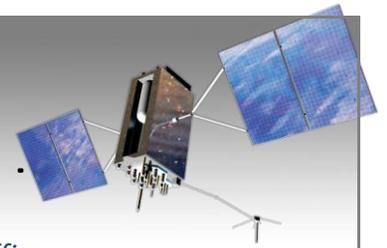


# GPS

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Information for Policymakers from the National Coordination Office  
for Space-Based Positioning, Navigation, and Timing (PNT)



August 2012

## Senate Appropriators Pass FY 2013 Defense Spending Bill with GPS Program Funding

On August 2, the Senate Appropriations Committee passed its defense spending package (H.R. 5856), fully funding the Air Force GPS program except for a \$1.5 million cut to the Next Generation Operational Control System (OCX). This is consistent with the recommended levels in the defense authorization bill for FY 2013. For further details about all GPS funding line items and bills, visit <http://www.gps.gov/policy/funding/2013/>.

FY 2012 Line Item	Request	House Mark	Senate Mark
Procurement: GPS IIF Satellites	\$58.147M	\$48.147M	\$58.147M
Procurement: GPS III Satellites	\$492.91M	\$492.910M	\$492.921M
Procurement: Ground Segment Equipment	\$7.741M	\$7.741M	\$7.741M
Development: GPS IIF and Control Segment	\$14.335M	\$14.335M	\$14.335M
Development: GPS III Satellites	\$318.992M	\$318.992M	\$318.992M
Development: Next Gen. Operational Control System	\$371.595M	\$333.295M	\$370.095M
<b>TOTAL</b>	<b>\$1.2637B</b>	<b>\$1.2154B</b>	<b>\$1.2622B</b>

## House Homeland Security Committee Analyzes GPS Spoofing of Aerial Drones



On July 19, the House Homeland Security Committee held a hearing to examine federal oversight of domestic unmanned aerial vehicles (“drones”) and the potential risks posed to national security and privacy.

Drones are highly reliant on GPS for navigation information. During the hearing, University of Texas at Austin professor Todd Humphreys highlighted their vulnerability to GPS “spoofing”—the transmission of false data to fool the drone’s navigational system and take control of it. Humphreys described a recent demonstration whereby he created a false civil GPS signal going to a university-owned test drone affecting its location and timing. He expressed concern that critical infrastructures relying on civil GPS signals for drone navigation or other applications may be prone to similar attacks, and recommended the FAA consider such security questions when integrating drones into U.S. airspace.

Other witnesses addressed regulations on drone use for targeted surveillance, law enforcement, and first responder operations.

## Application Spotlight: 4-H Use of GPS Technology



For nearly ten years, 4-H members have been using their GPS skills to improve community services.

In Iowa, 4-H youth have mapped fences, invasive species, oak stands, and other areas that need attention at a wildlife refuge. In Minnesota, 4-H’ers are locating and marking signs at another refuge to help prioritize capital improvements. In North Carolina, members are using GPS to map convenience and grocery stores offering healthy food options, in an effort to improve food selections throughout the community.

These projects serve as models to be replicated throughout the country. To learn more, visit [www.4-h.org](http://www.4-h.org).



SPACE-BASED POSITIONING  
NAVIGATION & TIMING  
NATIONAL COORDINATION OFFICE

[WWW.GPS.GOV](http://WWW.GPS.GOV)

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