



SAN DIEGO
INTERNATIONAL
AIRPORT



14 CFR Part 150 Noise Compatibility Program Update – New Alternatives Under Review

- 1. Nighttime Preferential Runway Use**
- 2. Aggressive Noise Abatement Departure Procedures**
- 3. RNAV Procedure for 290 Heading Departure**
- 4. Replace 290 with 310 Heading Departure**
- 5. Immediate Left Turn Over the Bay**

Nighttime Preferential Runway (2330-0630)

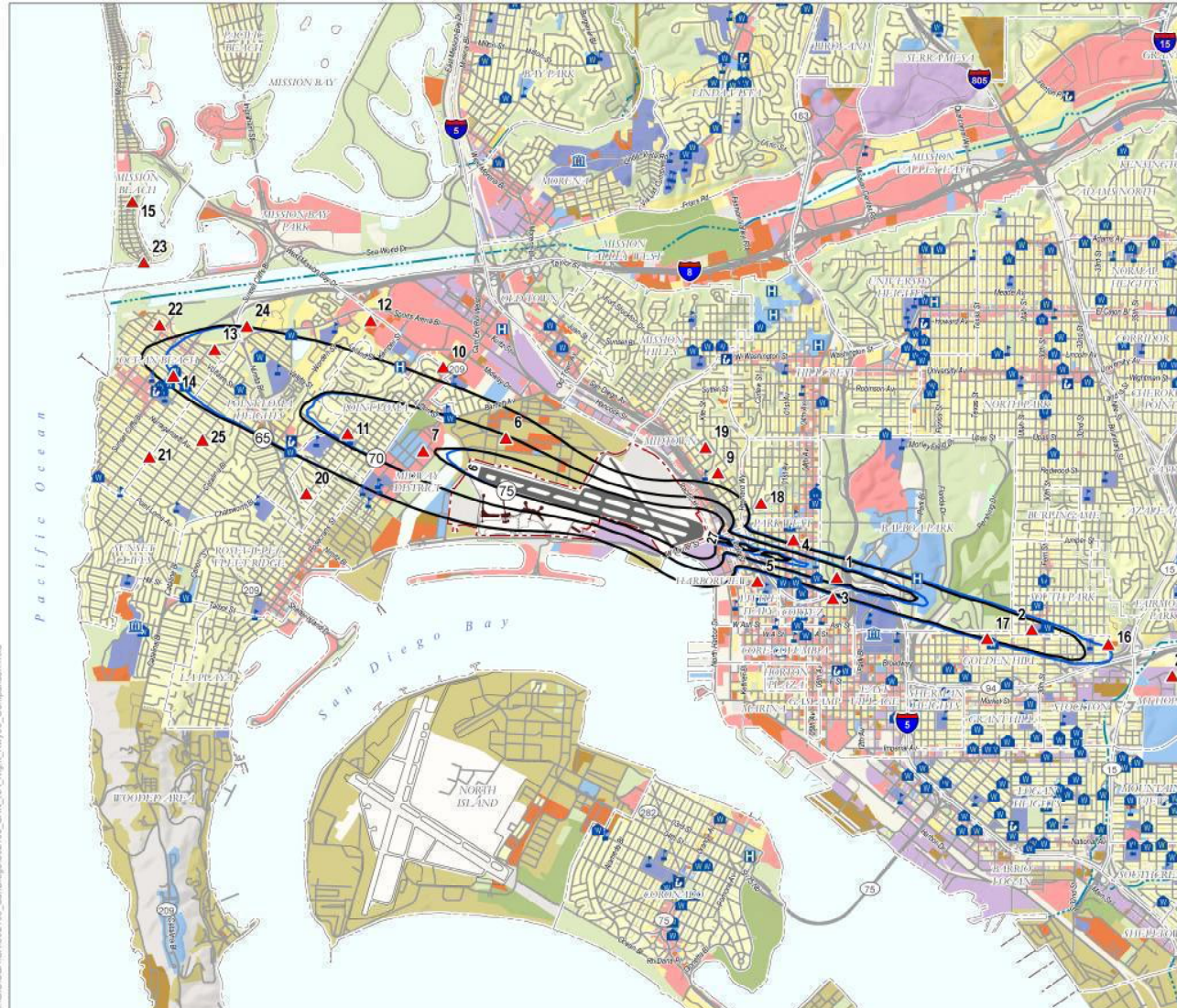
- **All nighttime aircraft arrivals on Runway 9**
- **All nighttime aircraft arrivals on Runway 27**

Nighttime Preferential Runway 9

All Arrivals from West (black) vs Existing (blue)



Comparison of CNEL Contours for Existing Conditions and All Nighttime Curfew Arrivals to Runway 09



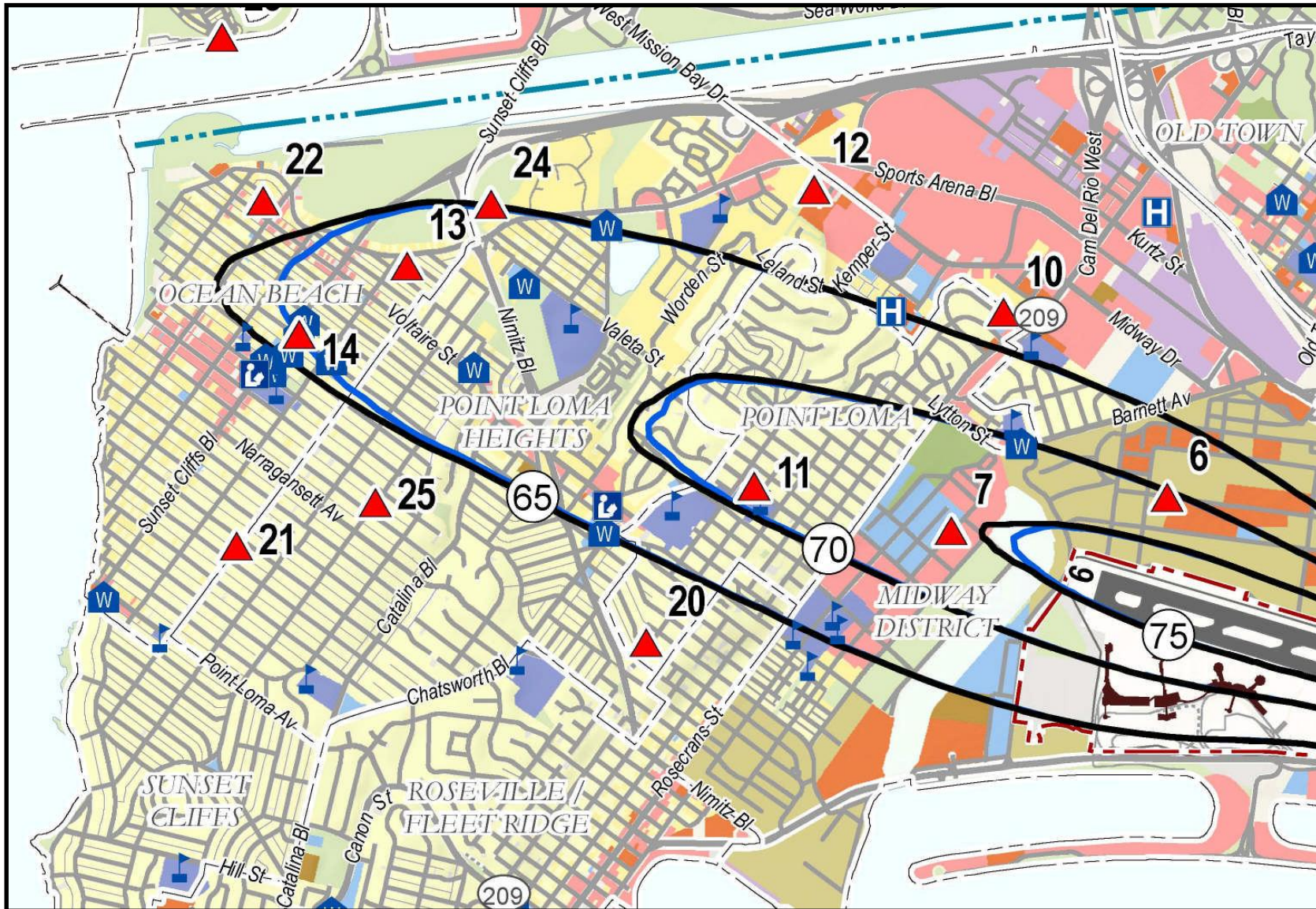
- CNEL Contours - Existing Conditions
- CNEL Contours - Nighttime Curfew Arrivals to Runway 09
- ▲ RMT Site Location
- Airport Property
- Roads
- Single Family Residential
- Multi-Family Residential
- Mobile Home Parks
- Hotel/Motel, Group Quarters
- Commercial
- Industrial
- Agriculture
- Parks
- Golf Courses
- Public Service
- Schools
- Military Use
- Transportation/Communication/Utilities
- Land Under Construction
- Vacant and Undeveloped Land
- Water
- H Hospital
- S Schools
- W Place of Worship
- H Library
- U College / University
- SAN Airport Runways
- ~ River / Stream

Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI).



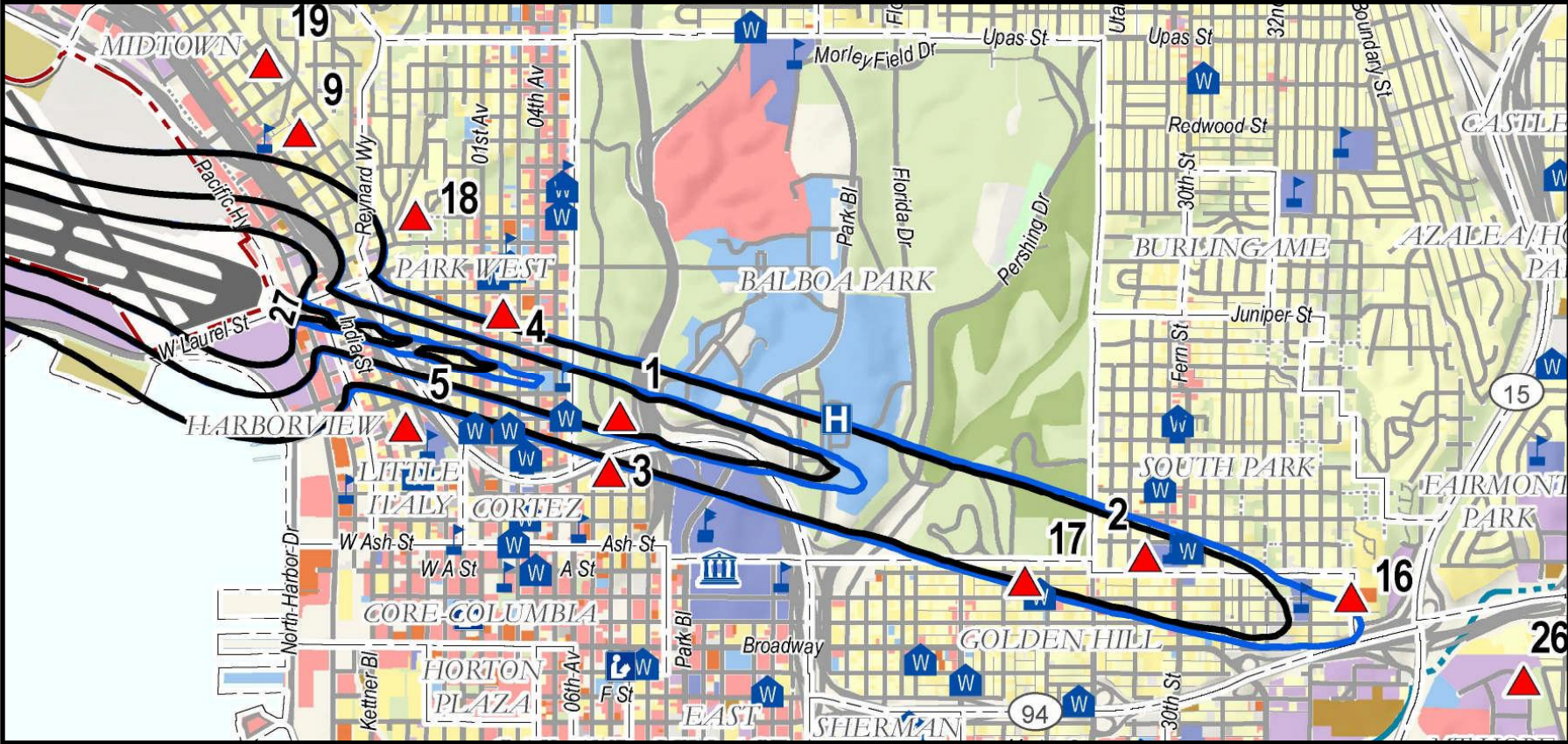
Nighttime Preferential Runway 9

All Arrivals from West (black) vs Existing (blue)



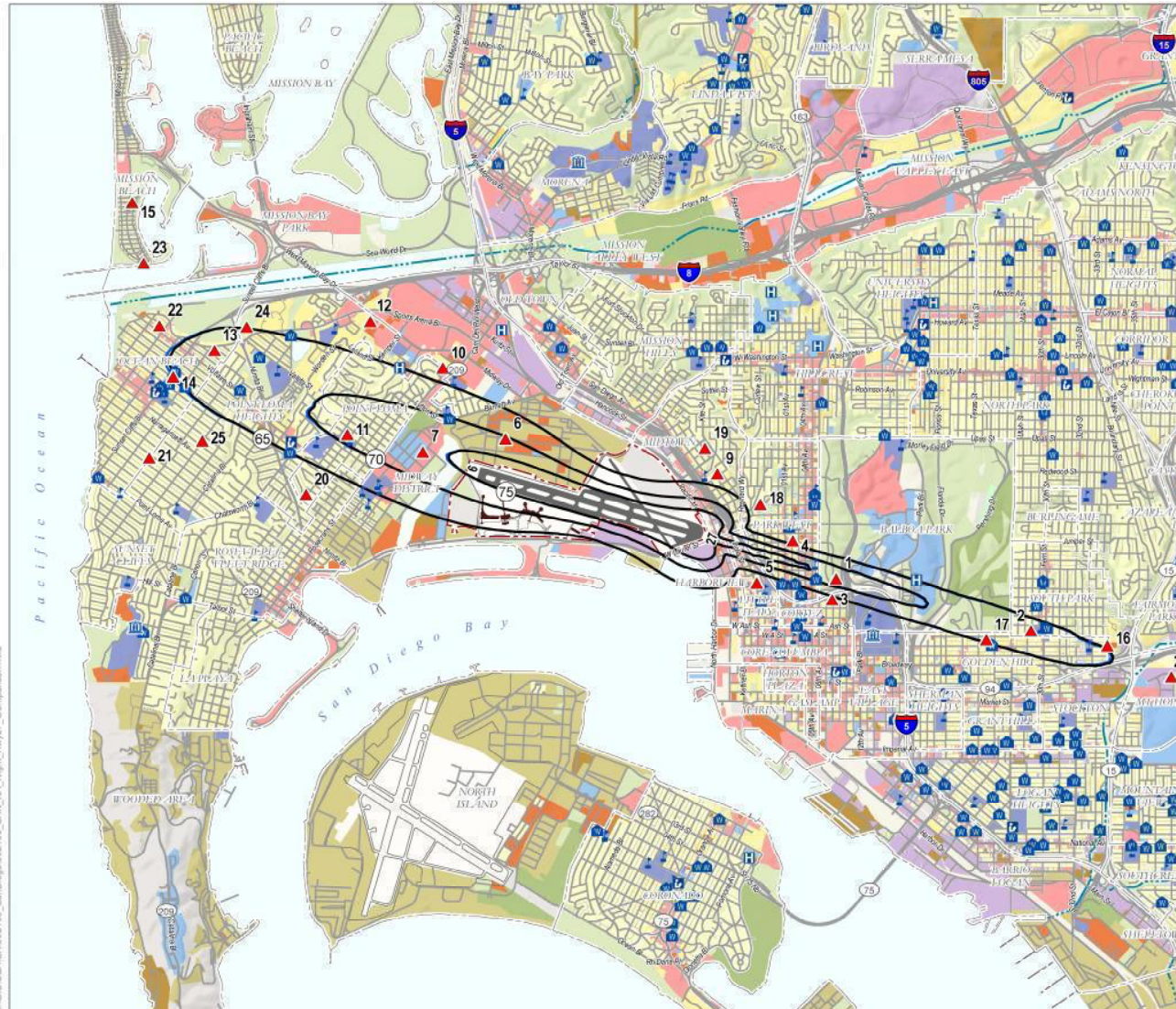
Nighttime Preferential Runway 9

All Arrivals from West (black) vs Existing (blue)



Nighttime Preferential Runway 27

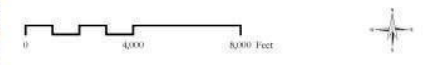
All Arrivals From East (black) vs. Existing (blue)



Comparison of CNEI Contours for Existing Conditions and All Nighttime Curfew Arrivals to Runway 27

- CNEI Contours - Existing Conditions
- CNEI Contours - Nighttime Curfew Arrivals to Runway 27
- ▲ RMT Site Location
- Airport Property
- Roads
- Single Family Residential
- Multi-Family Residential
- Mobile Home Parks
- Hotel/Motel, Group Quarters
- Commercial
- Industrial
- Agriculture
- Parks
- Hospital
- Schools
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- Military Use
- Transportation/Communication/Utilities
- Land Under Construction
- Vacant and Undeveloped Land
- Water
- Library
- College / University

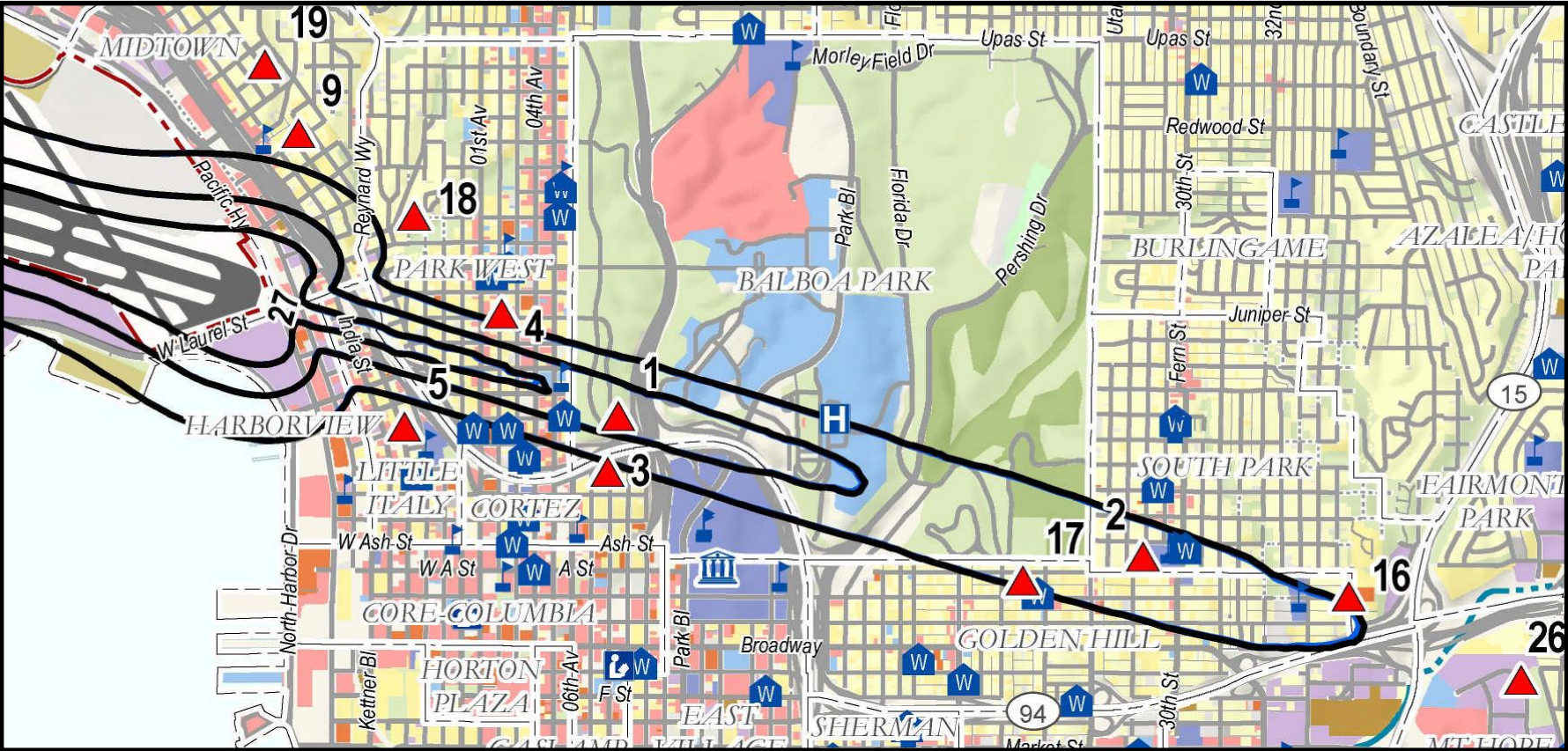
Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI).



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Nighttime Preferential Runway 27

All Arrivals From East (black) vs. Existing (blue)



Nighttime Preferential Runway – Awakenings

- Nighttime potential awakenings analysis results:

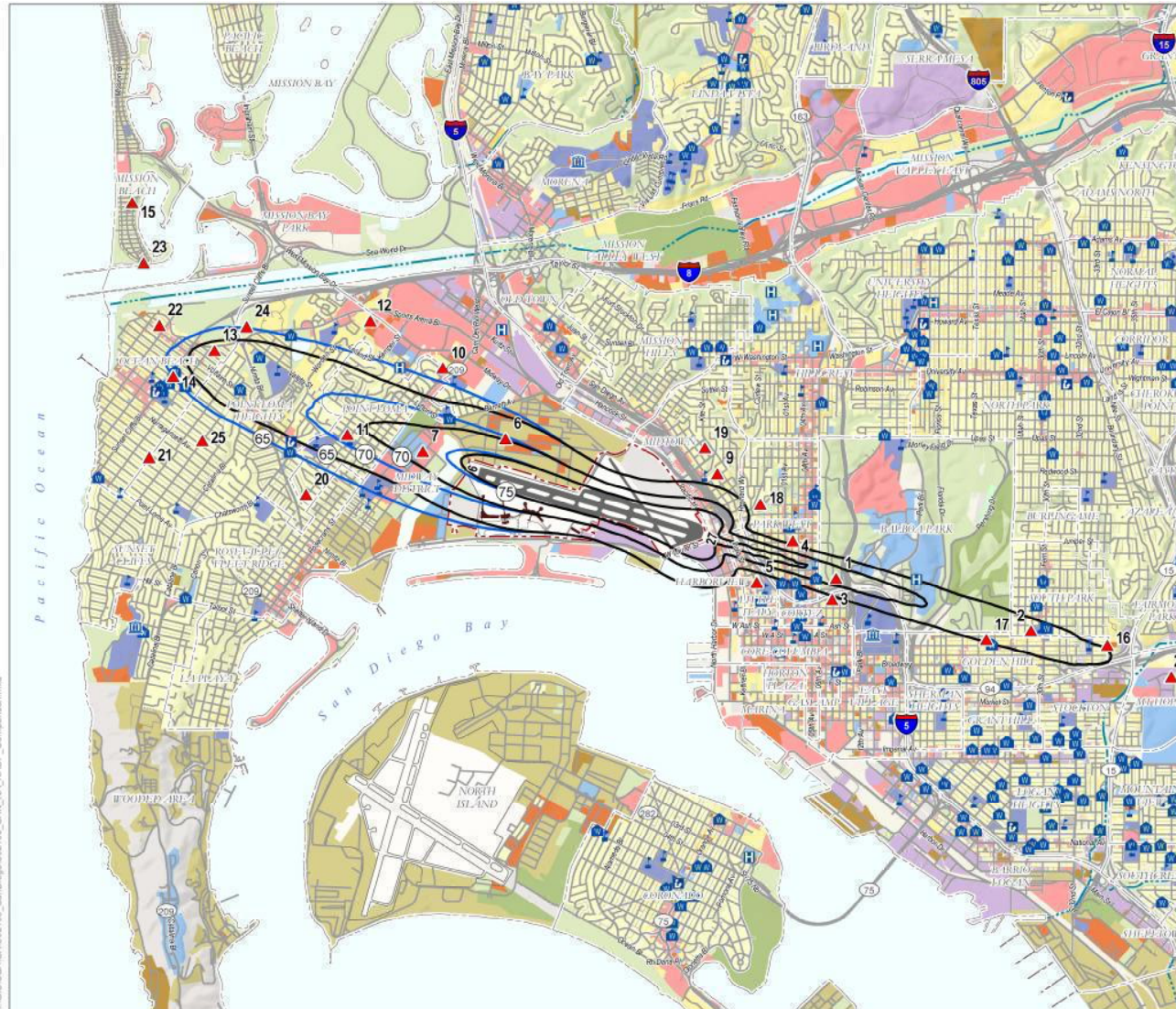
Population Potentially Awakened by Nighttime Arrivals			
Properties	Existing	Rwy 9	Rwy 27
Non-Sound Insulated	4,581	1,586	5,297
Sound Insulated	55	73	63
Total	4,636	1,659	5,360

- This analysis also revealed the benefit of the Quieter Home Program:
 - Sound insulation to date has resulted in 24 less people being awakened from at least one operation during the curfew hours
 - Without sound insulation, 79 (rather than 55) awakened under the existing condition

Noise Abatement Departure Procedure (NADP)

- **Modify John Wayne Airport NADP for San Diego**
 - Derated thrust takeoff vs. full power takeoff
 - Thrust cut-back at 800 feet above the airport
 - Maintain power reduction until beyond shoreline

Noise Abatement Departure Procedure (NADP) NADP (black) vs. Existing (blue)



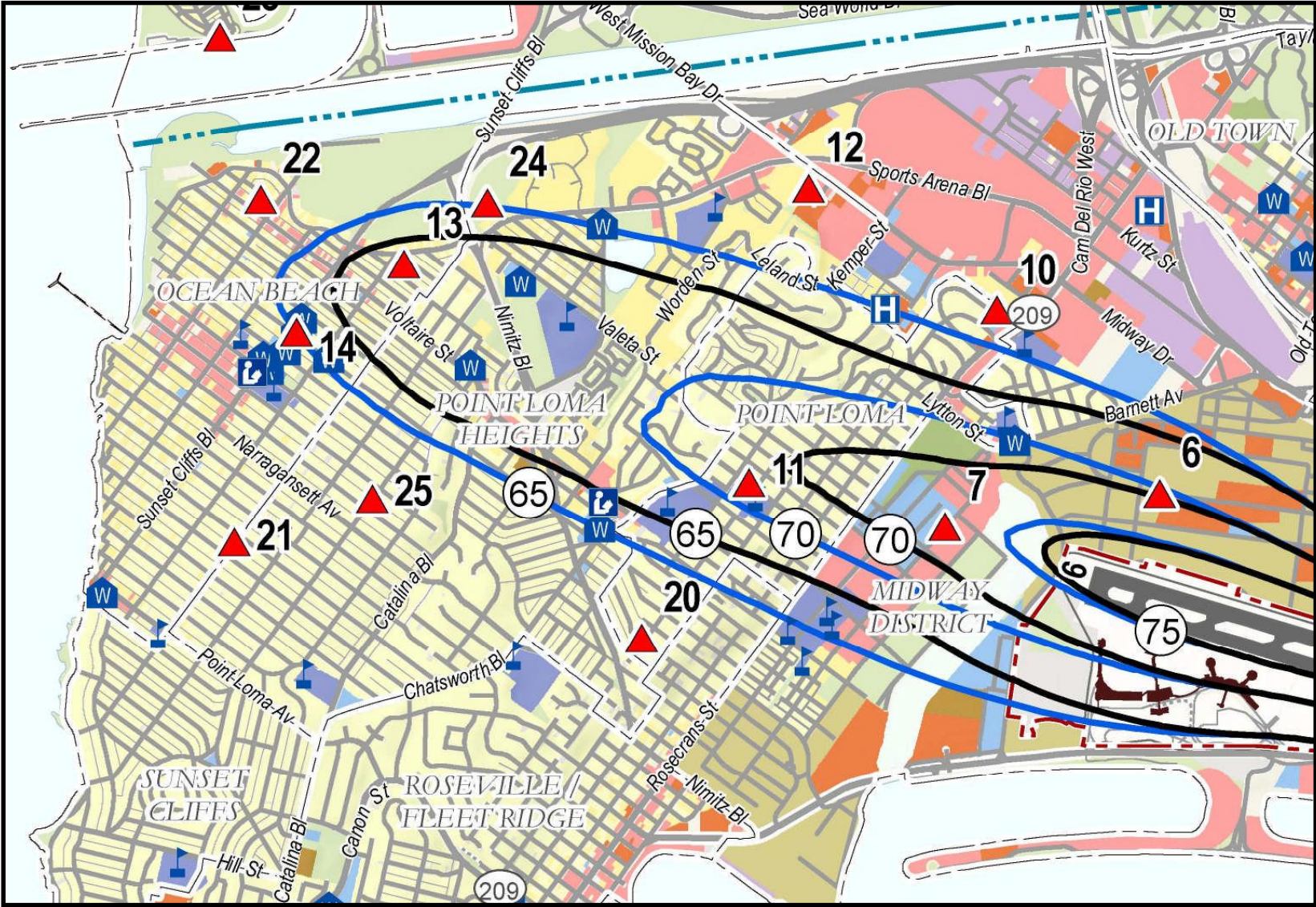
Comparison of CNEL Contours for Existing Conditions and Noise Abatement Departure Profile Alternative

- CNEL Contours - Existing Conditions
- CNEL Contours - Noise Abatement Departure Profile Alternative
- RMT Site Location
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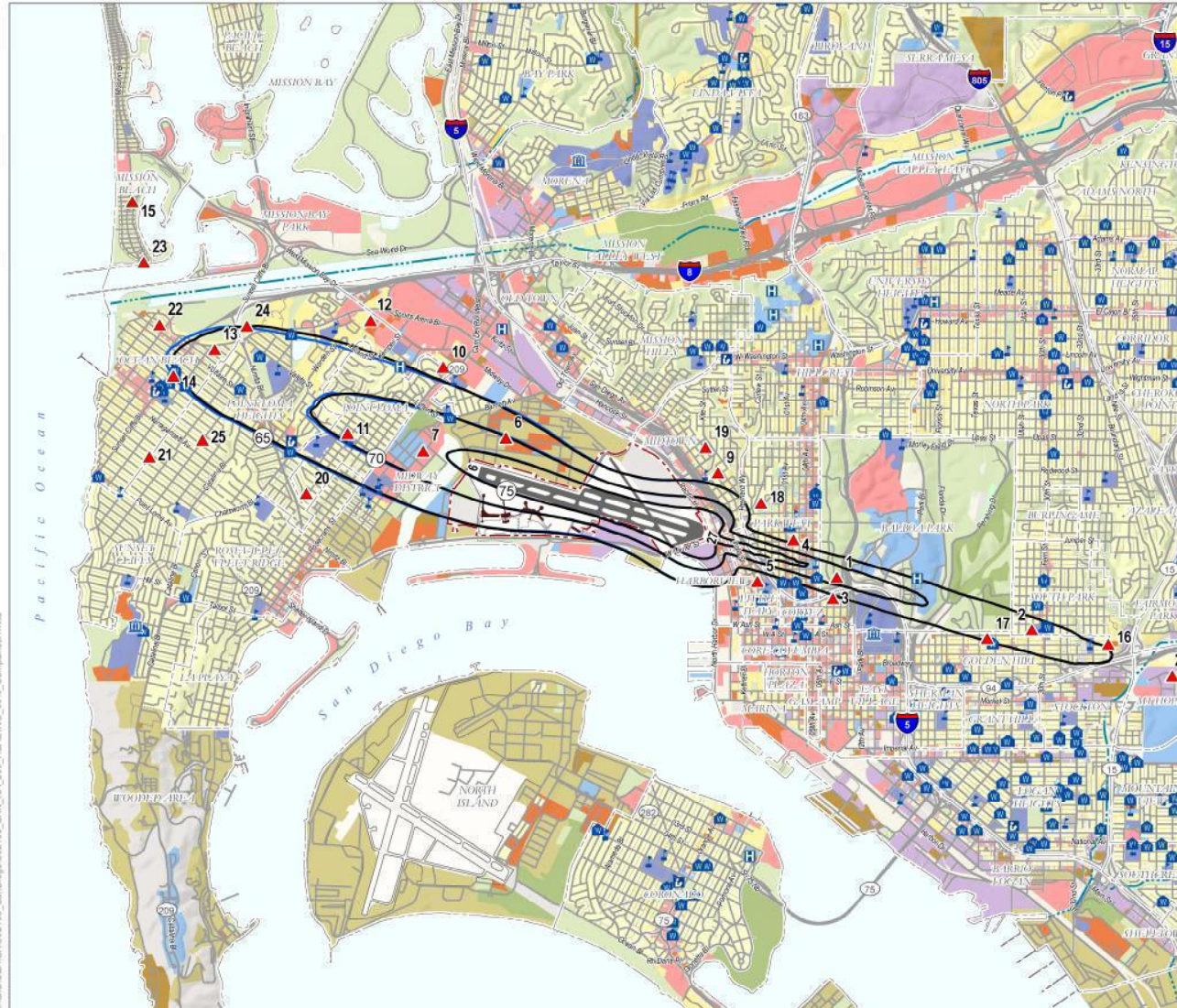
Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI).



Noise Abatement Departure Procedure (NADP) NADP (black) vs. Existing (blue)



Runway 27 RNAV Procedure on 290 Heading (black) vs Existing (blue)



Comparison of CNEI Contours for Existing Conditions and 290_degree Heading RNAV Departure Alternative (100%)

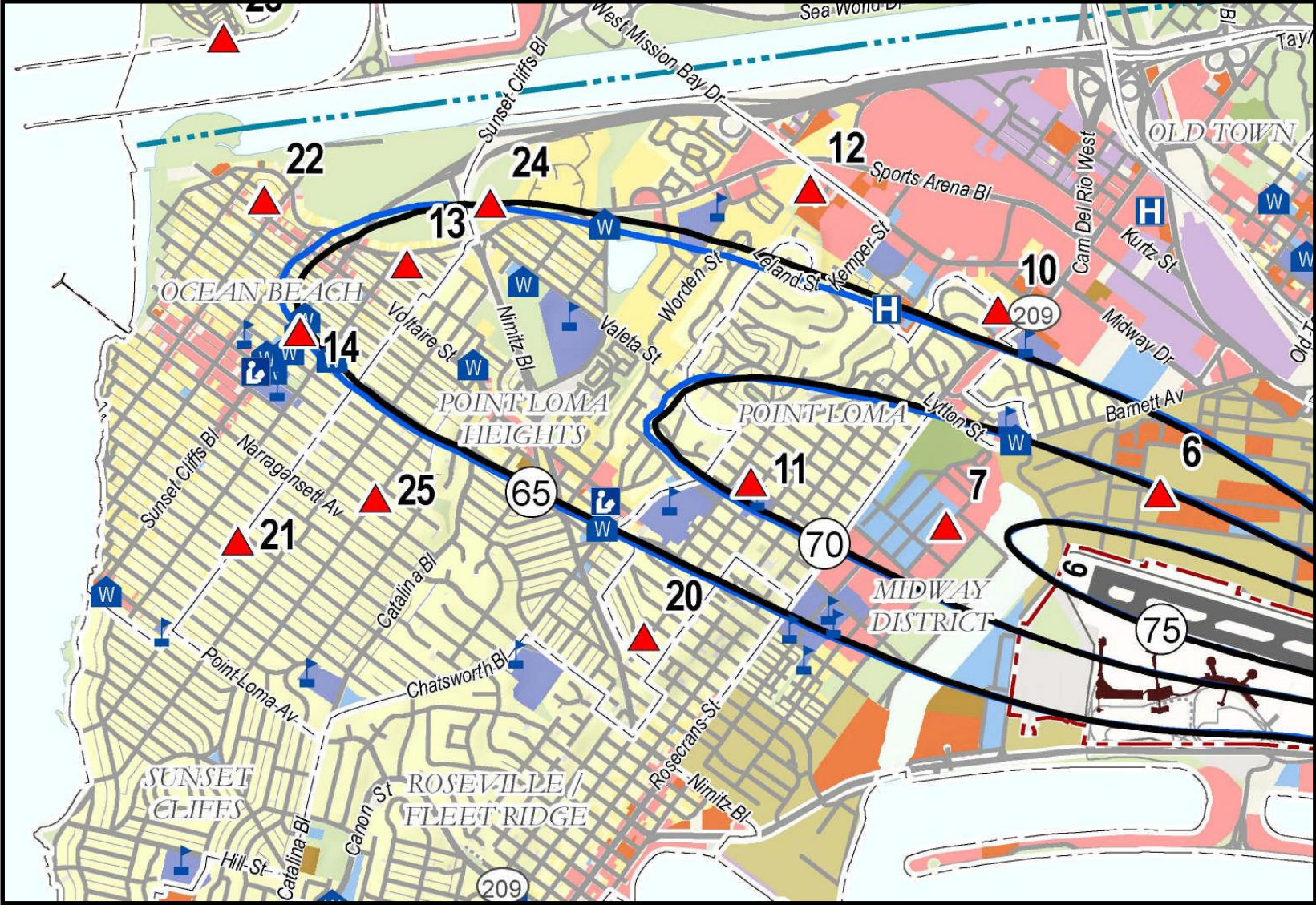
- CNEI Contours - Existing Conditions
- CNEI Contours - 290 Degree Departure Heading RNAV Alternative
- RMT Site Location
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Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI).



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Runway 27 RNAV Procedure on 290 Heading (black) vs Existing (blue)



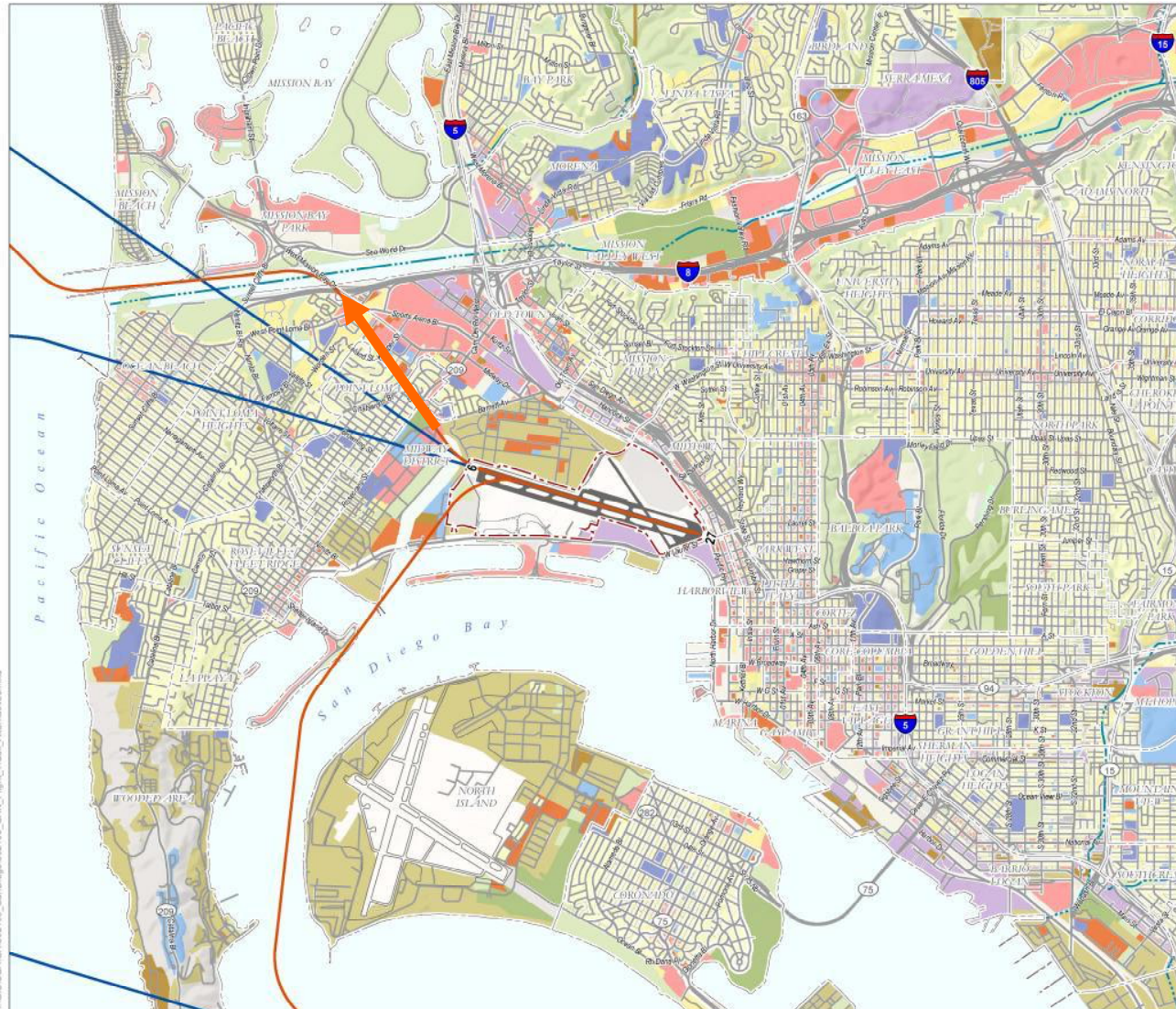
Runway 27 Departures on 310 Heading



Runway 27 Departure Flight Tracks

Figure

- Alternate Departure Flight Tracks
- Existing Departure Flight Tracks
- Airport Property
- Roads
- Single Family Residential
- Multi-Family Residential
- Mobile Home Parks
- Hotel/Motel, Group Quarters
- Commercial
- Industrial
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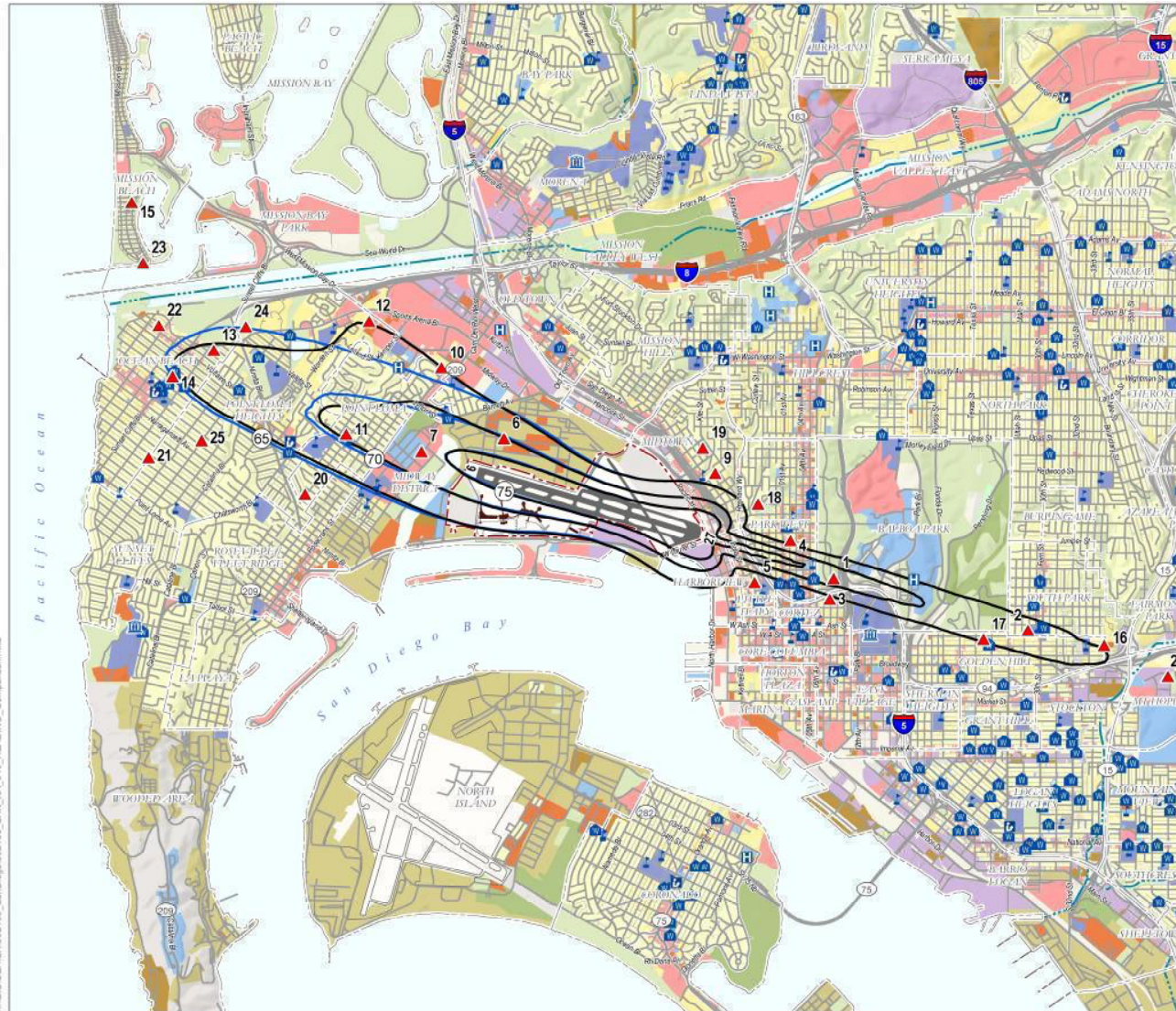


Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI).



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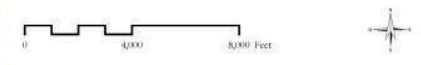
Runway 27 Departures on 310 Heading (black) vs. Existing (blue)



Comparison of CNEL Contours for Existing Conditions and 310-degree Departure Heading Alternative

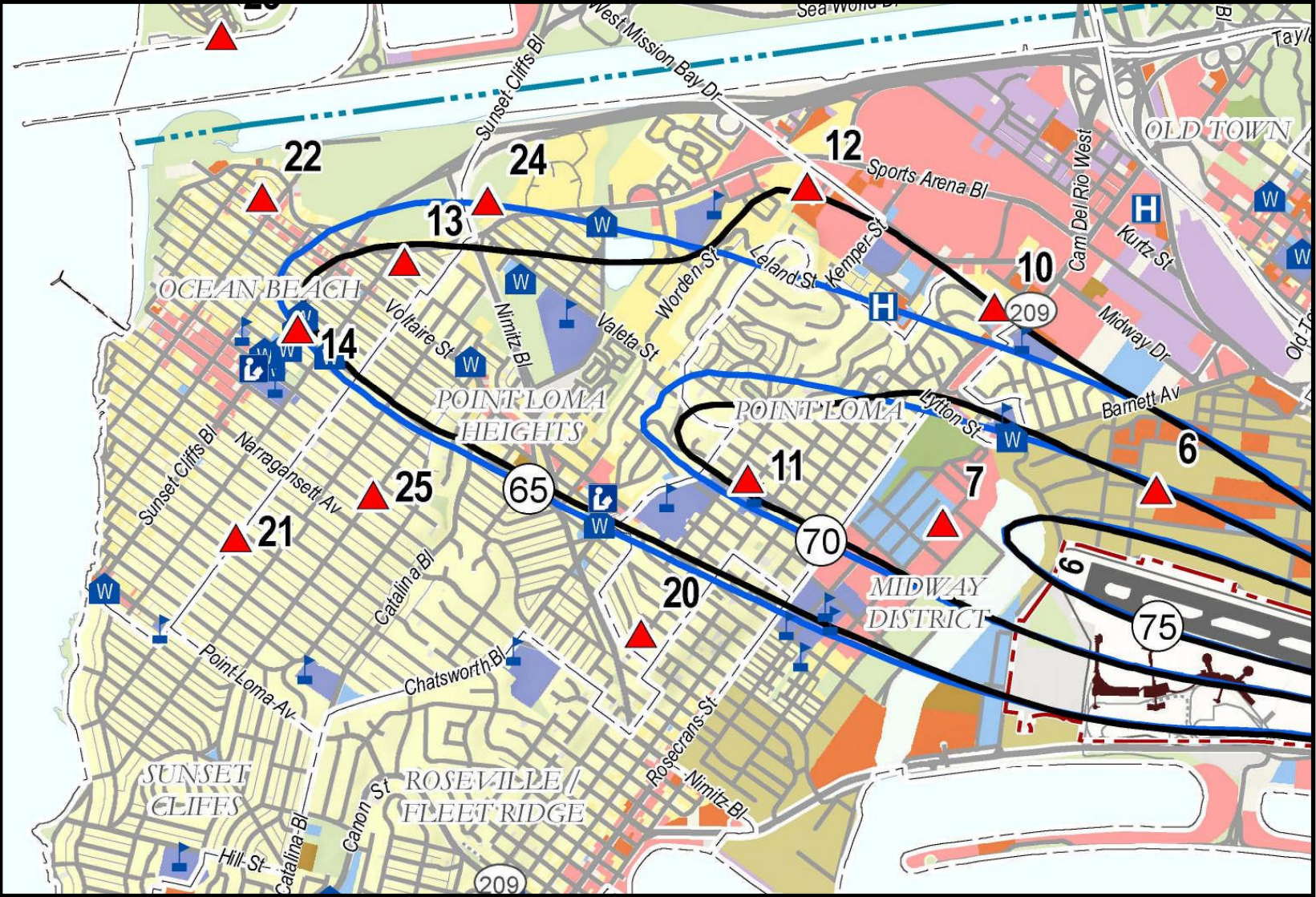
- CNEL Contours - Existing Conditions
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Runway 27 Departures on 310 Heading (black) vs. Existing (blue)

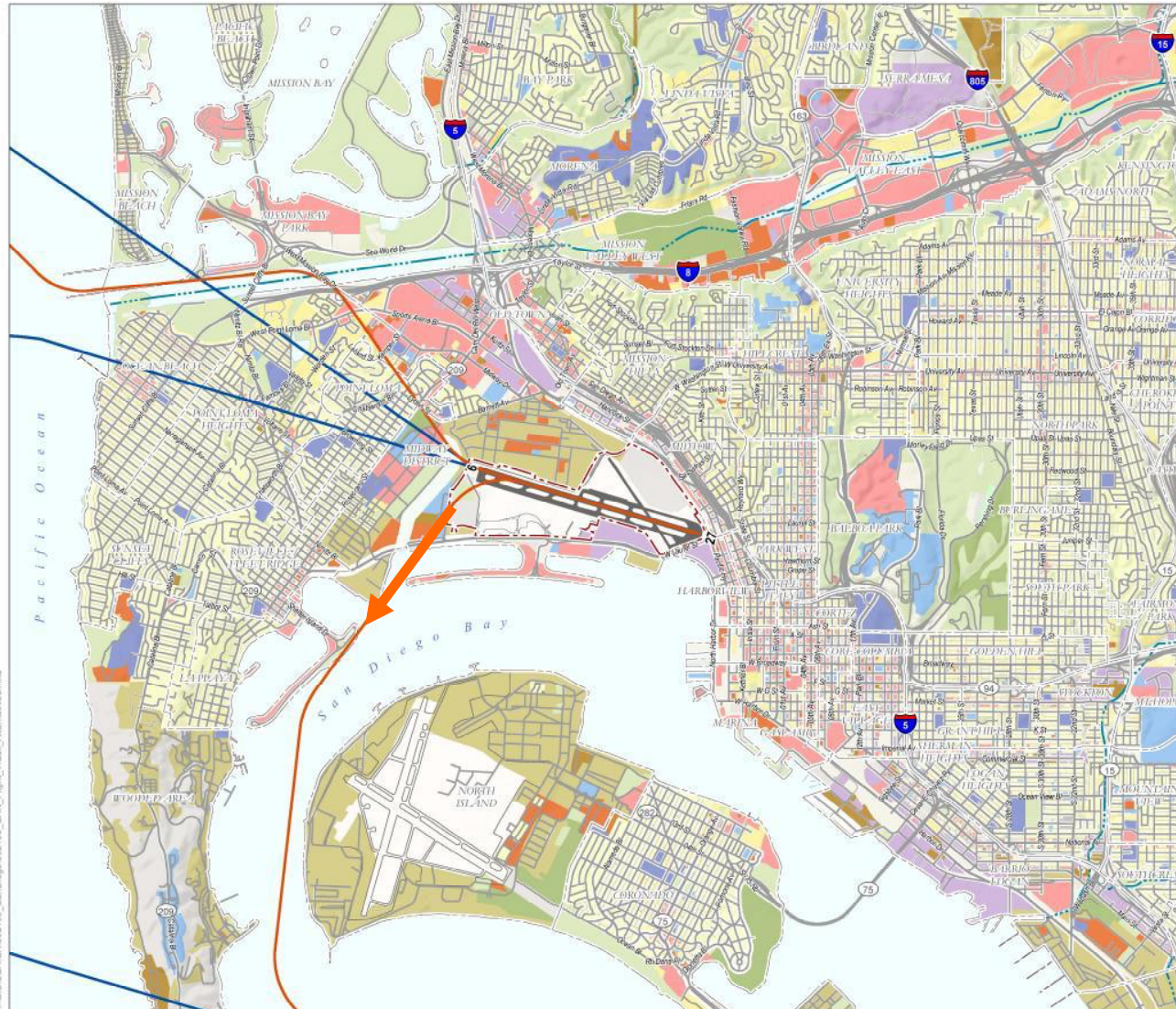
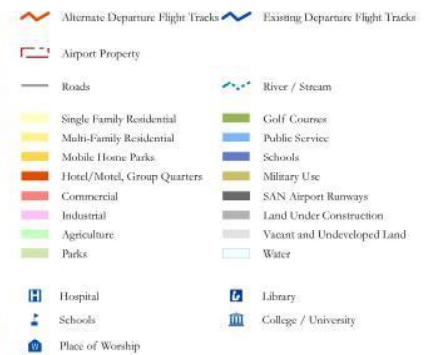


Runway 27 Left Turn Departure over the Bay



Runway 27 Departure Flight Tracks

Figure

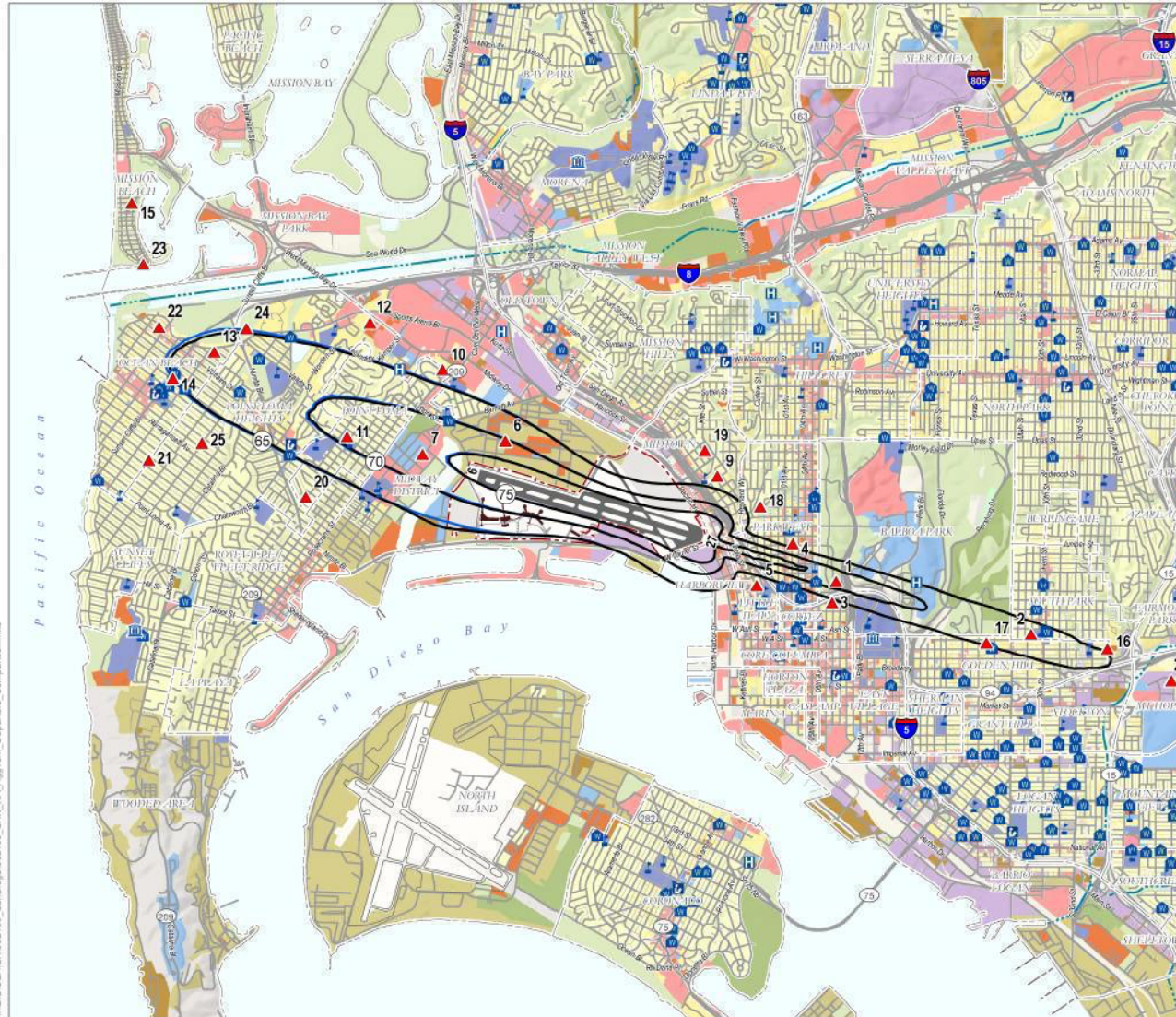


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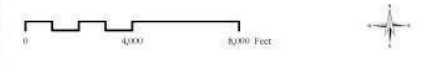
Runway 27 Left Turn Departure over the Bay (black) vs. Existing (blue)



Comparison of CNEL Contours for Existing Conditions and Aggressive Left Turn Departure Alternative

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Runway 27 Left Turn Departure over the Bay (black) vs. Existing (blue)

