**The Planning, Implementation and Documentation of the Redesign and Harmonization**

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**ABSTRACT TEXT:** Baltimore County, Maryland took advantage of an opportunity to redesign and harmonize the agency’s geodatabases to coincide with the migration to a GIS centric work management system, Cityworks. The goals of the project were to provide a common user experience between database themes, reconcile inconsistencies in the schemas between themes, and provide for the implementation of new tools within ArcGIS. The department’s data fits nicely into five broad categories: infrastructure/asset inventories, regulatory land use, emergency management, districts/administrative, and mapping reference; all of which were considered part of this project. The need for the redesign and harmonization was obvious based on the 25 plus years of designs, the sheer number of different designers and the availability of mature design standards and best practices. The redesign evaluated hundreds of database objects (over 900) and domains (over 450). The project included the build-out of new database environments (production, development, test and training) as well as full implementation of database roles. In the redesign and harmonization, the agency attempted to retire unused or repurposed attributes and standardize domain values, enterprise and asset management attributes. All of the geodatabase modifications were vetted by the data’s program managers. The project included the updating of geodatabase documentation and database objects metadata.

**Building and Leveraging GIS vs. CAD Infrastructure**

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**ABSTRACT TEXT:** Public and private agencies face continuous challenges to accomplish more with less as increases in demands, regulatory requirements, infrastructure deterioration, and political and economic forces have significantly outpaced increases in capital and operating budgets. Technologies are changing, and specific uses are emerging for engineering designs and operations management using CAD and GIS software. We will share knowledge base on how to develop GIS from scratch or enhance within your organization, the differences in application and purposes with CAD. This will help improve staff productivity, performance, reduce long term costs, and maximize ROI on your assets.

**Learning Objective1:** Set up CAD and GIS for novice to advance users, and interchangeability

**Learning Objective2:** Choose the right platform based on the business need and purpose; what applications leverage what kind of data - CAD vs. GIS

**Case Studies:** Cities and Districts - local gov.t case studies

**Skills:** understand what data, database, and platform is needed to do certain kind of work based on purpose, application, and needs