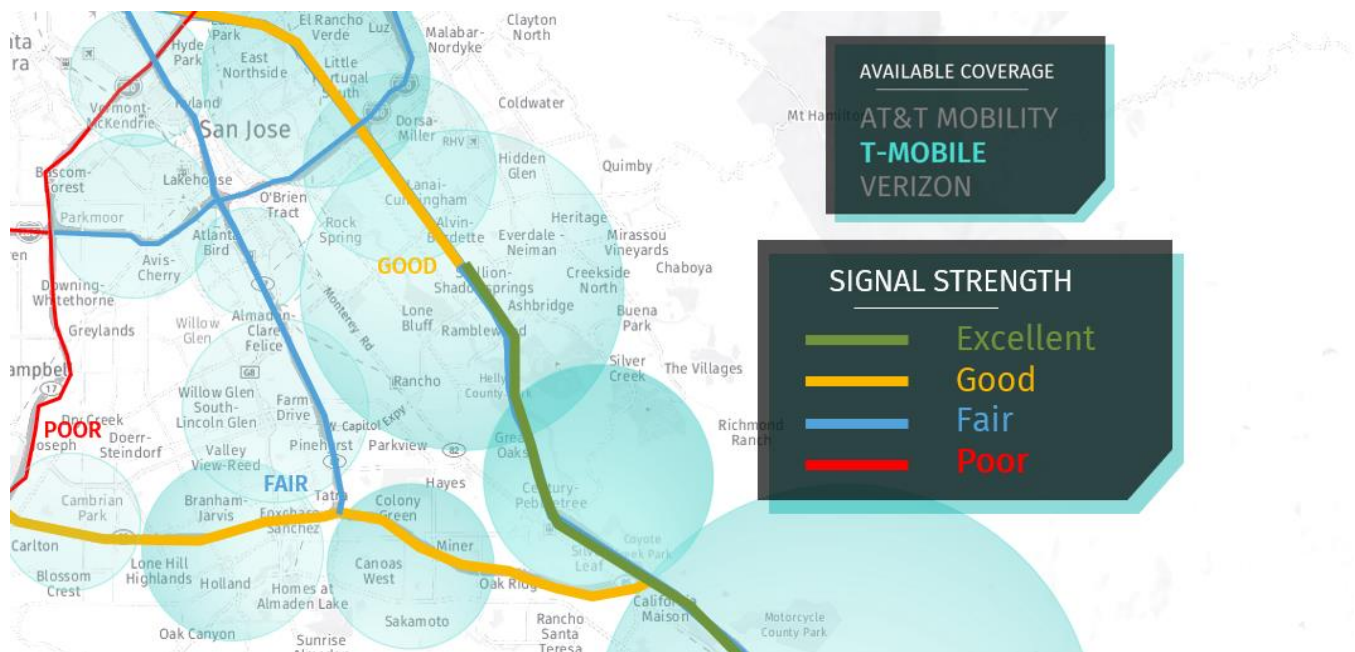


# HERE Cellular Signals

for the Telecommunications Industry

Provides information on all available cellular networks along the road network



HERE Cellular Signals provides multiple layers of information on the cellular networks in areas of service delivery, including network coverage, carriers, signal strength and frequency bands.

- Broad global coverage spanning more than 190 countries
- Built with data from more than 250M connected devices
- Aligned to the road network of the HERE map, best map in the market

## Benefits & Use Cases

- **Planning network expansions/support investment decisions**

As demand for mobile communications and broadband services continues to explode, wireless networks must expand greatly their capacities while maintaining quality. The industry is projected to continue growing at a rate of 66% a year for the next five years; Therefore, adequate planning is vital for carriers to make effective investment decisions. HERE Cellular Signals can be an instrumental tool in that analysis and decision making.

- **Quality evaluation and competitive assessment**

HERE Cellular Signals provides reliable information on the quality of each cellular network, in urban, rural and remote areas. This information can help cellular carriers monitor the performance of their own network and conduct competitive analysis to identify areas of strength and weaknesses.

- **Customer communication and support**

Customers expect timely information and service transparency. HERE Cellular Signals data can help the carrier's customer service team to answer network service related questions.

- **Meet zoning requirements and other license terms**

With cellular networks constantly evolving, carriers need to dynamically monitor their adherence to operating license terms to demonstrate compliance. HERE Cellular Signals can assist telecom companies in this intricate task.

- **For product messaging/market differentiation/sales support**

As competition continues to heat up, compelling marketing messaging is ever more important to gain and maintain share of mind, as well as to fence off competition and effectively differentiate from competitors in this crowded space.

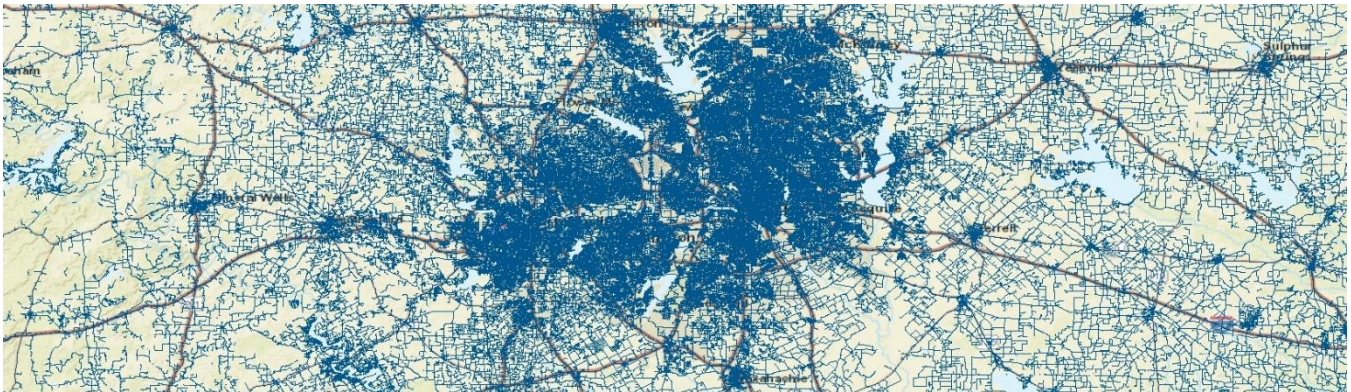
- **Bandwidth planning/Radio Frequency optimization**

Bandwidth is a limited and expensive resource. With the explosion of connected devices, mobile advertising and social media, plus the expected growth of the internet of things that will add billions of new connected data sources globally, radio frequency optimization will increasingly become a delicate balancing act. HERE Cellular Signals can be a valuable resource to add to the tool box of cellular carriers to help manage these challenges.

- **Performance reports for investors and the financial sector**

Cellular carriers are mostly publicly traded companies that need to maintain investors informed of their operating performance and occasionally secure new funding for future expansion. The information contained in HERE Cellular Signals can assist carriers formulate reports on the state of their business and the industry in general.

# Technical Product Details



- The HERE Positioning product collects information regarding available networks and develops coverage maps to enable positioning services
- These maps are then translated into individual layers of map content and aligned to the HERE road network
- HERE Cellular Signals provides 'snapshot' of cellular coverage at regular intervals
- Each cellular carrier is identified with a 6-digit code
- Signal Strength is measured in 4 categories: Excellent, Good, Fair or Poor, each one represented in a different colour



AVAILABILITY	Yes	No		
STRENGTH	Excellent	Good	Fair	Poor
INTERFACE	2G	3G	4G	
BY CARRIER	Verizon	AT&T	Sprint	

## Format

FGDB (File Geodatabase)

## Availability

- November 30, 2018
- Quarterly updates
- 196 countries globally (excluding China, Japan, North or South Korea)

### About HERE Technologies

HERE, the Open Location Platform company, enables people, enterprises and cities to harness the power of location. By making sense of the world through the lens of location we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or an enterprise optimize its assets to guiding drivers to their destination safely. To learn more about HERE, including our new generation of cloud-based location platform services, visit <http://360.here.com> and [www.here.com](http://www.here.com).