

**Surveyors** do one of three things:

1. Gather information and location of objects in the real world so that they can be placed in 'the record' (plans, maps, deeds);
2. Take information from 'the record' and locate them in the real world;
3. Determine the location of property interests and boundaries to include interpreting conflicting evidence.

**A surveyor's** role pre-project:

1. Provide topography and existing conditions currently existing on the proposed project area;
2. Determine that the proposed project area is within the project owner's property or jurisdiction;
3. Discover if there are encroachments (easements or unauthorized use) on the owner's property, or if there are possible boundary problems.

To do this the surveyor may use GIS, Remote sensing, aerial imagery, and record research in addition to traditional 'on the ground' surveying. I believe this year's focus is on pedestrian mobility. The surveyor can check sight distances and the cross slope on sidewalks to see if they are in compliance with ADA standards or need to be modified.

**A surveyor's** project role:

1. Provide project control reference points for locating what is to be built;
2. Project staking to guide the construction;
3. Coordination between subcontractors.

The surveyor is generally involved in all aspects of project construction, making him/her a valuable reference person as the project proceeds.

**A surveyor's** role post-project:

1. Provide 'as-built mapping' to record what is where, this often serves as the starting point for the next project.

**Surveyor** Knowledge:

Surveyors work in three dimensions (four actually if you add the influence of changes over time). They must be familiar with the most up-to-date locational technology (GPS, GIS, LiDAR, satellite imagery) and yet also have a knowledge of historical procedures and precedents. They must know the different spatial references systems currently used, as well as those used in the past (Datums, projections). A surveyor must know the laws governing property ownership and boundary determination governing the area where they work, as these laws vary from state to state. They must have good communication and people skills as every boundary determination affects not only their client, but the person on the other side of the boundary as well.