You may notice GPS doesn’t always work well under trees or next to buildings. This is because the radio signals from today's GPS satellites have trouble penetrating foliage and concrete.

The ongoing GPS modernization program is adding new civil and military signals that broadcast at higher effective power, improving reception under trees — and possibly even indoors.

The United States is also cooperating with Russia, Europe, Japan, India, and others to make their planned satellite navigation systems interoperable with GPS. This will increase the total number of satellite signals available to users in “urban canyons” and other areas where the sky view is blocked. More signals means better service continuity for the end user.

Learn more about GPS at

www.GPS.gov
Every Metrobus fielded since 1998 is equipped with GPS. The buses use the location information to automatically announce upcoming intersections and bus stops to passengers. This ensures compliance with the Americans with Disabilities Act, while allowing Metrobus drivers to focus on their most important duty: driving safely.

The Washington Metropolitan Area Transit Authority has also experimented with a system called NextBus, which lets customers at a bus stop call a number to find out when the next Metrobus will arrive. The NextBus system uses real-time GPS information from buses to accurately calculate their arrival times.

Learn more about GPS at

www.GPS.gov
The FCC requires all new cell phones to include an Enhanced 911 (E911) capability that automatically conveys your location when you dial 911. To meet the mandate, most cell phones incorporate GPS technology, which pinpoints your location to within a few meters.

Using this information, the 911 call center can quickly identify and dispatch the firefighters or other first responders who are closest to you. Most emergency vehicles are also equipped with GPS so they can navigate the fastest route to your location. Reducing response time is critical in emergency situations, where a few seconds can mean the difference between life and death.

Learn more about GPS at www.GPS.gov