

APPLICATION FOR MODIFICATION OF EXPERIMENTAL AUTHORITY

NextNav Inc. (NextNav) seeks modification of its experimental authority under call sign WP2XYS to relocate one of the eight authorized fixed base stations in Santa Clara County, California.¹ The new site, located approximately 1,400 feet northwest of the original, will replace the prior site due to lease-related constraints. The relocated base station will operate only one sector with the directional antenna, oriented towards the southeastern direction. The revised operational area will largely overlap with the original area. The base station will transmit in the 918–928 MHz sub-band at a radiated power of up to 1000 watts ERP per sector, with the antenna mounted at a fixed azimuth and the beamwidth and downtilt values specified below.

The proposed modified site will be located on an existing building rooftop in the same manner as the original site. These rooftop facilities involve antennas mounted below the building rooftop line and therefore do not create new obstructions requiring FAA notification or clearance. Because the rooftop site will be mounted at or below the rooftop line, this application introduces no new structures or obstructions.

An antenna data sheet, and typical deployment configurations on preexisting structures appear in the attached exhibit. The following chart provides detailed technical specifications for the original and relocated base station sites in the San Jose area. Each row includes the NextNav site identifier, geographic coordinates (latitude and longitude), antenna height above ground level, estimated structure height (AGL), and the azimuth and downtilt values for up to three antenna sectors (Alpha, Beta, and Gamma).² Testing from zero to up to 10 degrees downtilt allows NextNav to study the variation in group delay of the antenna due to nulls in the vertical antenna pattern on PNT performance.

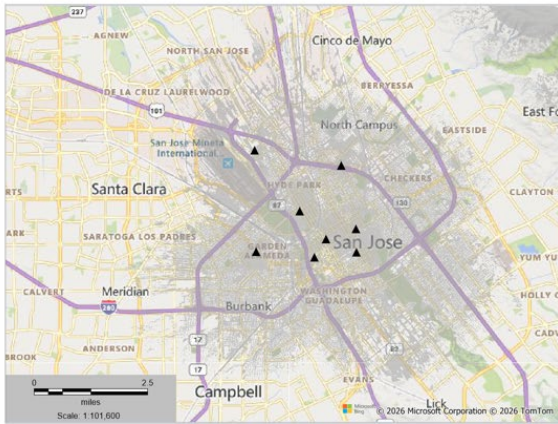
Site ID	Latitude	Longitude	NN Antenna Height AGL (m)	Est. Bldg. Height (m)	Alpha sector Az (Deg)	Beta sector Az (Deg)	Gamma sector Az (Deg)	Alpha sector Down- tilt (Deg)	Beta sector Down- tilt (Deg)	Gamma sector Down- tilt (Deg)
CASFO0502 (original)	37° 21' 53.8" N	121° 54' 52.8" W	39	39	110	200	N/A	0-10	0-10	0-10
CASFO0503 (relocated)	37° 22' 3.66" N	121° 55' 5.04" W	29.9	29.9	140	N/A	N/A	0-10	N/A	N/A

The maps below show the revised experimental coverage area incorporating the relocated site. Because the downtilt angle may range from 0 degrees to 10 degrees, coverage plots are shown for both 0 degrees downtilt and 10 degrees downtilt.

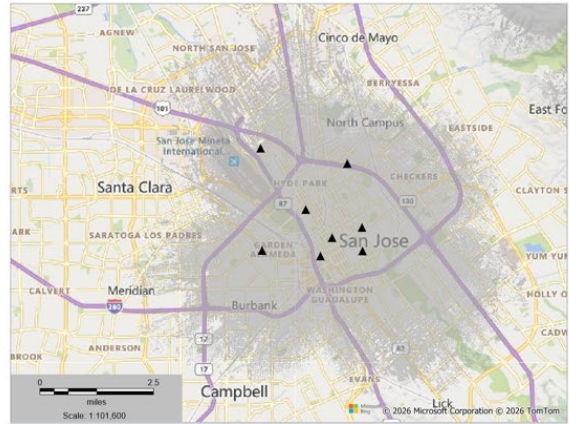
¹ The mailing address provided for the applicant in the original application for File No. 0622-EX-CN-2025 contained an incorrect ZIP code. The correct ZIP code is reflected in the applicant's mailing address as submitted with this modification application.

² As noted, the relocated site will operate only one sector.

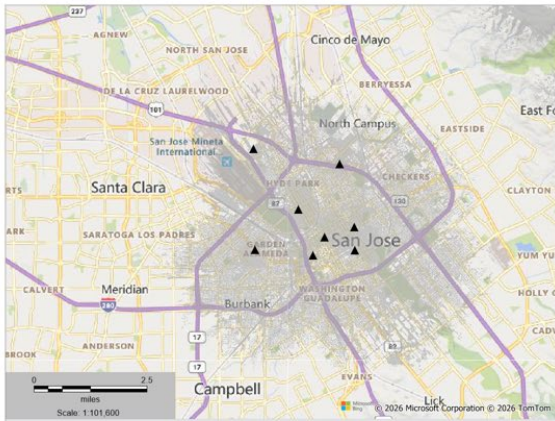
Outdoor + Indoor Coverage – 0° tilt



Outdoor Coverage Only – 0° tilt



Outdoor + Indoor Coverage – 10° tilt



Outdoor Coverage Only – 10° tilt

