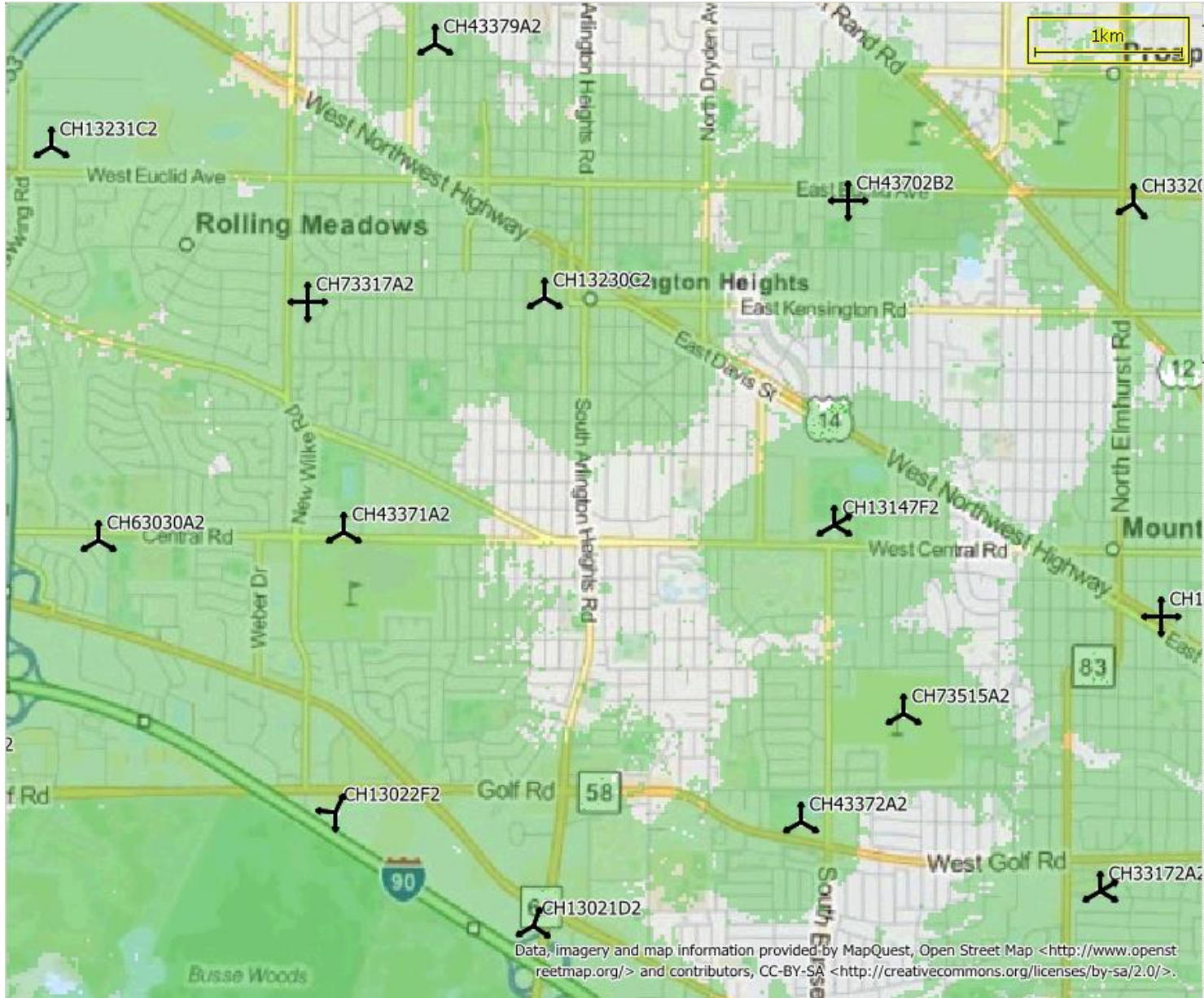
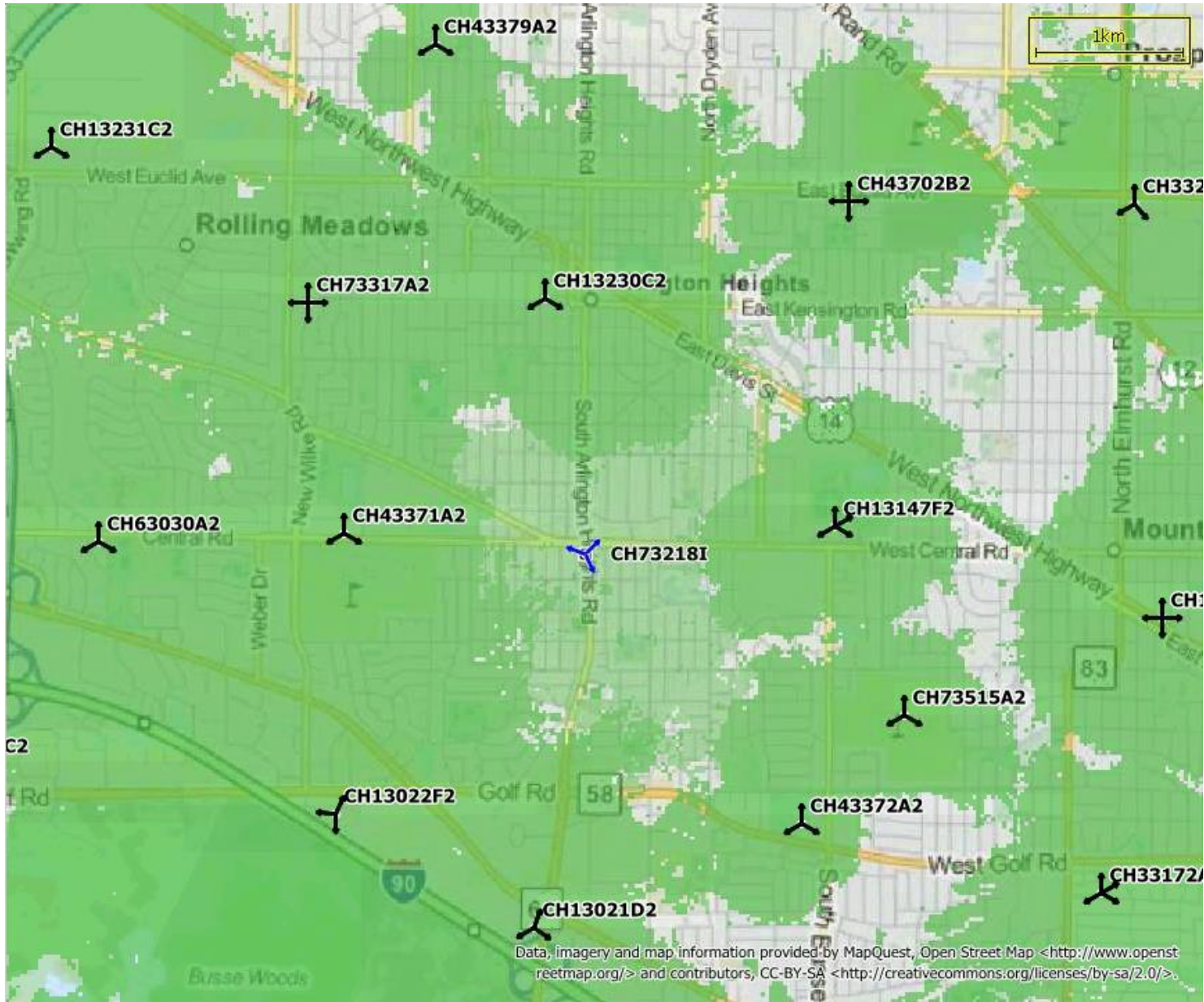


# T-Mobile Existing Coverage

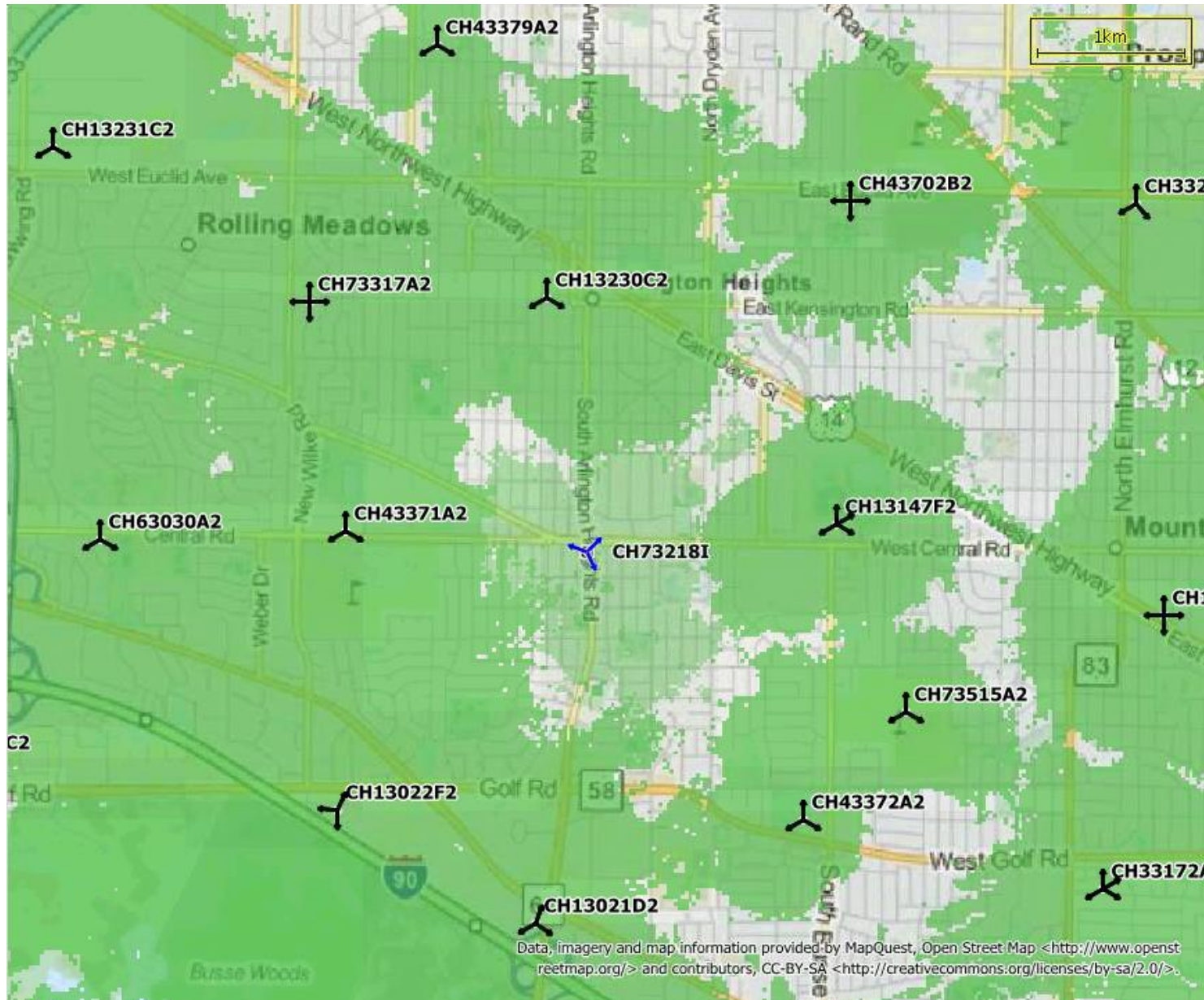


# T-Mobile Proposed Coverage



Indoor coverage with New Site at 100FT

# T-Mobile Proposed Coverage



Indoor coverage with New Site at 75FT

## **NSD Scope and Existing Co-location options**

The purpose of this search ring is to provide the in-building coverage within a 0.5 mile radius from the search ring center located at the intersection of E. Cypress St and S. Pine Ave. There are no existing towers close to the search ring center for co-location options and the roof-tops in the area are too short (less than 60ft) to meet the coverage objective. The Build to Suit (BTS) candidate provided is at a good location and that can provide better in-building coverage in the desired area, as well as assist in off-loading the T-Mobile on-air sites CH43371A and CH13147F.

Moorings Senior Center is located east of the search ring center and is close to T-Mobile on-air site CH13147F, approx. 0.72 miles, but the rooftop is less than 60ft and therefore is insufficient to fill the coverage gap. T-Mobile already has better coverage at this location and selecting this location will not cover the area on the north west of the search ring center.

North-western community hospital at 800 Central Rd is also very close to T-Mobile on-air site CH43371A. Approx. 0.37 miles, therefore can't be considered as a viable option.

## Existing Site Locations

Neighboring Sites	Address	Structure Type
❖ CH13230C	55 South Vail, Arlington Heights, ILLINOIS - 60005	Rooftop
CH73317A	121 S. Wilke, Arlington Hts., ILLINOIS - 60005	Rooftop
CH43379A	800 W. Oakton, Arlington Heights, ILLINOIS - 60004	Rooftop
CH13231C	3400 W EUCLID AVE, ARLINGTON HEIGHTS, ILLINOIS - 60005	Rooftop
❖ CH43371A	1610 W. Central, Arlington Heights, ILLINOIS - 60005	Monopole
CH63030A	3201 Central Rd, Rolling Meadows, ILLINOIS - 60008	Water-Tank
CH13022F	1701 W Golf Rd., Rolling Meadows, ILLINOIS - 60008	Rooftop
CH13021D	2340 S. Arlington Heights Rd., Arlington Heights, ILLINOIS - 60005	Rooftop
CH43372A	1768 Golf Rd., Mount Prospect, ILLINOIS - 60056	Monopole
CH33172A	720 Dulles Road, Des Plaines, ILLINOIS - 60016	Water-Tank
CH73515A	600 S. See Gwun Avenue, Mount Prospect, ILLINOIS - 60056	Monopole
❖ CH13147F	1700 West Central Rd, Mount Prospect, ILLINOIS - 60056	Monopole
CH43702B	1903 E. Euclid, Arlington Heights, ILLINOIS - 60004	Steeple
CH33209A	55 East Euclid, Mount Prospect, ILLINOIS - 60056	Rooftop
CH13146A	112 NW HWY, Mount Prospect, ILLINOIS - 60056	Water-Tank

❖ Neighboring sites close to search ring center.

## Used Cases – Stats of recently On-Air sites

T-Mobile is currently building new sites in Chicago market and remarkable increase in traffic is notice in the area with new sites. Apart from the increased in in-building coverage, the voice and data traffic increased for both 3G and 4G technologies.

Area level stats on some of the recently on-air sites are provided below:

- The new site CH92024A is located at 3301 S. Laramie drive, Cicero, IL 60804 and got on-air on 03/31/2015. The 3G voice traffic remain stable, 3G Data traffic increased by 12.13%, 4G - LTE Voice (VoLTE) traffic increased by 16.31% and 4G - LTE Data traffic increased by 11.56%.
- The new site CH92023A is located at 3344 W. Cermak Rd, Chicago, IL 60623 and got on-air on 03/31/2015. The 3G voice traffic increased by 2.99%, 3G data traffic is increased by 16.25%, 4G - LTE Voice (VoLTE) traffic increased by 23.87% and 4G - LTE Data traffic increased by 13.90%.