

PROJECT PROFILE

Project Title: Metro Manila Geographic Information System (GIS) Database Project

Project Period: 2018 onwards

Implementing Agency/Office: Metropolitan Manila Development Authority-Office of the Assistant General Manager for Planning (MMDA-OAGMP)

Cooperating Partners: Concerned MMDA Offices/Units (Flood Control and Sewerage Management Office and Traffic Engineering Center; 17 LGUs in Metro Manila; Geodata Systems Technology Incorporated and Globe Telecom Incorporated.

Objectives:

Urban planning is a vital component in the development of Metro Manila. With the aid of available advance technologies, planning and development works shall be facilitated while ensuring critical and more accurate analysis.

MMDA is mandated to provide seven (7) mandated functions such as development planning, transport and traffic management, solid waste disposal and management, flood control and sewerage management, urban renewal, health and sanitation, and public safety. The delivery of these functions will be made more effective, efficient and timely with the aid of latest acquisition of GIS technology by the agency.

The utilization of the GIS software can further assist in carrying out its mandated functions in terms of geographic or spatial analysis. Thus, there is a need to further enhance and update the existing GIS database of Metro Manila currently lodged at the MMDA under the Office of the Assistant General Manager for Planning to maximize the said GIS technology application.

Specifically, the objectives of the project are the following:

1. To update and expand the GIS database of Metro Manila to improve development planning and program/ project identification/ preparation;
2. To establish strong linkages between MMDA and the LGUs to further develop and promote coordination in various development works. Later on, said linkage will be expanded to include all relevant regional line agencies in Metro Manila for database expansion;
3. To organize a Metro Manila GIS Team composed of representatives from selected MMDA concerned units and the 17 local government units (LGUs) in Metro Manila;
4. To capacitate the Metro Manila GIS Team and other representatives; and
5. To establish a protocol for data sharing of GIS common datasets among the stakeholders.

Expected Outputs/Deliverables:

1. Updated and expanded the GIS database of Metro Manila;
2. Organized a Metro Manila GIS Team;
3. Capacitated the Metro Manila GIS Team and other representatives; and
4. Established a protocol in data sharing of pertinent GIS and non-GIS datasets.

Background:

Geographic Information Software or GIS is a powerful tool in capturing and displaying various spatial and geographical data/information, which leads to better technical analysis as well as understanding patterns and relationships with respect to location. The application and the benefits of GIS in urban planning impacts people living in an area in many ways.

In the past, the Metropolitan Manila Development Authority (MMDA) has invested in a GIS and accumulated data generated mostly from joint-projects such as the Metro Manila Earthquake Impact Reduction Study (MMEIRS) in 2004, "Enhancing the Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind, and Earthquake Hazards for Greater Metro Manila Area" or Risk Analysis Project in 2012, and the "Enhancing Greater Metro Manila's Institutional Capacities for Effective Disaster/Climate Risk Management towards Sustainable Development" or GMMA READY Project in 2011-2014.

Rationale:

The Metropolitan Manila Development Authority, through the Office of the Assistant General Manager for Planning is implementing a project known as the "Metro Manila Geographic Information System (GIS) Database Project".

A GIS Team will be organized composed of representatives from selected MMDA concerned units and the 17 local government units (LGUs) in Metro Manila who shall provide with the necessary trainings on data collection and management; data processing into pertinent visual map overlays; geographic data analysis for development planning; and program/project identification/preparation.

In partnership with Geodata System Technology Incorporated will conduct series of trainings and workshop on GIS operation in order to capacitate the Metro Manila LGUs particularly on GIS operation and using ArcGIS version 10.5.

Major Activities:

The project will consist of series of trainings on Arc GIS 10.5 (Basic and Advance) and other special skills sets or software necessary. Participants include representatives from the 17 Metro Manila local government units and MMDA concerned offices such as Flood Control and Sewerage Management Office and Traffic Engineering Center and Planning Office.

Geodata System Technology Incorporated will be the resource person and facilitator of the trainings.

More activities will be conducted in order to consolidate and update the GIS Database of Metro Manila as well as LGUs. Other proposed activities are as follows:

1. Identify and classify existing GIS information and files in database.
2. Update the existing MMDA GIS database
3. Develop/update the following maps:
 - a. Flood Inundation Map (Risk Maps)
 - b. Traffic Accidents/ "Black Spots" Mapping for Metro Manila Major Roads
 - c. Informal Settler Families Mapping LGU-Wide and per structure in coordination with LGUs
 - d. MMDA Facilities Mapping (Traffic Signal Lights, Footbridges, Pumping Stations, etc.)
 - e. Compilation and updating of LGUs GIS database.

The Project will be mainly carried out by the MMDA staff who have received training in GIS Software. Later on, hiring of personnel specializing on GIS may be considered by the office to mainly manage and utilize the database.

Status/Update:

- March 13-14, 2018: Conducted a "Hands-On Basic on GIS Operation" held at the 19th Floor, Geodata Office, Strata 100, F. Ortigas Jr. Road, Ortigas Center, Pasig City.
- March 16, 2018: Conducted seminar/workshop on "Building and Managing Metro Manila GIS Database" 19th Floor, Geodata Office, Strata 100, F. Ortigas Jr. Road, Ortigas Center, Pasig City.
- April 6, 2018: Metro Manila Geographic Information System (GIS) Team was created through the Office Order No. 111, S. 2018, for the implementation of Metro Manila GIS Database Project. GIS Team is composed of technical representatives from the 17 Metro Manila LGUs and MMDA concerned offices Flood Control and Sewerage Management Office and Traffic Engineering Center and Planning Office.
- May 24, 2018: Transmitted letter to Ms. Yoly Crisanto, Senior Vice-President of Globe Telecom requesting for support by sponsoring the relevant equipment required by the Metro Manila GIS Database Project including DSL connection.
- For the next MMC Meeting in July 2018: The project will be presented before the MMC for support by virtue of the issuance of a Manila Council Resolution entitled "Expressing support of the establishment of the Metro Manila Geographic Information System (GIS) Team to update and expand the GIS Database of the National Capital Region (NCR).

Funding Requirements:

Funding for this activity which includes the learning costs, expenses for transportation, and equipment for the staff shall be sourced from the MMDA internal funds, if necessary. Nonetheless, the project activities will be part of the ordinary work program of the OAGMP.