FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties

FAA & Select Committee Working Meeting

July 15, 2016

Noise Modeling
vs.
Noise Measuring

Measured noise data is the basis for the noise models

- INM/NIRS are based on international standards i.e. SAE
- Aircraft manufactures provide noise data
- Noise data is integrated into noise models and verified before release
- Field noise measurements have been taken at various locations to validate modeling

Field noise measuring has limitations

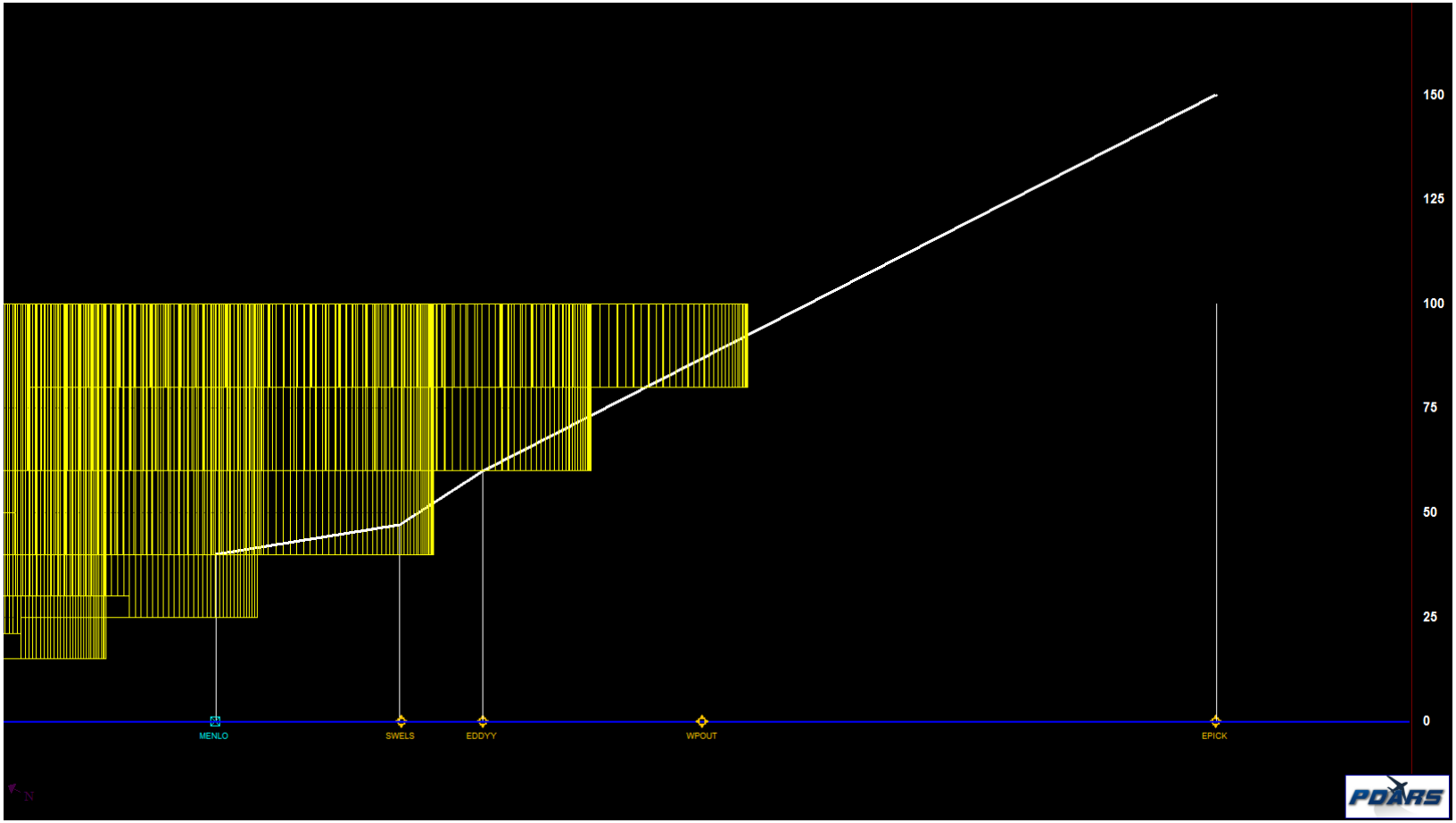
- Noise modeling is used to evaluate historical, existing, and forecast scenarios
- Noise measuring would only evaluate historical scenarios
- Noise measuring would require many monitors over large geographical area for a long period of time to replicate modeling

Field noise measuring is typically done at specific locations

- Noise measuring may be used at a specific location to demonstrate noise exposure for a give period of time
- Airport operators have installed noise monitors in some communities
- SFO installed noise monitors under the SERFR

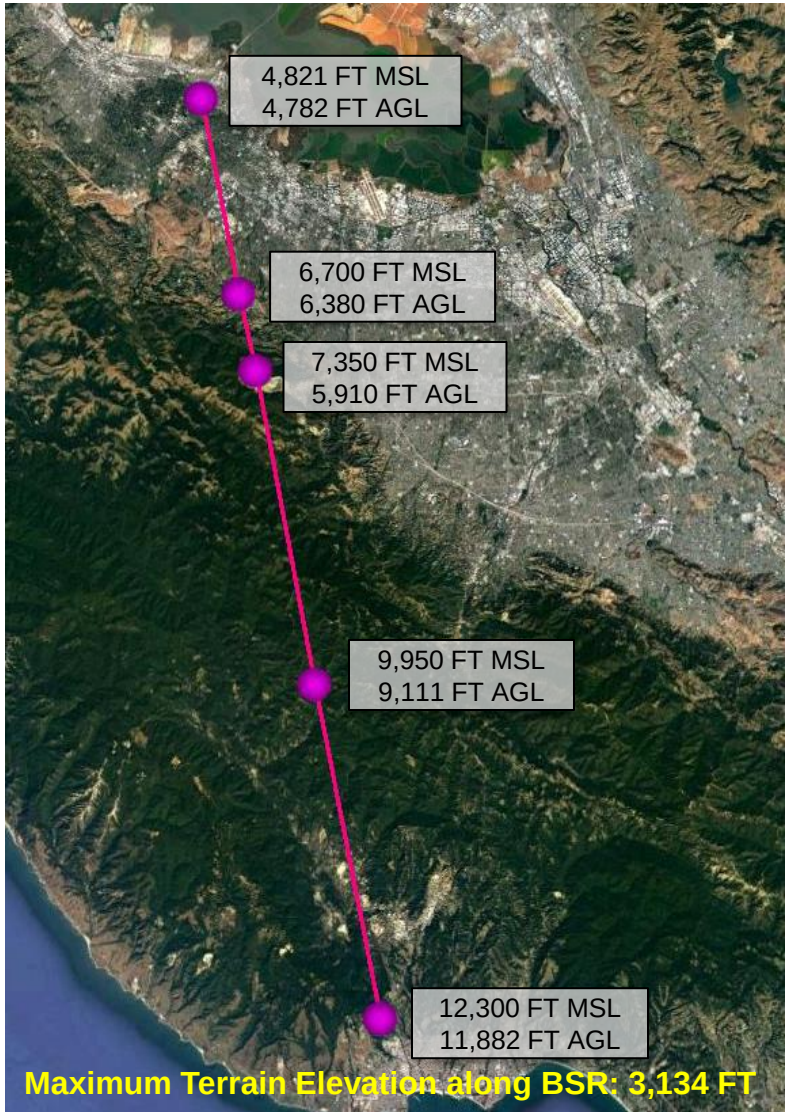
Class B

Current - SERFR Descent Profile

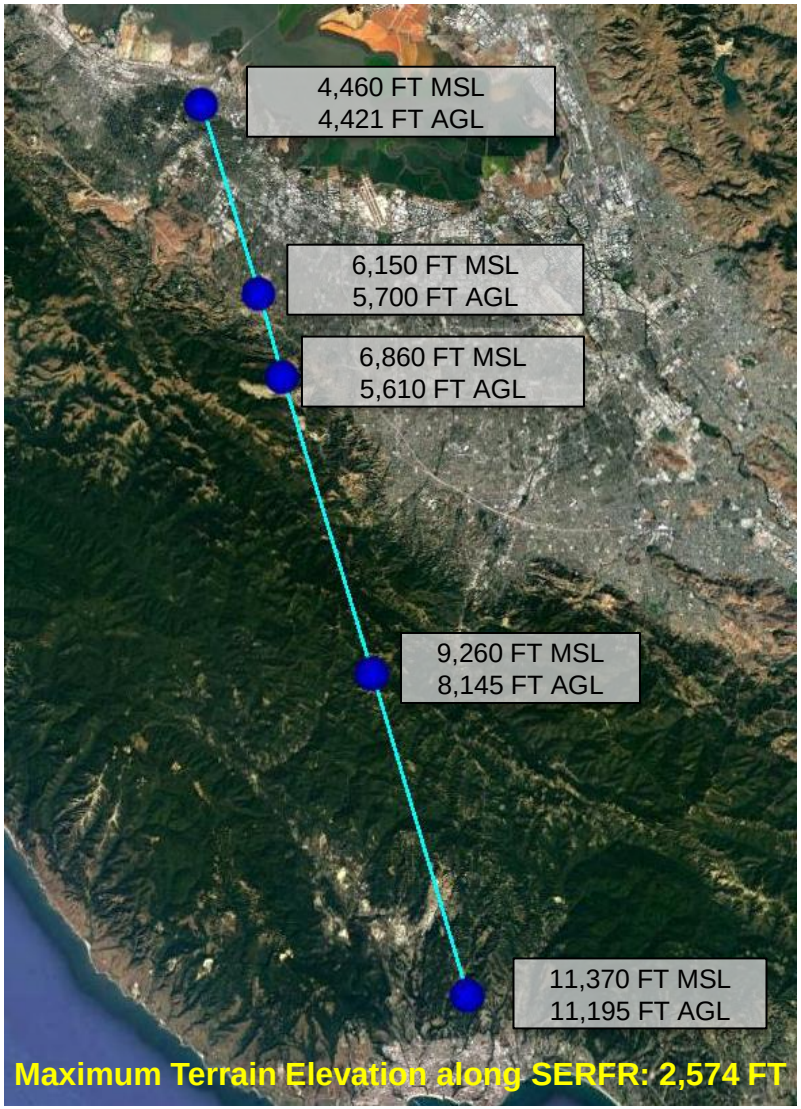


BSR – SERFR
Altitude and Elevation Comparison

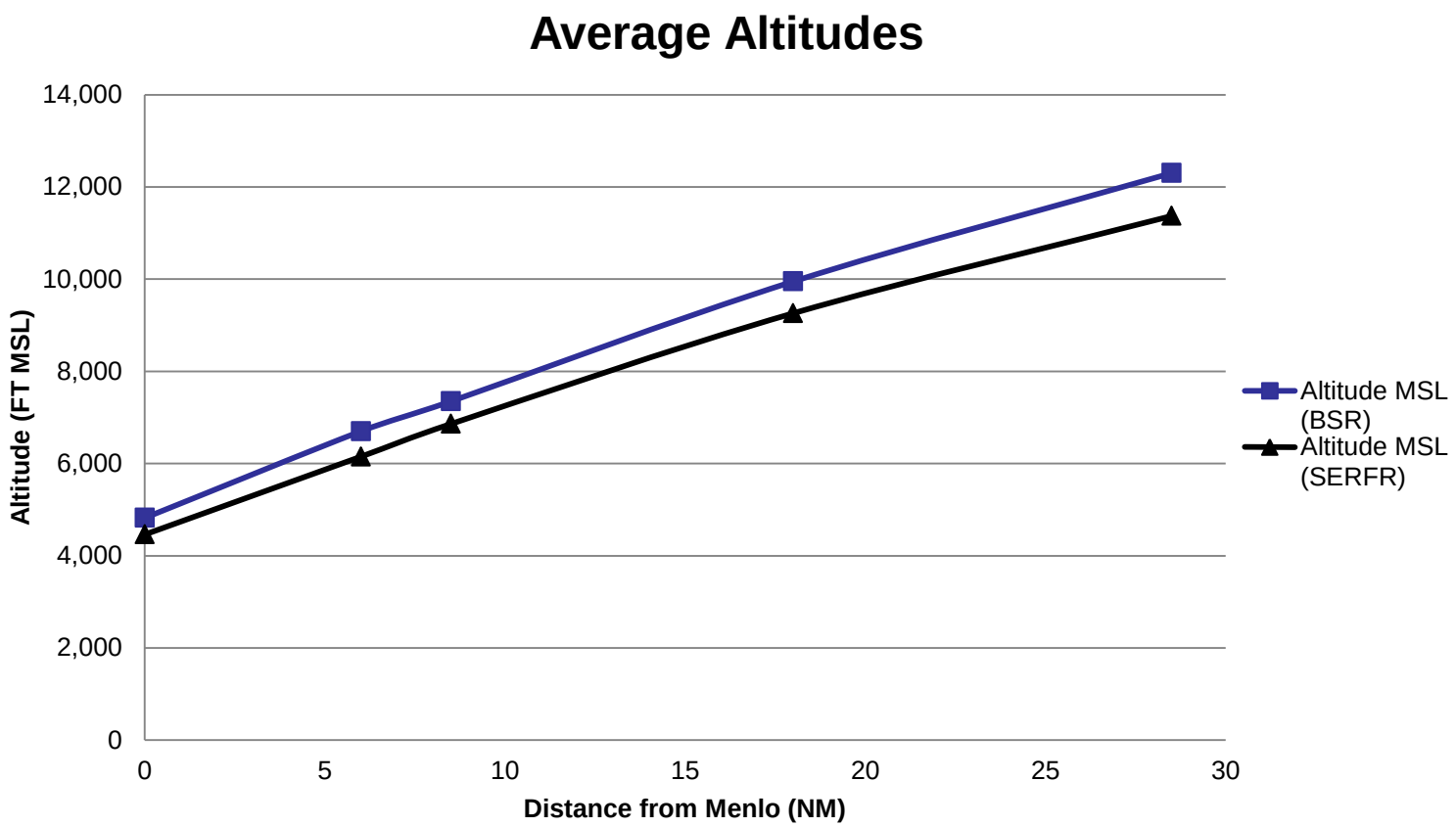
BSR STAR



SERFR STAR



BSR - SERFR


Average Altitudes
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Altitude (FT MSL)
0
5
10
15
20
25
30
Distance from Menlo (NM)
Altitude MSL (BSR)
Altitude MSL (SERFR)

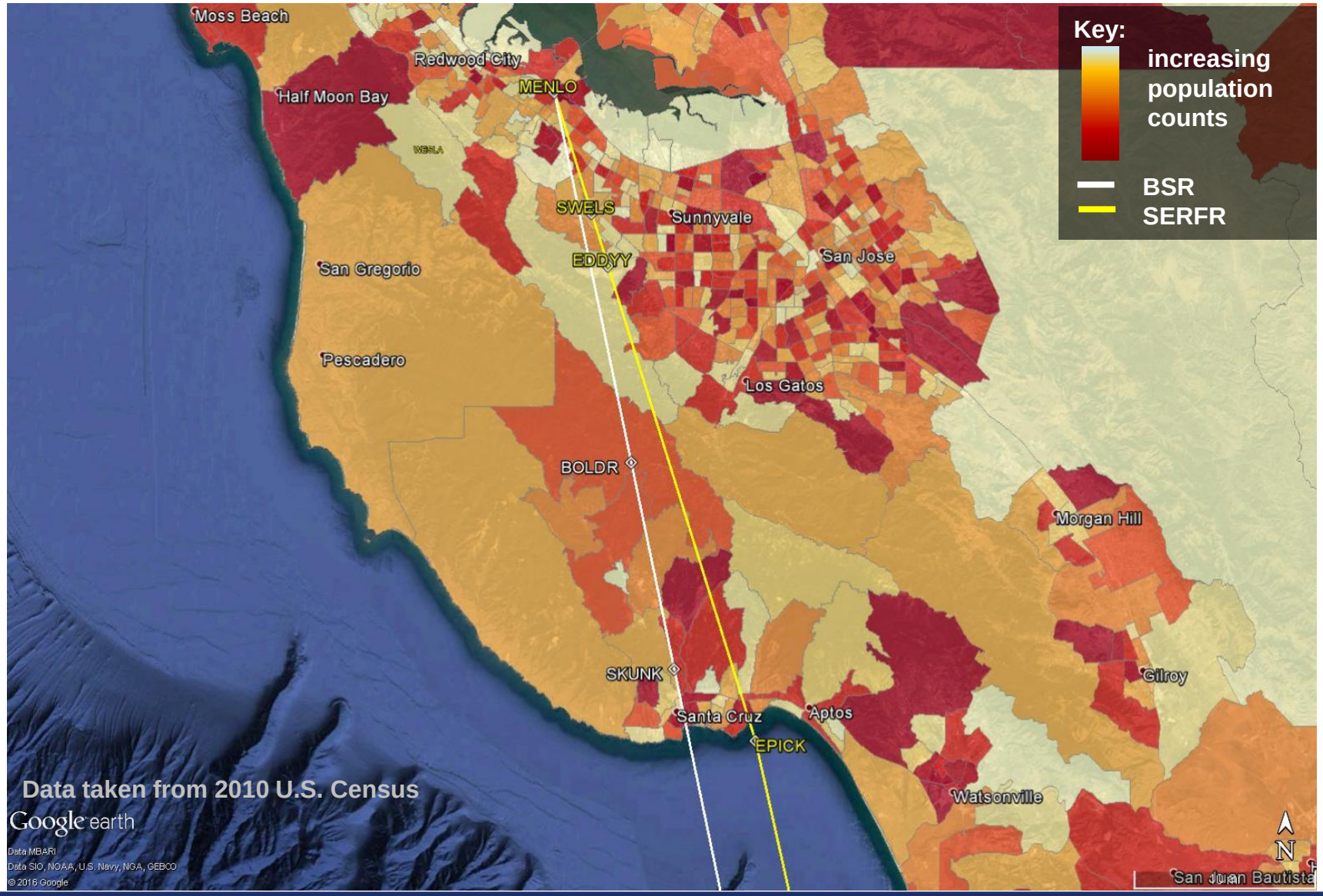
Maximum Elevation

SERFR

BSR

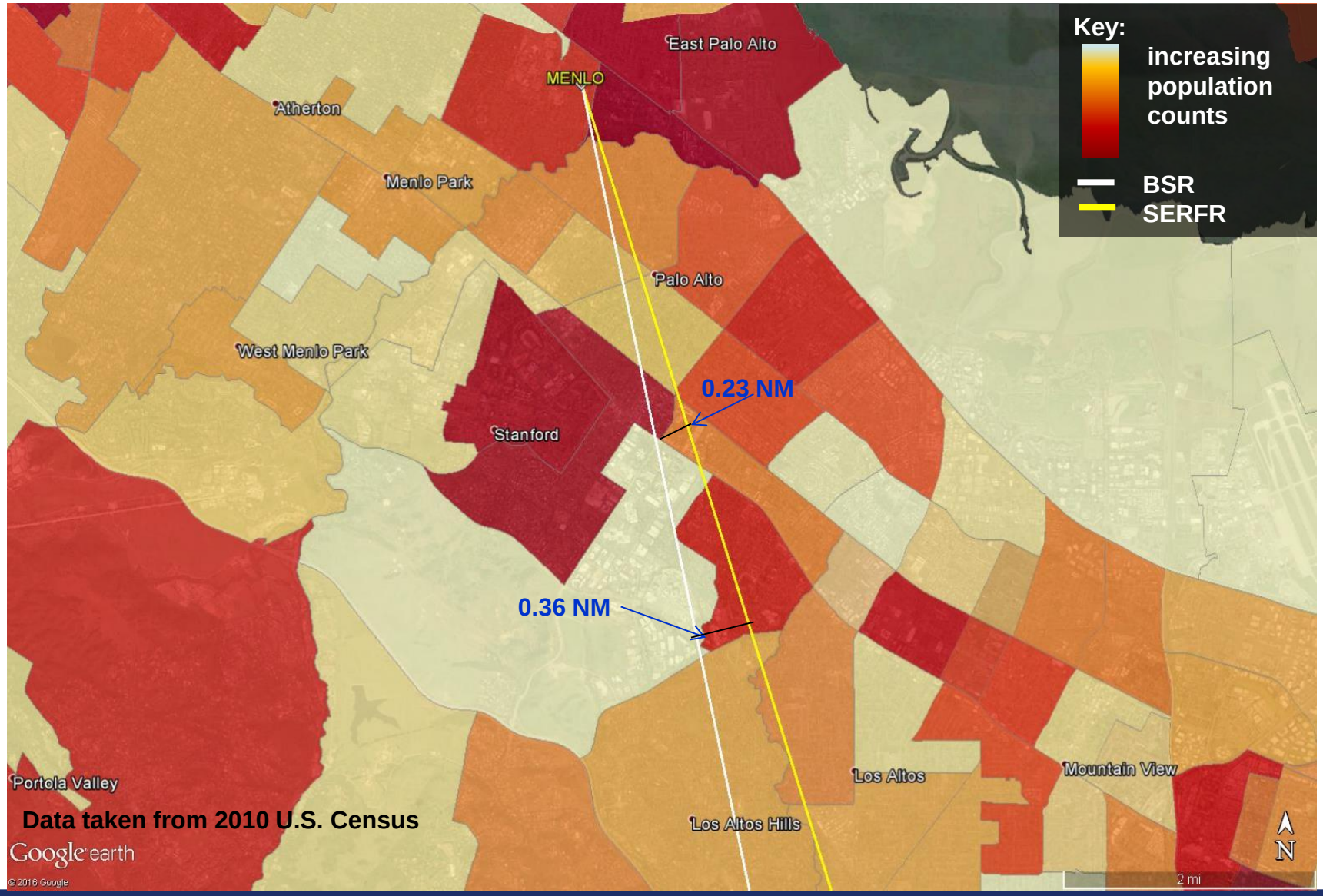
BSR – SERFR Population Density Comparison

Population Density Near to the BSR and SERFR

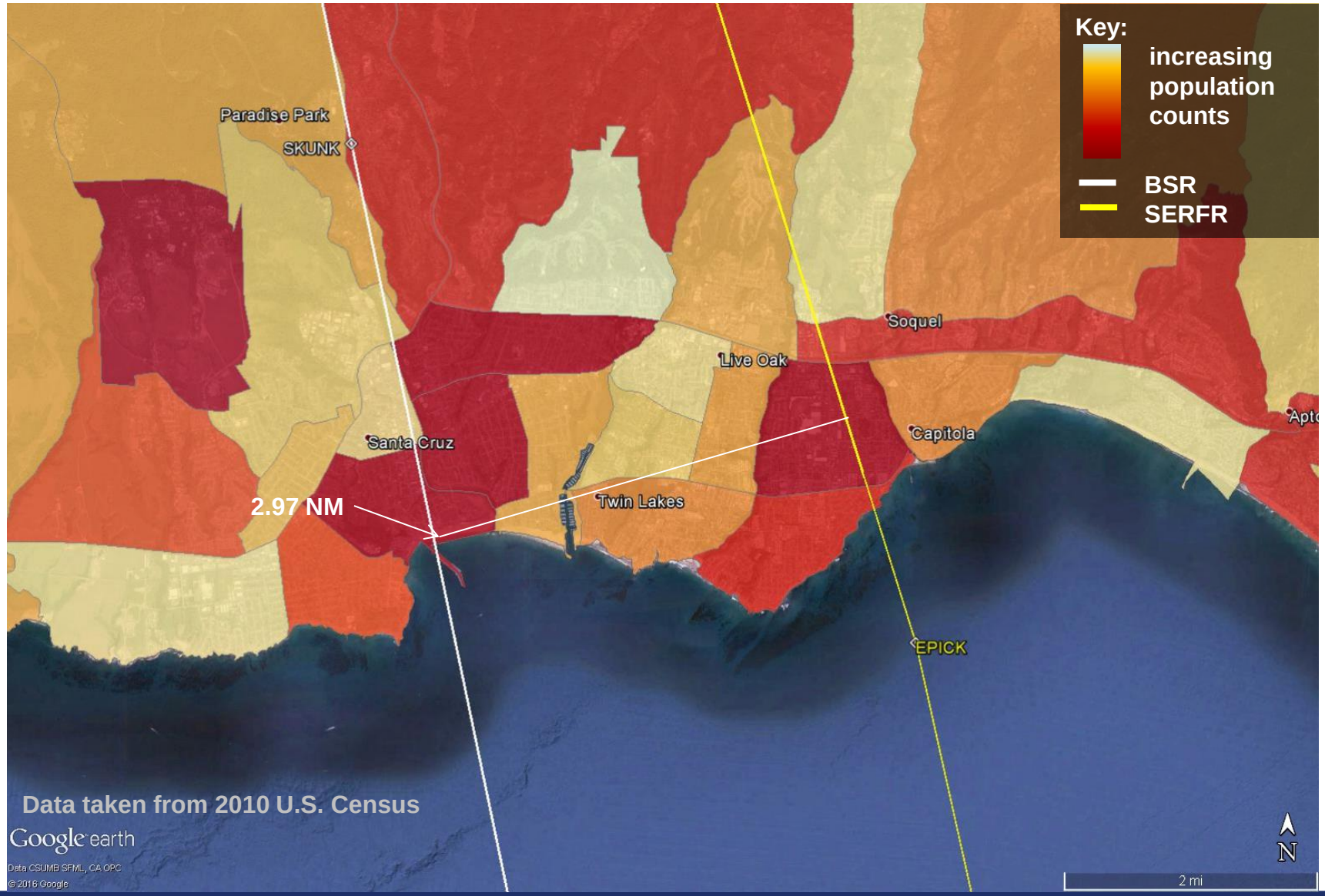


Federal Aviation Administration

Population Density Near to the BSR and SERFR



Population Density Near to the BSR and SERFR



Vortex Generator

Vortex Generator