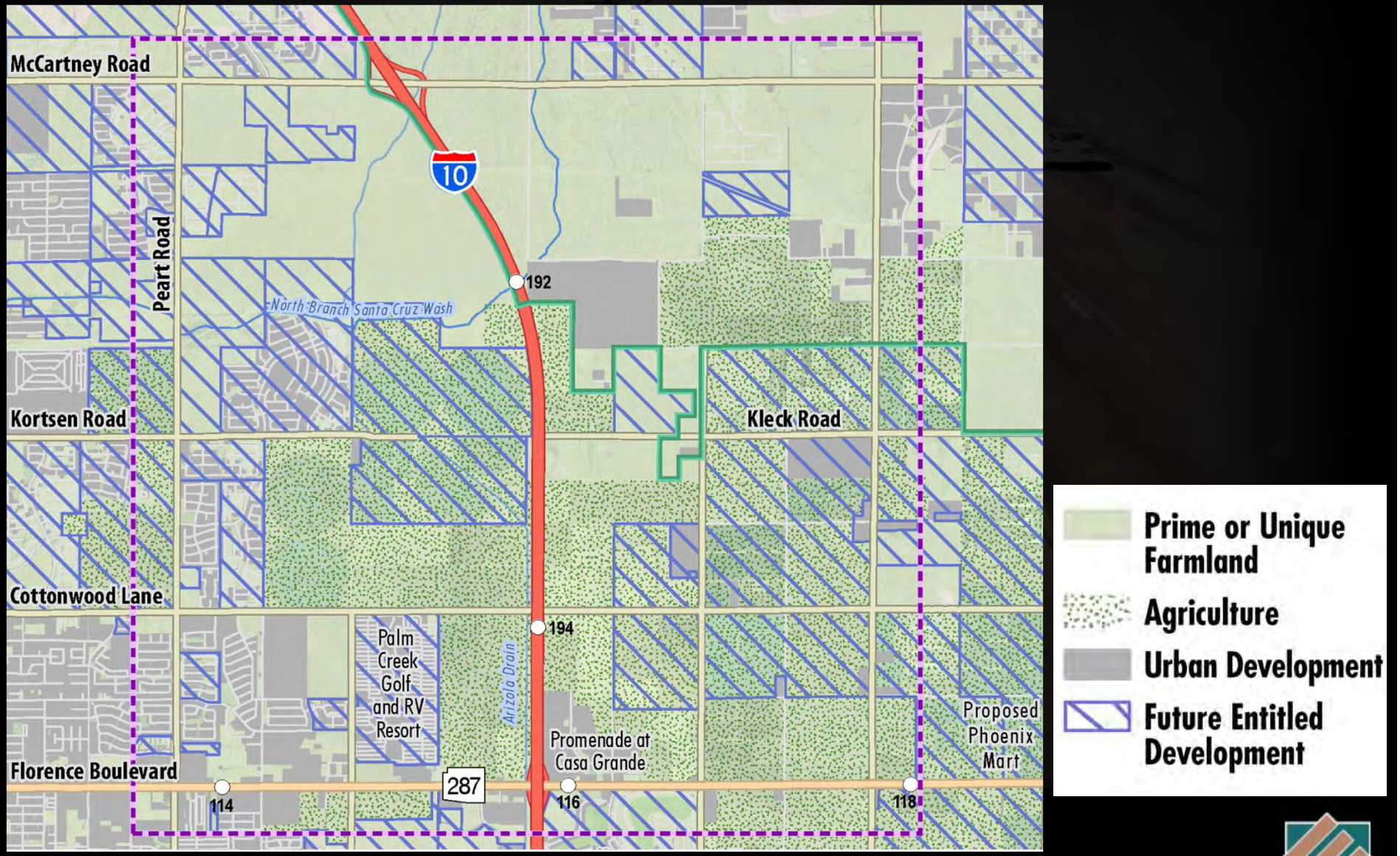
- Prepared an Environmental Overview
  - Describes the existing environment
  - Identifies potential issues in the study area
  - Contributes to decision-making at the alternatives analysis stage

Wetlands and Floodplains



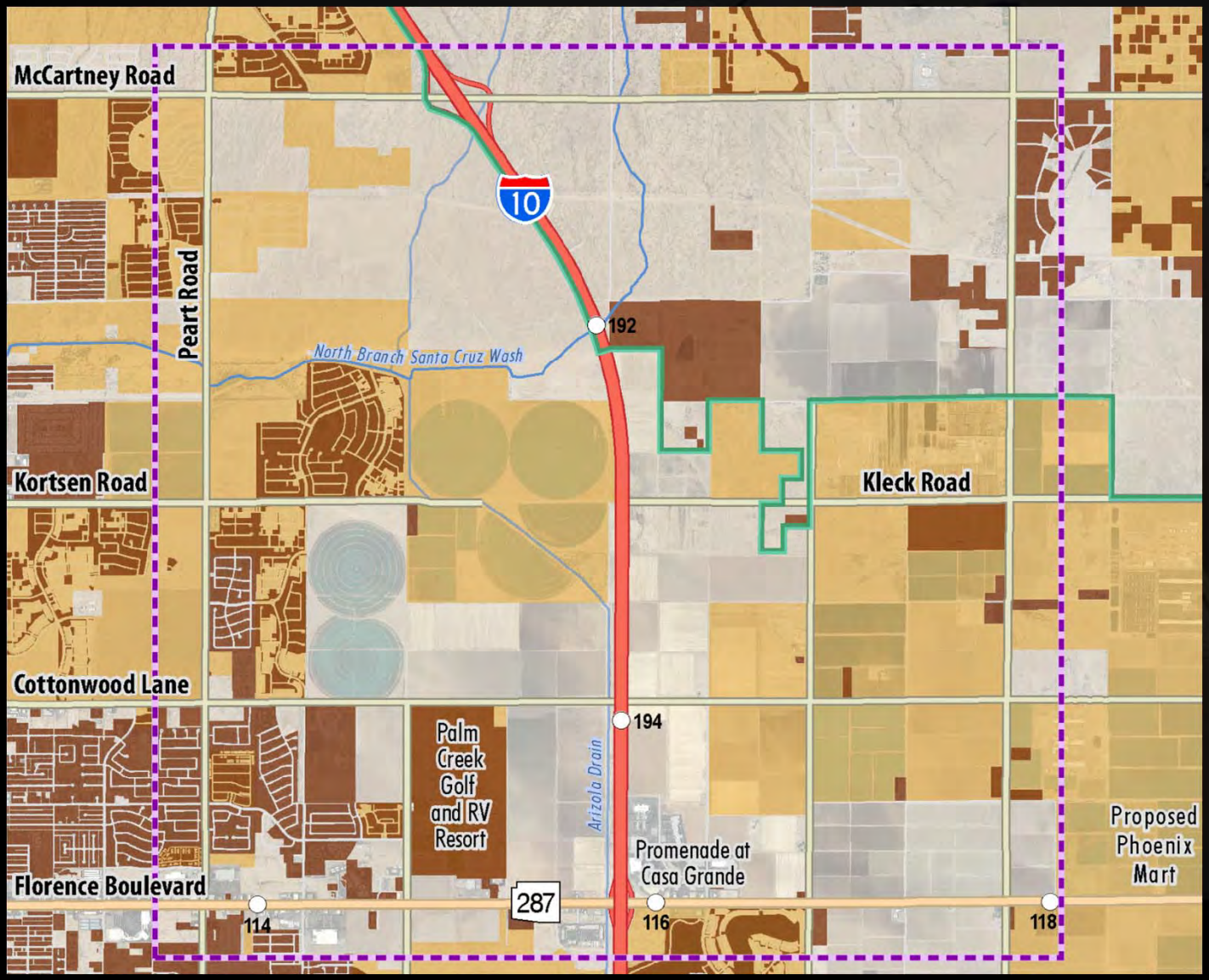
I-10/Kortsen Road Traffic Interchange

Prime and Unique Farmland



I-10/Kortsen Road Traffic Interchange

Noise Sensitive Locations

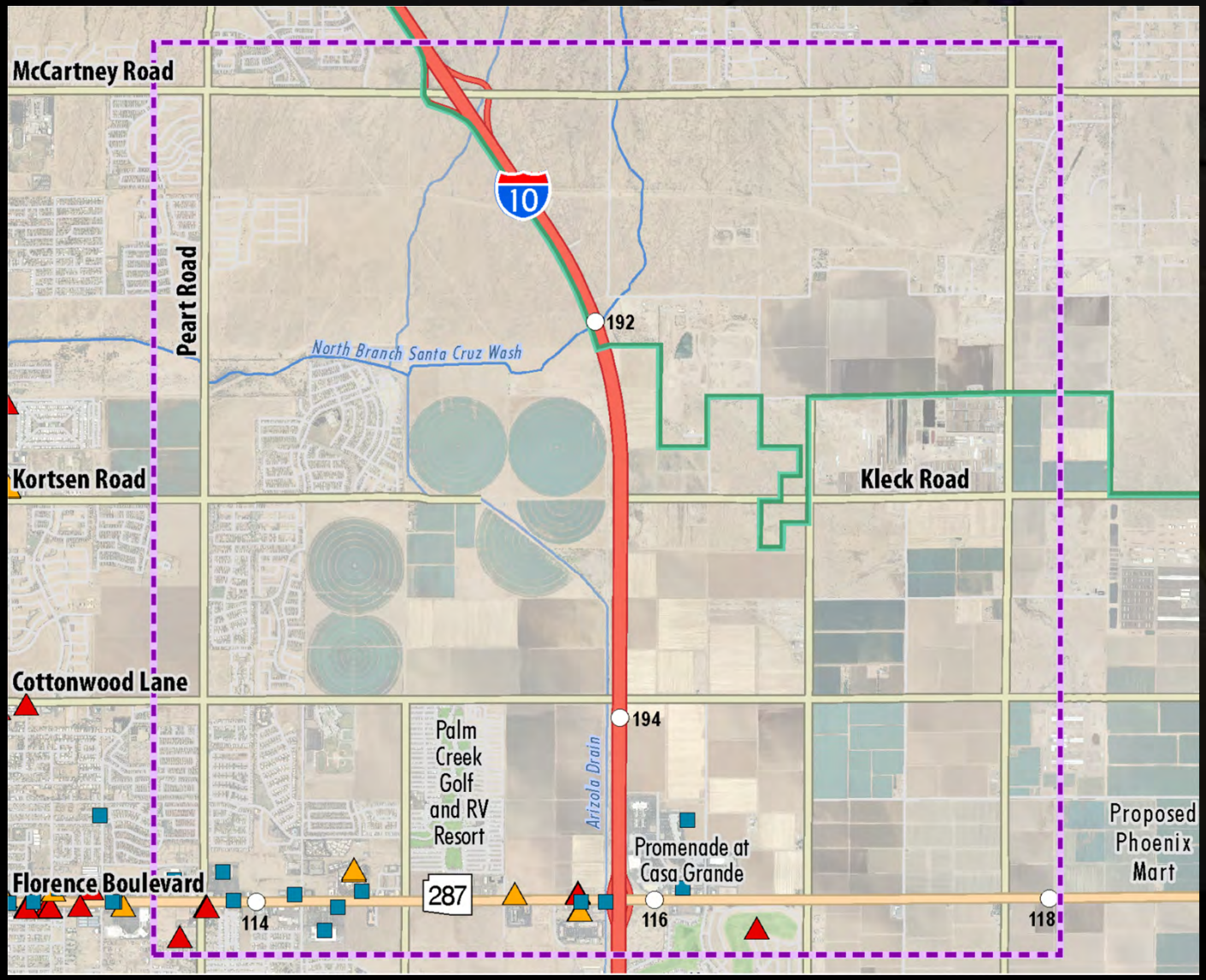


Existing Noise-Sensitive Receptors

Future Noise-Sensitive Receptors

I-10/Kortsen Road Traffic Interchange

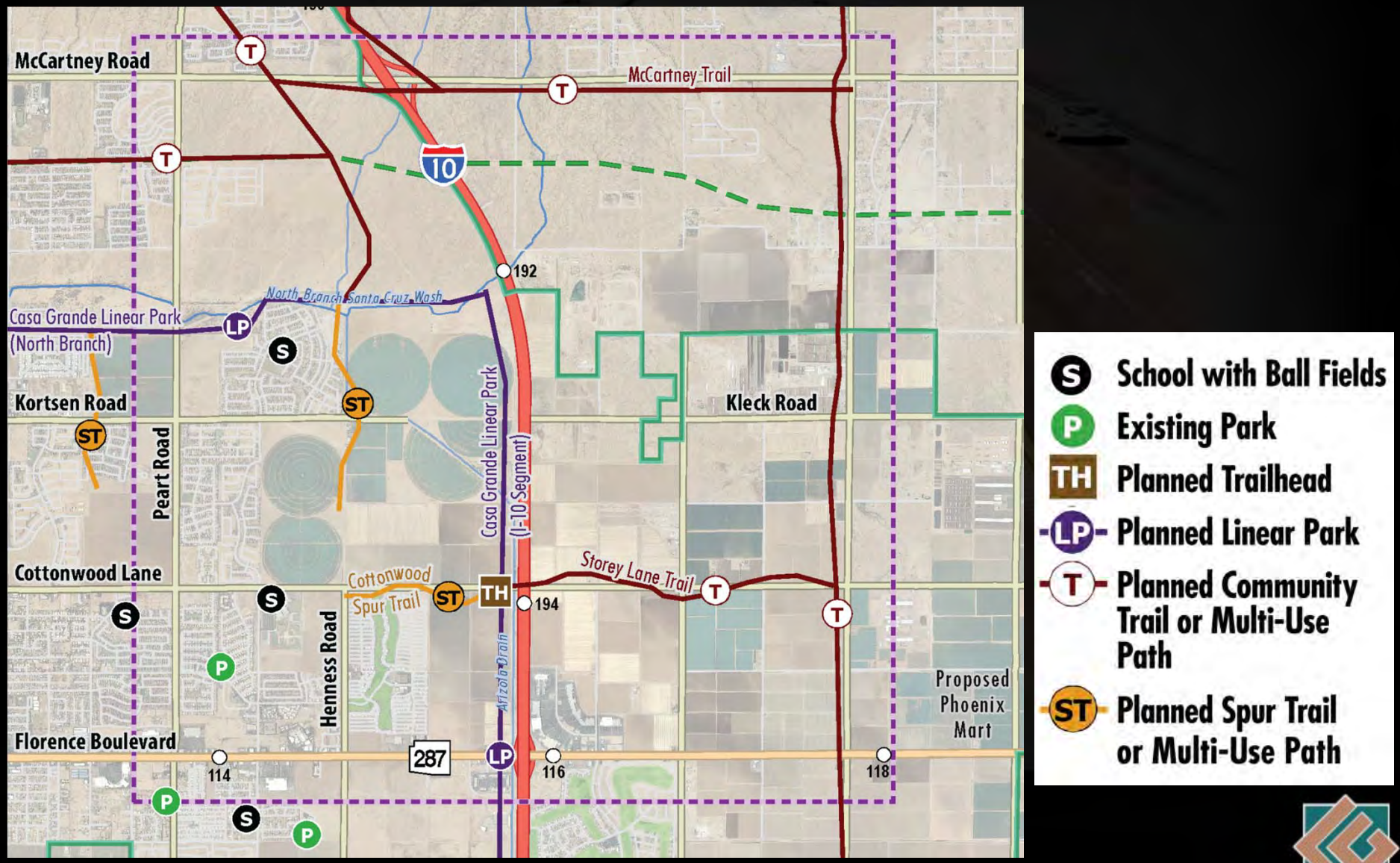
Potential Hazardous Material Sites



- Leaking Underground Storage Tank
- Underground Storage Tank
- Resource Conservation and Recovery Act (RCRA) Facility

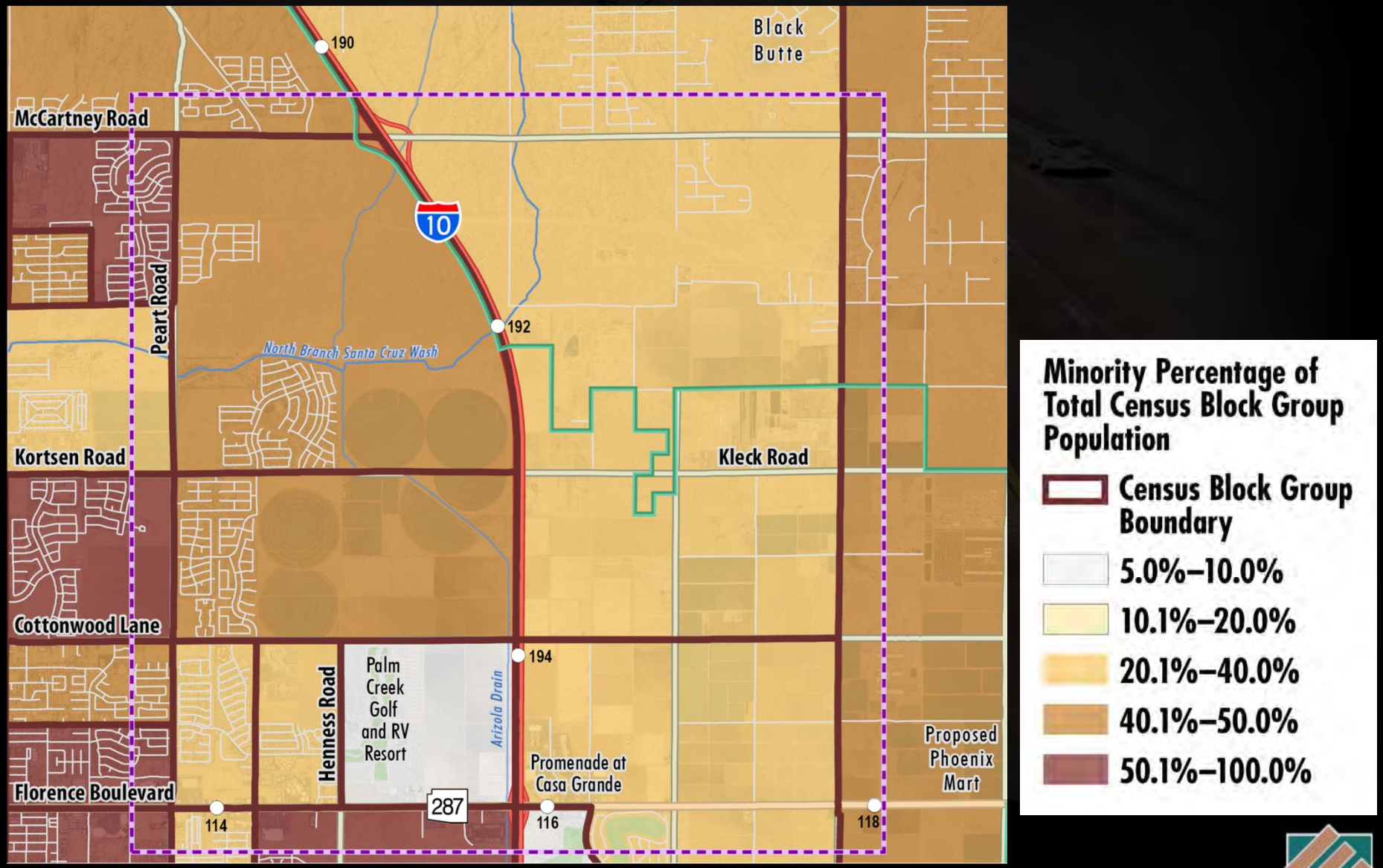
I-10/Kortsen Road Traffic Interchange

Public Parks, Recreation Areas, Historic Sites



I-10/Kortsen Road Traffic Interchange

Protected Populations



I-10/Kortsen Road Traffic Interchange

Other Environmental Resources for Screening and Comparing Alternatives

- Native vegetation and plant communities
- Sensitive species
- Compatibility with land use plans and zoning
- Potential to displace residences or businesses
- Potential to impact utilities
- Potential to impact cultural resource sites
- Topography
- Fissures and subsidence
- Air quality
- Visual resources

Potential Traffic Interchange Configurations

- 9 Concepts Considered
  - 5 concepts eliminated
  - 4 concepts for further evaluation

CONCEPTS ELIMINATED

Spread Diamond with Roundabout Ramp Terminals

- No traffic signals required
- Narrow bridge structure
- Suitable for high demand directional movements
- Increased R/W requirements
- Negative public reception of roundabouts
- Inefficient for cross traffic

Modified Diamond with Internal Loop Ramp

- Eliminate some left-turn movements
- Narrower bridge structure
- Suitable for high demand directional movements
- Increased R/W requirements
- Historically increased vehicular conflicts (Cloverleaf)

Partial Cloverleaf

- Eliminate some left-turn movements
- Narrower bridge structure
- Suitable for high left-turn movements
- Increased R/W requirements
- Historically increased vehicular conflicts (Cloverleaf)

Overpass with Frontage/ Collector-Distributor Roads

- Reduced mainline conflicts as traffic departs mainline before interchange
- Minimal Bridge over I-10
- High R/W requirements
- Limited Access
- Added congestion to adjacent interchanges (Florence Blvd. /McCartney Road)

Standard Diamond with Flyover Ramp

- High efficiency for flyover movement
- Narrow crossroad structure
- High construction cost
- Multiple structures required
- Increased R/W requirements

CONCEPTS CARRIED FORWARD FOR FUTURE EVALUATION

Standard Diamond, Spread OR Compressed

- Common interchange design
- Narrow bridge structure
- Less R/W required (Compressed Diamond)
- Operational capacity limitations

Single Point Urban Interchange

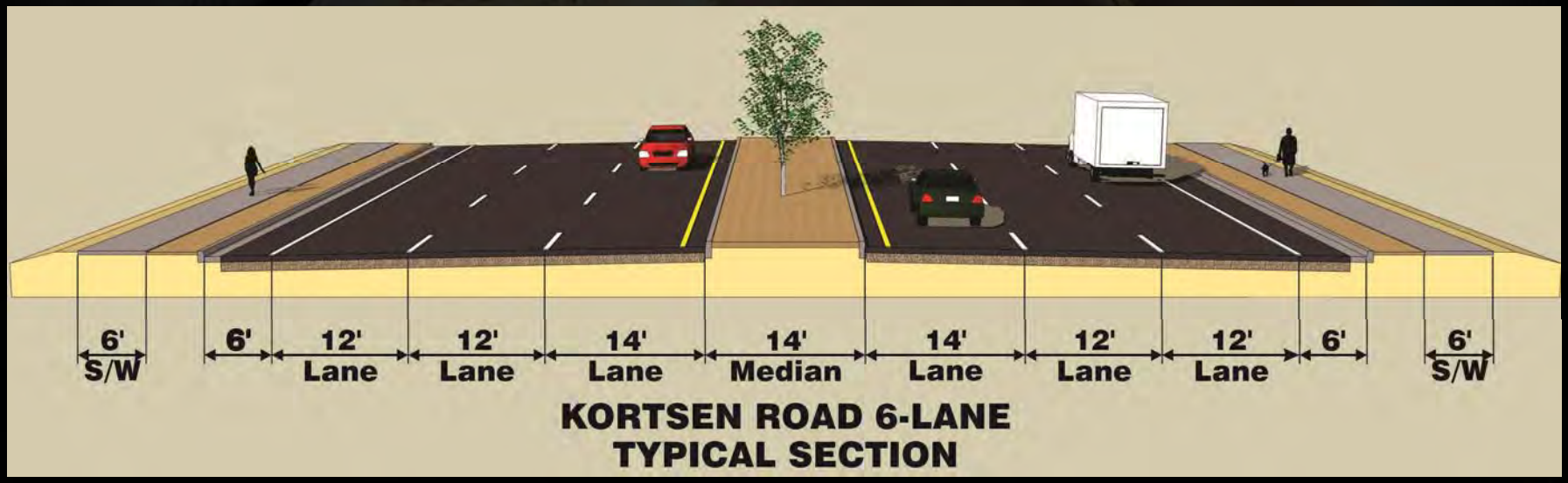
- One traffic signal required for interchange
- Increased left-turn efficiency
- Larger structure required
- High construction cost

Diverging Diamond

- Eliminate left-turn signal operation
- Less vehicular conflict points
- Narrow bridge structure
- Less R/W required
- Lower construction costs
- Uncommon interchange design in Arizona

Crossroad Approach

- Kortsen roadway section:
  - 6-lane road with raised median
  - Access control
  - Relocate Arizola drainage canal



Crossroad Approach

- Consistent with City plans
- Coordinate approach with planned development in the area

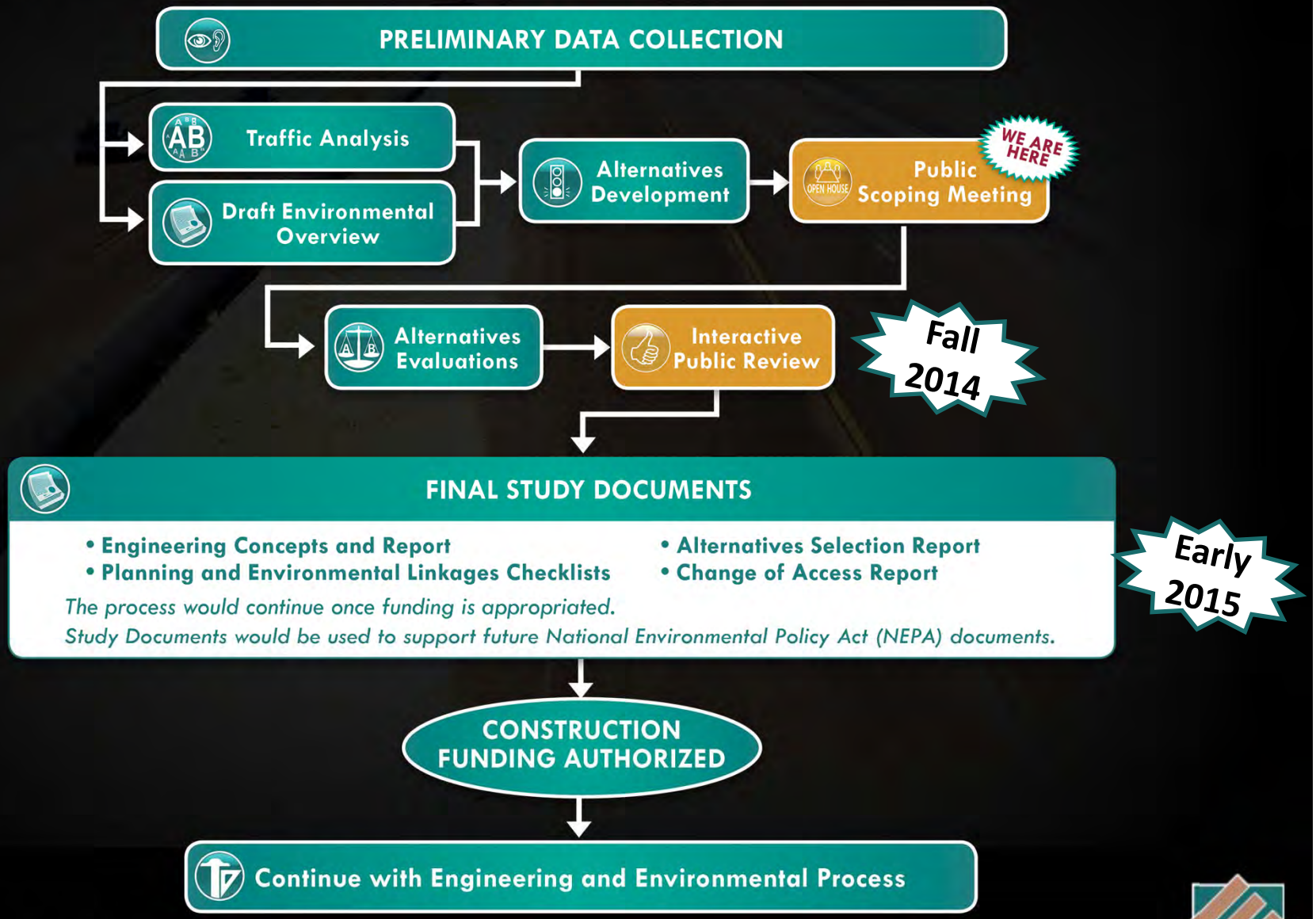
How You Can Participate

- Complete a comment form
- Submit written comments to:

  Michael Okamoto
  Jacobs Engineering Group Inc.
  101 N. 1st Avenue, Suite 3100
  Phoenix, AZ 85003

- E-mail comments to: michael.okamoto@jacobs.com
- Submit comments by August 8, 2014

Multiple Input Opportunities



Questions?

Thank you!