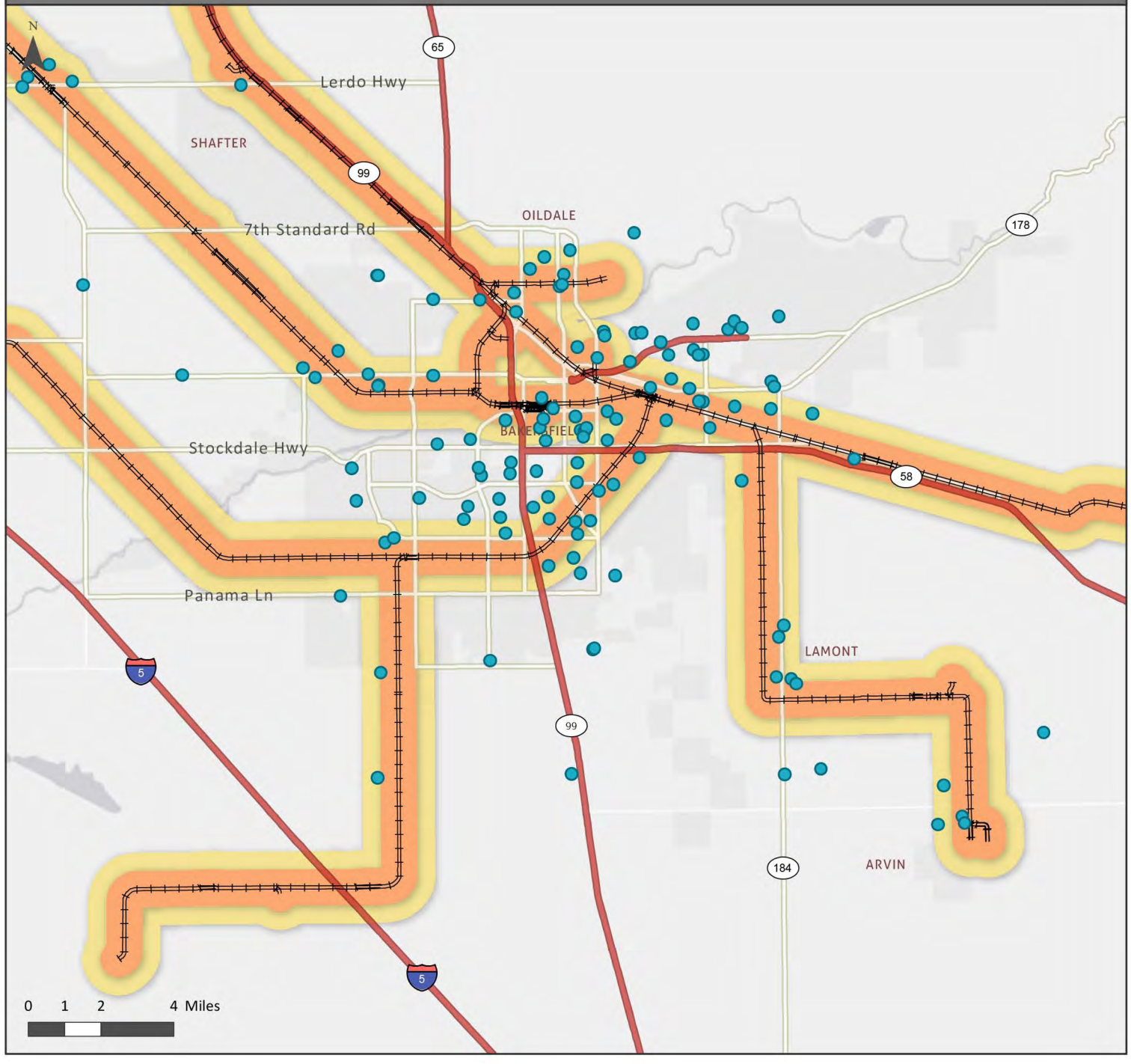
ATTACHMENT 7

Crude Oil Train Derailment Risk Zones in California for Selected Cities, NRDC, 2014

Crude Oil Train Derailment Risk Zones in Bakersfield, CA



Bakersfield Population at Risk*

0.5 mile	76,212
1.0 mile	167,098

*The number of residents of the City of Bakersfield living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

Schools: http://portal.gis.ca.gov/geoportal/catalog/main/home.page

NTAD Rail Lines: 2013 National Transportation Atlas Database http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_atlas_database/2013/polyline.html

Rail Line Buffers: Zones indicating risks around rail lines in the event of crude oil tanker car derailments, based on the US Department of Transportation Emergency Response Guidebook used throughout North America. This guidebook recommends a standard evacuation zone of 800 meters (0.5 miles) for accidents involving railcars filled with flammable liquids and gases and an isolation zone of 1600 meters (1 mile) in all directions around any railcar filled with those materials if they are on fire. http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/ERG2012.pdf

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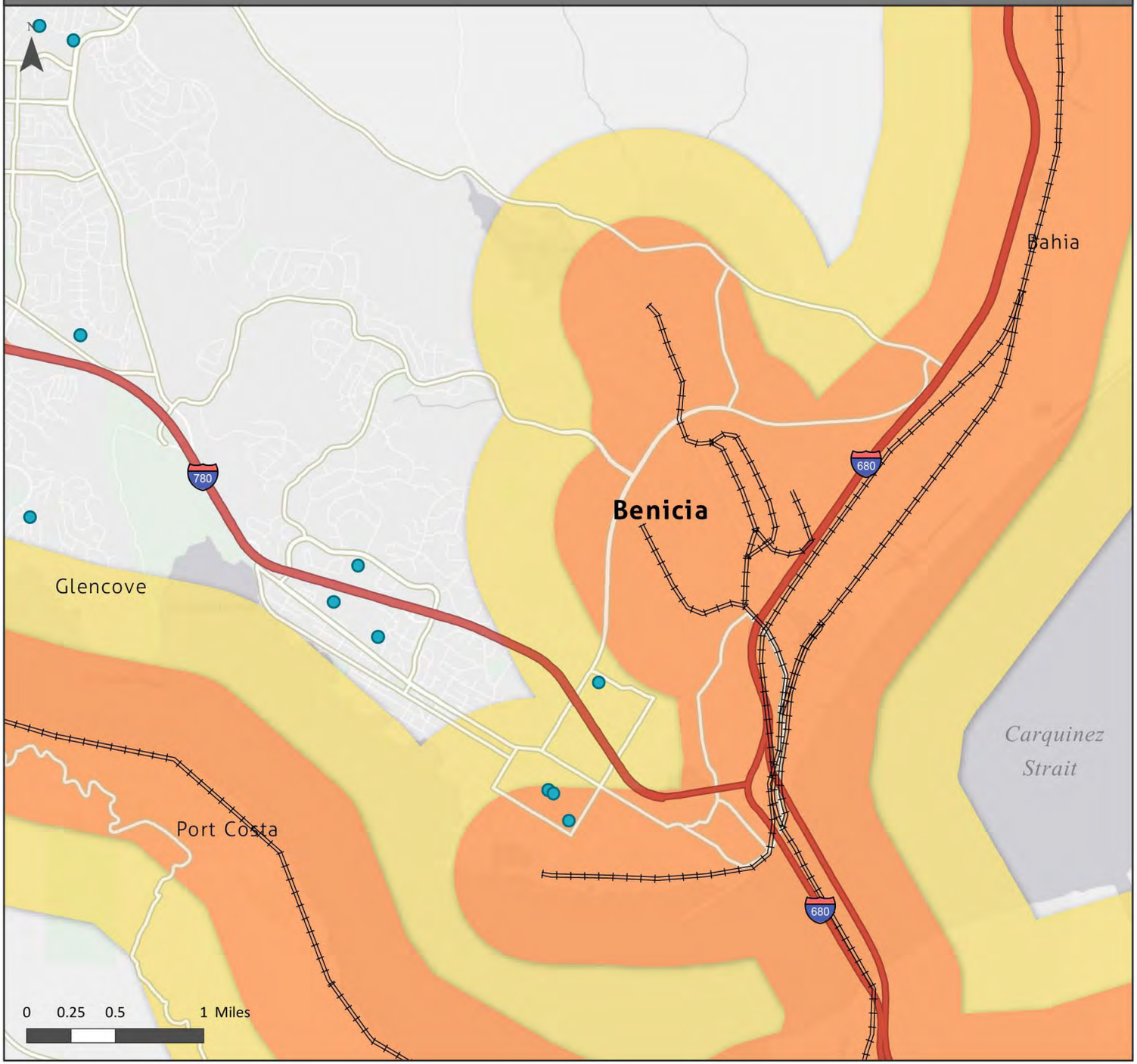
Crude Oil Train Derailment Risk Zones in Benicia, CA



Benicia Population at Risk*

0.5 mile	5,308
1.0 mile	12,436

*The number of residents of the City of Benicia living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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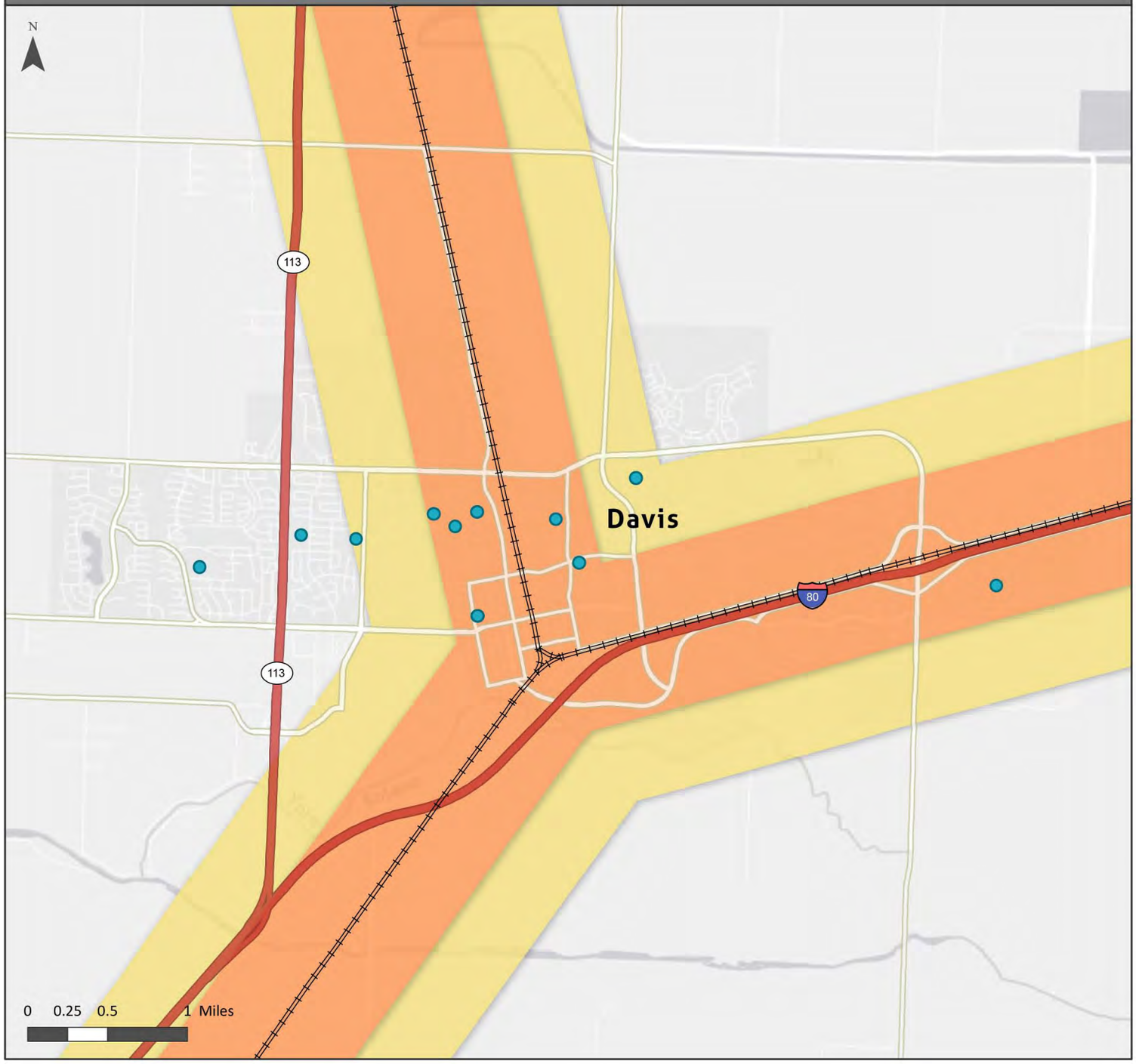
Crude Oil Train Derailment Risk Zones in Davis, CA



Davis Population at Risk*

0.5 mile	25,554
1.0 mile	45,000

*The number of residents of the City of Davis living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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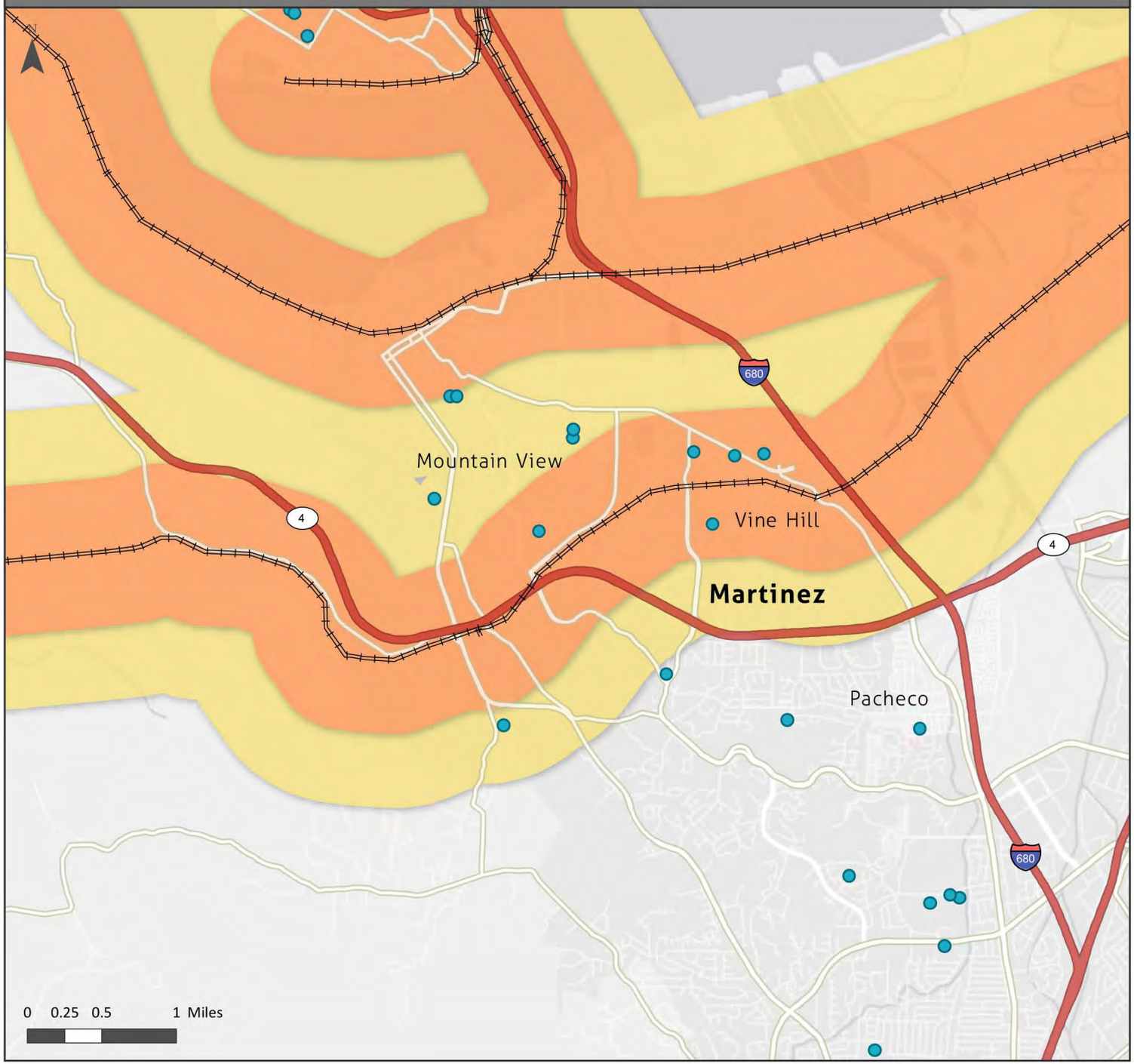
Crude Oil Train Derailment Risk Zones in Martinez, CA



Martinez Population at Risk*

0.5 mile	13,009
1.0 mile	24,257

*The number of residents of the City of Martinez living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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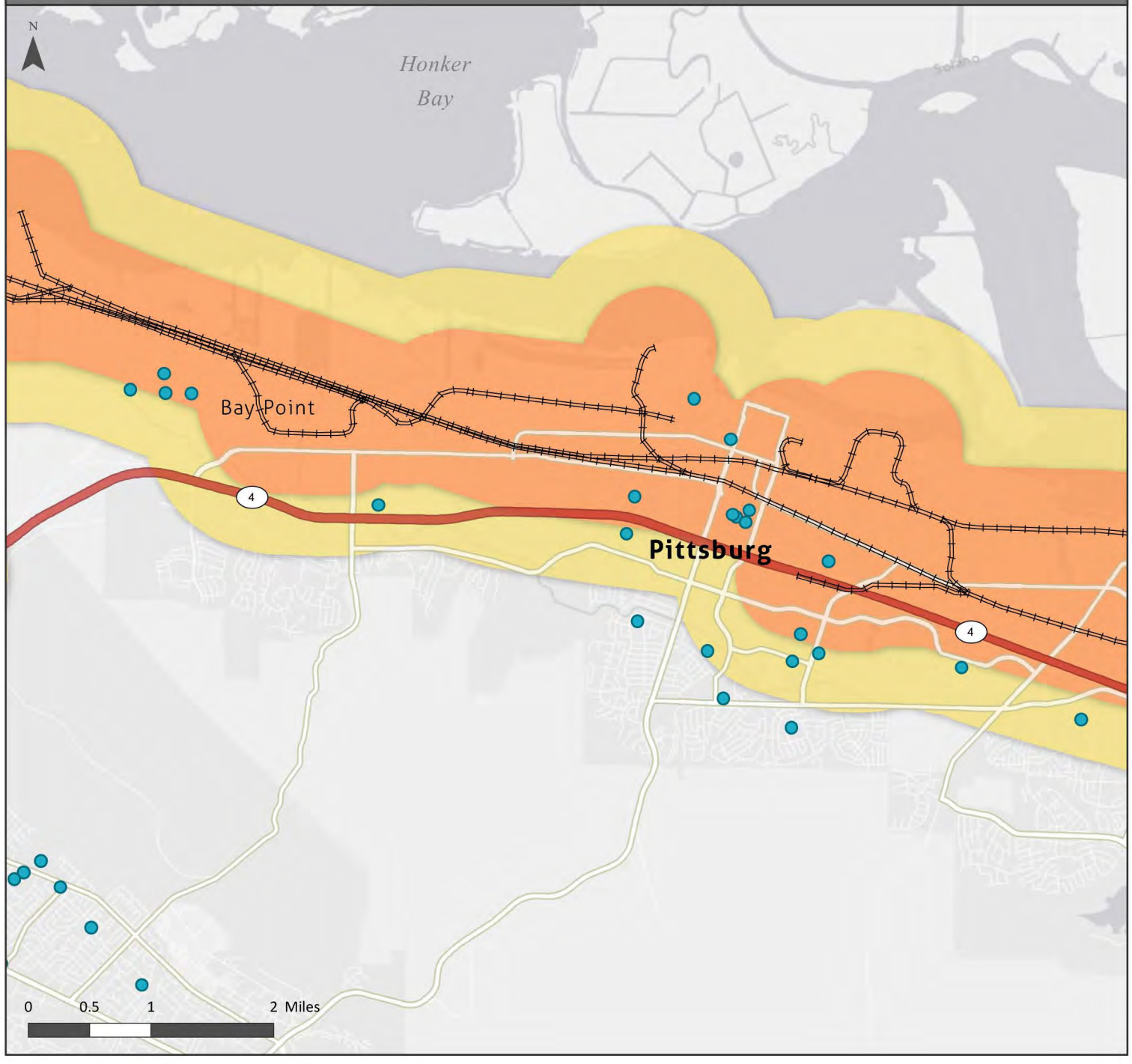
Crude Oil Train Derailment Risk Zones in Pittsburg, CA



Pittsburg Population at Risk*

0.5 mile	24,713
1.0 mile	40,250

*The number of residents of the City of Pittsburg living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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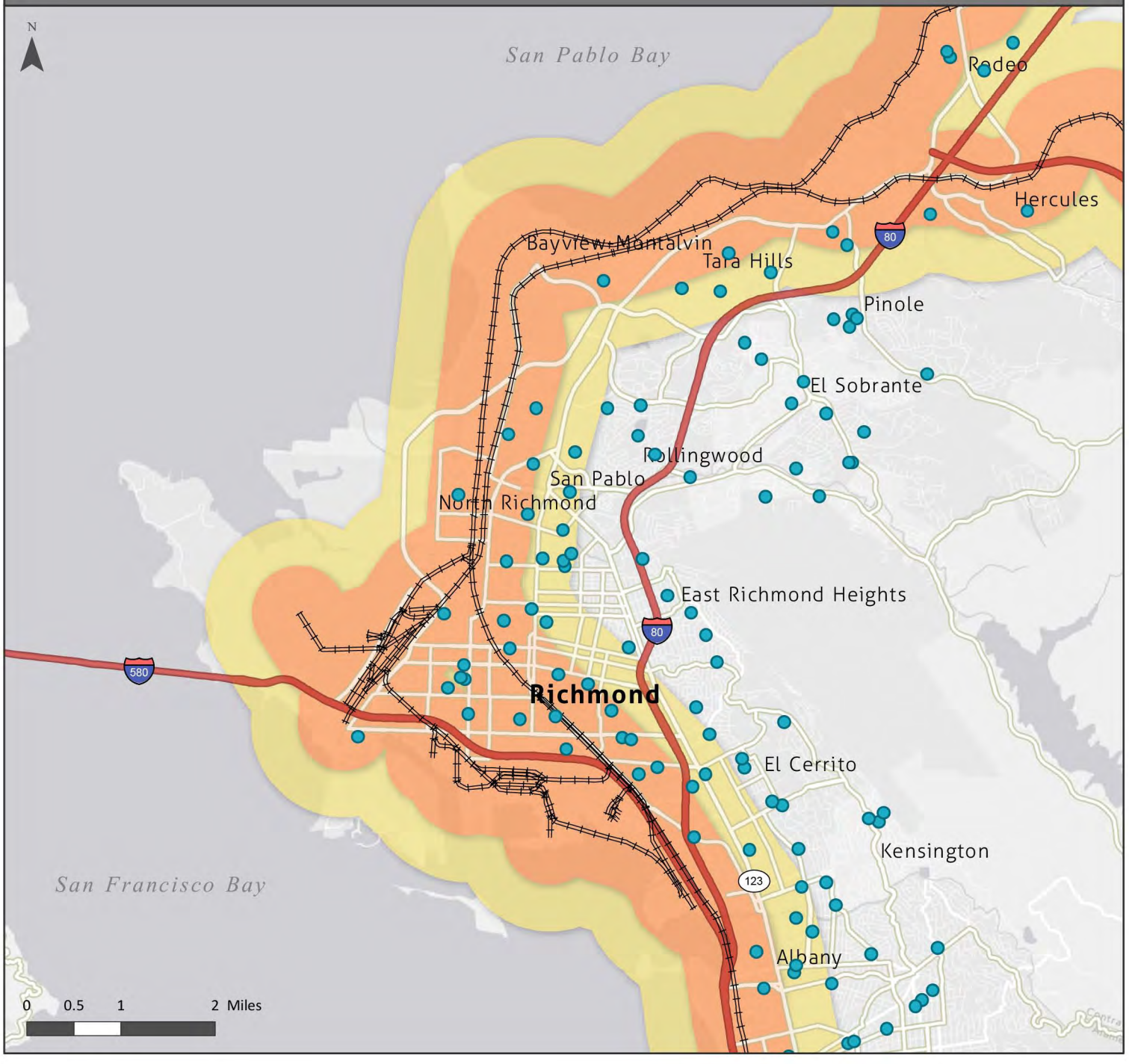
Crude Oil Train Derailment Risk Zones in Richmond, CA



Richmond Population at Risk*

0.5 mile	54,943
1.0 mile	75,905

*The number of residents of the City of Richmond living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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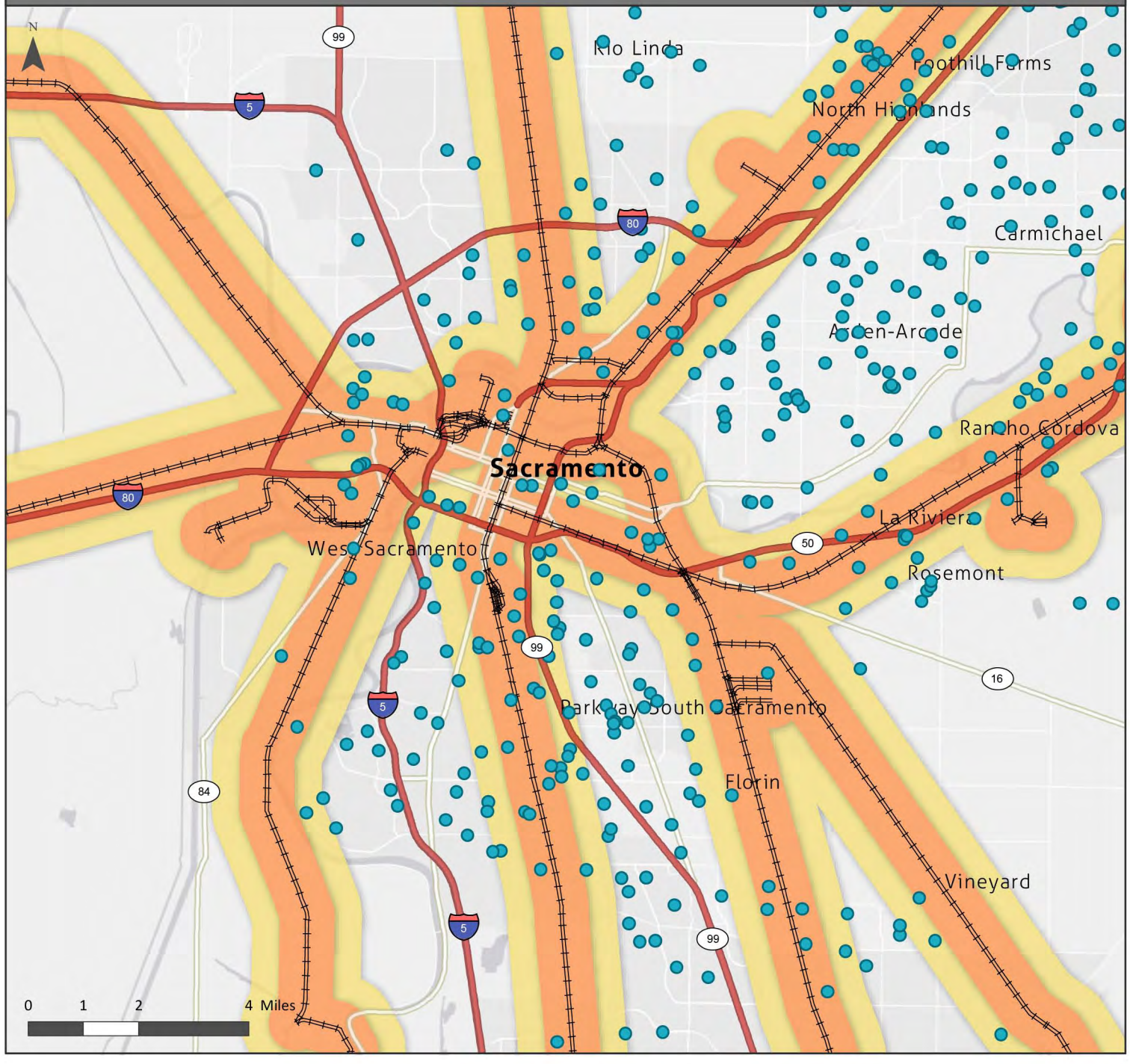
Crude Oil Train Derailment Risk Zones in Sacramento, CA



Sacramento Population at Risk*

0.5 mile	135,864
1.0 mile	256,299

*The number of residents of the City of Sacramento living within these impact zones

Legend

- Schools (K - 12)
- Active rail lines
- 0.5 mile US DOT Evacuation Zone for Crude Oil Train Derailments
- 1.0 mile US DOT Potential Impact Zone in case of Crude Oil Train Fire

Sources:

Population (2010): Estimates based on US Census 2010 Block Centroid Populations. Estimates were calculated within buffers located within US Census "Place" boundary (not shown).

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