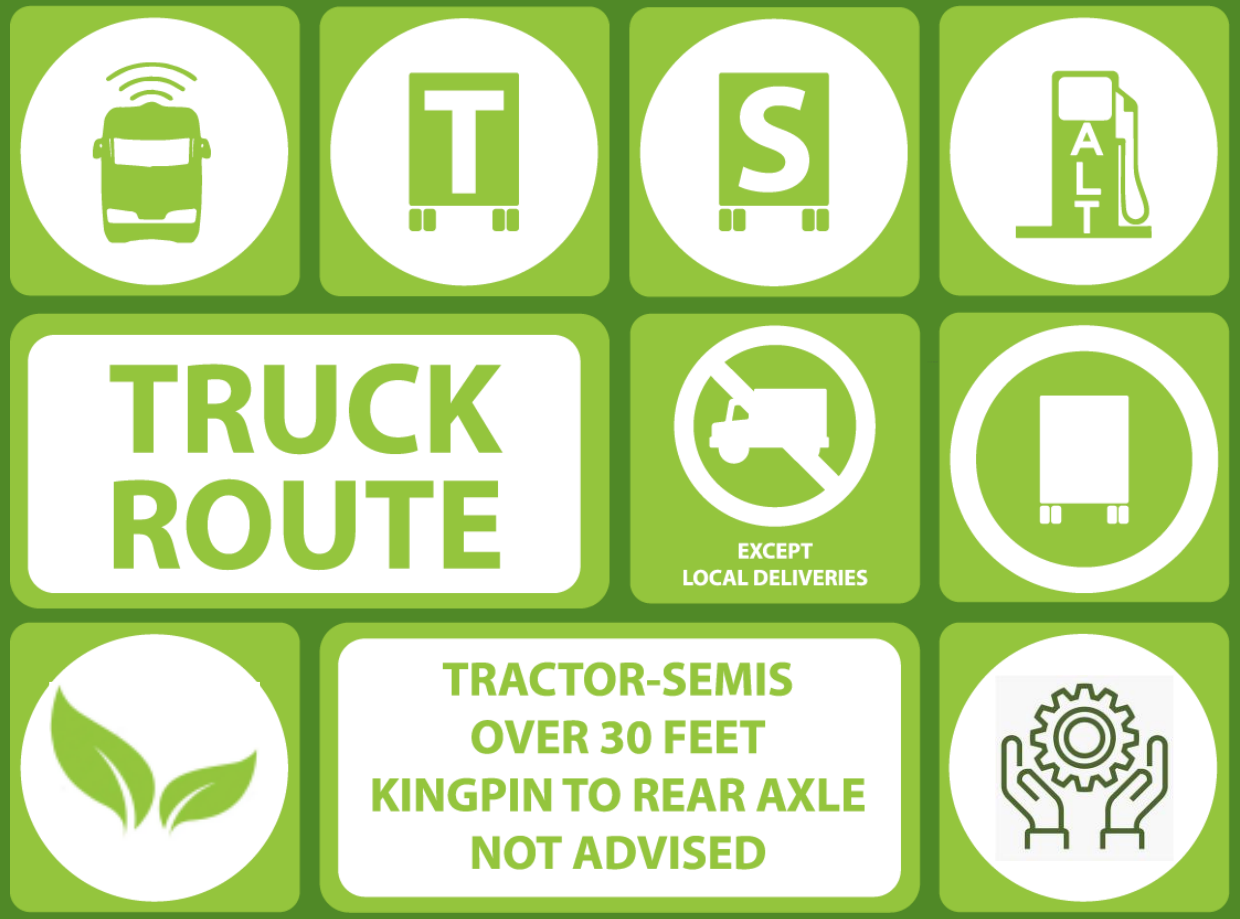


Kern Area Regional Goods-movement Operations (KARGO)

SUSTAINABILITY STUDY PHASE II

Kern Council of Governments

Kern COG – Rob Ball, Ben Raymond, Karl Davisson, Tom Whitaker

Fehr & Peers - Fatemeh Ranaiefar, Nico Boyd

Mark Thomas Engineers - Cynthia Horner

EPS - Jason Moody

June 2023

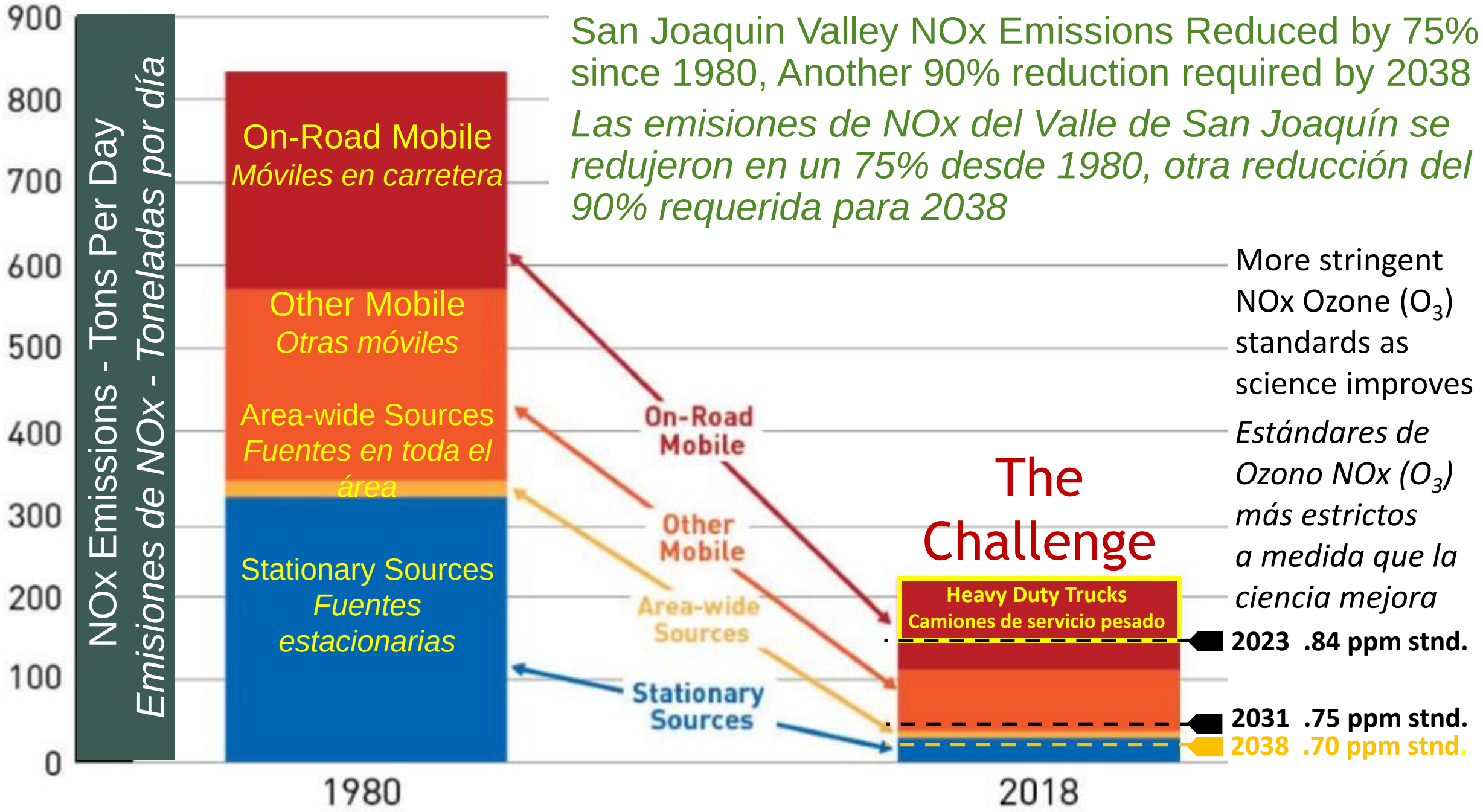


Chart modified from one prepared by San Joaquin Valley APCD 12/18 *Gráfico modificado de uno preparado por el Valle de San Joaquín APCD 12/18*

Truck Zero Emission Vehicles (ZEVs) Are Part of the Solution


264-475 kWh


475 kWh


653 kWh

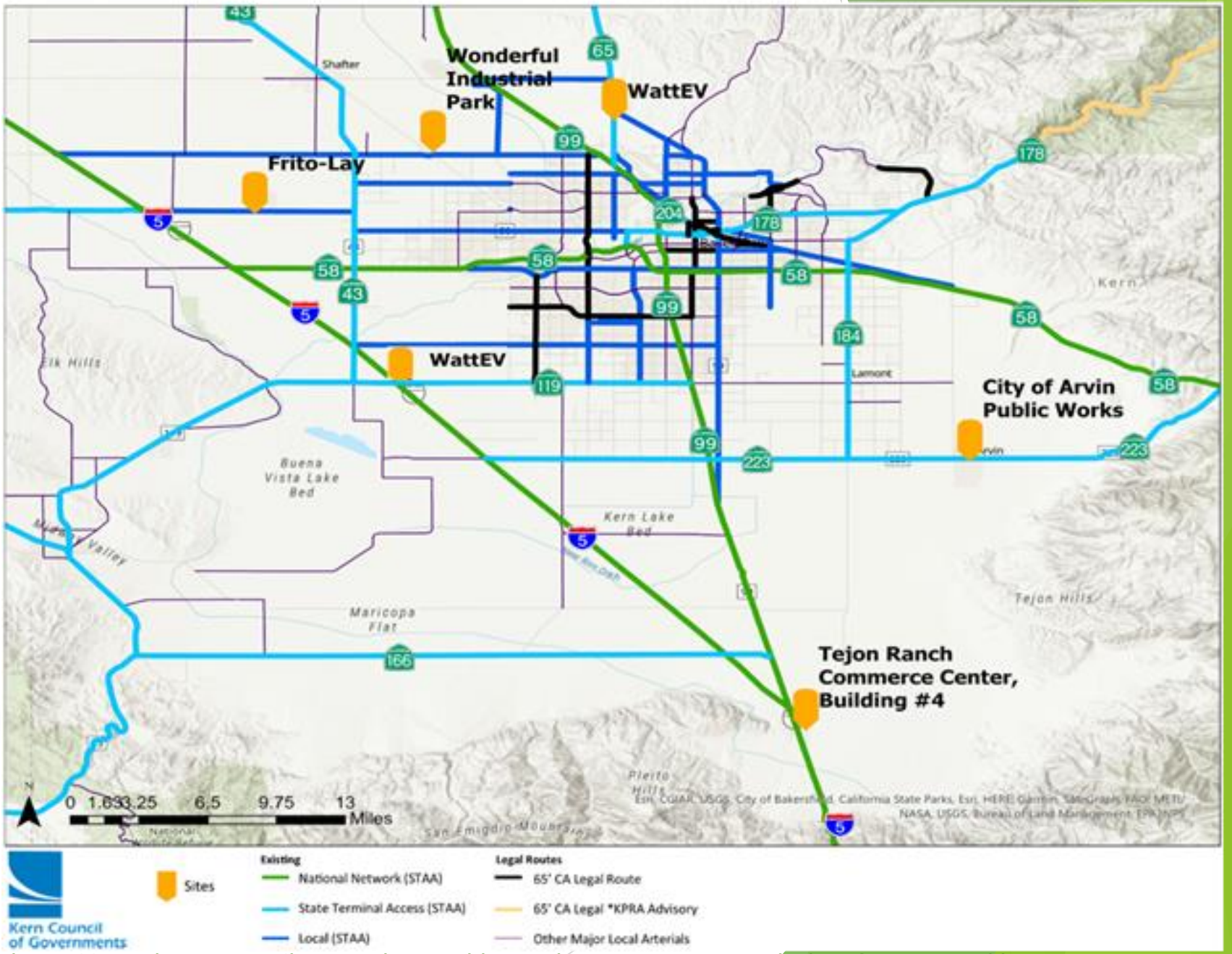

900 kWh


396 kWh


753 kWh


220+ kWh

Figure 8.3 Kern High Priority Medium- and Heavy-Duty ZEV Infrastructure Projects



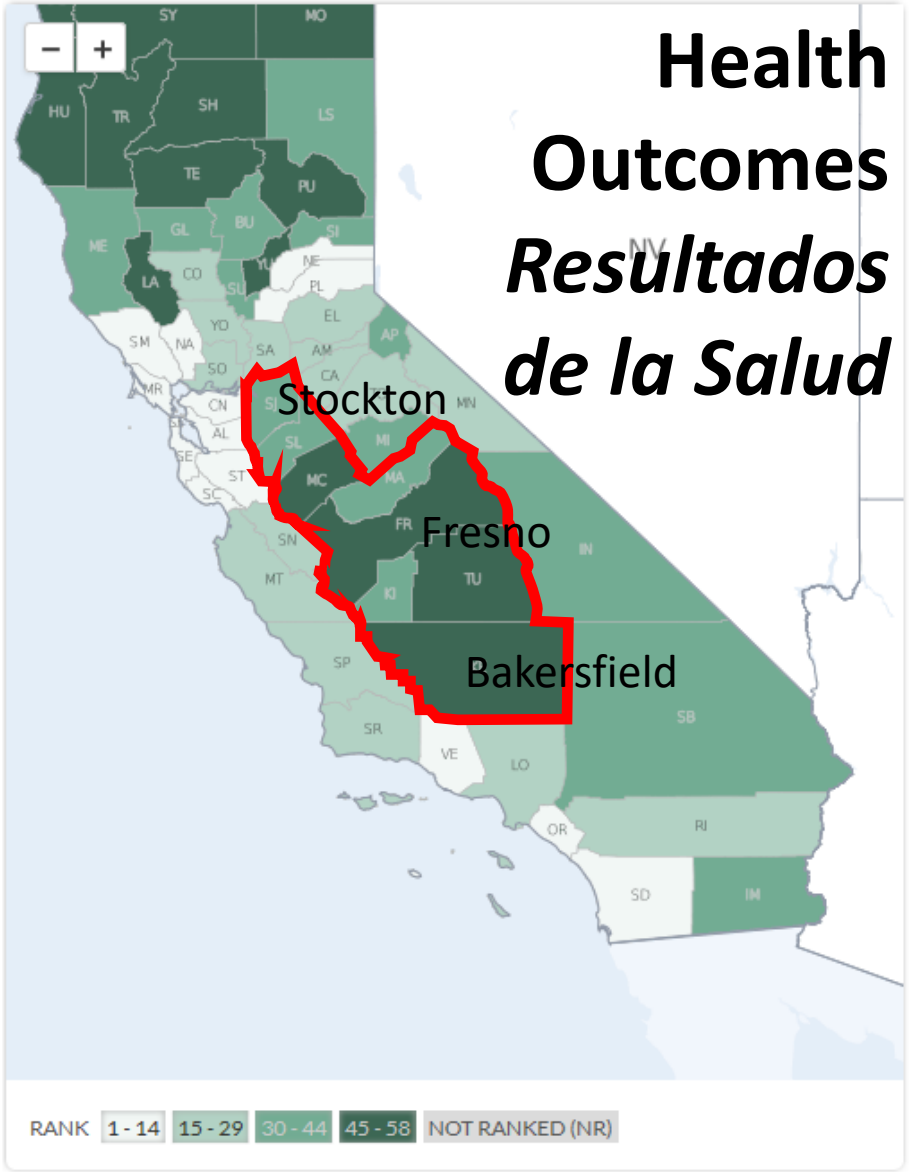
https://www.kerncog.org/kern-medium-and-heavy-duty-zero-emission-vehicle-infrastructure-blueprint

A Robert Wood Johnson Foundation program

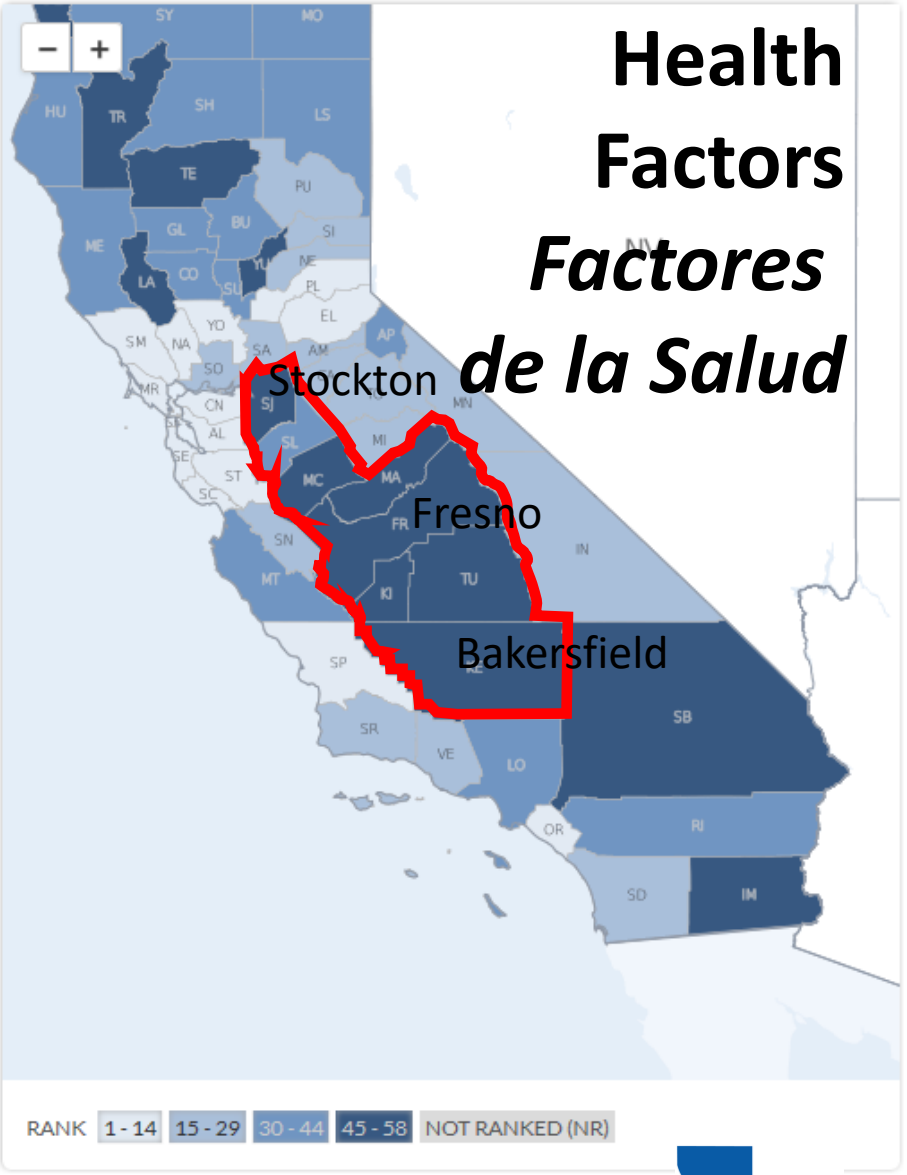
RWJ COUNTY HEALTH RANKINGS: To improve under this health ranking method, we need a balanced approach to improve the environment and economy. Roughly half their factors are economic.

CLASIFICACIONES DE SALUD DE CONDADO DE RWJ: *Para mejorar bajo este método de clasificación de la salud, necesitamos un enfoque equilibrado para mejorar el medio ambiente y la economía. Aproximadamente la mitad de sus factores son económicos.*

Overall Rankings in Health Outcomes



Overall Rankings in Health Factors

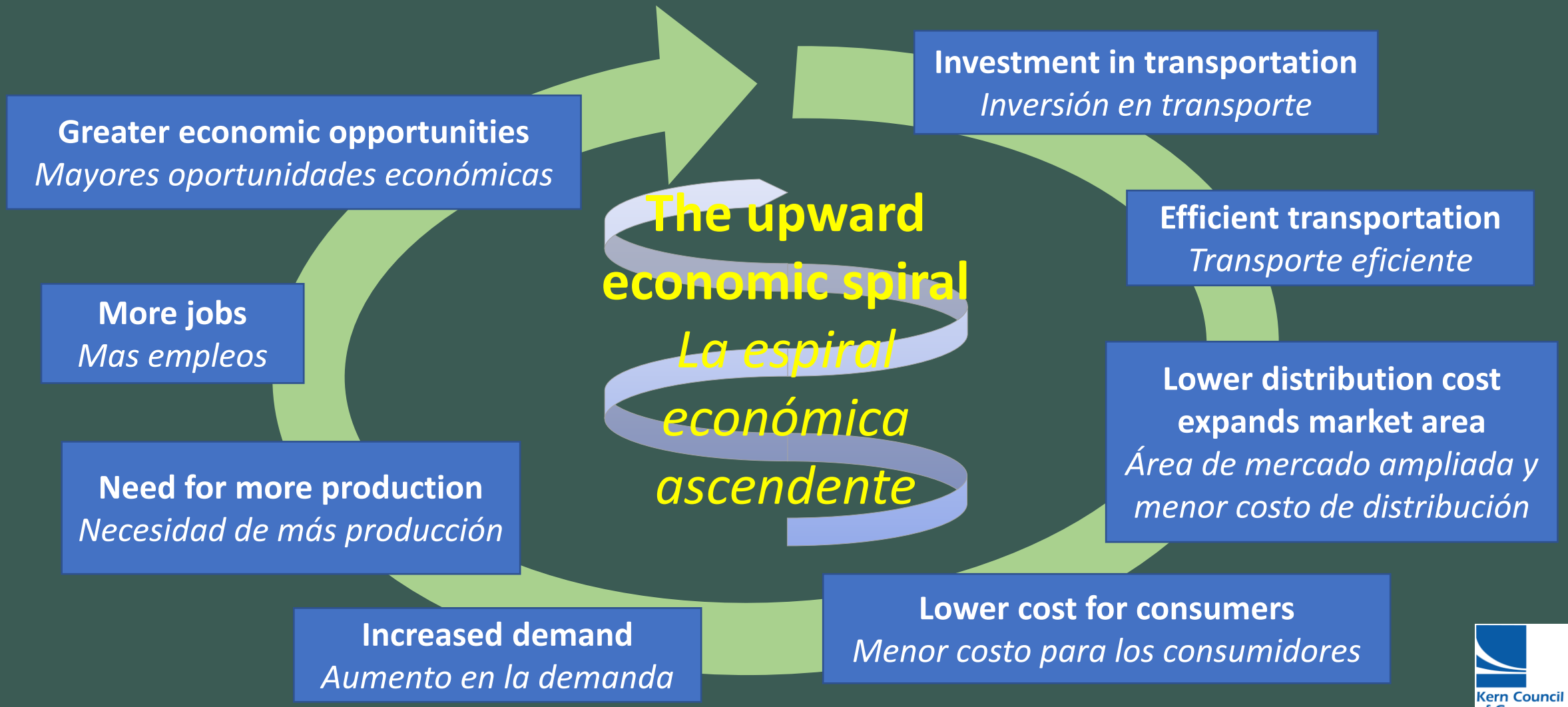


http://www.countyhealthrankings.org/explore-health-rankings/our-methods

Kern Council of Governments

Transportation Investment in Goods Movement Helps Drive the Economy

La inversión en transporte en el movimiento de mercancías ayuda a impulsar la economía



Kern Council of Governments

Automated Warehousing/Manufacturing Jobs - High Tech/Good Pay & Benefits

One of 3 New Automated Perishable Grocery Distribution Centers in the U.S.

Walmart

West U.S. Largest Perishable Grocery DC

Shafter, CA/BNSF – 5-story, .6M Sq. Ft.

Tall vertical automated rack system in a 100’ tall building will be able to pick products 40% faster than a conventional forklift accessed rack system

See video link of automated rack system https://youtu.be/cUHj2qff1Ds

6 out of 7 Kern Residents Favor New Distribution Centers *Spring 2019 statistically valid survey**

- **1,400 people in Kern were asked:** *"Recently new employers, such as Amazon.com, have located in Kern County, creating many new jobs in the County. These jobs have also created new commuter and truck trips.* ***Do you think these new jobs are worth the additional traffic?"***

  82% say worth it, 13% not worth it, ~5% didn't know or no answer

**2019 is the last time this question was asked. Survey available online with other survey results thru 2023:* https://www.kerncog.org/quality-of-life-survey/

Inland Empire's Sales Tax Measures & Impact Fees May Have Been Too Little Too Late

The New York Times

California's Inland Empire Pushes Back on Booming Warehouse Construction

Several municipalities have halted new projects to study their impact on pollution and congestion.

By Kurtis Lee

Oct. 17, 2022

https://www.nytimes.com/2022/10/17/us/california-inland-empire-warehouse-construction.html

Susan Phillips, a professor of environmental analysis and director of Pitzer College's Robert Redford Conservancy for Southern California Sustainability and San Bernardino County Supervisor Curt Hagman with warehouses in San Bernardino county (Getty, San Bernardino county, Pitzer)

By TRD Staff

JAN 31, 2023, 6:33 PM

By TRD Staff

JAN 31, 2023, 6:33 PM

https://therealdeal.com/la/2023/01/31/ie-warehouse-boom-generates-call-for-building-moratorium/

Kern is Seeing Spillover From the Inland Empire

Equivalent Single Axel Loads (ESALs)
One Loaded 18-Wheeler = 3,000-10,000 cars of road ware on the highways

Many of Kern's roadways were not designed to handle the anticipated increase in truck volumes. Revenue needs to be acquired to rebuild roads to a higher Traffic Index.

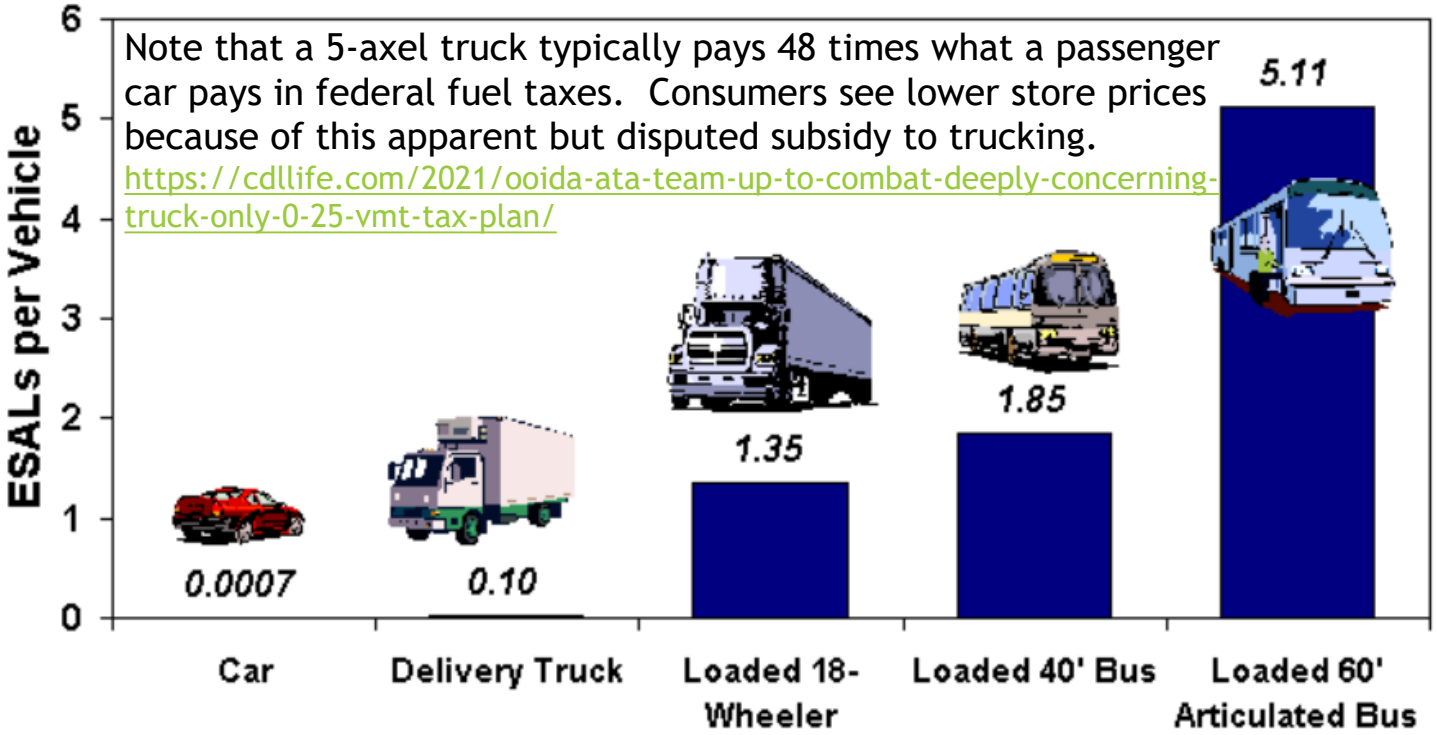


Figure 8: Some typical Load Equivalency Factors

https://pavementinteractive.org/reference-desk/design/design-parameters/loads/

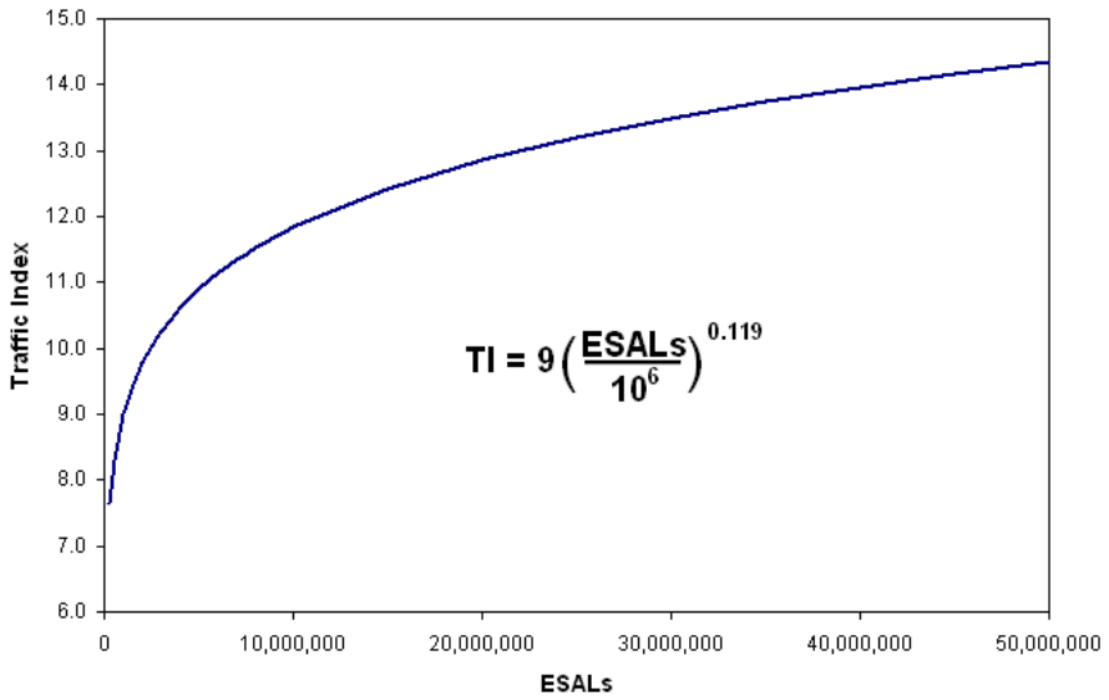


Figure 9: Traffic Index vs. ESALs

Challenge: Can Kern achieve the benefits of good paying/well benefited jobs while avoiding the air quality, road safety, traffic, road maintenance, and other impacts of trucking on our communities?

KARGO Phase II – Who's been involved so far?

- **Project Team**
  - Cities, County, Caltrans, Industry, COG Staff, Consultants
- **Public Participants**
  - Residents Countywide Including Arvin, Bakersfield, Lamont, and Shafter
  - Kern Transportation Foundation, California Trucking Association, Central California Rail Shippers/Receivers Association, SJVAPCD AB 617 Work Groups Shafter/Lamont, Center for Race Poverty & Environment
- **Potential Future Participants**
  - Local jurisdictions vote to place a measure on ballot
  - Most funding programs require a 2/3rds voter approval
  - Voters ultimately have the final say

Public Engagement Feedback

- Kern Transportation Foundation Symposium – 10/28/21
  7th Standard Rd improvements needed; S. Arvin Corridor good idea; Intermodal rail expansion S. of 7th Standard; Alt fuel facility near BFL Airport
- SJVAPCD AB 617 Shafter Committee Online Mtgs. – 1/10/22, 3/14/22
  Reduce traffic on 43 near Buena Vista school; What are benefits to Shafter residents not just business? remove at grade RR crossings through Shafter for safety and reduce noise from RR Xing bells; Enforce businesses payment for road improvements
- Center for Race, Pov. & Env. (CRPE) mtg w/CA Transp. Comm. – 3/24/22
  Concern for rural, low-income communities burdened by transportation inequities; Dangerous conditions for residents with disabilities, limited or no maintenance for pedestrian accessibility; Major safety concerns exist with rail crossings; Freight traffic creates substantial health/safety burdens throughout agri-industrial rural communities; Excessive noise pollution/congestion issues create burdens for communities near hwys.
- CRPE hosted mtg online for KARGO Study – 5/26/22
  Extend Mt. Vernon to Panama Ln and make it a truck route; Redirect trucks from 184 Lamont to Edison Rd; Reroute trucks away from 43 & Lerdo Hwy in downtown Shafter; S. Arvin Corridor would reduce trucks on 223 through Arvin; trucks need to pay for road maintenance; Fees need to be used for street improvements, not govt. waste

KARGO Phase II – Goal/Major Tasks

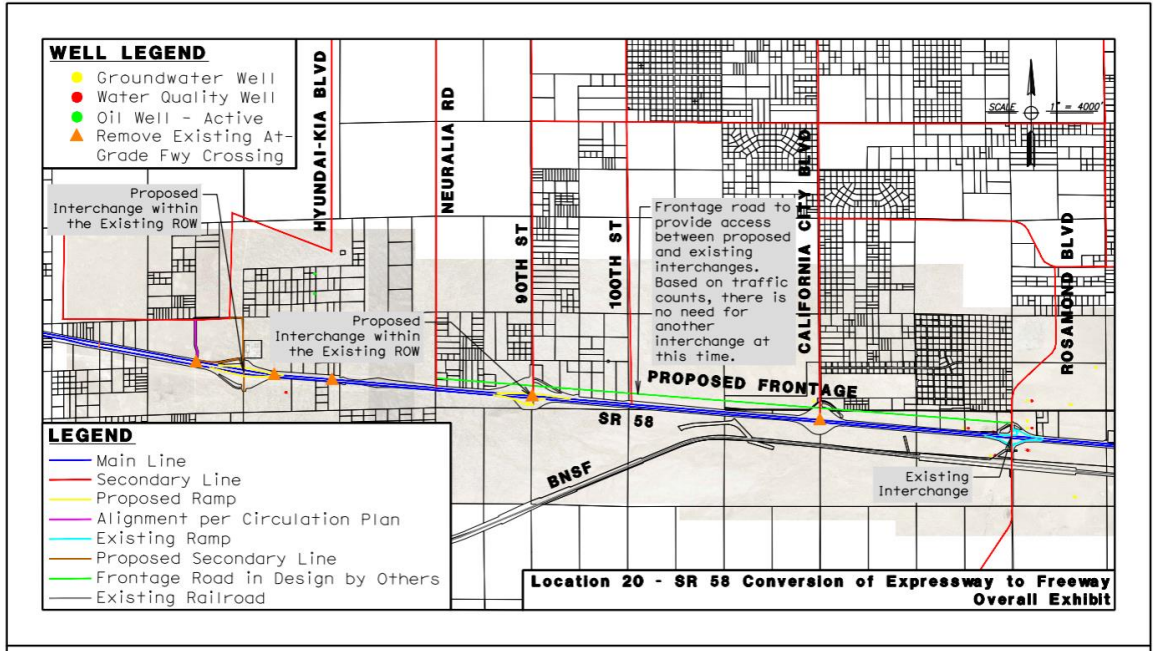
PREPARE FOR THE EXPECTED FREIGHT GROWTH IN THE REGION

SUGGEST GENERAL PLAN **CIRCULATION ELEMENT** AND STAA **TRUCK ROUTE MAP CHANGES** TO ACCOMMODATE LONG RANGE FREIGHT GROWTH

DEVELOP **FUNDING OPTIONS AND A NEXUS STUDY** TO ACCOUNT FOR FREIGHT TRANSPORTATION NEEDS (ROAD MAINTENANCE, CAPACITY, CLEAN TECH, ETC.)

KARGO II – Suggested Truck Routes, Proposed Right Of Way & Circulation Element Map Updates (sample maps)

Figure 0.1 Existing, Candidate, and Future Truck Routes (Sample Maps from Appendix A1)

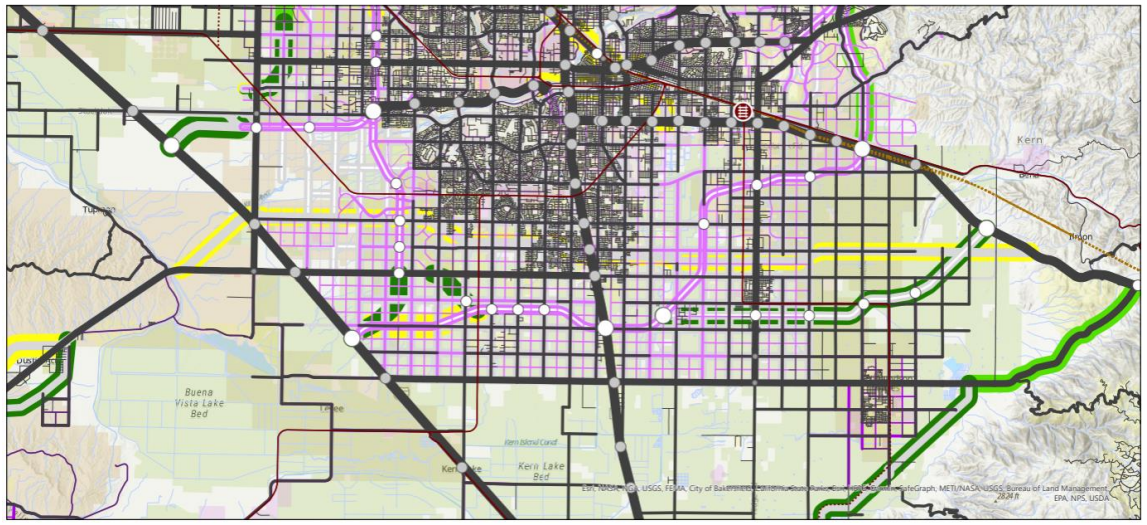


MARK THOMAS

KARGO PHASE 2 STUDY
EXHIBIT: SKETCH

C-4 Metro Bakersfield - Combined Circulation Plans Suggested Map Edits

11-1-2022



3.5 Miles

Kern Council of Governments

Suggested Circulation Plan Edits
Add
Class Change
Remove

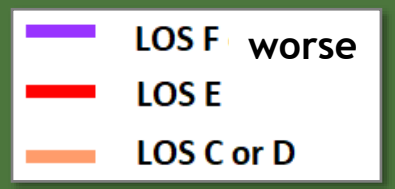
Existing
City/ Specific Plan
County Circ. Plan
Arterial
Expressway
Arterial/Rural Highway
Collector
Other Roads
Existing Rail
Future Rail
High Speed Rail Alignment
Waterways
Freeway/Freeway
Arterial/Fwy
Roundabout
Existing
Proposed
Intermodal Freight Hub
Existing
Potential
General Plan Area
Residential
Commercial
Industrial

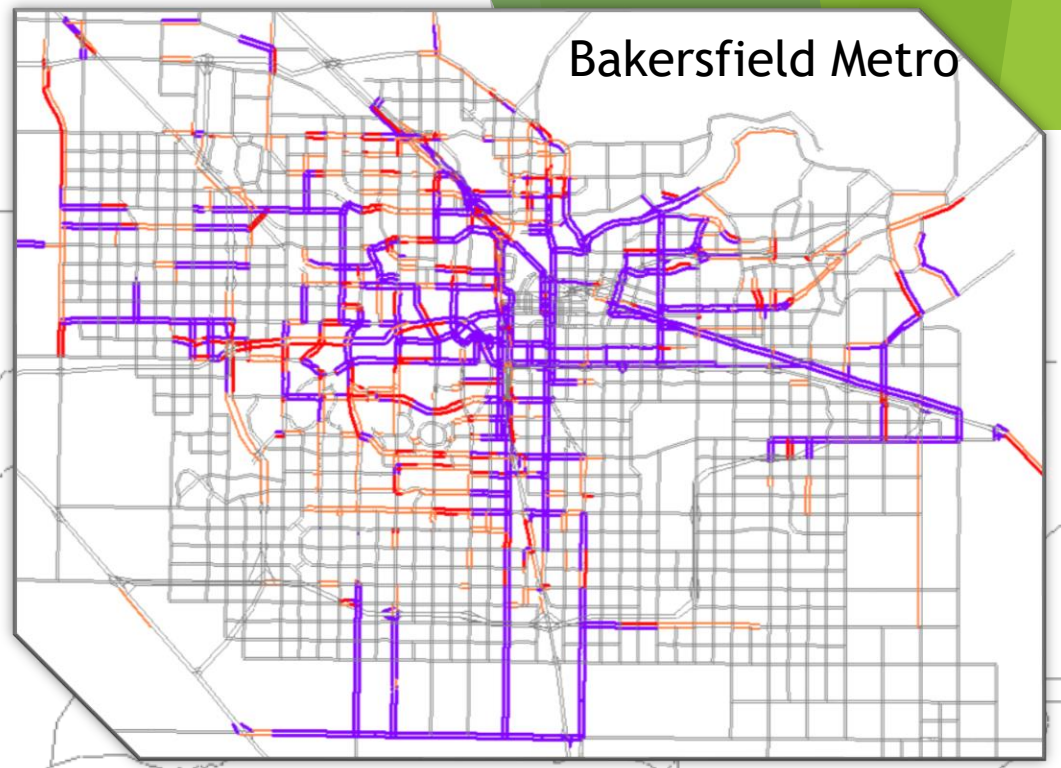
General Plan Traffic at Full Buildout

WHY So Long Range?

Adopted general plan entitlements in Shafter and Bakersfield will bring most roads to LOS E or F by approx. the year 2100 even with full buildout of the current circulation plans. Circulation elements need updating.

Buildout Traffic Projection



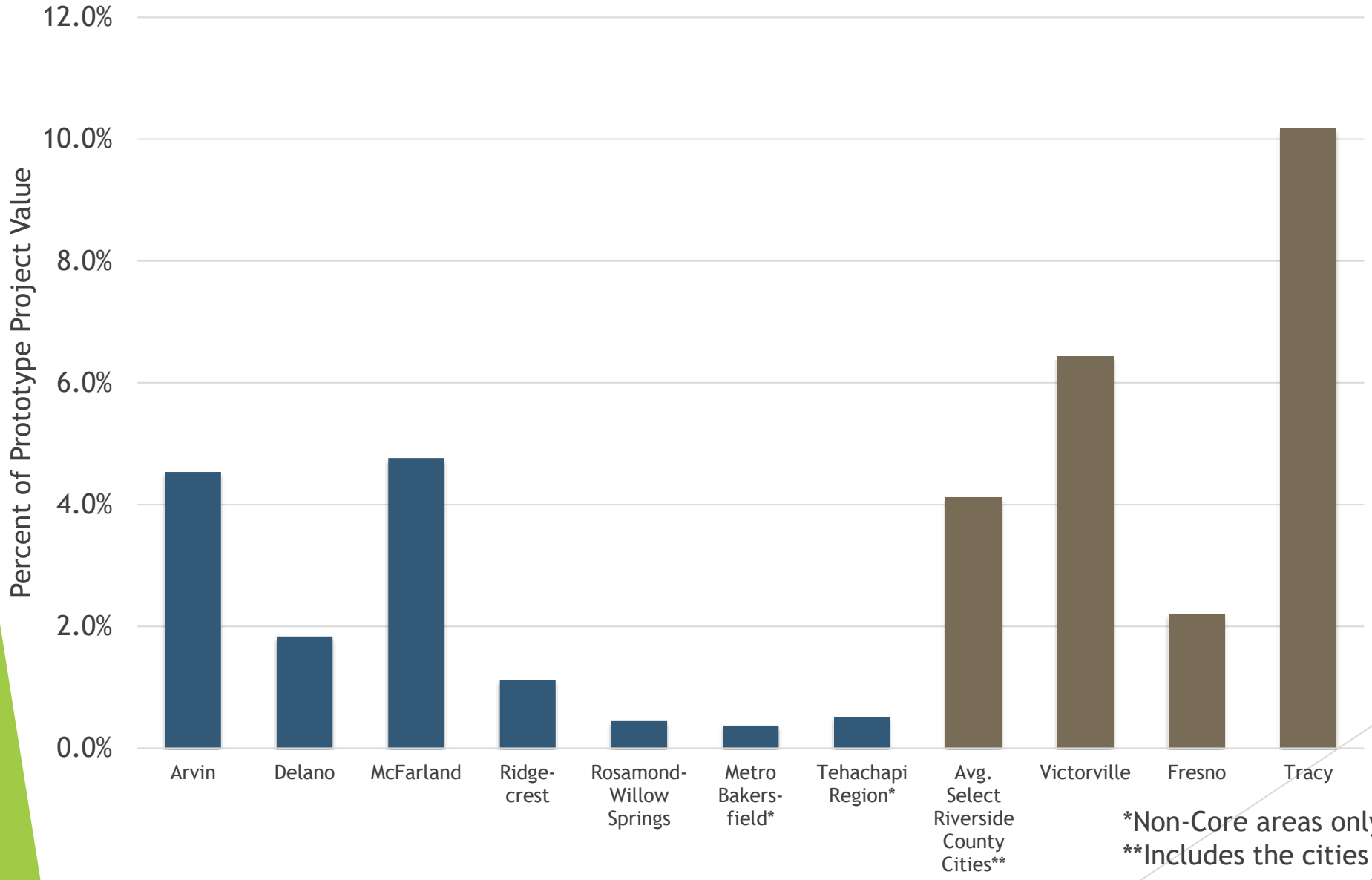


KARGO II – Funding Options/ NEXUS Study Outcomes

In collaboration with stakeholders, identify strategies, projects and programs to:

- Adopt **Clean Tech** – need to incentivize a faster shift to zero-emission technologies to achieve GHG reduction and AQ improvements goals;
- Add Network **Capacity** – where truck volumes are anticipated to grow the most;
- Improve **Maintenance** – identify a mechanism to safeguard the longevity of all capacity enhancing improvements that are made;
- Maintain **Competitiveness** and **Economic Benefit** – attract high-paying/high-tech jobs in the industrial / logistics industries

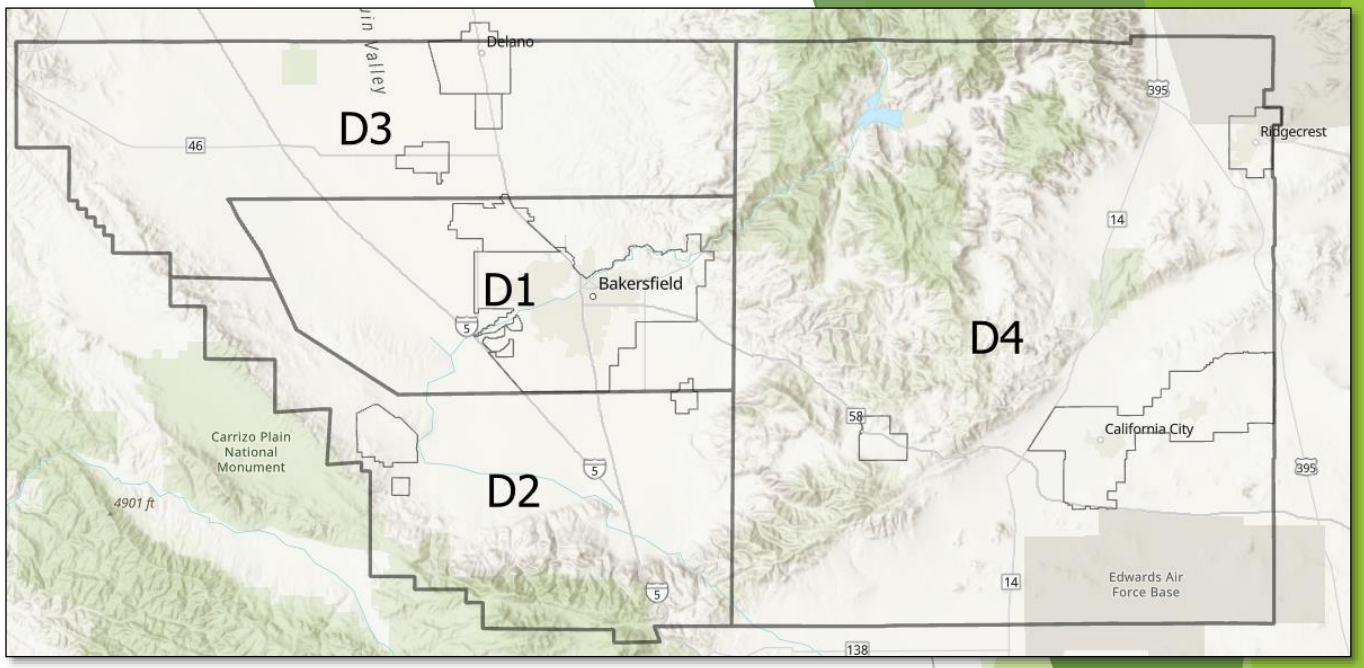
FEE BURDEN AS A PERCENT OF PROJECT VALUE -TODAY



*Non-Core areas only
**Includes the cities of Calimesa, Norco, and Temecula

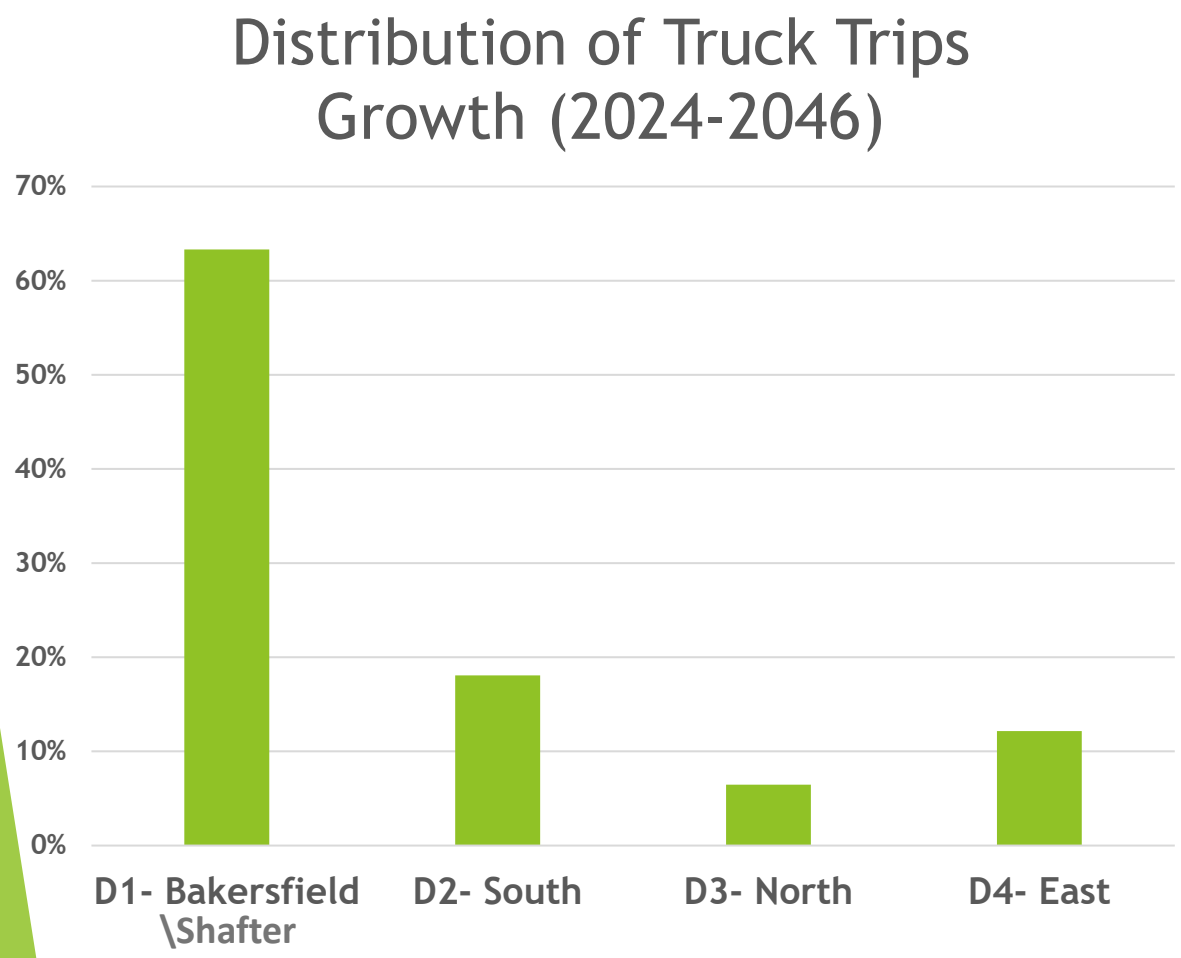
Projected Industrial Land Use Growth By 4 Sample Districts & Countywide

- Period: 2022-2046
- 40 million Square of new Industrial use
- Volume of growth: Bakersfield, Kern County, and Shafter have 85% of overall growth



Period	Land Use	D1- Bakersfield	D2- South	D3- North	D4- East	Kern County
2022 Base Year	House Hold	197,880	14,779	22,665	50,668	285,992
	Population	640,052	48,748	89,070	133,251	911,122
	Total Employee	234,804	23,967	44,845	40,161	343,777
	Indistrial/Agg Employee	69,613	14,530	24,165	4,615	112,923
2046 Future Baseline	House Hold	240,488	29,053	26,083	58,634	354,258
	Population	826,356	93,808	110,536	165,863	1,196,563
	Total Employee	267,314	37,249	48,326	47,125	400,015
	Indistrial/Agg Employee	78,982	21,040	25,789	6,709	132,520
Growth 2022-2046 Base Scenario	House Hold	42,608	14,274	3,418	7,966	68,266
	Population	186,305	45,059	21,466	32,611	285,441
	Total Employee	32,511	13,282	3,482	6,964	56,238
	Indistrial/Agg Employee	9,369	6,510	1,624	2,094	19,597

Projected Truck Traffic Growth



2022 Base Year					
Region	**Total**	**Passenger cars**	**Medium Trucks**	**Heavy Trucks**	**All Trucks**
D1	3,147,754	2,944,343	184,411	19,000	204,214
D2	188,444	168,452	16,006	3,987	20,333
D3	329,905	294,825	28,230	6,850	35,659
D4	469,784	435,306	31,864	2,615	34,543
Kern	4,135,888	3,842,925	260,510	32,452	294,749
External	283,896	160,230	9,327	43,047	42,580

2046 Baseline RTP/SCS Without WUC					
Region	**Total**	**Passenger cars**	**Medium Trucks**	**Heavy Trucks**	**All Trucks**
D1	3,707,601	3,468,875	216,816	21,910	239,621
D2	326,938	296,855	25,349	4,734	30,440
D3	373,950	335,300	31,228	7,422	39,272
D4	555,301	514,058	37,922	3,321	41,345
Kern	4,963,790	4,615,088	311,315	37,387	350,677
External	320,649	183,566	11,968	49,521	49,438

2046 No Ind|Agg , No WUC					
Region	**Total**	**Passenger cars**	**Medium Trucks**	**Heavy Trucks**	**All Trucks**
D1	3,684,575	3,451,305	212,597	20,673	234,054
D2	307,761	280,490	22,900	4,371	27,604
D3	370,613	333,010	30,477	7,125	38,196
D4	549,894	509,885	37,015	2,995	40,080
Kern	4,912,844	4,574,690	302,989	35,164	339,935
External	316,819	179,737	11,967	49,521	49,438

Prioritizing Freight Transportation Improvements

Low Cost / Near Term

D1 Central Kern

a. 99/58 I-change missing ramps
b. 99/7th Standard I-change (HSR to fund)
c. 7th Std/I-5 I-change/passing lanes, 43 - I-5
d. Merced/Cherry/Superior "T" Corridor
e. W Urban Corr (WUC) 7th Std-Express Blvd
f. WUC, WSP-Rosedale Hwy
g. Mt Vernon extension, Planz-Panama
h. 58 Stockdale Hwy, 43 Enos-Heath
i. Burbank Expwy, 99-James Rd
j. Santa Fe Wy, Burbank-Rosedale Hwy
k. Allen Rd, White-Panama
l. I-5/58 Stockdale I-change/passing lanes

D2 S | N | D3

m. I-5/43 I-change
n. Wasco Av frontage rd (HSR to fund?)
o. 99/Whistler I-change
p. 99/Merced I-change
q. 46 extend passing lanes, near county line

D4 E Kern

r. 58/223 I-change
s. 58 truck climbing lanes, Bealville-Keene
t. 58 frontage rd, Cal City Blvd-N Gate Blvd

Mid Cost / Mid Term

D1 C Kern

a. Complete WUC 99 - I-5 (formerly W Bltwy)
b. Burbank Expwy, 43 Beech-WUC
c. 99, Burbank Corr-Beardslee Canal
d. 58 Truck climb/pass lanes, 223-Tower Line Rd
e. 58 Stockdale passing lanes, Enos toward I-5

D2 S

f. S Arvin Corridor
g. I-5 Grapevine 2nd truck climb/passing lanes
h. Copus safety realignment

D3 N

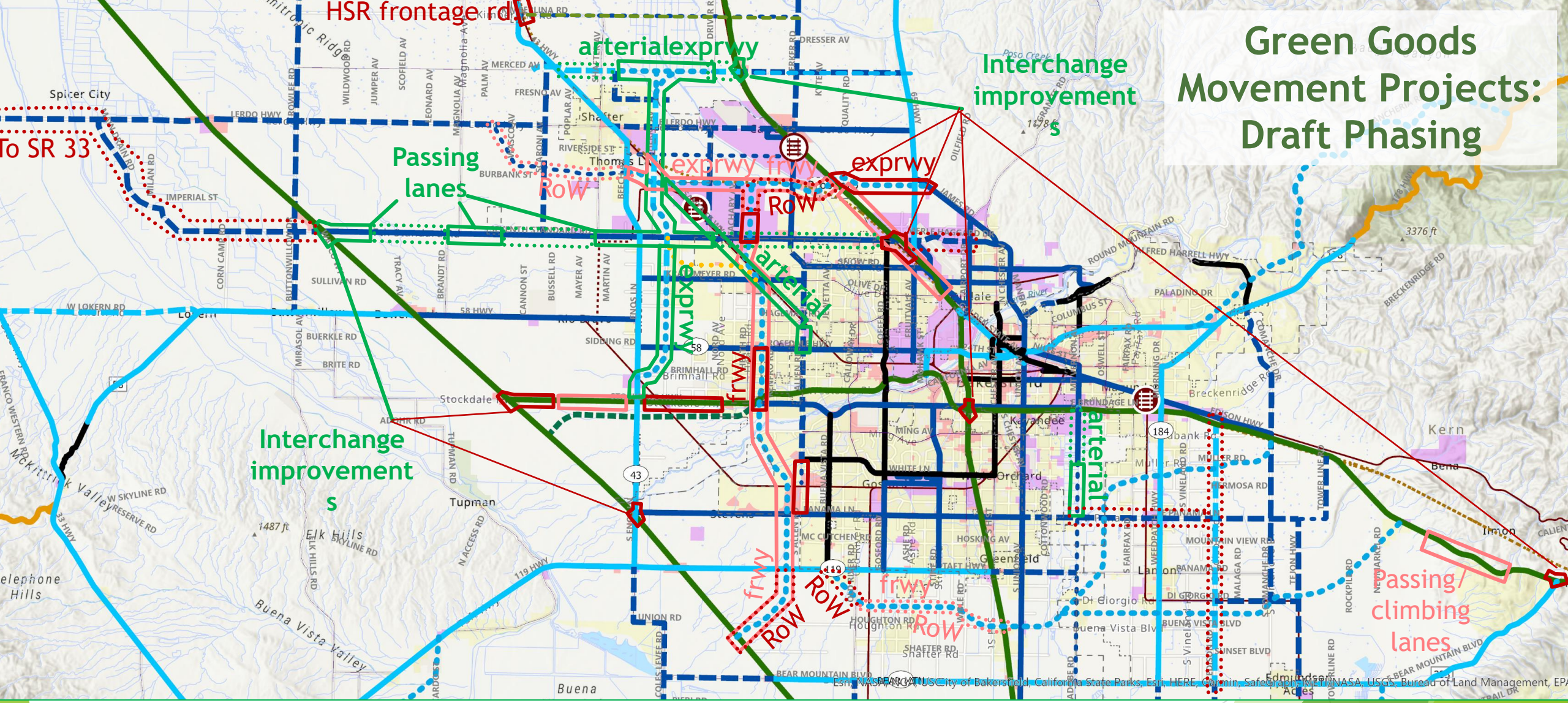
i. 99/Pond Rd I-change/
j. Tehachapi and CA-58 Ramps
k. 14/Purdy Av I-change

D4 E Kern

l. 395 extend passing lanes, N of Garlock Rd
m. I-5 & 58 truck weight station relocations

(Green text denotes suggested projects for draft phase I of Impact Fee Nexus Study)

Green Goods Movement Projects: Draft Phasing



Rough Draft Phasing based on model/cost

Major Improvement

Safety/Re-hab/RoW

Low-cost/very near-term

Low-cost/near-term

Mid-cost/mid-term

Existing Candidate Future

National Network (STAA)

State Terminal Access (STAA)

Local (STAA)

65' CA Legal Route

65' CA Legal *KPRA Advisory

Other Major Local Arterials

Other Roads

Existing Rail

Future Rail

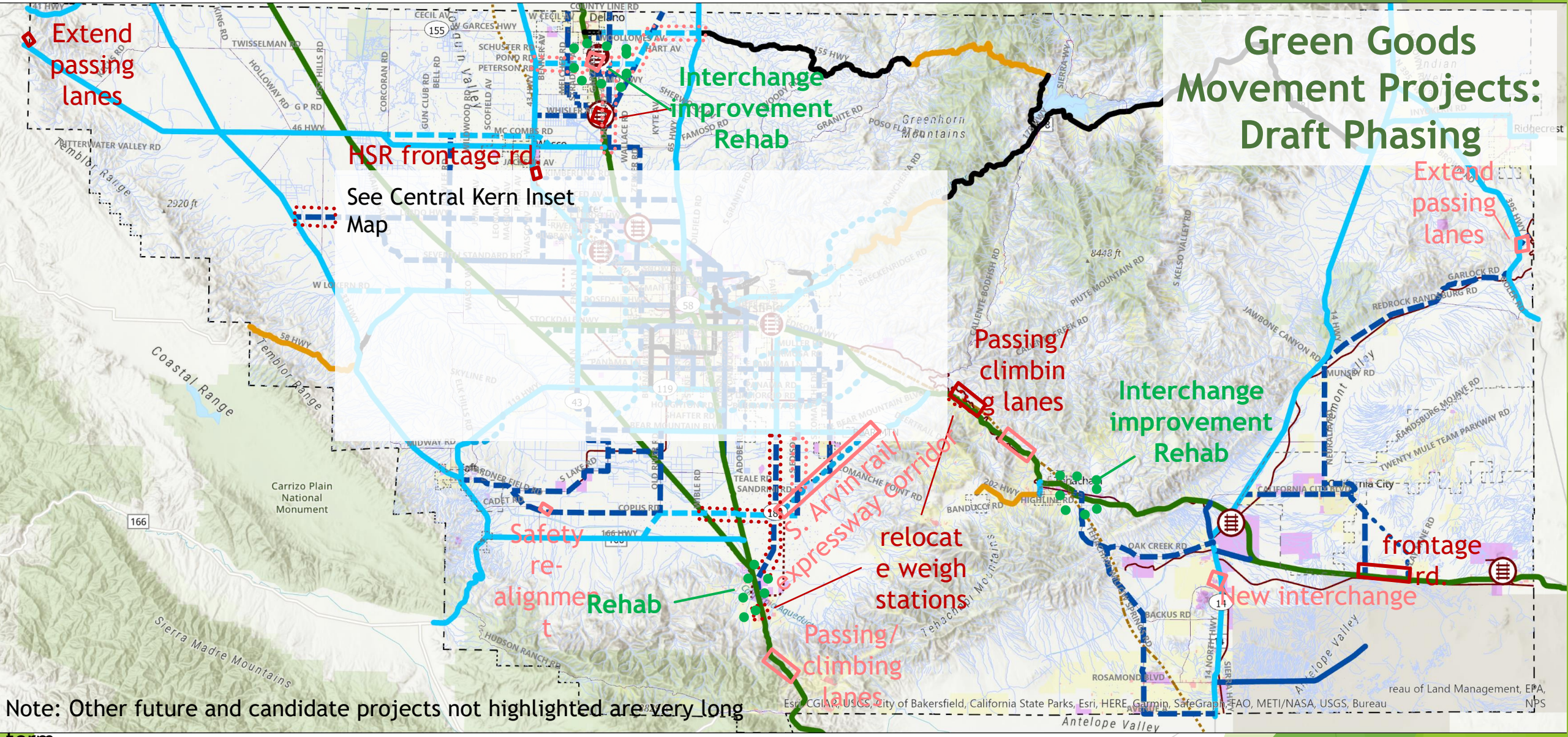
High Speed Rail Alignment

Intermodal Freight Hub

Existing

Potential

Note: Other future and candidate projects not highlighted are very long term.



Note: Other future and candidate projects not highlighted are very long term.

Rough Draft Phasing based on model/cost

Low-cost/very near-term

Low cost/near term

Mid cost/mid term

Major Improvement

Safety/Re-hab/RoW

	Existing	Candidate	Future
National Network (STAA)			
State Terminal Access (STAA)			
Local (STAA)			

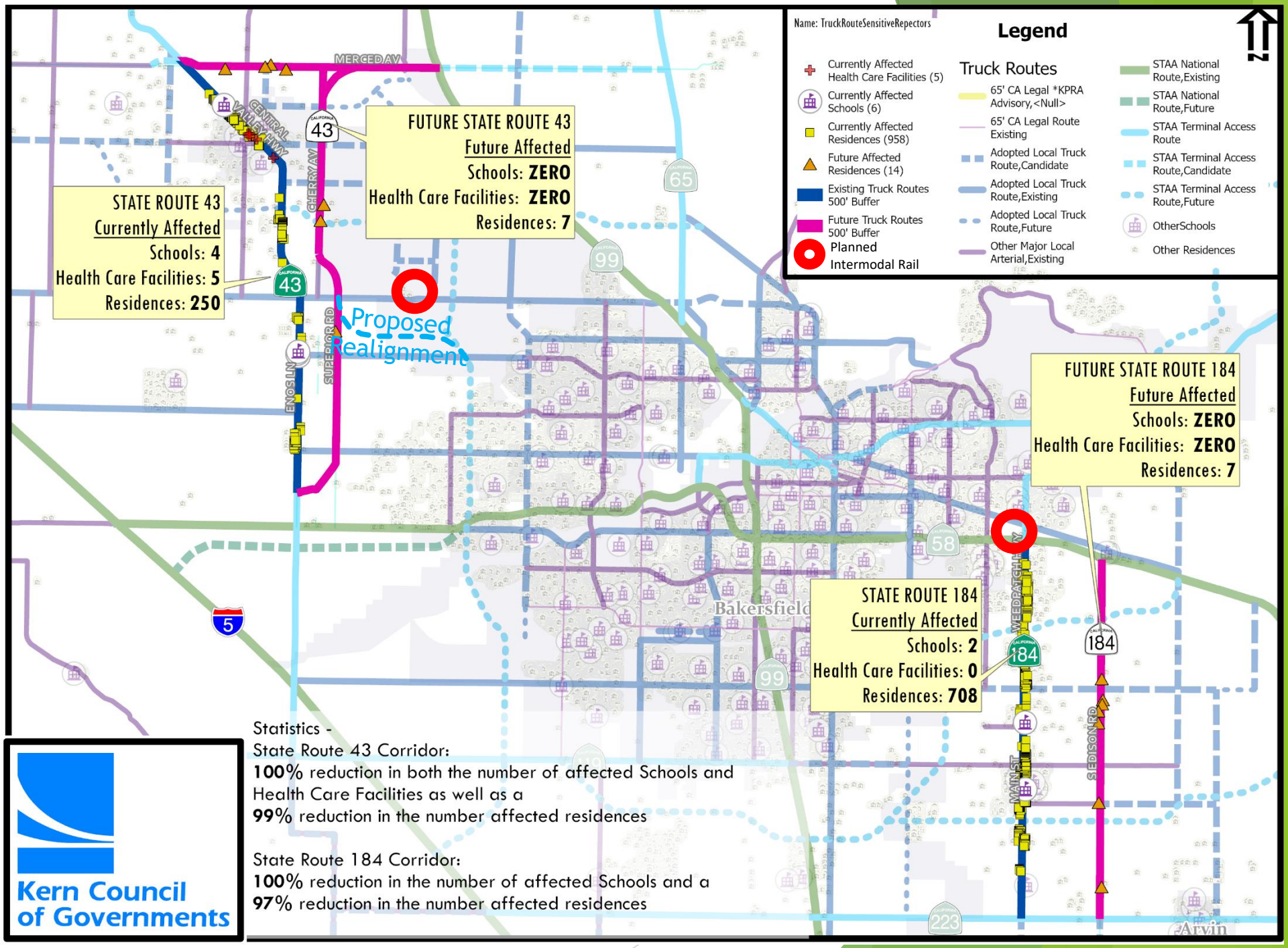
- 65' CA Legal Route
- 65' CA Legal *KPRA Advisory
- Other Major Local Arterials
- Other Roads
- Existing Rail
- Future Rail
- High Speed Rail Alignment

Intermodal Freight Hub

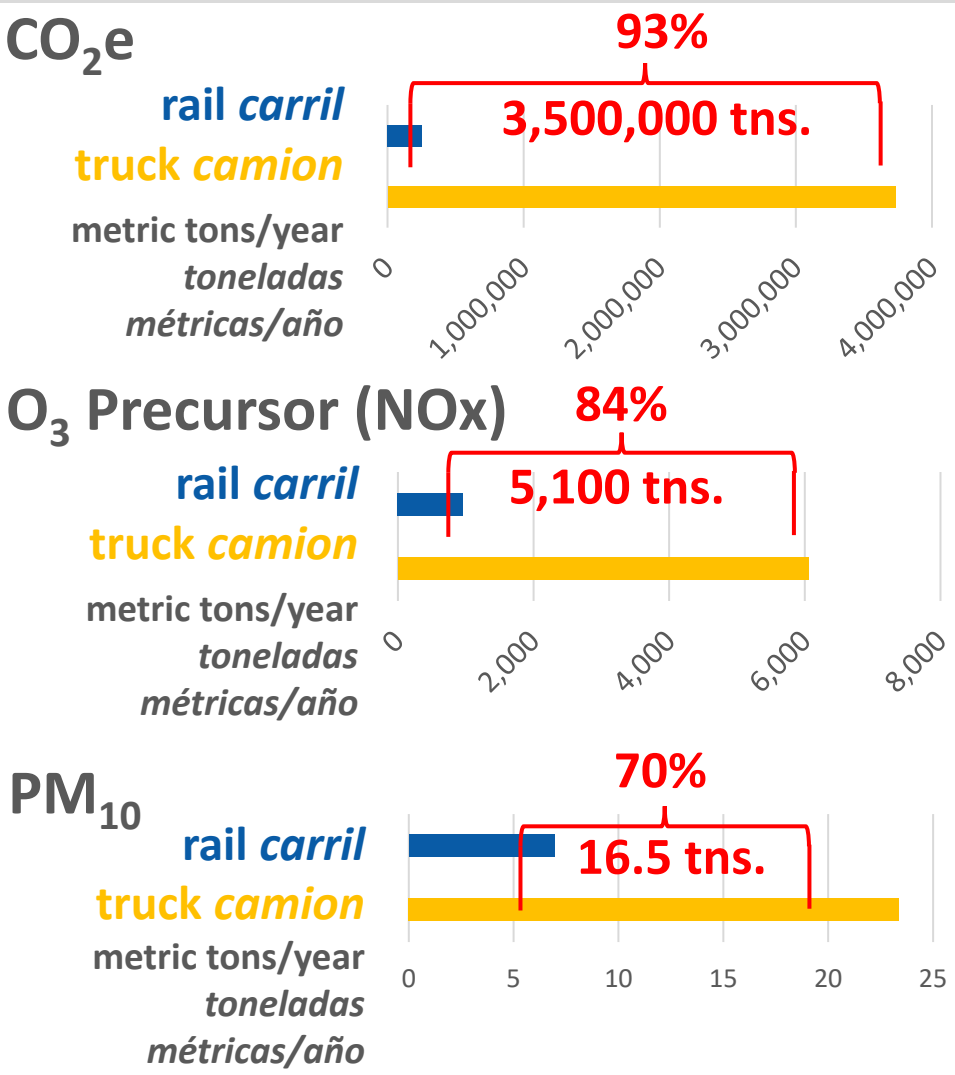
- Existing
- Potential

Potential projects to move truck traffic away from homes & schools on State Routes 43 & 184, providing spokes to planned intermodal rail hubs.

Source: KARGO Sustainability Study Phase II



Rail vs. Truck Emission Reductions
Reducción de emisiones ferroviarias contra camiones

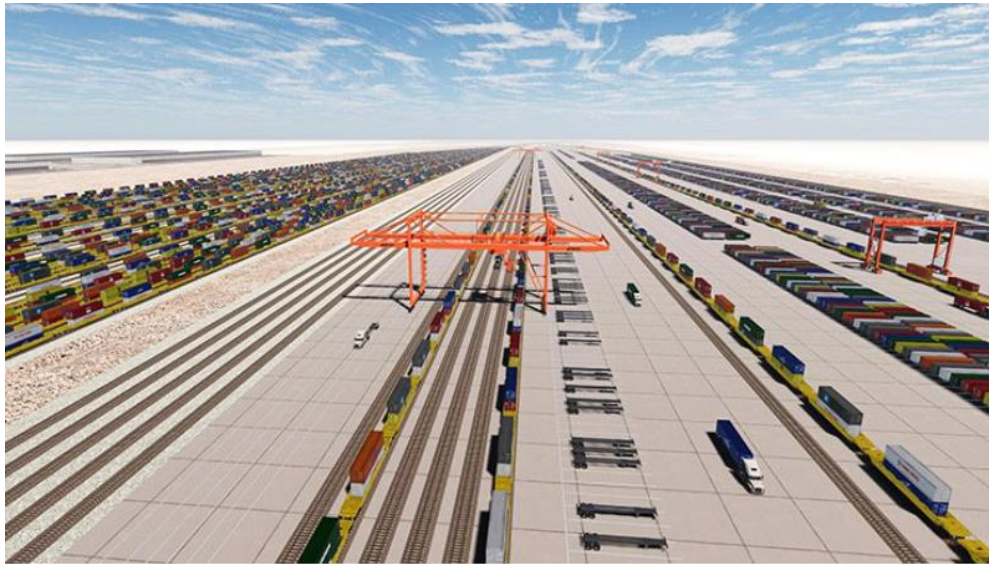


Source *Fuente*: California Inland Port Feasibility Study 2020

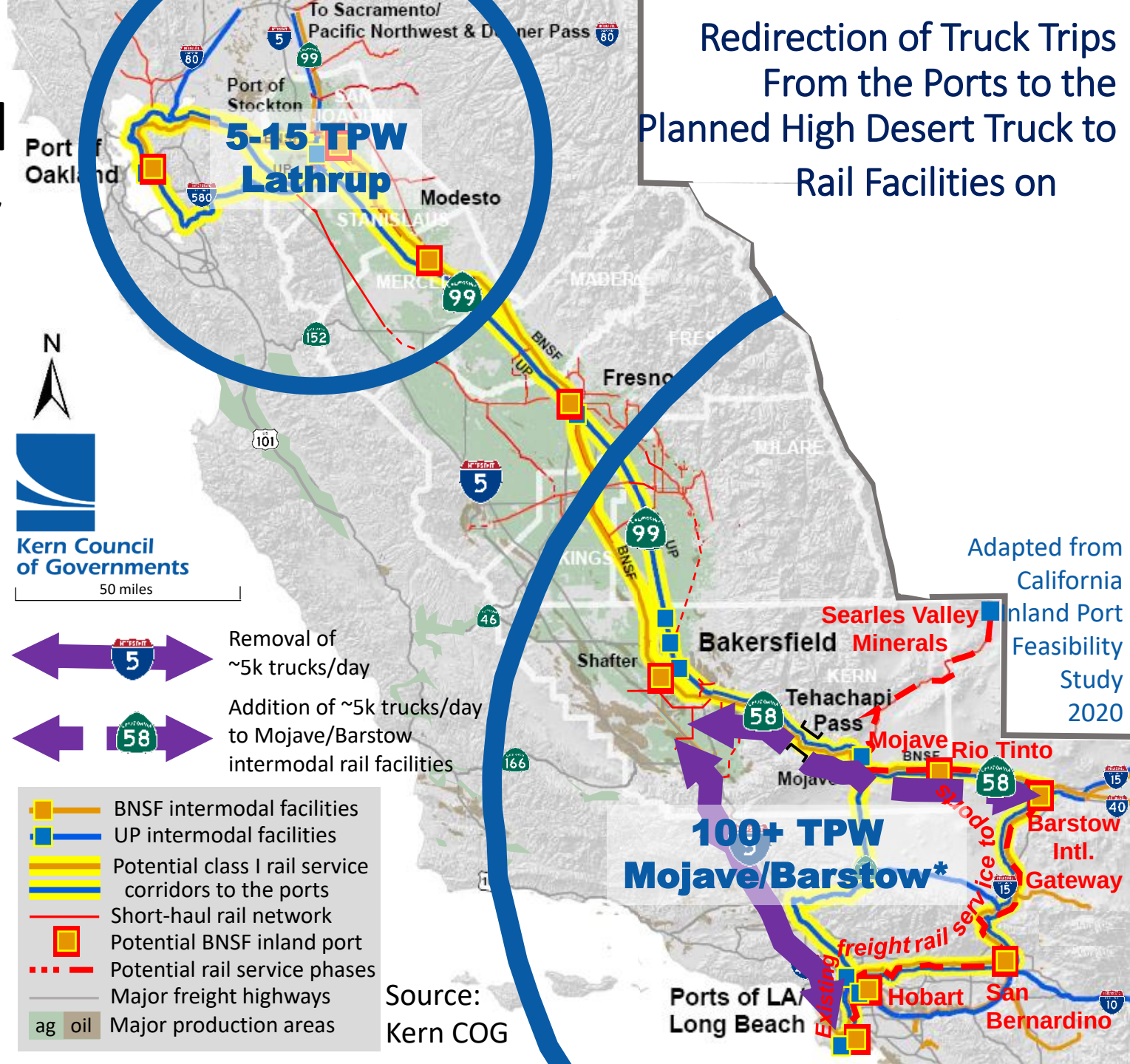
Potential Inland Ports
Puertos interiores Potenciales

HSR service frees up 14 slots per day on BNSF for freight
El servicio HSR libera 14 espacios por día en BNSF para carga

Barstow Intl. Gateway Truck to Rail Facility Could Shift 5,000 Trucks Per Day From 5 to 58

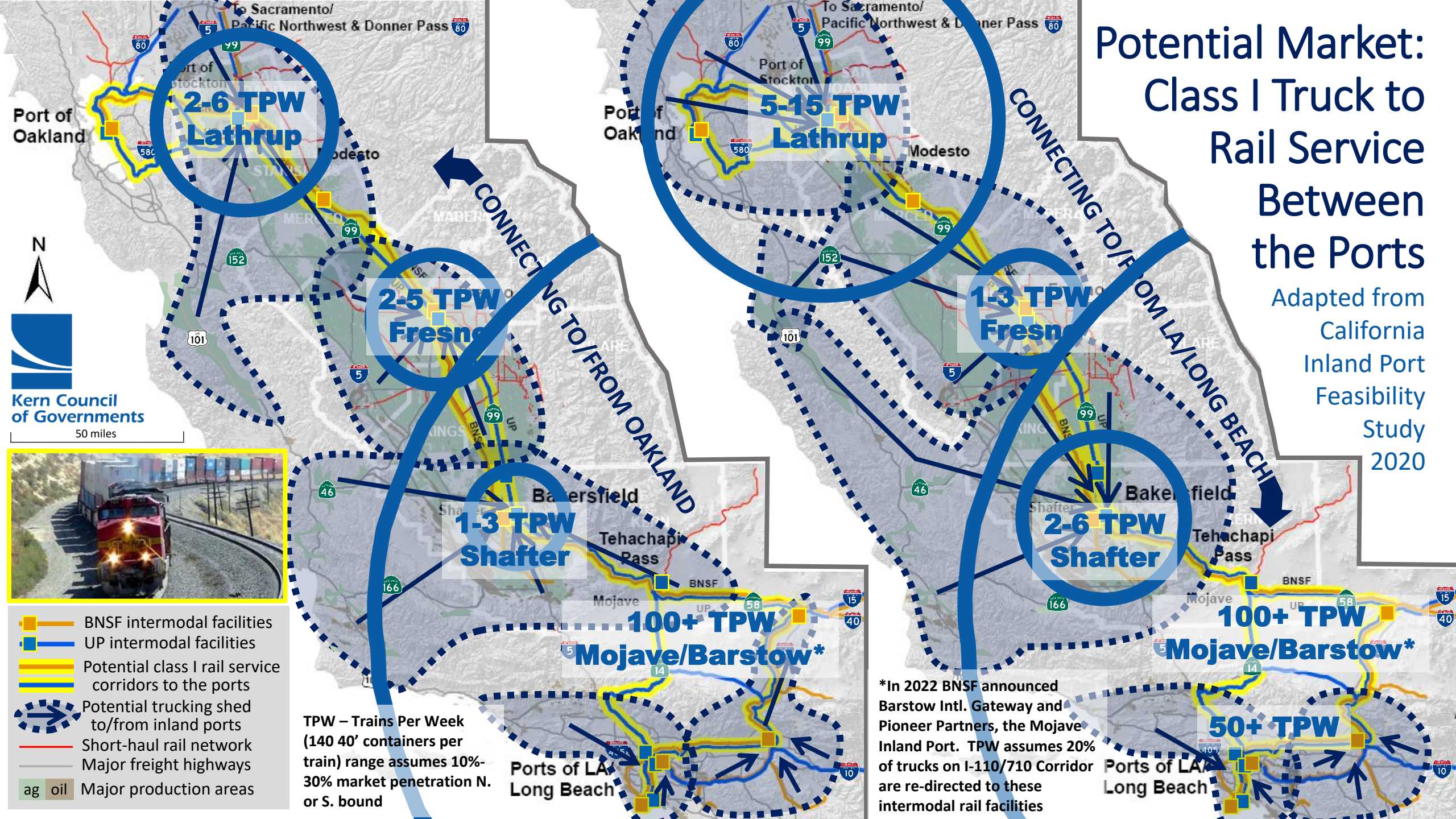


Redirection of Truck Trips From the Ports to the Planned High Desert Truck to Rail Facilities on

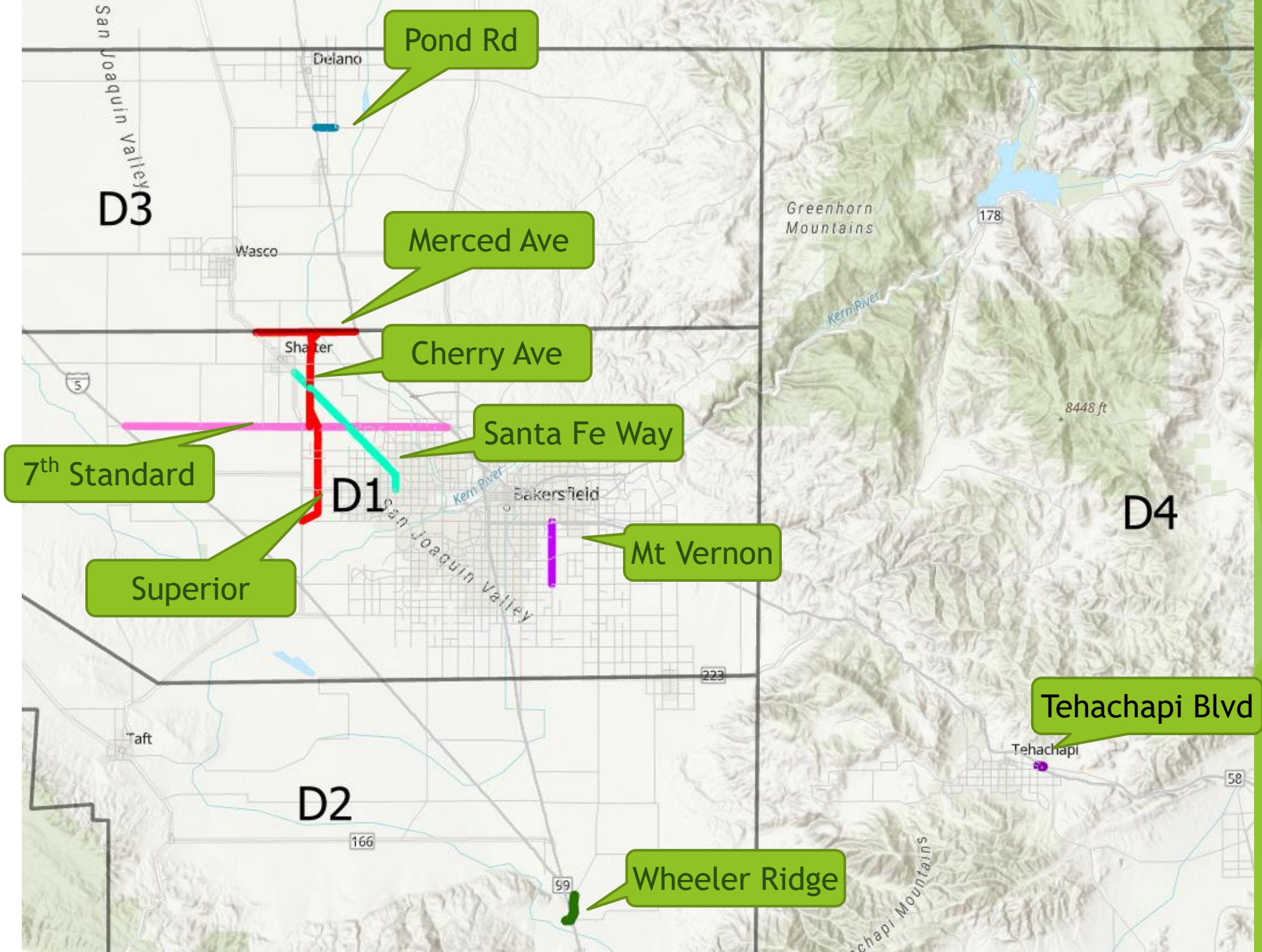


Potential Market: Class I Truck to Rail Service Between the Ports

Adapted from California Inland Port Feasibility Study 2020

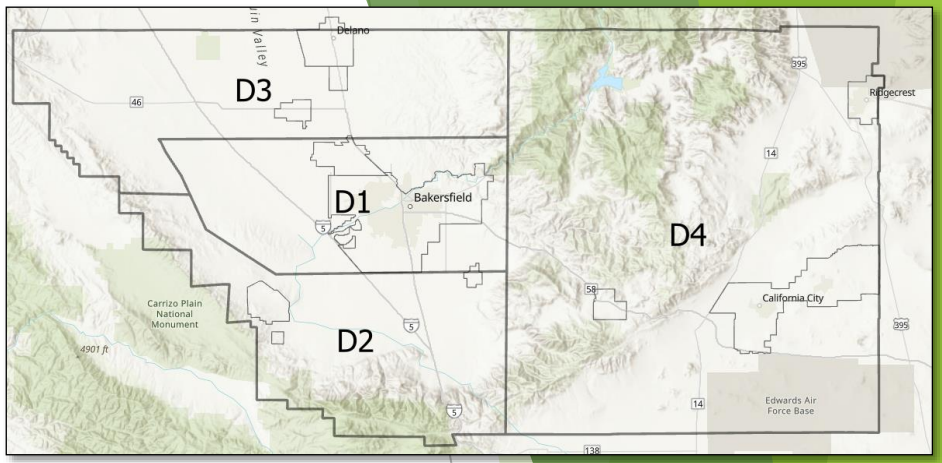


Early Phase I Projects for Draft Nexus Study



Draft Phase I - Impact Fee Projects

ID	Nexus District	Main Route	Brief Description	Approximate cost (Million $)
1	D1	Santa Fe	Santa Fe Wy, Burbank-Rosedale Hwy	$88.20
2	D1	7th Std	I-5/7th Std Rd I-change	$20.00
3	D1	7th Std	7th Std Rd-passing lanes, 43 - I-5	$6.74
4	D1	7th Std	7th Std Rd Concrete Rehab, 43 - I-5	$50.34
5	D1	7th Std	7th Std Rd Concrete Rehab, 43 - 99	$62.04
6	D1	Cherry	Merced Av - Expressway, 2 canal bridges	$59.42
7	D1	Cherry	Cherry Av - Expressway, 2 grade seps.	$53.59
8	D1	Superior	Superior Rd - Expressway, 1 grade sep	$84.44
9	D1	99	99/Merced I-change Improvements	$30.00
10	D2	Wheeler Ridge	Wheeler Ridge/Laval Rd TRCC core, safety rehab	$11.42
11	D1	Mt Vernon	Mt Vernon/58-Planz, safety rehab	$28.41
12	D3	Pond Rd	Pond Rd, Richgrove/43-155, safety rehab	$3.00
13	D4	Tehachapi Blvd	Near 58 Summit I-change	$1.20
	All Projects			$498.80



Cost Estimate

Nexus District	Total Cost (Million $)
D1	$483.18
D2	$11.42
D3	$3.00
D4	$1.20
County	$498.80

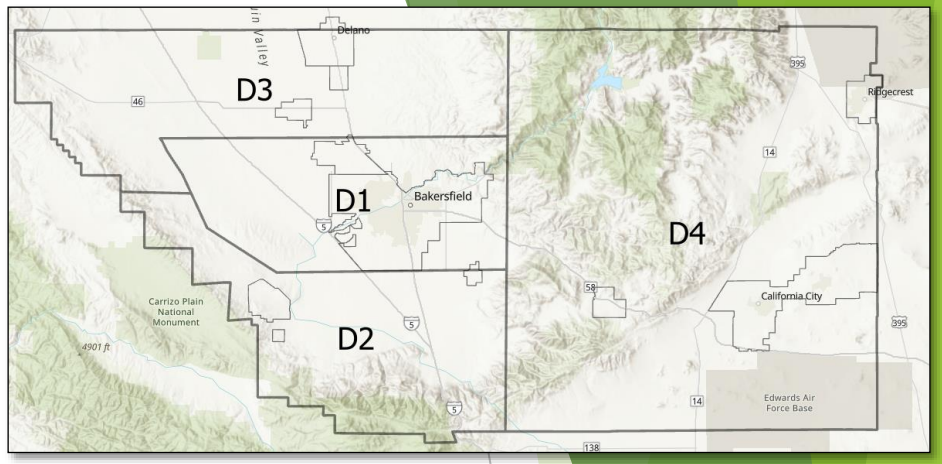
Potential Fee Program Structures

Scenario	Who pays?	Region	Structure	Metric for Fee	Notes
S1	Only Industrial	Countywide	Single Fee	Trips Generated/ Square Foot	Majority of growth is in North Bakersfield, Shafter, County; projects should address those areas
S2	Commercial /Industrial (Non- Residential)	Countywide	Single Fee	Trips Generated by Land Use	Some uses may get a fee reduction (ex., 30% discount for retail because of pass-by trips; 140% for industrial because of trucks; truck stops get a discount for pass-by trips)
S3	Everyone (residential and commercial)	Countywide	Single Fee	Trips Generated by Land Use	Some cities already have a fee for residential so there is a need to ensure that the same land uses are not included in multiple fee programs; if fees overlap, cities should pay a lesser regional fee; the benefit of this approach is that everyone pays less since the fee is distributed more widely, and by providing more capacity for trucks, residents also benefit from less congestion

Units of Calculating Fee:

- Number of trips (cars, Trucks, all, PCE)
- Square feet of development
- Dwelling Units

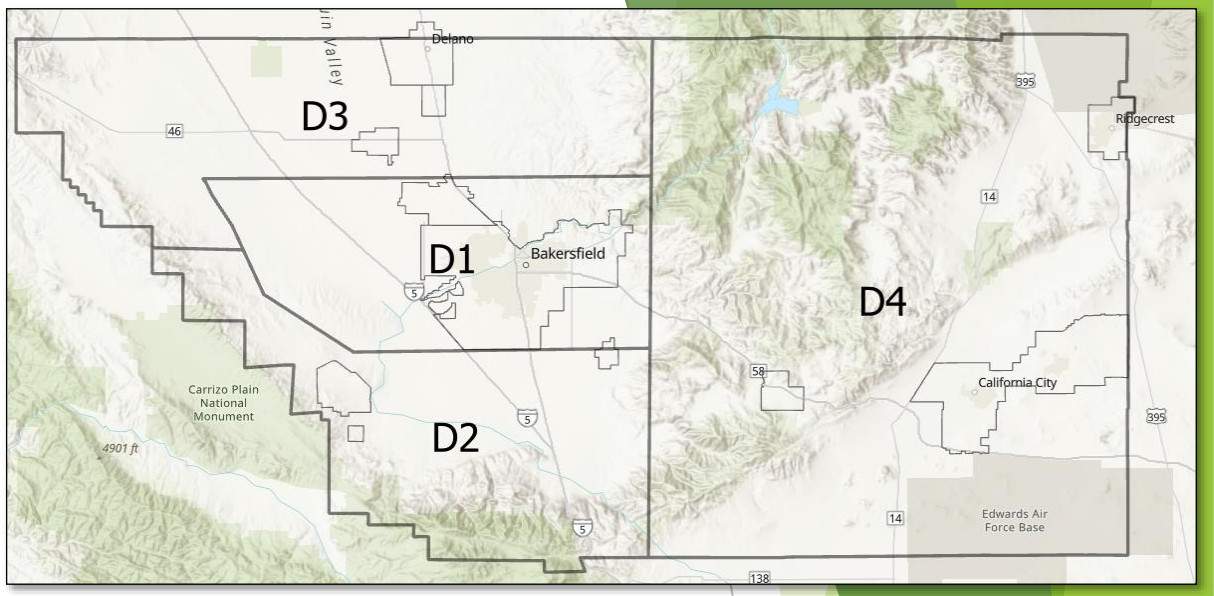
Potential Fee Calculation Units



District	Growth in Land Use 2046-2022				Growth in Trips					
	Dwelling Units	All Employees	Industrial/ Agg Employee	Industrial land 1000 square feet *	Car-All	Car-Industrial	Trucks All	Trucks-Industrial	Vehicles-All	Vehicles-Industrial
D1	42,608	32,511	9,369	19,518.6	524,532	17,570	35,407	5,567	559,939	23,137
D2	14,274	13,282	6,510	13,561.9	138,494	26,455	10,107	2,836	148,601	29,291
D3	3,418	3,482	1,624	3,384.0	44,045	5,860	3,613	1,076	47,658	6,935
D4	7,966	6,964	2,094	4,362.7	85,517	10,938	6,801	1,264	92,318	12,202
County	68,266	56,238	19,597	40,827.2	827,902	96,137	55,929	10,743	883,831	106,880

*assuming 0.5 industrial employee per 1000 sf of industrial development building

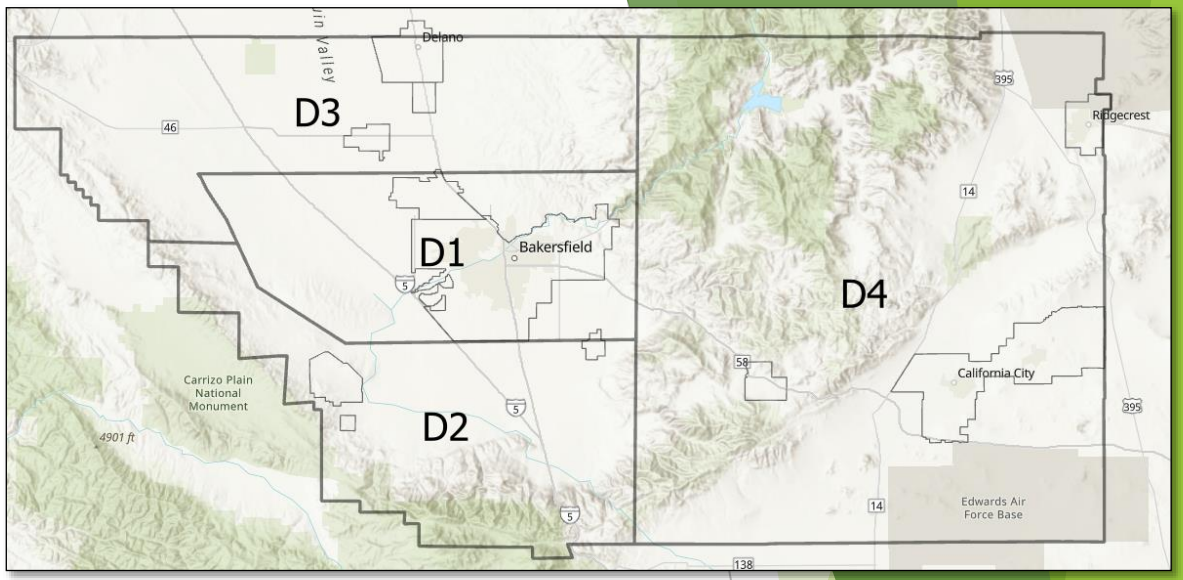
Growth as % of Total Future Value - Fair Share



District	Growth in Land Use 2046-2022			Growth in Daily Trips		
	all EMP	IND+ AGG Emp	Population	Total Vehicles	Trucks	PCE*
D1	12.2%	11.9%	22.5%	15.1%	14.8%	15.1%
D2	35.7%	30.9%	48.0%	42.4%	33.2%	41.3%
D3	7.2%	6.3%	19.4%	11.8%	9.2%	11.5%
D4	14.8%	31.2%	19.7%	15.4%	16.5%	15.5%
County	14.1%	14.8%	23.9%	16.7%	15.9%	16.6%

- the impact of each unit of growth in employment is assumed to be 1 unit of growth in population
- PCE=Passenger Car Equivalency

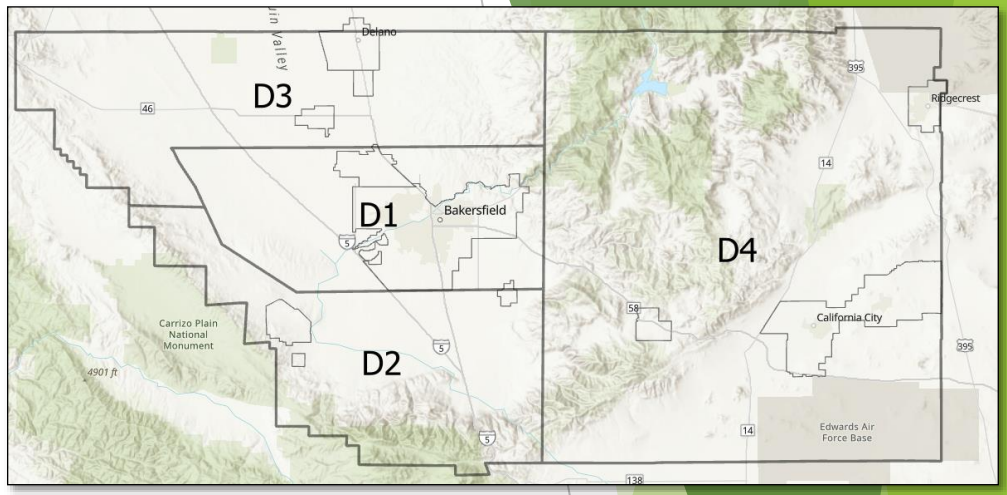
Fee Calculation Rates ($ per daily trip)



Region	IND+Agg - PCE	Non-Residential - PCE	All Uses - PCE
D1	$ 1,929	$ 450	$ 122
D2	$ 158	$ 65	$ 32
D3	$ 40	$ 24	$ 7
D4	$ 54	$ 6	$ 2
County	$ 1,158	$ 303	$ 93

Summary of Fee Scenario

New Trips Estimated to be Added by 2040 (PCE)			
District	S1	S2	S3
D1	29,718	130,531	598,071
D2	22,351	62,431	149,331
D3	4,681	9,097	48,186
D4	6,967	29,203	92,988
Total	63,717	231,262	888,577



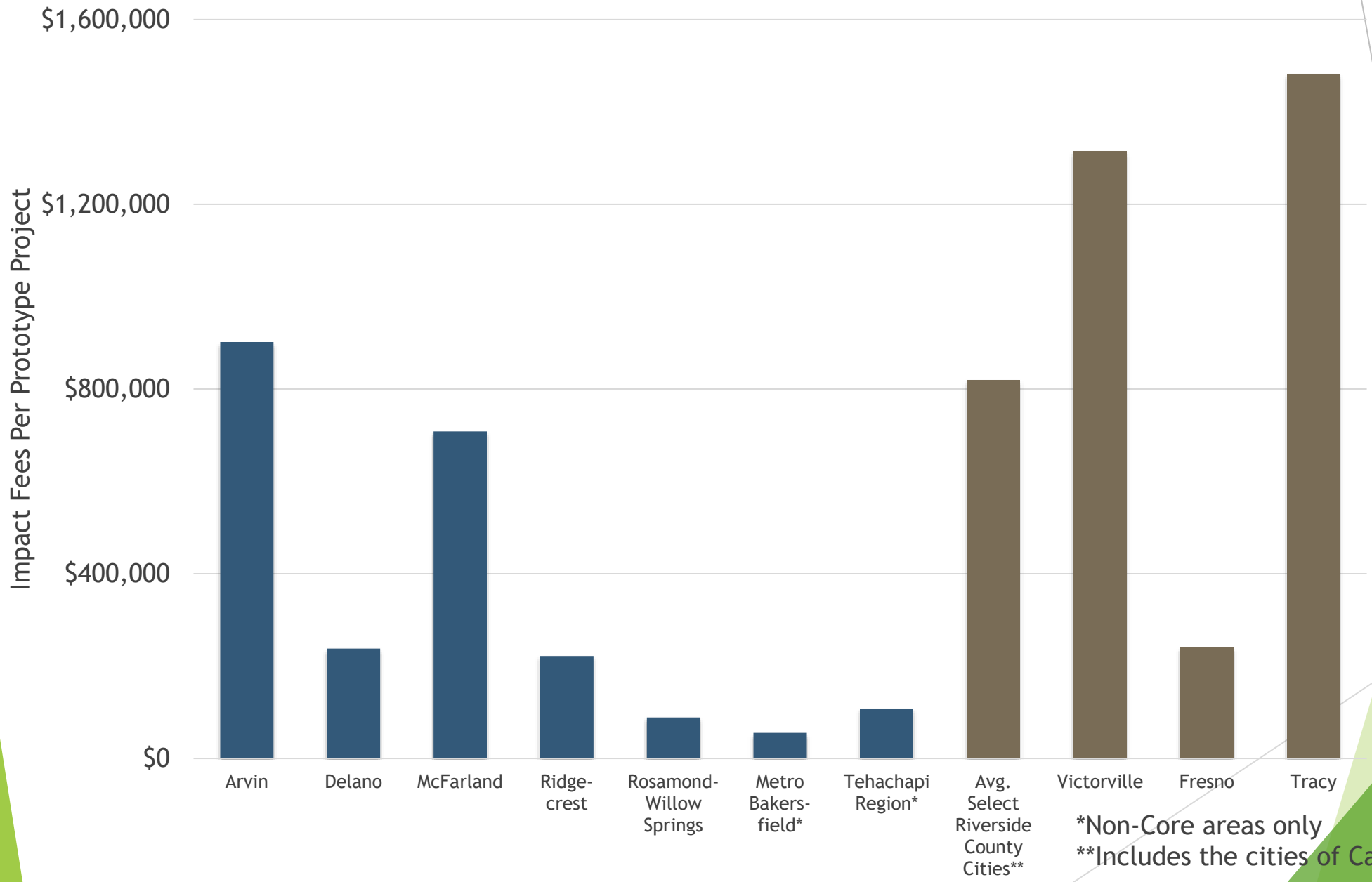
Fee Scenario	S1: only industrial	S2: all commercial	S3: all uses
Fee $/PCE trip	$ 1,158	$ 303	$ 93
Fee contribution to total cost	14.8%	14.1%	16.6%

Total Fee Collected by 2040: dollars				
District	S1	S2	S3	Project Cost: Mil $
D1	$ 57,315,334	$ 58,764,173	$ 72,822,248	$ 483.18
D2	$ 3,533,357	$ 4,072,043	$ 4,714,124	$ 11.42
D3	$ 188,954	$ 216,132	$ 344,169	$ 3.00
D4	$ 374,544	$ 177,329	$ 186,019	$ 1.20
Total	$ 73,762,436	$ 70,126,358	$ 82,847,104	$ 498.80

Measuring Competitiveness with a Prototype Industrial Project

- Built after 2012 (for lease rate comparisons)
- Site Area: 9.56 acres
- Gross Building Area: 106,320 square feet
- Rentable Building Area: 105,699 square feet
- Assumed “Heavy Industrial” fee when necessary
- Impact fee rates modified by applicable geography

DEVELOPMENT IMPACT FEE COMPARISONS - TODAY



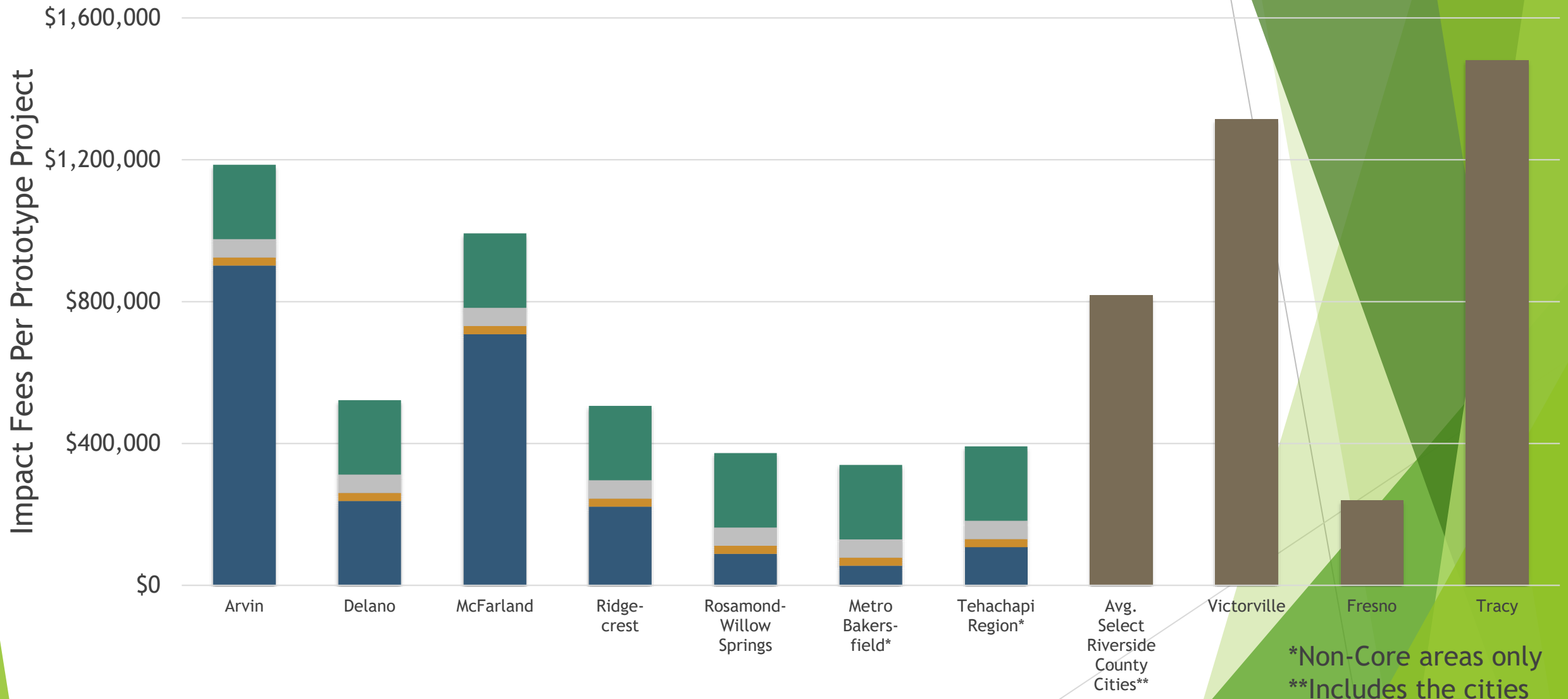
*Non-Core areas only
**Includes the cities of Calimesa, Norco, and Temecula

New Nexus Fee

Prototype project

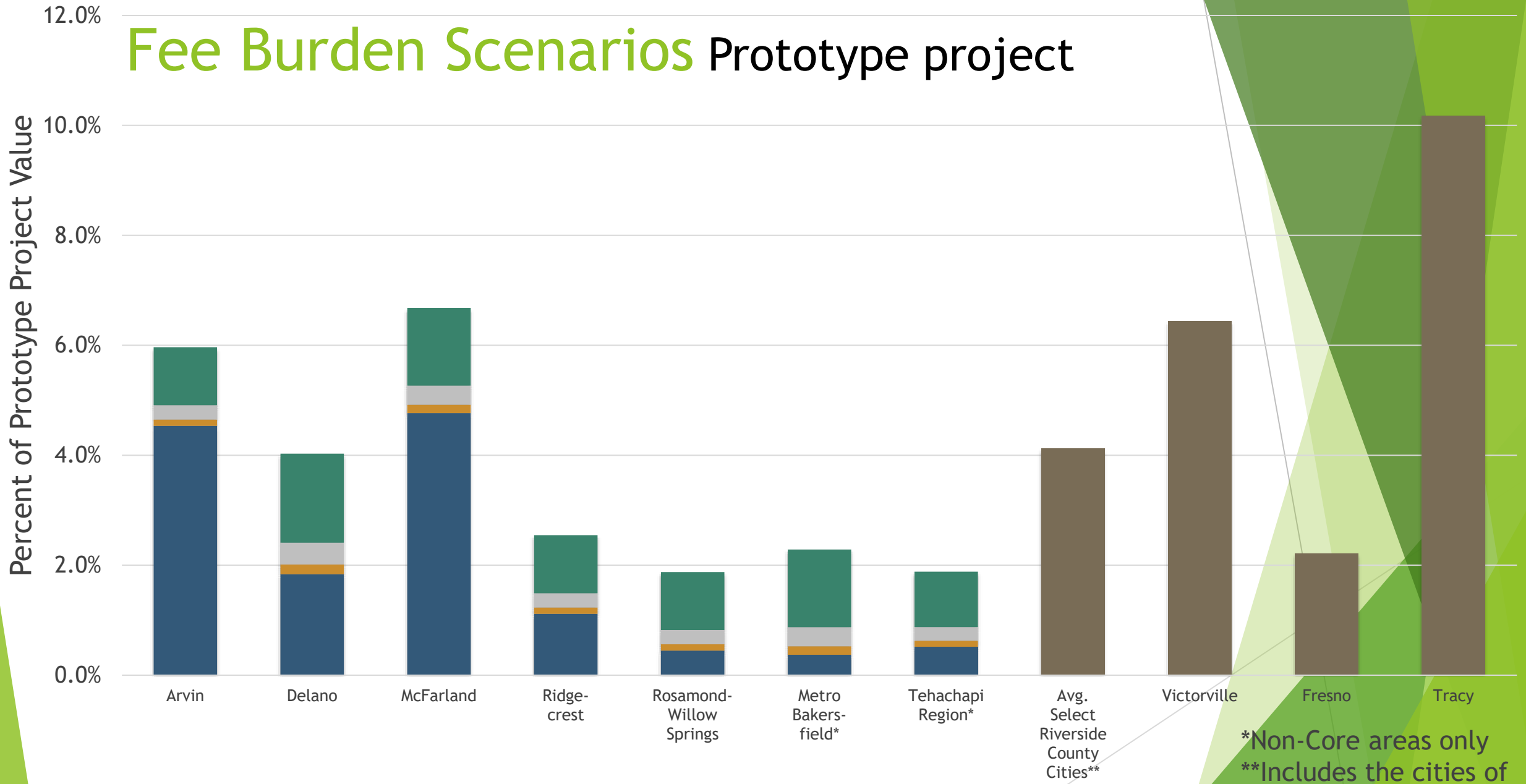
General Warehouse ITE 150	
105.699	ksf
1.71	ALL trip per ksf
0.6	Truck trips per ksf
2.31	PCE trips per ksf
53	employee
181	Daily trips
244	Daily PCE trips
S1- Only Industrial	
$ 331,712	Toal Fee
$ 3.14	Fee per sf
S2-All commercial	
$ 86,150.96	Toal Fee
$ 0.82	Fee per sf
S3-All uses	
$27,299.06	Toal Fee
$ 0.26	Fee per sf

DEVELOPMENT IMPACT FEE SCENARIOS Prototype project



*Non-Core areas only
**Includes the cities of Calimesa, Norco, and Temecula

Fee Burden Scenarios Prototype project



*Non-Core areas only
**Includes the cities of Calimesa, Norco, and Temecula

Other Potential Local / Regional Revenue Options Besides a Truck TIF

Measure / Source	Approval Process	Advantages	Disadvantages
Enhanced Infrastructure Financing Dist. (EIFD)	**Approval by Council / Board of participating jurisdictions**	Does not raise taxes, Can be limited to a specific district	Re-directs potion of future property tax revenue increases from general fund of participating jurisdictions
Mobility/VMT Fee Pilot- Autonomous ZEV Trucking	**Ordinance approval by County Board of Supervisors/jrsdctn**	Tax incident on ZEV truck road users not paying diesel tax	Initially a small revenue source
Sales Tax Measure	2/3^{rds} voter approval	Largest potential revenue generator	Recent local general sales tax increases may hinder support
Property Assmt. District (e.g., Mello-Roos CFD)	2/3^{rds} landowner / voter approval	Most applicable for local serving facilities	Less applicable to regional serving projects.
Gas or Diesel Tax	2/3^{rds} voter approval	Tax incidence focused on users / beneficiaries	Incentivizes "Fuel-up" outside County. Clean tech → declining revenues
Business License or parcel tax on industrial uses	2/3^{rds} voter approval	Tax incidence focused on users / beneficiaries	May impact local economic competitiveness
Project Specific Mitigation (CEQA)	Local jurisdiction entitlement process	Direct nexus with local development	Less applicable to regional serving projects

Enhanced Infrastructure Financing District (EIFD)

- Provide an emerging form of tax increment financing available to local public agencies in California
- May be formed over a defined area (the district), including non-contiguous areas, by a city, county, or joint powers authority (JPA), to capture incremental increases in property tax revenue from future development and assessed value appreciation
  - Without an EIFD, this revenue would accrue to the City's General Fund (or other property-taxing entity revenue fund
  - EIFDs do not provide access to property tax revenue beyond the share agreed to by participating jurisdictions (e.g., City and County)
- Establishment requires approval by every local taxing entity that will contribute its property tax increment
- Revenues may be used to provide funding and financing for broad range of infrastructure projects, provided those projects have a useful life of 15 years and are of 'community-wide' significance

Pilot Mobility Fee – Autonomous/ZEV Trucking Zone

- Trucking fleets already track their mileage and to pay the IFTA tax by state jurisdiction.
- Autonomous truck vendors are looking for a warehouse-to-warehouse haul in a rural area to test their new technology.
- Kern is an ideal location for testing this technology and potentially benefitting from high tech jobs.
- Many autonomous trucks use ZEV technology but do not pay diesel fuel tax.
- Autonomous technology easily collects milage data.
- KARGO phase I study proposed creation of a Safer Autonomous Freight Enhanced Testing Environmentally Clean (SAFETEC) Logistics Zone in Kern.

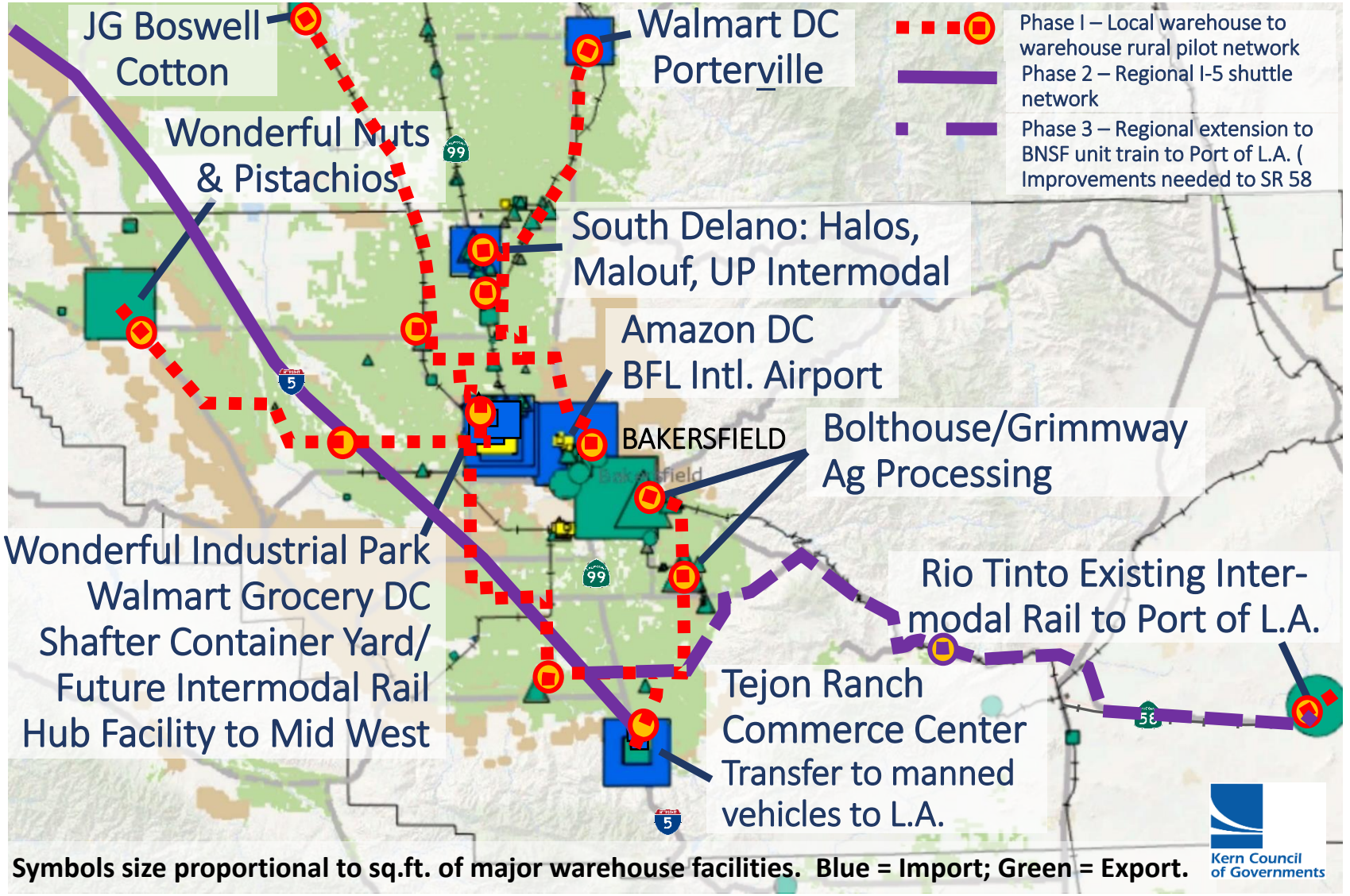
Volvo Autonomous Vehicle

https://www.entrepreneur.com/business-news/sorry-truckers-volvos-autonomous-vehicles-can-handle-it/335385

Proposed Kern SAFETEC Logistics Zone – Advanced Research Corridor Network

– Safer Autonomous Freight Enhanced Testing Environmentally Clean (SAFETEC) Logistics Zone

Potential Pilot Rural Logistics Corridor Network



Symbols size proportional to sq.ft. of major warehouse facilities. Blue = Import; Green = Export.

Kern Council of Governments

Sales Tax Measure

Approval Process:

- 2/3rds voter approval

Advantages:

- Strong case for Kern to join other 24 Self-Help Counties Coalition (SHCC)
- Can generate significant revenue
- Tax exempt bond financing potential ("up-front" revenue)
- Maximum local control on use of funds

Disadvantages:

- Voter approval may be difficult

Illustrative Revenue Generation (high-level Calculation)	
Assumptions	
Annual Population Growth = Real Sales Tax Revenue Growth	1.29%
Revenue	
2022 - with **1/4% Sales Tax**	$62,685,468
2046 – with **1/4% Sales Tax**	$85,297,000
Total Revenue (24 years): 1/4% Sales Tax	**$ 1,836,000,000**

Property Tax Measure

Approval Process:

- 2/3rds voter approval

Advantages:

- Can generate significant revenue
- Can be used to secure tax exempt bonds – "up-front" revenue
- Maximum local control on use of funds

Disadvantages:

- Voter Approval may be difficult
- County already has relatively high property tax rate

Illustrative Revenue Generation (high-level Calculation)

Assumptions	
Annual Real Growth in Assessed Value	1%
Average Property Tax Rate	1.259%
New Property Tax for Transportation Project	0.05%

Revenue

Year	Total Assessed Value	Existing Property Tax Revenue	New Property Tax Revenue for Transportation
2022	$96,672,959,000	$ 1,217,576,000	$ 48,336,000
2046	$ 122,749,000,000	$ 1,545,000,000	$ 61,374,000
Total Revenue (24 years)		$ 34,375,000,000	$ 1,365,000,000

State or Federal Funding Sources

Approval Process:

- State / Federal appropriations, rule-making, competitive selection

Advantages:

- Numerous “pots” of money may be applicable
- Does not raise local taxes or require voter approval

Disadvantages:

- Funding is competitive and uncertain
- Many restrictions on use of fund, matching source needed

Program Examples (partial listing)	Type of Facility
Highway User Tax Account (HUTA)	Pavement
SB1 Road Maintenance Rehabilitation Acct. (RMRA)	Pavement
Regional Surface Transportation Program (RSTP)	Pavement
Transportation Development Account (TDA/LTF)	Pavement
Highway Safety Improvement Program (HSIP)	Pavement / Bridge
Highway Bridge Program (HBP)	Bridge
Highway Infrastructure Program (HIP)	Bridge
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	Varies

Conclusions

- To do nothing will likely result in accelerated pavement degradation, and potential backlash toward new warehousing projects.
- The B3K economic development effort in Kern calls for automated manufacturing/warehousing high-paying tech jobs. Identifying infrastructure investment to support this much needed industrial diversification in the economy is being driven the curtailment oil production by the state.
- Revenue programs should have a return to source provision.
- Revenue programs can incentivize shipping by rail to reduce road wear.
- EIFD tax increment finance district is a promising new revenue program.
- Spread the burden – develop multiple revenue programs.
- New revenue efforts need to be championed by both the social equity and private sector community leaders.

Next Steps for Consideration

- Finalize KARGO II study report
- Seek grant funding to refine impact fee project list and costs
- Select preferred funding and fee scenario
- Identify “Return to Source” percentages
- Finalize the impact fee schedule
- Complete a formal nexus study and draft ordinances
- Seek equity & business champions for voter approval efforts
- Seek approval by participating jurisdictions
- Seek grant funding to research EIFD and other revenue mechanisms
- Leverage state increase in climate adaptation grant funds for goods movement in the region