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Limited English Proficiency (LEP) populations are identified in Census block groups where the LEP population percentage (households where all members 14 years old and over have at least some difficulty speaking English) exceeds the countywide average. (9.1 percent for Kern County; 14.5 percent for Los Angeles County)

Environmental Justice Resource Study Area (RSA)

Limited English Proficiency Population

- Substantial
- Less Than Substantial
- Low Population Density (Less Than 128 People Per Square Mile)

Note: Substantial Limited English Proficiency (LEP) populations are identified in Census block groups where the LEP population percentage (households where all members 14 years old and over have at least some difficulty speaking English) exceeds the countywide average. (9.1 percent for Kern County; 14.5 percent for Los Angeles County)

Figure 5-A-5

Limited English Proficiency Populations in the Environmental Justice Resource Study Area

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October 30, 2019

Bakersfield to Palmdale Project Section
Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA

Limited English Proficiency Population
- Substantial
- Less Than Substantial
- Low Population Density (Less Than 128 People Per Square Mile)

Limited English Proficiency Populations are identified in Census block groups where the LEP population percentage (households where all members 14 years old and over have at least some difficulty speaking English) exceeds the countywide average.

Note: Substantial Limited English Proficiency (LEP) populations are identified in Census block groups where the LEP population percentage exceeds the countywide average. (9.1 percent for Kern County; 14.5 percent for Los Angeles County)

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)

Figure 5-A-5  Limited English Proficiency Populations in the Environmental Justice Resource Study Area

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October 30, 2019
Note: Substantial Limited English Proficiency (LEP) populations are identified in Census block groups where the LEP population percentage (households where all members 14 years old and over have at least some difficulty speaking English) exceeds the countywide average.

(9.1 percent for Kern County; 14.5 percent for Los Angeles County)

Limited English Proficiency (LEP) populations are identified in Census block groups where the LEP population percentage (households where all members 14 years old and over have at least some difficulty speaking English) exceeds the countywide average. (9.1 percent for Kern County; 14.5 percent for Los Angeles County)
Figure 5-A-6
Operation-Phase
Alternative 1
Noise Receptor Impacts
Low-Income and/or Minority Populations in the Environmental Justice Resource Study Area
Map Index for Pages 1-11

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
Figure 5-A-6

Operation-Phase Alternative 1 Noise Receptor Impacts
Low-Income and/or Minority Populations

Legend:
- Environmental Justice Resource Study Area (RSA)
- 0.5 mile Buffer of Project Footprint
- Census Tracts (with Tract Numbers) Intersecting the RSA
- City/Census Designated Place
- Low-Income and/or Minority Populations

- B-P Noise Receptor Impacts
  - Severe
  - Moderate
  - None
  - Alternatives Under Consideration
  - Alternative 1

- Elevated
- Surface
- Underground

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED

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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 1
Low-Income and/or Minority Populations

Figure 5-A-6
Operation-Phase Alternative 1
Noise Receptor Impacts
Low-Income and/or Minority Populations
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Operation-Phase Alternative 1
Noise Receptor Impacts
Low-Income and/or Minority Populations

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Environmental Justice Resource Study Area (RSA)

0.5 mile Buffer of Project Footprint

Census Tracts (with Tract Numbers) Intersecting the RSA

City/Census Designated Place

Low-Income and/or Minority Populations

- Substantial
- Less Than Substantial
- Low Population Density

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration

Alternative 1
Elevated
Surface
Underground

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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Environmental Justice Resource
Study Area (RSA)

0.5 mile Buffer of Project Footprint

Census Tracts (with Tract Numbers) Intersecting the RSA

City/Census Designated Place

Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 1

Low-Income and/or Minority Populations

Figure 5-A-6
Operation-Phase Alternative 1
Noise Receptor Impacts

Figure 5-A-6
Operation-Phase Alternative 1
Noise Receptor Impacts

Low-Income and/or Minority Populations

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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations
B-P Noise Receptor Impacts
Severe
Moderate
None
Alternatives Under Consideration
Alternative 1
Low-Income and/or Minority Populations

Figure 5-A-6
Operation-Phase Alternative 1
Noise Receptor Impacts
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Figure 5-A-6

Operation-Phase Alternative 1 Noise Receptor Impacts
Low-Income and/or Minority Populations
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Bakersfield to Palmdale Project Section
Environmental Justice Resource Study Area (RSA)

- 0.5 mile Buffer of Project Footprint
- Census Tracts (with Tract Numbers) Intersecting the RSA
- City/Census Designated Place

Low-Income and/or Minority Populations

- Substantial
- Less Than Substantial
- Low Population Density

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration

- Alternative 1

Operation-Phase Alternative 1

Noise Receptor Impacts

Low-Income and/or Minority Populations

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Figure 5-A-6

Operation-Phase Alternative 1
Noise Receptor Impacts
Low-Income and/or Minority Populations

Legend:
- Environmental Justice Resource Study Area (RSA)
- 0.5 mile Buffer of Project Footprint
- Census Tracts (with Tract Numbers) Intersecting the RSA
- City/Census Designated Place
- Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
- Alternative 1
- Elevated
- Surface
- Underground

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)
Environmental Justice Resource Study Area (RSA)
- 0.5 mile Buffer of Project Footprint
- Census Tracts (with Tract Numbers) Intersecting the RSA
- City/Census Designated Place
- Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None
- Alternatives Under Consideration
- Alternative 1

Operation-Phase Alternative 1
Noise Receptor Impacts
Low-Income and/or Minority Populations

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Figure 5-A-7

Operation-Phase Alternative 2
Noise Receptor Impacts
Low-Income and/or Minority Populations in the Environmental Justice Resource Study Area
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Figure 5-A-7
Operation-Phase Alternative 2 Noise Receptor Impacts
Low-Income and/or Minority Populations
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Figure 5-A-7

Operation-Phase Alternative 2
Noise Receptor Impacts
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations
- Substantial
- Less Than Substantial
- Low Population Density

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)

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Figure 5-A-7

Operation-Phase Alternative 2
Noise Receptor Impacts
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2
Elevated
Surface
Underground

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations
Substantial
Less Than Substantial
Low Population Density


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Environmental Justice Resource Study Area (RSA)
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Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2

Low-Income and/or Minority Populations

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Figure 5-A-7

Operation-Phase Alternative 2
Noise Receptor Impacts

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Figure 5-A-7
Operation-Phase Alternative 2
Noise Receptor Impacts
Low-Income and/or Minority Populations

- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2

B-P Noise Receptor Impacts
- Elevated
- Surface
- Underground

Environmental Justice Resource Study Area (RSA)
- 0.5 mile Buffer of Project Footprint
- Census Tracts (with Tract Numbers) Intersecting the RSA
- City/Census Designated Place
- Low-Income and/or Minority Populations

- Substantial
- Less Than Substantial
- Low Population Density

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Figure 5-A-7
Operation-Phase Alternative 2
Noise Receptor Impacts
Low-Income and/or Minority Populations

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2

Elevated
Surface
Underground

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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Figure 5-A-7
Operation-Phase Alternative 2 Noise Receptor Impacts
Low-Income and/or Minority Populations

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 2

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Operation-Phase Alternative 3 Noise Receptor Impacts Low-Income and/or Minority Populations in the Environmental Justice Resource Study Area Map Index for Pages 1-11
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Figure 5-A-8

Operation-Phase Alternative 3
Noise Receptor Impacts
Low-Income and/or Minority Populations
Environmental Justice Resource Study Area (RSA)  
0.5 mile Buffer of Project Footprint  
Census Tracts (with Tract Numbers) Intersecting the RSA  
City/Census Designated Place  
Low-Income and/or Minority Populations  
B-P Noise Receptor Impacts
- Severe  
- Moderate  
- None  
Alternatives Under Consideration  
Alternative 3

Figure 5-A-8
Operation-Phase Alternative 3  
Noise Receptor Impacts  
Low-Income and/or Minority Populations  
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Operation-Phase Alternative 3
Noise Receptor Impacts
Low-Income and/or Minority Populations
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Operation-Phase Alternative 3 Noise Receptor Impacts
Low-Income and/or Minority Populations
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Environmental Justice Resource Study Area (RSA)

0.5 mile Buffer of Project Footprint

Census Tracts (with Tract Numbers) Intersecting the RSA

City/Census Designated Place

Low-Income and/or Minority Populations

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration

Alternative 3

Low-Income and/or Minority Populations

Figure 5-A-8

Operation-Phase Alternative 3 Noise Receptor Impacts

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Operation-Phase Alternative 3
Noise Receptor Impacts
Low-Income and/or Minority Populations
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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 3

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 3

Operation-Phase Alternative 3 Noise Receptor Impacts Low-Income and/or Minority Populations

Figure 5-A-8

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
Figure 5-A-9

Operation-Phase
Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations in the Environmental Justice Resrouce Study Area

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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 5

Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations

Figure 5-A-9

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Environmental Justice Resource Study Area (RSA)  
0.5 mile Buffer of Project Footprint  
Census Tracts (with Tract Numbers) Intersecting the RSA  
City/Census Designated Place  
Low-Income and/or Minority Populations  
B-P Noise Receptor Impacts  
- Severe  
- Moderate  
- None  
Alternatives Under Consideration  
Alternative 5  
Low-Income and/or Minority Populations
Figure 5-A-9
Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 5
- Elevated
- Surface

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations
- Substantial
- Less Than Substantial
- Low Population Density

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)
Figure 5-A-9

Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations

Table 5-A-9

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<th>Substantial</th>
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<tr>
<td>City/Census Designated Place</td>
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</tbody>
</table>

B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
- Alternative 5

Source: Esri Aerial Imagery (2015); CHSRA (4/2016); US Census Bureau American Community Survey (2009-2013)
Environmental Justice Resource Study Area (RSA)

0.5 mile Buffer of Project Footprint

Census Tracts (with Tract Numbers) Intersecting the RSA

City/Census Designated Place

Low-Income and/or Minority Populations

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration

Alternative 5

Low-Income and/or Minority Populations

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Figure 5-A-9

Operation-Phase Alternative 5 Noise Receptor Impacts

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED

Environmental Justice Resource Study Area (RSA)

0.5 mile Buffer of Project Footprint

Census Tracts (with Tract Numbers) Intersecting the RSA

City/Census Designated Place

Low-Income and/or Minority Populations

Substantial

Less Than Substantial

Low Population Density

B-P Noise Receptor Impacts

- Severe
- Moderate
- None

Alternatives Under Consideration

Alternative 5

Low-Income and/or Minority Populations

Figure 5-A-9

Operation-Phase Alternative 5
Noise Receptor Impacts

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Figure 5-A-9
Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations

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Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers) Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations
B-P Noise Receptor Impacts
- Severe
- Moderate
- None

Alternatives Under Consideration
Alternative 5
Elevated
Surface
Underground
Figure 5-A-9
Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations
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Operation-Phase Alternative 5
Noise Receptor Impacts
Low-Income and/or Minority Populations

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Appendix 5-A

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September 23, 2019
Bakersfield to Palmdale Project Section
Appendix 5-A

Figure 5-A-10
Operation-Phase Bakersfield Station – F Street Station Alternative Noise Receptor Impacts

Environmental Justice Resource Study Area (RSA)
0.5 mile Buffer of Project Footprint
Census Tracts (with Tract Numbers)
Intersecting the RSA
City/Census Designated Place
Low-Income and/or Minority Populations

- Substantial
- Less Than Substantial
- Low Population Density

Bakersfield Station – F Street

- Severe
- Mod
- None

Alternatives Under Consideration
- Elevated
- Surface
- Underground

Low-Income and/or Minority Populations

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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