



CITY OF TAMPA

3.8.2. – Grids and Coordinate Systems
Technology & Innovation Department

TITLE

3.8.2. – GRIDS AND COORDINATE SYSTEMS

HISTORY

Status	Date	Author	Approving Manager
Version 1.0	01/08/2010	K. Wright and G. De Stoppelaire	R. Austin

DESCRIPTION

The City supports the use of the following grids and coordinate systems:

1. State Plane Coordinate System

The preferred coordinate system for all department projects is State Plane Coordinate System Florida West. See section [3.8.1.5. Map Projections](#) for more detailed information.

Data developed by third parties (i.e., not on behalf of the City) shall be transformed to the following State Plane Coordinate System prior to being stored in the GIS database:

Coordinate System: State Plane Coordinate System Florida West
Federal Information Processing Standard (FIPS) Zone: 0902
Automated Digitizing System (ADS) Zone: 3626

For horizontal coordinates, the standard is the State Plane Coordinate System Florida West FIPS 0902 of the North American Datum of 1983 (NAD83). Horizontal coordinates are stored in US Survey Feet. For vertical coordinates, the standard is the North American Vertical Datum of 1988 (NAVD88). Vertical coordinates are stored in US Survey Feet.

[Public Land Survey System \(PLSS\)](#)

2. Latitude and Longitude (Geographic Coordinate System (GCS) GRS 1980)

Emergency management and public safety, as well as projects for GPS data collection, use the Geographic Coordinate System (GRS 80).

[USGS Latitude and Longitude article](#)

3. United States National Grid (USNG)

The United States National Grid (USNG) is a uniform grid mapping system for search and rescue, emergency planning, response, and recovery. The United States National Grid is essentially the same as the Military Grid Reference System (MGRS).



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USNG grids are available at scales of 1:100,000m, 1:10,000m, 1:1,000m, and 1:100m in Universal Transverse Mercator (UTM) NAD83 map projection.

The CoT GIS map book standard is the USNG 1:1,000m and the 1:10,000m UTM 17 grid. All CoT emergency management maps are done to this standard. A grid template is available for both scales. For specific information about the USNG templates, contact the [GIS Supervisor \(or designee\)](#).

[US National Grid General](#)

[US National Grid Specifications \(FGDC-STD-011-2001\)](#)

[USGS How to Read a United States National Grid \(USNG\) Spatial Address](#)

[The US National Grid \(USNG\): A simple and Powerful Geospatial Tool](#)

[Delta State University's Center for Interdisciplinary Geospatial Information USNG](#)

4. Public Land Survey System (PLSS)

The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. The PLSS typically divides land into 6-mile-square townships. Townships are subdivided into 36 one-mile-square sections. Sections can be further subdivided into quarter sections, quarter-quarter sections, or irregular government lots. For more information about PLSS and PLSS rules of division, see the link below.

[Public Land Survey System \(PLSS\)](#)

5. CoT Tampa Police Department (TPD) Grid

The Tampa Police Department (TPD) grid is a reference grid used by Police that defines CoT boundaries by district, beat and grid area to determine regions of responsibility for response and dispatch.

[Tampa Police Department \(TPD\) Grid](#)

6. CoT Tampa Fire and Rescue (TFR) Grid

The Tampa Fire and Rescue (TFR) grid is a reference grid used by Fire and Rescue that defines CoT district, zone, and grid to determine regions of responsibility for response and dispatch.

[Tampa Fire and Rescue \(TFR\) Grid](#)



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7. City of Tampa Utility Service Atlas Grids

These atlas grids are the frame of reference for the CoT utility service departments: Water, Wastewater, and Stormwater. CoT Atlas Grids correspond to the Public Land Survey System (PLSS).

[City of Tampa Atlas Grids](#)

REFERENCE

The standard described above has been developed internally by the City of Tampa. The standard is part of the T&I Service Catalog.

[City of Tampa – T&I Service Catalog](#)