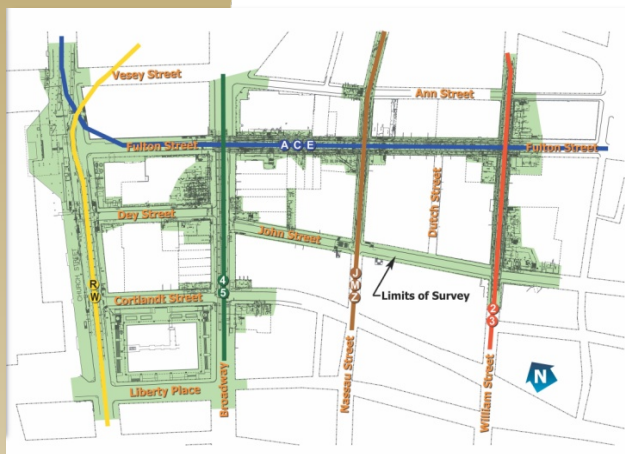


# Design Services for the Fulton Street Transit Center

Manhattan, New York



**NAIK** provided complete topographic and utility survey services for the structural locations of five stations and roadways, including columns, girders, platforms, tracks, switches, and other station appurtenances for this new NYCT hub, now known as the Fulton Center. Our team of survey personnel established a subordinate horizontal and vertical control network throughout the station limits, tied directly to the primary network, in addition to providing a detailed utility survey extending from building line to building line. This network has been utilized to perform survey observations of critical structural and utility elements.



Structural elements such as platforms, columns, crash-walls, walls, stairwells, girders, tracks, booths, major utilities etc., were surveyed utilizing a combination of sophisticated electronic reflectorless total stations and a RIEGL Model 360 3D laser scanner. The 3D scanning provided an accurate 3D model of the existing station facilities that will be utilized for planning and design. **NAIK** established control points within the subject scans in sufficient number and location to accurately combine the digital data obtained in the individual scans.

Architectural detail elements were scanned and computer-modeled utilizing a RIEGL Model LPM 25HA-C (1mm accuracy) 3D laser scanner. The 3D scanning provided an accurate 3D model of the existing artwork, railings, sculpture, etc., that will be utilized for preservation and or refabrication. **NAIK** established control points within the subject scans in sufficient number and location to accurately combine the digital data obtained in the individual scans. The scanner meets the intended accuracy requirements as specified by NYCT.



**NAIK** is the winner of the ACEC Metro Section Diamond Award for Surveying Excellence and ACEC National Gold Award for Surveying Excellence and Arup was awarded the NYSSPE Project of the Year Award for this project.

**Agency/Owner:**  
MTA New York City Transit  
**Construction Cost:**  
\$1.4B  
**Project Duration:**  
2003 - 2014