

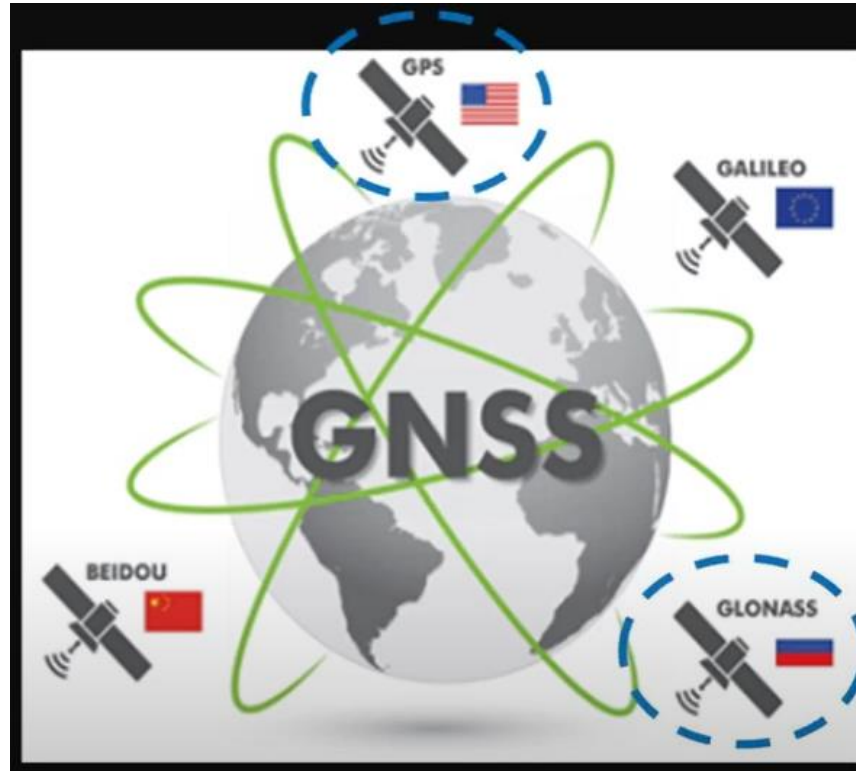


## Productivity

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Prepared by Transportation Planning  
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## Realtime Network Upgrade



### Description and Benefit

Real-Time Network provides the GNSS (aka GPS) community the ability to obtain real-time geospatial positioning up to an accuracy of  $\pm 1\text{cm}$ . The network uses a combination of physical base stations operating 24/7 and cellular communications to triangulate the position of a single GNSS receiver being used for ground measurements. By upgrading the network hardware and software, we have been able to add two more satellite constellations (Galileo and Beidou) to our real-time network positioning. Adding these constellations to our existing constellations (GPS and Glonass), will provide GNSS users the ability to obtain positioning and better accuracies in harsh environments, like tree canopy and urban area with large buildings. The additional satellite constellation will help ensure GNSS users will have an adequate number of satellites for obtaining a position on the ground. These upgrades to the real-time network can greatly improve the network's ability to provide an invaluable service for our internal staff as well as our external consultant and construction partners, private surveying firms, other State and Federal agencies, agriculture, GIS, Emergency Management and Law Enforcement, to name a few.

### For More Information Contact

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