

Department of Planning and Zoning

LOB #70:

MAPPING AND GIS SUPPORT

Purpose

The purpose of the Mapping and Geographic Information Systems (GIS) Support LOB to create and maintain Plan-related maps, graphics, and data bases used for depiction, analysis, and consideration by BOS, staff, and citizens. The LOB includes maintenance of accompanying GIS data bases. Specific products include creating or regular updates of:

- the Comprehensive Plan wall map,
- over 600 maps in the Comprehensive Plan five-volume text,
- the Inventory of Historic Sites wall map,
- detailed maps of 13 Historic Overlay Districts,
- a 450-page Planner-of-the-Day map reference book,
- detailed maps of 33 County development centers,
- detailed maps for all Environmental Quality Corridors (EQC) and Wetlands determinations, and
- detailed maps for ongoing Comprehensive Plan amendments, of which there are currently 31 in progress.

Description

This Mapping and GIS Support LOB is provided by a dedicated section which has a wide range of responsibilities in support of the planning staff. Some Geographic Information Systems (GIS) products are also created by other staff not a part of the dedicated section. This Mapping and GIS Support LOB includes building maps and graphics for the Web and for paper publication. These include all the maps and graphics in the Comprehensive Plan, which has become a Web-based document where it formerly was a paper publication. In addition, this LOB includes making the required maps and graphics for all Plan amendments, Public Facilities items, and EQC and Wetlands determinations. Aerial photos with supplemental line work and type callouts and titling are put together by the section.

Other products produced under this Mapping and GIS Support LOB include books, booklets, posters, PowerPoint presentations, magazine type publications, large wall maps and multi-page atlases. The Graphics and GIS Section also coordinates printing efforts with the County Print Shop.

An important aspect of the responsibilities of this Mapping and GIS Support LOB is the creation, analysis, and maintenance of databases of all the planning-related shapes, such as the boundaries of development centers, planning sectors, special studies, and Plan amendments. This LOB is also includes the creation of large free-standing displays, for example, for the design awards program.

To facilitate this Mapping and GIS Support LOB, the agency uses and maintains a wide range of high tech equipment including various GIS, publishing, and illustration software administered by the Administrative Section's IT branch.

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Benefits

Benefits of the Mapping and GIS Support LOB include providing a visual interface to enhance the community's access to information about the land use planning process and the delivery of land use information. Maps and graphics effectively communicate information to the public about current usage, Board adopted plans for future use, and proposals being evaluated for new scenarios.

Maps and graphics are used in both the County's website and in published paper materials. This use of Web and hard copy publications is in support of the jurisdiction's goal of coordinated countywide presentation of data in a transparent and timely manner.

Other benefits which accrue from the use of GIS are the maintenance of permanent records of use-related boundaries and quantification of land use attributes.

Mandates

All efforts undertaken in the Mapping and GIS Support LOB are in support of three major program areas:

- Comprehensive Plan Management
- Environmental Planning and Development Review
- Public Facilities Planning

Each of these areas, in turn, are mandated by local state, and federal requirements.

Trends and Challenges

Trends:

- Development of new applications allowing non-GIS staff and citizens to analyze data and create presentations.
- GIS will move beyond the simple display and query of online mapping to development of technology that provides more analytical and data processing capabilities via the cloud.
- Use of data brought in via the Web.

Challenges:

- Maintenance of databases in as close to real time as possible.
- Making access to GIS data more user-friendly.
- Coordination with other County agencies who participate in the Plan amendment process.
- Timely updates of map images on the County website.

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Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
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FUNDING			
<u>Expenditures:</u>			
Compensation	\$271,142	\$263,839	\$293,205
Operating Expenses	25,477	20,601	20,541
Total Expenditures	\$296,619	\$284,440	\$313,746
General Fund Revenue	\$0	\$0	\$0
Net Cost/(Savings) to General Fund	\$296,619	\$284,440	\$313,746
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
<u>Positions:</u>			
Regular	4 / 4	4 / 4	4 / 4
Total Positions	4 / 4	4 / 4	4 / 4

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Percent of digital Comprehensive Plan maps and Plan Amendment layers completed within 10 working days of adoption by the Board of Supervisors	NA	NA	98	99	99
Number of graphics prepared in support of Comprehensive Plan maintenance	NA	NA	815	850	850

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Two metrics are identified for DPZ Mapping and GIS support.

1. Percent of digital Comprehensive Plan maps and Plan Amendment layers completed within 10 working days of adoption by the Board of Supervisors

This metric reflects the timeliness of Comprehensive Plan map and GIS layer updates. Sixteen Comprehensive Plan amendments were adopted by the Board of Supervisors within the last year. These include major revisions to recommendations guiding the redevelopment of activity centers such as Seven Corners Community Business Center, as well as editorial amendments that updated several sections of the Comprehensive Plan. The timely update of accompanying maps and GIS layers is imperative in providing reliable information to residents and those contemplating development investments in the County. Updates of the approximately 100 digital layers maintained on the Spatial Data Engine, and other layers maintained for Planning Division uses and shared with County counterparts is also essential to the work of other County agencies.

2. Number of graphics prepared in support of Comprehensive Plan maintenance

Unique deliverables are created for a wide-variety of planning studies, reports, reviews, presentations, and public handouts. Some of these discrete images may run into the hundreds of pages, i.e., the Planner of the Day atlas may run to 450 pages, each with a separate map image. Deliverables can include both maps and other graphics such as charts and perspective drawings. The increased complexity of Plan Amendments over time and the addition of Web publishing results in the need for many more maps and graphics for each planning effort.