When I was living in Tampa, Florida, the thunderstorm capital of North America (perhaps even the world), my goal was to get Nexrad weather into my cockpit at the lowest possible cost. I started by using one of the Garmin auto/marine GPSMAP units equipped with the GXM30 low-profile XM radio receiver. I chose the GPSMAP 376C because it was readily available and already superseded by newer models, which made the purchase cost quite low. The 376C can be purchased for about one-third the cost of an aviation GPSMAP396 (via Ebay in new or open box/display model condition).

Of course the 376C has none of the highly touted navigation and database of airports, intersections, airspace, etc. But for my purposes, this was not an issue. I already had equipment in an aviation panel-mounted IFR-certified GPS with moving-map display and a small battery-powered handheld GPS with database.

I simply wanted to get the important Nexrad capability in my plane for strategic inflight decision-making. It does not hurt that the 376C is a WAAS-capable GPS unit for an emergency navigation backup in the event of a complete electrical failure or panel-mounted GPS equipment failure.

I found the XM's Sailor Weather package gave me high resolution Nexrad and many other helpful weather products to work with: surface analysis weather maps; precipitation type at surface; surface wind speed and direction; surface analysis forecast chart for 12, 24, 36 and 48 hours; and airport observations (you look them up on the 376C as “transportation” facilities and then click “Find” then “weather data”) including wind speed and direction, visibility, barometric pressure and sometimes ceiling, when reported.

So if you can't swing the price of the GPSMAP 396 or the GPSMAP 496, a system like this can give you some affordable inflight situational weather awareness.

If this article helps you in any way, pay it forward and take a young person flying with you on your next hamburger run!
Fig. 7 - These clips from True Value Hardware keep the wires in place, eliminating dangling wire hell in your cockpit.

Fig. 8 - With Garmin GPSMAP screen cover.

Fig. 9 - Full panel with GPSMAP in stowed position and GXM30 antenna in place on glareshield. No compass issues, since magnets were removed, via the procedure outlined by NUMA Aviation at http://www.numa.aero/GXM30.html