

Transportation

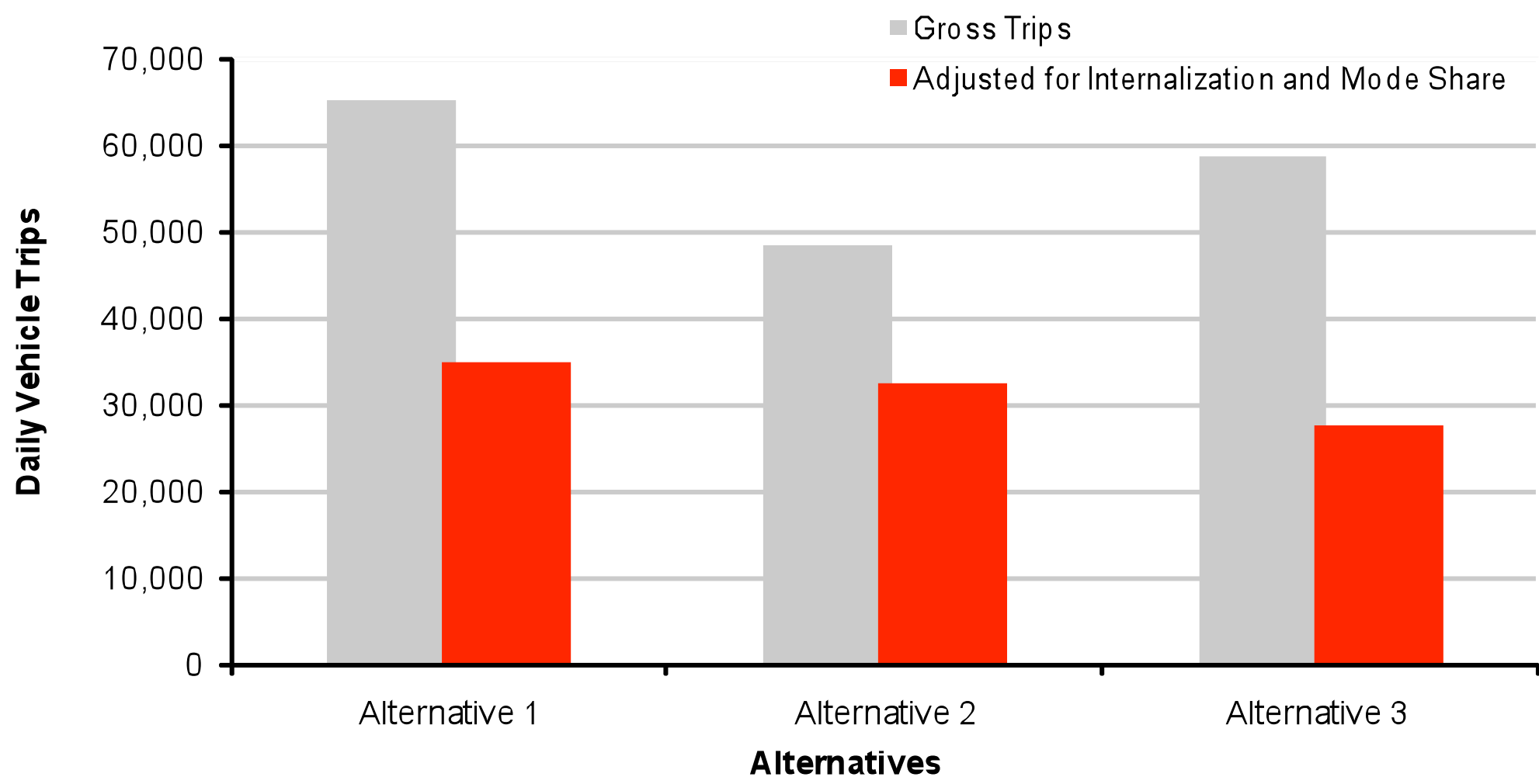
Three key areas of potential change are analyzed here:

The **traffic** indicators describe the potential of each Plan Alternative to impact the transportation network surrounding the Plan Area.

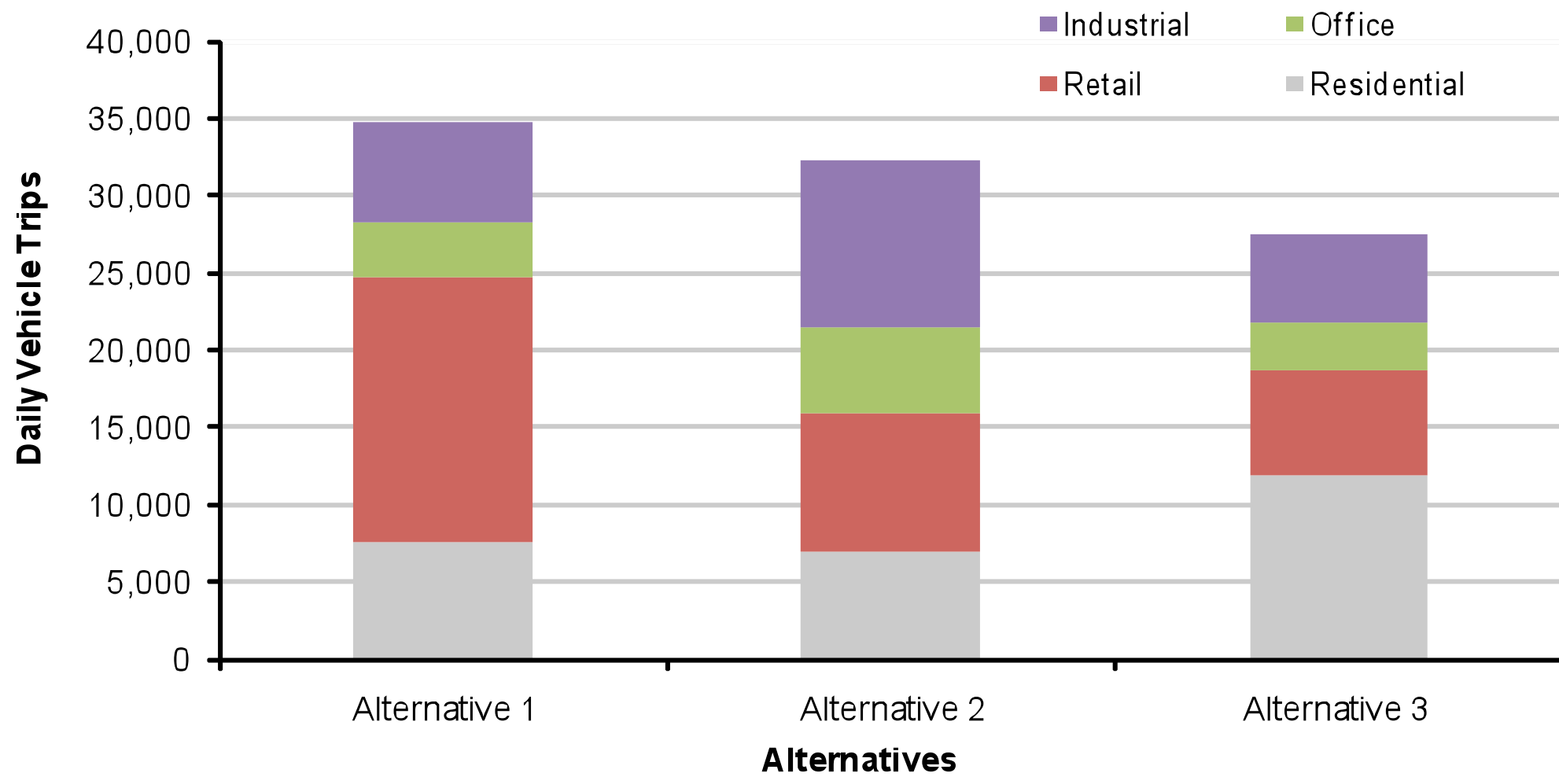
Travel choices assesses each Plan Alternative’s ability to support and promote travel by transit, pedestrian, and bicycle modes, a key goal of the Central Estuary Plan.

Connectivity highlights new roadways that provide paths for cars to navigate through the area and shorten walking distances, creating an inviting and safe pedestrian environment and providing sufficient roadway capacity without having to design wide streets with large intersections.

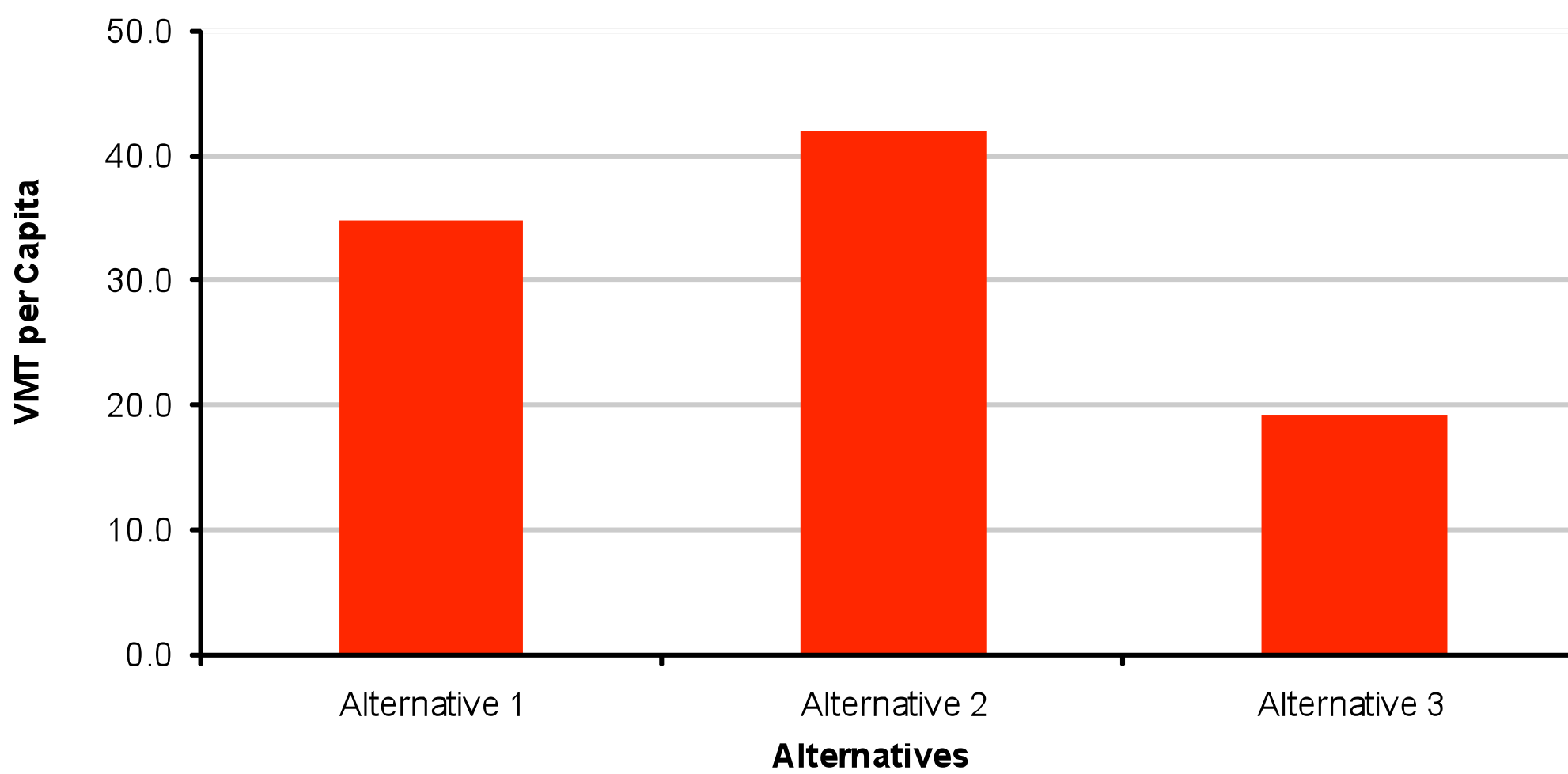
Traffic
Gross Daily Vehicle Trip Generation Comparison



Net External Vehicle Trip Generation by Land Use



Vehicle Miles Traveled (VMT) per Capita

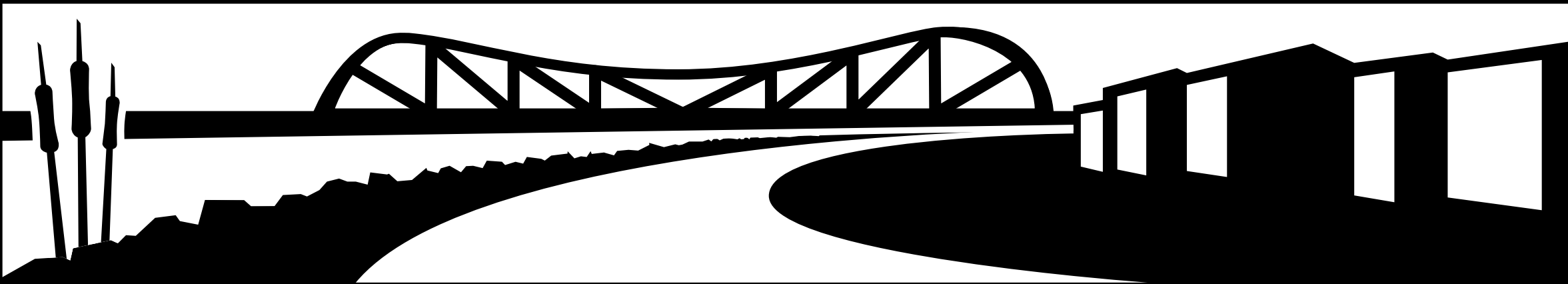


Travel Choices
Transit Suitability

Population Density (DU per Acre)	Alternative 1	Alternative 2	Alternative 3
West	0.8	9.03	8.15
Central-West	9.97	7.87	10.64
Central-East	6.74	0.73	15.31
East	7.98	0	9.27
Plan Area	5.89	4.3	10.56
Viability of New Transit	Unlikely	Unlikely	Possible

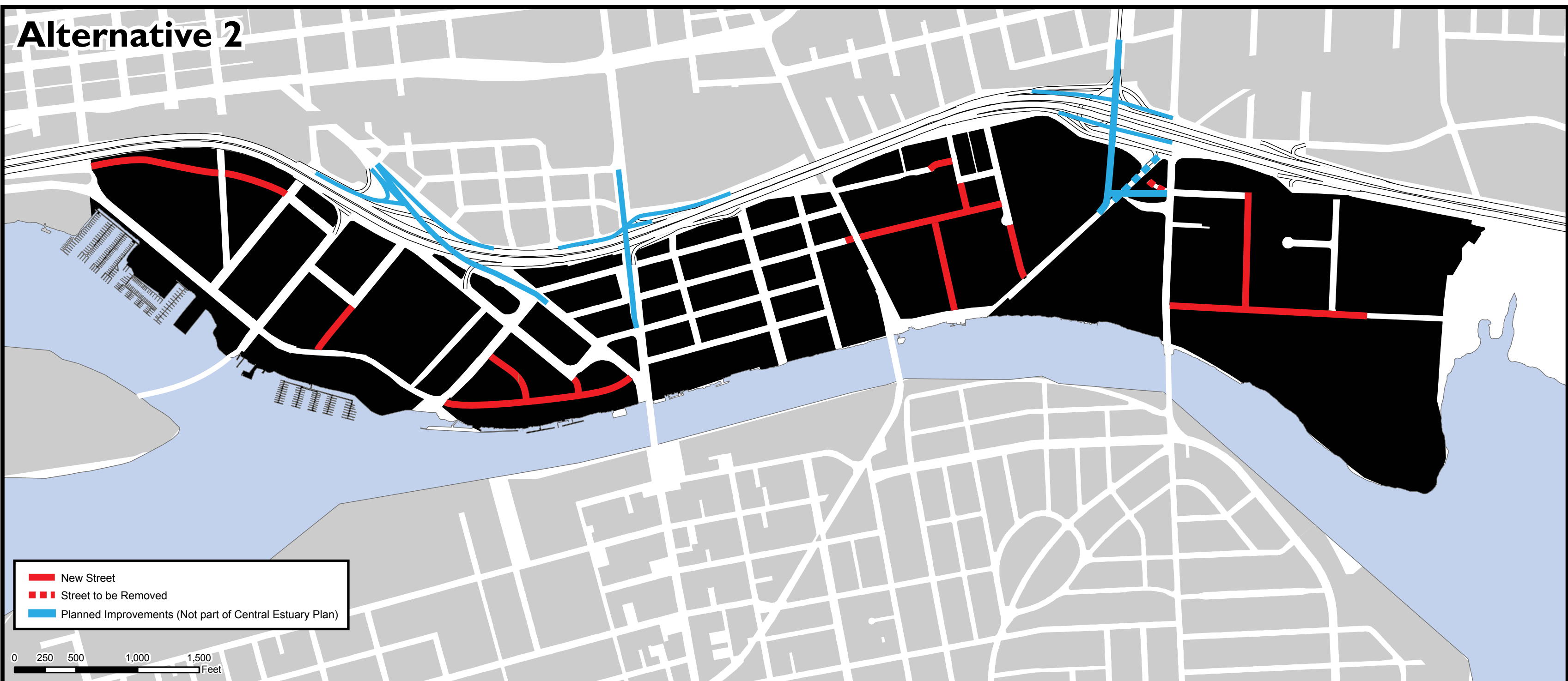
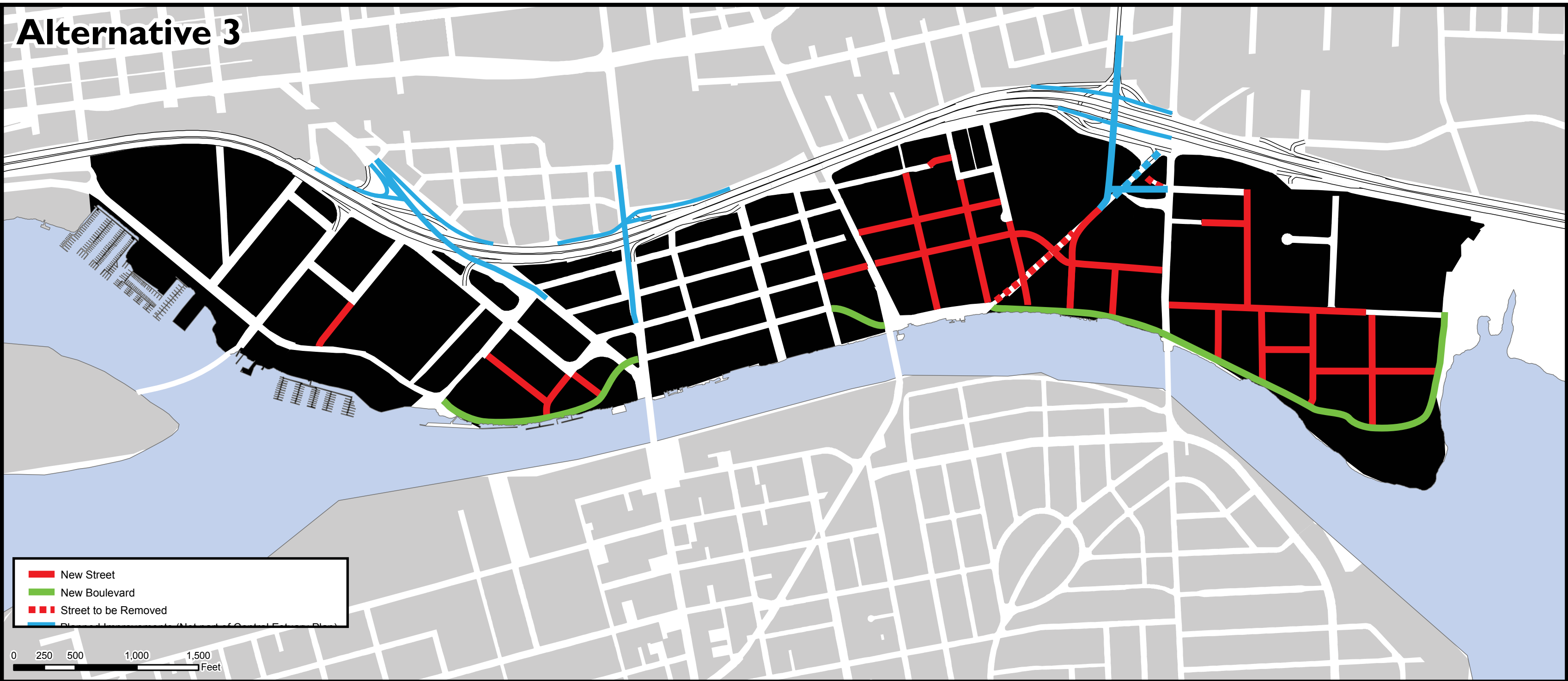
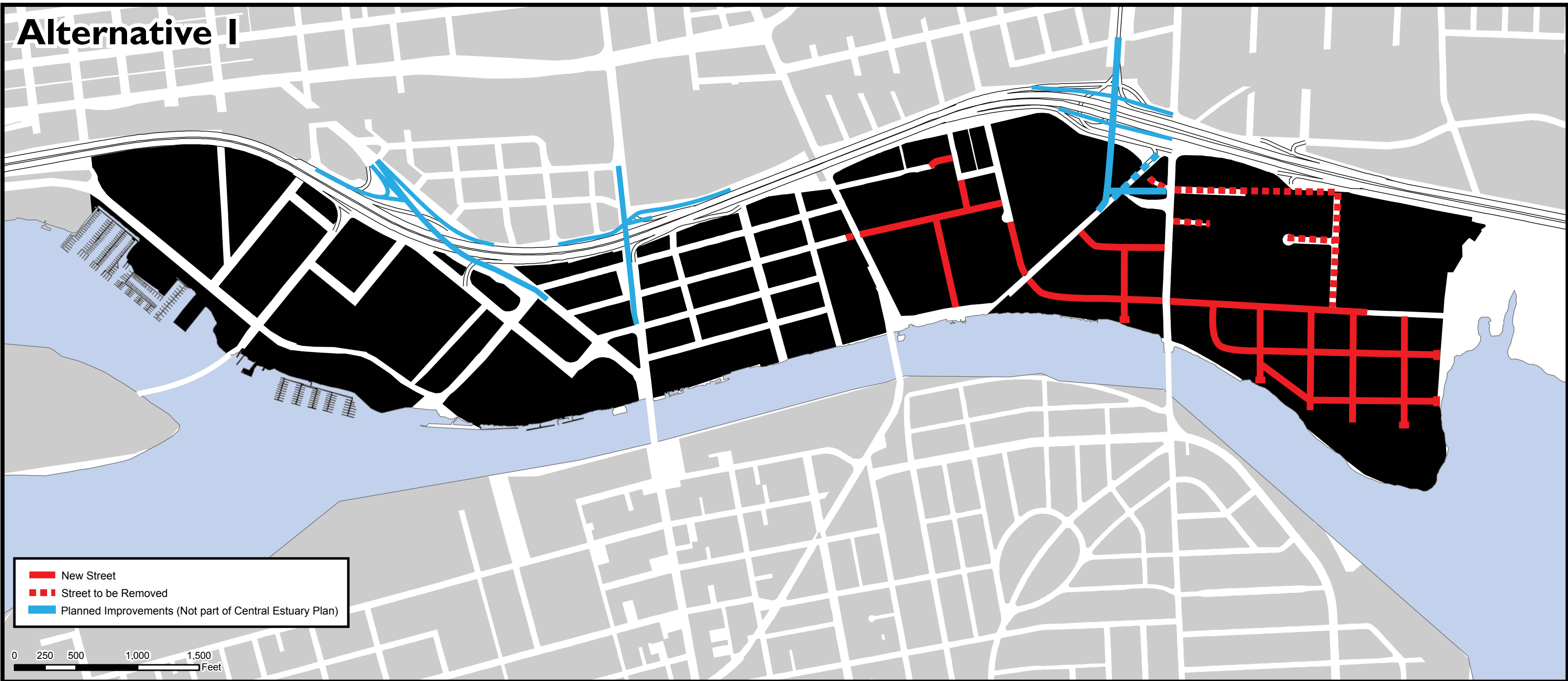
Bike and Pedestrian Suitability
The alternatives provide sufficient density, mix of land uses, and internal connectivity to support a significant level of pedestrian and bicycle activity.

- All 3 Alternatives propose significant increases in mixed-use development throughout the Plan Area. Complimentary land uses (e.g., residential and retail) will promote walking and biking in the area by providing destinations within a reasonable distance of origins.
- Improving connections to the Fruitvale BART station and the City of Alameda should also improve walking and biking. The Fruitvale station has the second-highest bike mode share in the BART system and the City of Alameda offers a number of shopping destinations a short distance across the Estuary.
- New development will contribute funds toward infrastructure improvements such as improved sidewalks, intersection crossings, bike lanes, etc.



Transportation

Connectivity



Summary

Transportation Topic Area	Alternative 1	Alternative 2	Alternative 3
Traffic			
Gross Daily Vehicle Trips			
Internal Capture, External Walk/Transit Mode Share Reductions			
Net External Daily Vehicle Trips			
Vehicle-Miles Traveled (VMT)			
VMT per Capita			
Travel Choices			
Transit Suitability			
Pedestrian and Bicycle Suitability			
Connectivity			
External Connections			
Internal Connections (Includes Bike/Ped Access)			

Legend

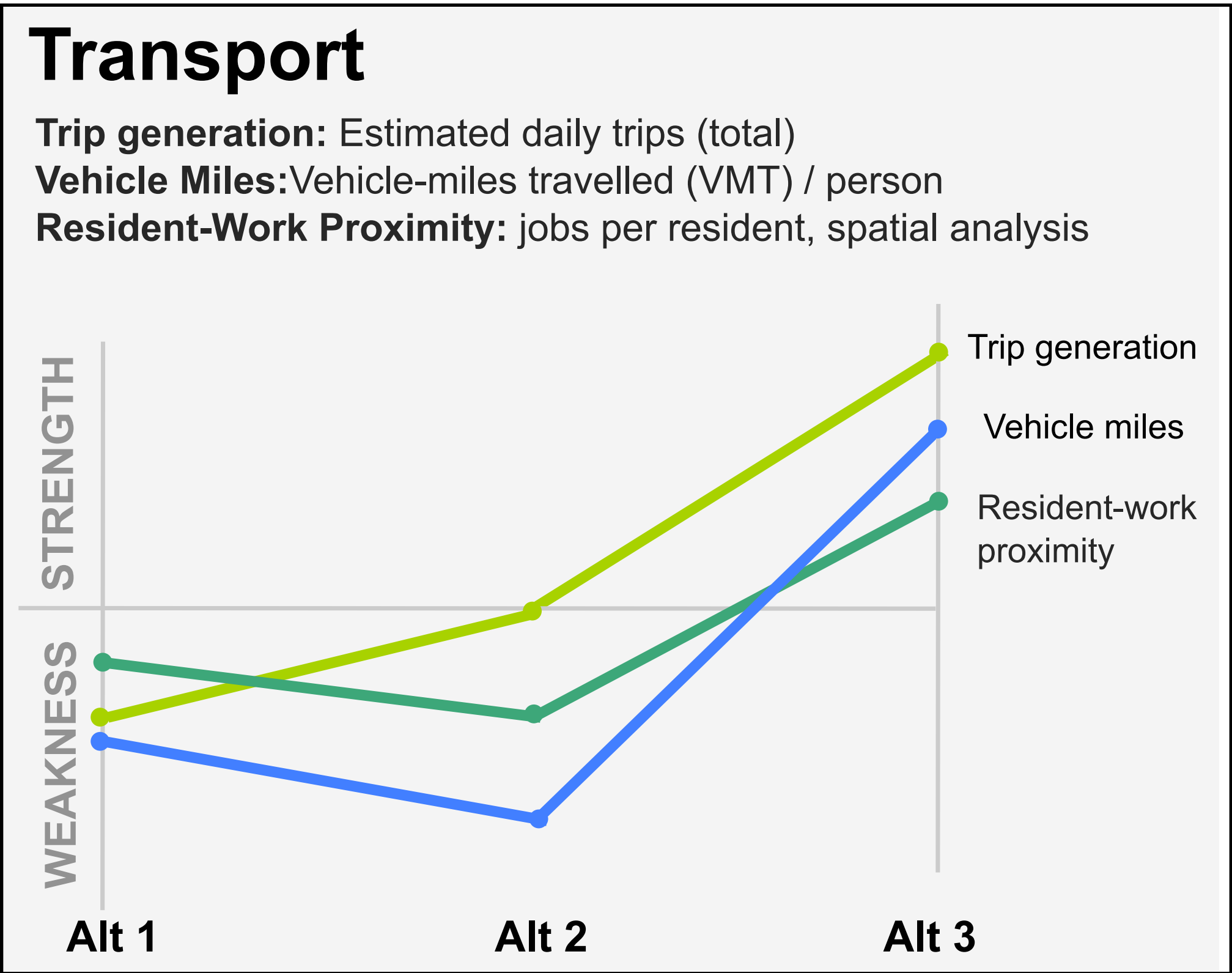
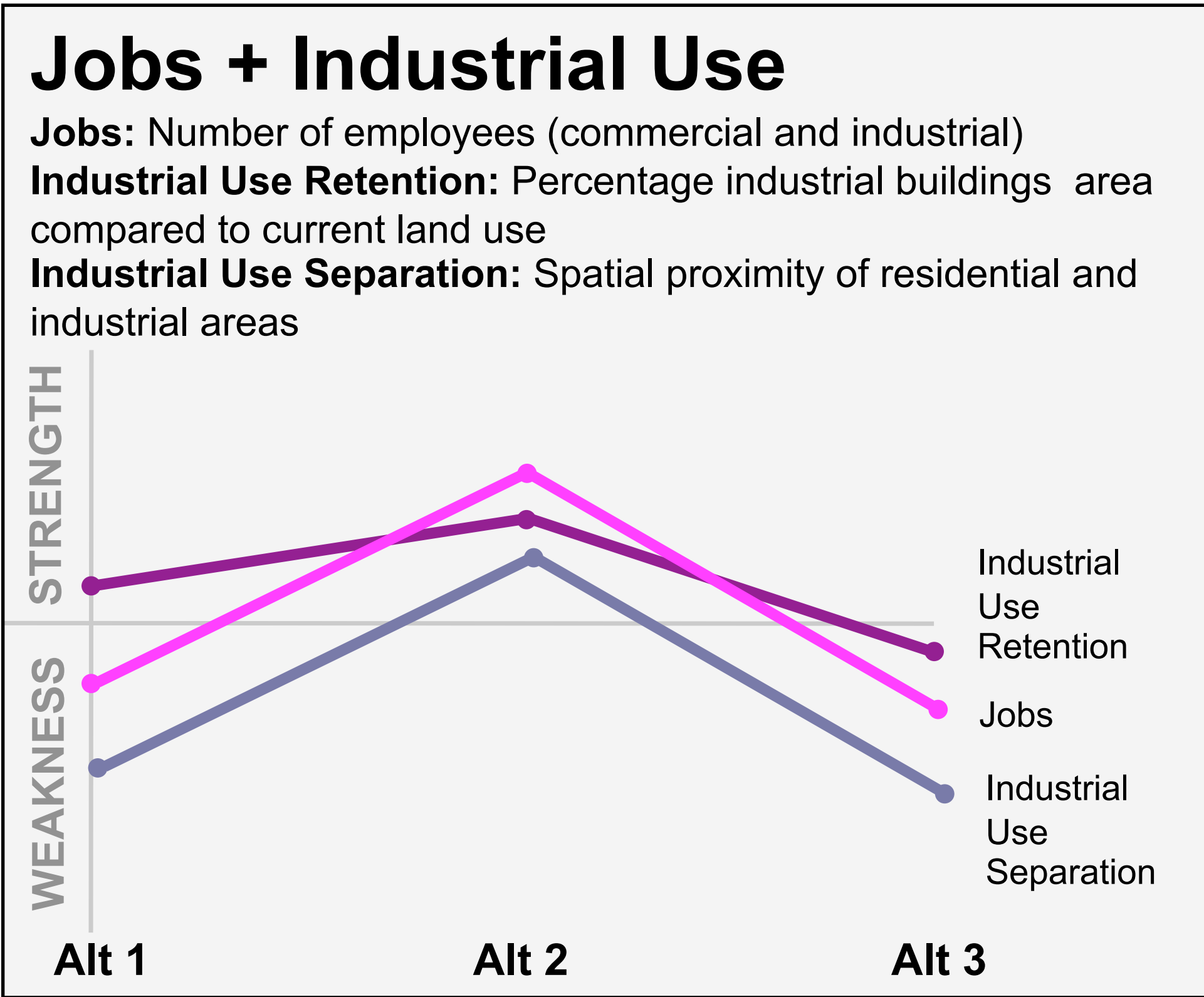
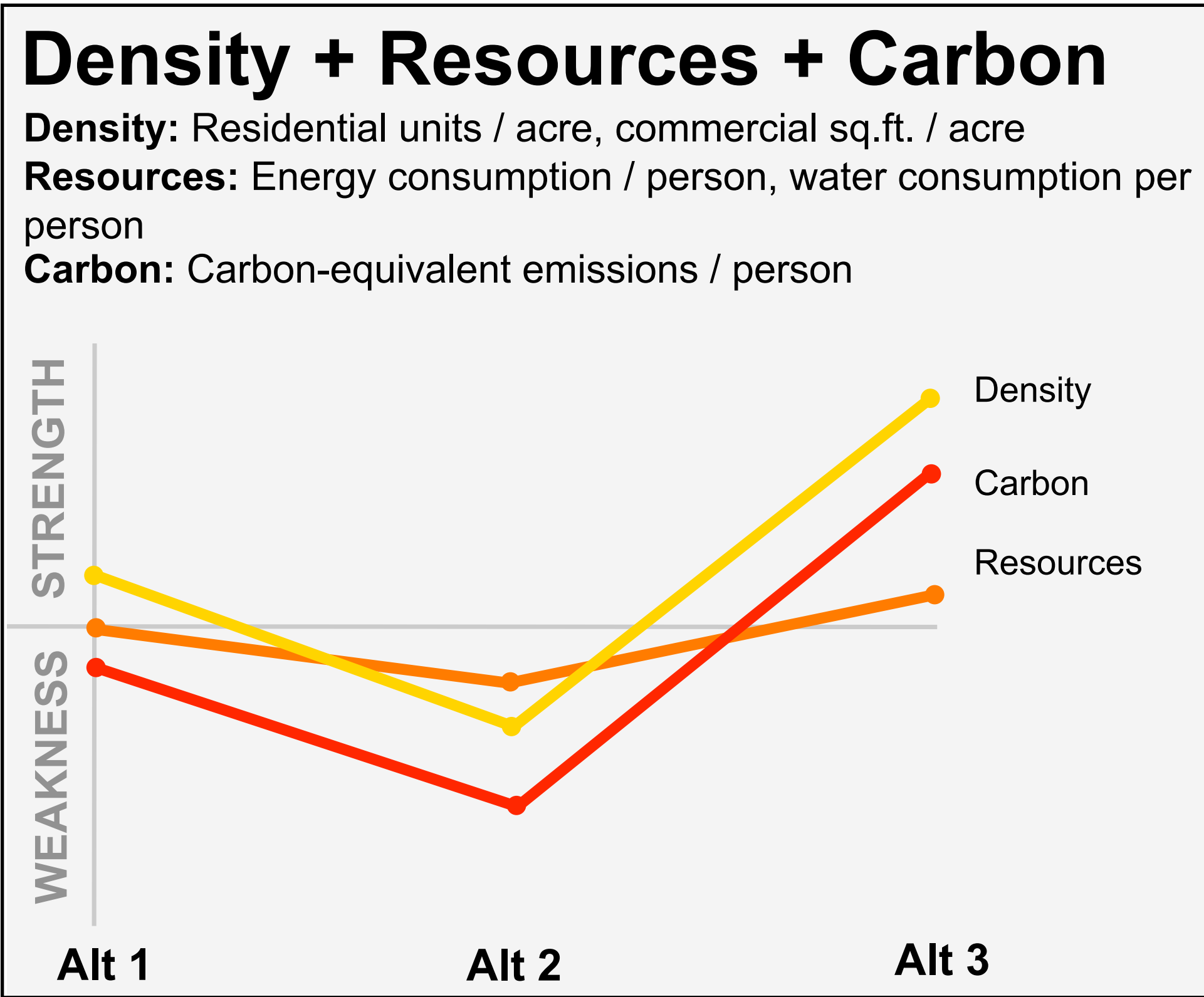
Somewhat Worse **Somewhat Better**

Neutral **Significantly Better**



Sustainability

This evaluation assesses the ability of each Plan Alternative to positively address the Sustainability goals defined in the Central Estuary Plan, City of Oakland plans and policies and the California State law. It is intended to provide a holistic performance appraisal of the alternatives.



Alternative 1

Key Strengths

- Open space accessibility – waterfront development provides good access to parks and the Bay Trail
- District energy systems – district heating and cooling feasible with the relatively high density and energy consumption

Key Weaknesses

- Trip generation – highest probability of congestion problems
- Resident work proximity – few residents for local jobs, increasing commuting probability
- Housing density – low resident population per acre

Alternative 2

Key Strengths

- Retains more than 60% of current buildings
- Separation of industrial uses – aggregates industrial program, reducing public health risk and increasing public space quality.

Key Weaknesses

- Density – accommodates too little residential population on site.
- Resources – high energy and water consumption per person.
- Carbon – high emissions per person due to resource consumption and transport demand.

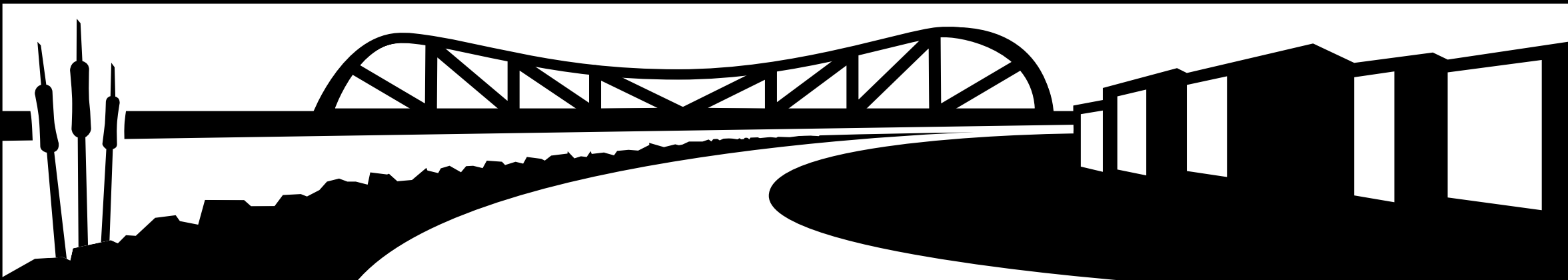
Alternative 3

Key Strengths

- Resident-work proximity –good allocation of jobs and housing with high resident population.
- Carbon – lowest emissions per person due to high density and good balance of land use programs.

Key Weaknesses

- Separation of industrial uses – has waterfront development in proximity to industrial uses, increasing public health risk and reducing public space quality.
- Open space availability – has relatively small park acreage for the high resident population.



Public Health

A comparison of public health impacts across Alternatives

The charts on this page illustrate the baseline conditions, and conditions under each Alternative, of various public health indicators within the Plan Area. The color green indicates desirable performance, while the color red indicates poor performance. The size of each pie chart corresponds to the relative size of the population within each Alternative.

The Alternatives have wide-ranging effects on the status of these public health indicators. While in certain cases the addition of new housing provides opportunities for some, it may also result in a higher percentage of Plan Area residents living in poor proximity to amenities like schools and transit, and living closer to certain liabilities like truck routes and sources of pollution.

Likewise, the redevelopment of industrial lands into retail, business parks and R&D incubator spaces may result in reduced pollution and noise, but it also displaces certain jobs in favor of others.

This public health assessment helps to inform a dialogue about trade-offs between the various Alternatives. For certain indicators, specific numbers cannot be forecasted. These indicators are shown as improved, neutral, or declining in quality.

Summary

Health-related Element	Alternative 1	Alternative 2	Alternative 3
Environment			
Sustainable and Safe Transportation			
Access to Goods and Services			

Health-related Element	Alternative 1	Alternative 2	Alternative 3
Impacts on Housing			
Impacts on Workforce			
Social Cohesion			

Legend

- Somewhat Worse
- Somewhat Better
- Neutral
- Significantly Better

	Existing	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Subarea Totals:	916 total residents 366 total households	4,731 total residents 2,297 total households	3,530 total residents 1,782 total households	8,469 total residents 4,096 total households

LIABILITIES				
Busy Roadways (100,000+ vehicles/day) Households within 1,000 feet	81% 297 households	30% 698 households	72% 1,283 households	37% 1,505 households
Truck Routes Households within 500 feet	81% 297 households	46% 1,052 households	80% 1,419 households	32% 1,297 households
Stationary Pollution Sources Households within close proximity	100% 366 households	100% 2,297 households	20% 350 households	40% 1,650 households
High-Noise Environment Households within close proximity	100% 366 households	100% 2,297 households	100% 1,782 households	100% 4,096 households

	Existing	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Subarea Totals:	916 total residents 366 total households	4,731 total residents 2,297 total households	3,530 total residents 1,782 total households	8,469 total residents 4,096 total households

ASSETS				
Public Elementary Schools Households within ½-mile	85% 312 households	36% 817 households	88% 1563 households	66% 2702 households
Neighborhood or Regional Parks Population within ¼-mile	95% 866 residents	99% 4700 residents	99% 3500 residents	99% 8400 residents
Public Library Population within 1-mile	99% 904 residents	81% 3843 residents	99% 3500 residents	87% 7396 residents
Grocery Store Population within ¼-mile	88% 806 residents	42% 1993 residents	91% 3221 residents	69% 5846 residents
Bank or Credit Union Population within ½-mile	92% 847 residents	79% 3731 residents	91% 3221 residents	84% 7087 residents
Local Transit Households within ¼-mile	78% 285 households	27% 610 households	77% 1,369 households	44% 1,800 households
Regional Transit Households within ½-mile	41% < 150 households	26% 592 households	19% 339 households	33% 1,356 households



Employment & Demographics

Employment in the Plan Area

- Alternative 1
- Preserves strong food-related industrial cluster in the West Subarea
 - Some increase in jobs - new retail and industrial business park
 - New retail-oriented jobs would offer low wages

- Alternative 2
- Least jobs would be displaced
 - Most new jobs at R&D incubator best support the existing workforce
 - Greatest overall increase in employment
 - Displacement of the food-related industry

- Alternative 3
- Many new jobs
 - New retail-oriented jobs offer very low wages
 - Office/R&D jobs offer high wages, poor match for existing workforce
 - Remaining industrial uses expected to lose viability

Displacement of Existing Jobs

	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Creation of New Jobs

	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Employment Change by Subarea - Alternative 1

	West	Central-West	Central-East	East	Total
Jobs Lost	0	50	507	531	1088
Jobs Added	0	0	570	879	1449
Net Change in Total Jobs	0	-50	63	348	361

Employment Change by Subarea - Alternative 2

	West	Central-West	Central-East	East	Total
Jobs Lost	497	21	216	0	734
Jobs Added	544	0	888	0	1432
Net Change in Total Jobs	47	-21	672	0	697

Employment Change by Subarea - Alternative 3

	West	Central-West	Central-East	East	Total
Jobs Lost	195	93	507	201	996
Jobs Added	10	0	150	1454	1614
Net Change in Total Jobs	-185	-93	-357	1253	618

Impact on Residential Uses

Land Use Market Viability	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Impact on Office Uses

Land Use Market Viability	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Impact on Light-industrial/Warehousing Uses

Land Use Market Viability	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

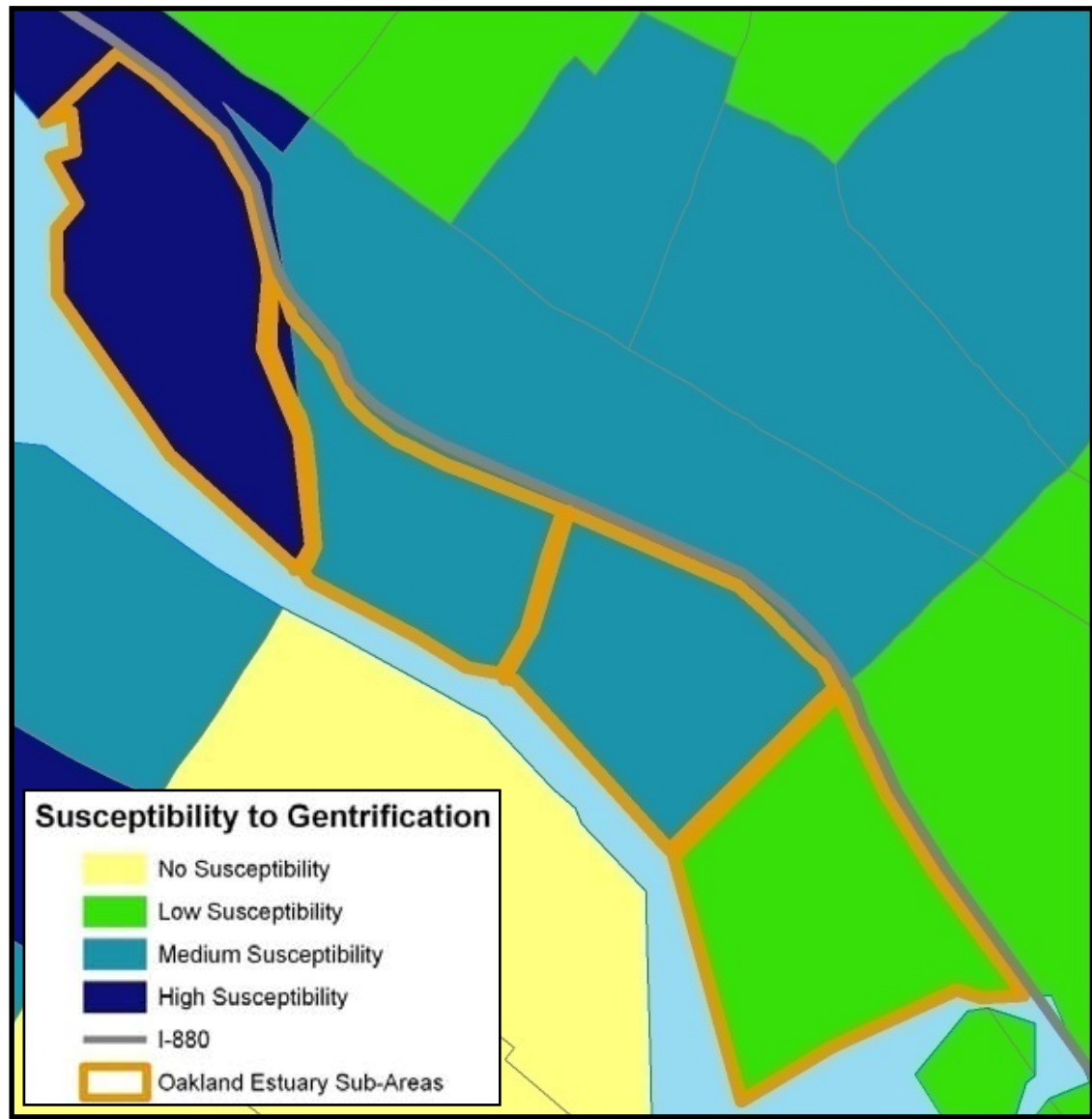
Impact on Heavy Industrial Uses

Land Use Market Viability	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Impact on Retail Uses

Land Use Market Viability	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Housing in the Plan Area



- Alternative 1
- Protected industrial uses keep land/housing prices low
 - Lowest risk of displacement of households in Plan Area

- Alternative 2
- New residential development replaces industrial uses
 - High risk of displacement of households in West and Central West Subareas

- Alternative 3
- New residential development replaces industrial uses
 - High risk of displacement of households in West, Central West & East Subareas

Impact on Existing Low-Income Households

	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Impact on Housing Needs

	West	Central-West	Central-East	East
Alternative 1				
Alternative 2				
Alternative 3				

Legend

- Somewhat Worse
- Somewhat Better
- Neutral
- Significantly Better

