



4.02.01 GIS Implementation Strategy

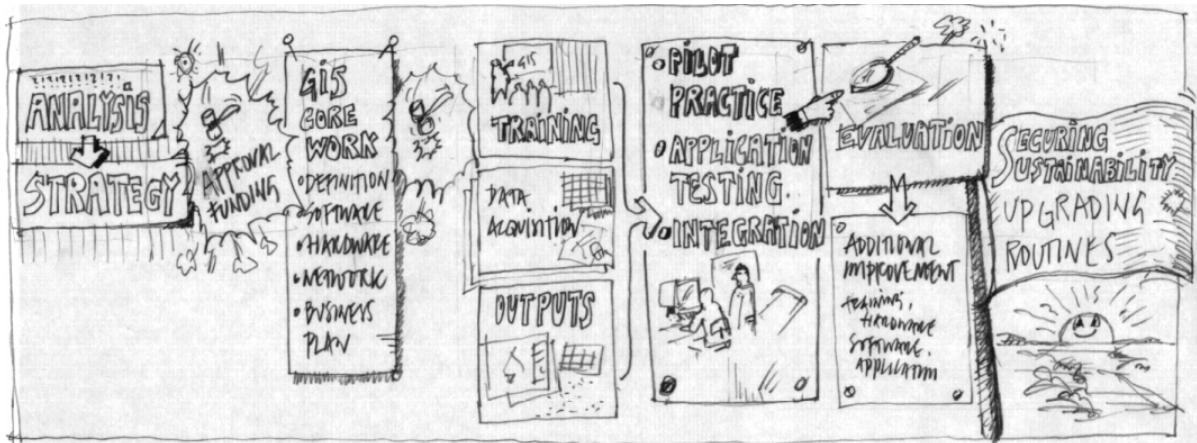
Background

Only a few of the 1,650 LGUs in the Philippines (consisting of cities, towns and rural municipalities of various classes) have established a functional local Geographic Information System (GIS). However, majority of them, including low-income towns, are now using computers mainly for word processing and spreadsheets.

Introduction

The design of implementation of a GIS is a major, long-term undertaking. The entire process, from when the LGU becomes aware of the technology through to when it is finally implemented takes one or more years. The implementation of a GIS is where technology and people meet and computer-generated data is a potent political tool in its power to influence. The introduction of new technology will also change an organization in ways that cannot be entirely predicted. Likewise, new ideas, such as GIS, have to be 'sold' within the LGU.

Most GIS are complex systems. All computer systems can be prone to failures, hence consideration should be given to the probability of such failures, the potential effects they have on operations, and the recovery procedures to be used. The more consequences there are due to failure, the more important it becomes to have alternative methods to generate specific information.



Recommended List of Actions in the Future

The following is an ideal step by step implementation process for the establishment of GIS in an LGU, particularly for its use in the preparation of the CLUP. It is a process that is facilitated by the HLURB, and it is assumed in this case that the target municipality has not used GIS before.



	Action taken by:	ACTIVITY	DOCUMENTATION
1	HLURB	HLURB promotes the CLUP GIS Starting Package and training opportunities at occasions where LGU representatives meet. Attends and gives information about CLUP GIS at the annual meetings of League of Municipalities/Cities, Councilors League, Vice-Mayor's League, Union of Local Administrator of the Philippines, League of Planners and Development Coordinators of the Philippines, PIEP, and the like.	<ul style="list-style-type: none"> Information Leaflet Homepage
2	LGU	LGU decides to update CLUP and wants to use GIS; approaches HLURB RO to seek advice.	<ul style="list-style-type: none"> Letter of Intent
3	CPDC/MPDC with HLURB	HLURB visits the LGU, briefs them about local GIS for CLUP preparation and about the GIS Cookbook, training program, the Starting Package and assesses the feasibility for GIS development in the LGU.	<ul style="list-style-type: none"> Invitation letter to LGU representatives PowerPoint presentation on Local GIS Information Leaflet LGU Computerization Proficiency Form
4	HLURB, LGU	If the study finds it feasible that the LGU has enough resources and capability to start up a GIS, a MoA between HLURB and the LGU is signed.	<ul style="list-style-type: none"> Memorandum of Agreement on the cooperation for the CLUP and GIS GIS Start Package CV for the 2 trainees List of issues to bring to the Basic/beginner Training
5	LGU	The CLUP Budget (including cost for GIS) is prepared and approved.	<ul style="list-style-type: none"> CLUP Budget SB Resolution authorizing the LCE to enter into MOA SB Resolution regarding the CLUP Budget
6	LGU	Procurement of hardware and software.	<ul style="list-style-type: none"> Bidding Documents



	Action taken by:	ACTIVITY	DOCUMENTATION
7	HLURB CO	HLURB transmits fresh information on LGU GIS status to the National GIS Literacy Level Survey.	<ul style="list-style-type: none"> ☑ National GIS Literacy Level (ArcView) Project
8	HLURB	HLURB assists in the inventory and compilation of available data at national/regional level that can be used in the CLUP GIS, as provided in the MOA.	<ul style="list-style-type: none"> ☑ List of secondary source materials to be used during CLUP preparation. ☑ CD with data
9	LGU	LGU trainees, one of whom should be the appointed GIO, prepare for the training.	<ul style="list-style-type: none"> ☑ List of Issues to bring to the Basic/Beginner Training ☑ Travel Order
10	HLURB	HLURB prepares for the Basic/beginner Training.	<ul style="list-style-type: none"> ☑ List of Trainees ☑ Budget Presentation ☑ Course Agenda ☑ List of Resource Persons ☑ Course Material compiled in a ring file ☑ Checklist for logistics (accommodation, transport, venue, hardware and software, meals, snacks, etc.) ☑ Performance Test ☑ Course Evaluation Form ☑ CD/floppy with the work results from the training ☑ Certificates
11	HLURB CO LGU	HLURB conducts Basic/Beginner training.	
12	HLURB	HLURB instructs LGU trainees about the interim activities to be undertaken by the LGU after the Basic/beginner and prior to the Applied CLUP Training.	<ul style="list-style-type: none"> ☑ List of databases and other materials to be prepared prior to the Applied CLUP Training



	Action taken by:	ACTIVITY	DOCUMENTATION
13	HLURB RO/CO	HLURB evaluates the performance of the LGU at Basic/beginner Training and determines if it is feasible to conduct the CLUP GIS Applied Training	<ul style="list-style-type: none"> ☑ LGU Evaluation Form
14	HLURB RO	HLURB starts up the Log Book of communications with the LGU, which records the actions taken and the results thereof.	<ul style="list-style-type: none"> ☑ Log Book format
15	LGU	LGU trainees brief the local officials and heads of different offices.	<ul style="list-style-type: none"> ☑ CD with the work results from the training ☑ Power Point presentation on Local GIS
16	LGU	LGU trainees with the help of LGU staff prepare databases and other materials to be used during the Applied CLUP Training.	<ul style="list-style-type: none"> ☑ List of databases and other materials to be prepared prior to the Applied CLUP Training
17	HLURB	HLURB prepares for Applied CLUP Training	<ul style="list-style-type: none"> ☑ List of Trainees (hopefully the same as previous) ☑ Budget Presentation ☑ Course Agenda ☑ List of Resource Persons ☑ Course Material compiled in a ring file ☑ Checklist for logistics (accommodation, transport, venue, hardware and software, meals, snacks, etc.) ☑ Performance Test ☑ Course Evaluation Form ☑ CD/floppy with the work results from the training ☑ Certificates
18	LGU	LGU trainees prepare for the Applied CLUP Training	<ul style="list-style-type: none"> ☑ List of Issues to bring to the Applied CLUP Training ☑ Travel Order



	Action taken by:	ACTIVITY	DOCUMENTATION
19	HLURB LGU	HLURB conducts Applied CLUP Training	Action Plan
20	LGU	LGU prepares Action Plan (Short Term Plan) based on above	
21	LGU	LGU trainees present their achievements in Applied CLUP Training in a wider forum and initiate the formation of an LGU GIS Task Force with representatives from various departments.	CD/floppy with the work results from the training LGU GIS Implementation Strategy
22	LGU	The LGU mobilizes the LGU GIS Task Force that will review and update the existing data in preparation of applicable GIS databases.	LGU Metadatabase
23	LGU	LGU GIS Task Force prepares a list of prioritized activities regarding compilation of attribute data.	LGU Metadatabase
24	LGU	LGU GIS Task Force prepares a list of analogue map information that need to be digitized.	LGU Metadatabase
25	HLURB	During one-year period after the Applied Training, HLURB extends back up support to the LGU as per Start Package agreement.	Log Book
26	LGU	LGU GIS Task Force prepares a GIS Implementation Plan.	GIS Implementation Plan-Guidelines Protocols from the Local Chief Executive.
27	HLURB	Within one year after the Applied Training, HLURB performs an evaluation of the progress of GIS development and revises the National GIS Literacy Level.	National GIS Literacy Level (ArcView) project



	Action taken by:	ACTIVITY	DOCUMENTATION
28	LGU	LGU provides the updated Geographic Data to HLURB on an annual basis.	MOA
29	HLURB	HLURB delivers data to concerned Central Institutions for sharing.	

The linkage between the steps in the CLUP Planning Process and the CLUP GIS Implementation Strategy is shown below.

