



DATA AVAILABILITY
AND QUALITY REPORT
GUIUAN

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DEVELOPMENT DATA LAB



Local governments are at the forefront of redefining public service delivery, but people should be at the core of every innovation. Over the years, it has become widely accepted that local government units (LGUs) should not only strive to improve the type and quality of government services but also transform the culture of government to make it more inclusive, transparent, and accountable. Generally, there are two ways by which LGUs can satisfy this objective:

1. Having a deep understanding of the needs of the citizens and stakeholders as direct beneficiaries of public sector policies and services and

2. Cultivating an active public participation in designing, delivering, and monitoring policies and services that affect their lives.

Central to the approach is the intensive and extensive use of data along with the adoption of appropriate technological tools. On the one hand, LGUs should be able to effectively leverage data to inform strategies in providing services that are attuned to people's needs and well-being. On the other hand, people should be aware of the availability of data and are able to actually use data to influence how they should be governed and yield benefits to their communities. In other words, effective local governance is one that employs a data-informed participatory decision-making process. This

type of governance is more likely beneficial to human development.

It is through the appropriate use of data that duty-bearers can fully grasp the realities on the ground, strategically respond to public concerns, and allocate resources efficiently and effectively. Unfortunately, establishing a culture that values data-driven decision-making and a good uptake of open data by citizens remain elusive, in many local governments in the country. The Data-Driven Development in the Philippines (PH3D) Project helps all its project sites strengthen the culture of data in the local community and embrace innovations towards a people-centered local governance. The Municipality of Guiuan is one of them. A preliminary step in this intervention is to make sure the data are available and of good quality. This report provides an assessment of data collected and held by the local government of Guiuan, in terms of availability and quality, to effectively ensure that the LGU can make competent decisions for the people and draw policy lessons for good governance. Towards the end of this report some recommendations and solutions are suggested.

DATA AVAILABILITY (MANDATED VS. HELD) & QUALITY ASSESSMENT

National legislations on the collection of local data have increased notably in recent periods (see Appendix 1). In particular, various laws mandate the collection of local data in the following sectors: Disaster Risk Reduction and Management (DRRM), Health, Environment, Labor, Agriculture, Social Services, Business, Education, Human Rights, Gender, Urban Development, and others. Although not exhaustive, Table 1 provides the important sets of data required for collection in the LGU that are deemed sufficient to aid in crafting policies to promote local development. The data are clustered into five sets:

Community-Based Monitoring System (CBMS), Health, Business, Geospatial including Risk Management, and Human Rights Violations Case Monitor. As shown in Table 1, the LGU of Guiuan holds data that can potentially cover the sectors of DRRM, Health, Labor, Agriculture, Business, and Social Services. However, no data on monitoring human rights violation cases is available, yet. Table 1 also provides the conditions of the collected data particularly format, disaggregation, and frequency of data collection.



TABLE
1

AVAILABILITY OF LOCAL DATA IN GUIUAN

MANDATED DATA	PURPOSE	LGU COLLECTED DATA	YEAR
CBMS HOUSEHOLD SURVEY DATA	Derive the multidimensional poverty index and indicators on: <ul style="list-style-type: none"> • <i>Health, Nutrition, Housing, Water and sanitation, Education, Income and Employment</i> 	Not available; ongoing validation	Not applicable
HEALTH DATA	Gather relevant data on: <ul style="list-style-type: none"> • <i>PWDs</i> • <i>Responsible reproductive health and parenthood</i> • <i>Health facilities and skilled health professionals</i> • <i>Mental health</i> • <i>Universal Health Care</i> • <i>Cancer Cases</i> • <i>Notifiable diseases</i> • <i>Health events of public concern</i> 	List of PWDs	2019, 2020, 2021
		List of Senior Citizens	Not specified in the actual file
		Field Health Service Information System (FHSIS)	2020
		Covid Cases and Vaccination Status	2020-2021
BUSINESS DATA	Identify businesses operating in the locality and status of their compliance to environmental monitoring and compliance	List of business establishments	2021
GEOSPATIAL AND RISK MANAGEMENT DATA	Get information on climate change and disaster risk management, vulnerability of the agriculture and fishery sector, vulnerability of flooding, drought and other calamities, and hunger, and the extent of disaster preparedness	Boat Registration	2019, 2020, 2021
		List of Registered Farmers (RSBSA)	Not specified in the actual file
		List of Registered Fisherfolk (RSBSA)	Not specified in the actual file
		High Value Crops Development Program (HVCDP)	2021
		Farming Systems Development Project (FSDP)	Not specified in the actual file
		Agricultural Production	Not specified in the actual file
		Maps shapefiles	Not specified in the actual file
		Shelter Data - Informal Settlers, Settlers in Relocation Sites, Evacuation Centers, etc.	Not specified in the actual file
CASE MONITOR DATA	Monitor human-rights cases: <ul style="list-style-type: none"> • <i>Extralegal killings</i> • <i>Enforced disappearances</i> • <i>Torture</i> • <i>Trafficking</i> • <i>Sexual harassment</i> • <i>Programs under the Juvenile Justice and Welfare Act</i> 	None	Not applicable

MANDATED DATA	FORMAT	DISAGGREGATION	FREQUENCY OF DATA AVAILABILITY	
CBMS HOUSEHOLD SURVEY DATA	Not applicable	Not applicable	Not applicable	
HEALTH DATA	xls	Location/Barangay Age, Sex Type of disability	Consolidated Annually	
	xls	Location/Barangay	Cannot be determined (no historical data)	
	xls	Location/Barangay Age, Sex, etc.	Yearly	
	xls	Location/Barangay Type of Case Vaccination Status	Daily	
BUSINESS DATA	xls	Location/Barangay Nature of business Business Type and size Status of Registration Employee Sex (Male/Female)	Cannot be determined (no historical data)	
	xls	Location/Barangay Engine type, Tonnage depth, etc.	Yearly	
GEOSPATIAL AND RISK MANAGEMENT DATA	xls	Location/Barangay	Cannot be determined	
	xls	Location/Barangay, Sex	Cannot be determined (no historical data)	
	xls	Location/Barangay Type of produce	Cannot be determined (no historical data)	
	xls	Location/Barangay Type of produce	Cannot be determined (no historical data)	
	xls	Type of Commodity	Cannot be determined	
	jpeg/shp files	Not applicable	Cannot be determined	
	jpeg	Location/Barangay	Cannot be determined (no historical data)	
	CASE MONITOR DATA	Not applicable	None	Not applicable



A noticeable weakness in the LGU's data assets is the unavailability of the mandated Community-based Monitoring System (CBMS) data. Although the Municipality of Guiuan has started the implementation of CBMS digitally in 2021, data validation is still ongoing. Based on RA 11315 or the Community-Based Monitoring System Act, the CBMS includes data on population and household size, health and nutrition, housing, water and sanitation, basic education and literacy, income and livelihood, and peace and order. This household-level data can be used by the municipality to conduct a comprehensive poverty analysis to shape policies and interventions targeting the appropriate households.

The CBMS data should be collected every three years making it a useful tool for monitoring the impact of future poverty alleviation and development programs.

It can also be a source of information for disaster risk reduction and management. As for other existing datasets, most lack the actual date of data collection, the regularity of data collection are uncertain and historical data are not available.

On the other hand, some good practices in the LGU's collection of data are requiring all barangays in the municipality the same data submission, collecting date of birth (not just age) of individuals and disaggregating individual data by sex. Data are gathered and/or stored digitally. These practices enhance the quality of local data and its usefulness for crafting local policies. For the purpose of discussion, some of the collected data are assessed in terms of the five dimensions of data quality – precision, accuracy, reliability, timeliness, and integrity. The detailed assessment of the quality of local data is displayed in the Data Processing template (Appendix 2). A summary of the result is shown in Table 2.

TABLE
2

QUALITY OF LOCAL DATA IN GUIUAN

DATASET	PRECISION	ACCURACY	RELIABILITY	TIMELINESS	INTEGRITY
HEALTH DATA <i>(LIST OF PWD)</i>	Contains a comprehensive list of persons-with-disability per barangay classified per type of disability, sex, etc.	Date data has a consistent format. Other important variables useful for policymaking are missing like educational attainment, employment status, marital status and skills.	Data are defined and collected in the same way across the LGU and periods of data collection. Some entries on disability types are general descriptions but some include specifics. The list is not updated yearly, that is PWDs who registered in the previous years are not included in the next periods. Only the registrants in the applicable year are in the list. Some individuals' type of disability are not specified.	Data are collected yearly as determined to be an ideal period for data collection. But no historical data are available.	Some important variables are not collected and some data on collected variables are missing so the individual's profile is incomplete.
BUSINESS DATA	Contains a list of business establishments in every barangay classified per type and line of business, business size, no. of employee, type of licence or status of registration, etc.	Dataset has almost no missing data and the format of the variables are consistent. Important variables like owner's contact no. and email address are complete. The no. of employees are disaggregated by sex.	Data are generated from regular licence issuance operations of the LGU.	Data are up to date and taken at the point of application.	Data are collected electronically and reduces human errors.
RISK MANAGEMENT DATA <i>(BOAT REGISTRATION)</i>	Contains a list of fishing vessels, fishing gears and vessel owners in every barangay classified by engine type, year built, size, capacity, etc.	Around 80% of the data on gears used for fishing are missing. Fishing gears as well as fishing vessels are required for registration as part of monitoring the fishing activities in the municipality.	Uses a standard form that is consistent across barangays and LGUs. A huge amount of missing data on an important variable reduces the dataset's reliability.	Data are collected yearly as determined to be the ideal period of data collection.	Some important variables are not collected and some data on collected variables are missing. Does not include data on fishworkers.

HEALTH DATA

Digital copies of health data are still very scarce in Guiuan. The Field Health Service Information System (FHSIS) data which is the designated national health statistics by the Department of Health (DOH) is the major source of indicators for public health monitoring and the measures to track progress in healthcare management in the municipality. The data are collected from public primary healthcare facilities and hospitals following the standards set by the DOH, so the protocols for collection and the granularity of required data is well-defined. Unfortunately, based on what is available, the FHSIS data of the municipality is still mostly paper-based and are not orderly consolidated quarterly and/or annually or per health facility.

Digitizing FHSIS data will definitely enhance data quality and therefore, the quality of insights that can be derived from it.

BUSINESS DATA

The LGU maintains a list of business establishments operating in the municipality in Excel format. The data are disaggregated per location or barangay, type and line of business, type of license or status of registration, etc. The data can be used to identify the nature of businesses thriving in the area. Around 98 percent are micro and small businesses that are involved in food production and sale (like restaurants, sale of fish and other seafoods, fruits and vegetables, rice, corn, and cereals, meat products, etc.), and services (like hotel or accommodation, sports and recreation, tricycle and pedicab operation, etc.). A good feature of the dataset is it includes the number of employees for each establishment and disaggregates it by sex which can serve as an indirect measure of employment in the area. However, caution should be exercised when using the dataset because there may still be informal businesses which make up a significant portion of active businesses in the locality that are not covered.

Aside from the FHSIS data, the LGU also collects profiles of persons with disability (PWDs) and senior citizens. The PWD dataset contains a comprehensive list of persons-with-disability per barangay classified per type of disability, sex, etc. Data are collected annually as determined to be an ideal period for data collection. An assessment of data quality in Table 2 shows that other important variables useful for policymaking are, however, not collected like educational attainment, employment status, marital status and skills. Some data on collected variables are missing so the individual's profile is incomplete. Particularly, some individuals' type of disability are not specified and while some entries are general descriptions some include specifics. The list is not updated yearly. Only the registrants in the applicable year are in the list. Registered PWDs in the previous years are not included in the next periods. A good list should be cumulative.

Also, the data can be used to track compliance of the establishments on application and renewal of licences.

Unfortunately, it does not contain data on environmental compliance and payment of taxes and clearances of registered establishments as required by law to be monitored by the LGU. Still, from Table 2 timeliness appears to be the best characteristic of this dataset because the data are up to date and taken at the point of application. Data are collected electronically such that it reduces encoding errors.

GEOSPATIAL AND RISK MANAGEMENT DATA

Geospatial data, Registry System for Basic Sectors in Agriculture (RSBSA), and data on agricultural production and high value crops, are some of the helpful sources of information on disaster risk management, determining the vulnerability of the agriculture and fishery sector, vulnerability of the populace to flooding, drought and other calamities, and hunger, and the extent of disaster preparedness of the municipality. These are collected by the LGU and are available in digital format. Of these datasets, the RSBSA contains data on farmers and fisherfolks which are the most vulnerable groups to natural phenomenon. Another interesting dataset held by the LGU is the registry

of commercial fishing vessels and fishing gears. The fishing vessels from every barangay are classified by engine type, year built, size, capacity, etc. The fishing gears are required to be registered along with the fishing vessels as part of the regulations to monitor the fishing activities in the municipality. Unfortunately, a huge amount of data on fishing gears used, which constitute around 80 percent, are missing. Therefore, it reduces the dataset's reliability to serve its purpose. Also, the database only provides the owner of the fishing vessels but does not include all fishworkers whether regularly or not regularly employed in commercial fishing.




 Data-Driven Development
 in the Philippines

GENERAL RECOMMENDATIONS

The availability, conditions, and characteristics of local data are critical to draw valuable insights. High quality data translates into better opportunities to transform the lives of the people. However, based on the previous discussions, the municipality's data assets are still lacking important elements to further progress on data driven development. To ensure better data availability and quality of local data, the following are suggested:

1 STRENGTHEN DIGITAL DATA COLLECTION

Digitizing data or collecting data digitally is vital to ensure data accessibility and quality. Basically, it increases data availability that allows for readily performing computations and data analysis and enhances data quality so that derived insights are reliable and effective. Digital data collection tools facilitate faster and more reliable data collection. There are free or open-source tools that are secured like KoBo Toolbox which the LGU can use. Data are collected real-time and made available in machine readable format. It also readily provides basic analysis. Hence, shifting from paper-based to digital collection reduces costs and increases efficiency in governance.

Digital methods can best be explored to expand business data and geospatial and risk management data, in the hope of collecting more comprehensive, accurate and timely data necessary to make richer analysis and derive more valuable insights in these areas. In terms of health, the LGU can start digitizing FHSIS data for faster and more reliable consolidation of health and health-related data. Electronic Medical Records (EMRs) are also not

available in the LGU. Acquiring an EMR system is a good example of health care innovation that enhances data quality because unlike the traditional paper-based ones, using the digitally collected and stored patient data like the EMR tend to be more precise, accurate, reliable, timely and less prone to human errors.

The CBMS is to be implemented consistently and data should be made available immediately. An important reminder in acquiring and storing survey data like the CBMS is to have proper documentation of the entire process from survey conceptualization to implementation. Some important elements of the documentation should include guides for data users to track details and understand how and what data were collected like the metadata, codebook or coding information, questionnaires, and so on. These documents can make it easier to retrieve datasets and facilitate accurate use and reuse of collected data. It is a standard discipline in data management which the municipality can adopt to ensure the integrity of local data.

2

DETERMINE AND COLLECT ALL RELEVANT VARIABLES

There are missing or uncollected variables useful to influence decisions and policies. Consider geospatial data, for example. An accurate, complete and up-to-date geospatial data are needed to make timely decisions and appropriate actions, in any disaster situation. It can inform the overall extent of damages caused by the calamity and the affected communities and individuals thereby, helps in assessing the individual needs and determining the type and scale of assistance to be provided. For this reason, it is essential for the LGU to collect geospatial data that will guide decisions for disaster prevention (like topographical maps, communities and settlements, etc.), preparedness (location of facilities, evacuation centers, relocation sites, etc.), mitigation (land use, zoning, etc.), and response (accessible roads, feasible transport routes, etc.) initiatives. Geospatial data also provide critical information for recovery or post-disaster rehabilitation, reconstruction and government administration for sustainable community planning.

In the area of health, aside from the lack of good data from public health facilities there is uncollected data from private facilities which are beneficial to overall health system operations. Health-related data that are important in coming up with effective health programs or strengthening the existing health programs are unavailable too. For example, data on health appropriations and expenditure, health care products and facilities utilization, and human resources for health and their corresponding competencies. There is no data to measure health care worker knowledge like the skilled health workers' continuing professional development. Such data will help ensure that the health workers' knowledge and skills stay relevant, and their capacities keep pace with current health standards. Good quality health and health worker data can be a reliable source of information for LGU's disaster management.





3

AVOID REDUNDANCIES AND KEEP HISTORICAL DATA

The implementation of the CBMS, presents an opportunity for the LGU to synchronize data collection efforts to minimize the costs and maximize the benefits of data collection. Activities like securing a list of households per barangay may no longer be a stand-alone activity. Historical data should also be maintained because it can provide critical information with high value to society. For example, the analysis of health data from previous years

can provide insights about disease trends and risk factors, patterns of care, health care use and its costs, and the outcomes of public health interventions in the municipality. Similarly, an updated list of vulnerable individuals will facilitate faster, more reliable and transparent distribution of cash and in-kind assistance to eligible beneficiaries.

4

ENRICH LOCAL DATA THROUGH PARTNERSHIPS WITH DIFFERENT SECTORS

As mentioned earlier, peoples' participation is the sufficient condition for reforms in governance. Starting from data publication, the LGU can advance work to data dissemination through intentional coalition building. Data should be made easily accessible to spark innovation. People should know data are available and use it to yield

benefits to the community. Eliminating the horizontal (between LGU and the public) and vertical (between LGU and national government offices and agencies) barriers to data access is the first big step towards free flow of data that will potentially broaden the database in the locality.

APPENDIX

1

NATIONALLY MANDATED DATASETS FOR LOCAL GOVERNMENT

SECTOR	DATASET	DESCRIPTION	LEGISLATION/ AGENCY DIRECTIVE	
MULTIPLE	Community-based Monitoring System	Generates updated and disaggregated data necessary in targeting beneficiaries, conducting more comprehensive poverty analysis and needs prioritization, designing appropriate policies and interventions, and monitoring impact over time.	Community-Based Monitoring System Act (RA 11315)	
	Climate Disaster Risk Assessment (CDRA)	Considers the "risks and vulnerabilities of exposed elements, namely the people, urban area, agriculture, forestry and fishery production areas, critical points facilities, and lifeline infrastructure associated with natural hazards and climate change."	HLURB Board of Commissioners Resolution No. 915 (2014), "Approving the Supplemental Guidelines for Mainstreaming Climate Change Adaptation and Disaster Risk Reduction in the Comprehensive Land Use Plan"	
	Local Disaster Risk Reduction and Management Fund (LDRRMF) Utilization	Contains the specific projects an LGU undertakes relative to DRRM, and how the funding for such projects have been utilized.	Philippine Disaster Risk Reduction and Management Act of 2010 (RA 10121)	
DISASTER RISK REDUCTION & MANAGEMENT (DRRM)	Disaster Management Services	Includes up-to-date information about the LGU in times of disasters (contact information of the LGU and agencies required to respond to emergency situations, evacuation areas, relief sites, and pick-up points, etc.)	The Free Mobile Disaster Alerts (RA 10639)	
	Persons with Disabilities (PWDs)	Contains a list of PWDs in the LGU, and the relevant data including specific disabilities of the PWDs	Rep. Act No. 10070, amending Rep. Act No. 7277, otherwise known as The Magna Carta for Disabled Person	
	Responsible Parenthood and Reproductive Health	Data on women's health and safe motherhood and health services in the LGU (list of deceased mothers due to maternal deaths, deceased infants, hospital and health centers in the LGU, assets relevant to dealing with maternity issues)	The Responsible Parenthood and Reproductive Health Act of 2012 (RA 10354)	
	Excise Tax Allocation and Utilization	Contains a list of programs for tobacco farmers and workers and funding support to health facilities	Implementing Rules and Regulations of RA 10351, DOF-BIR-DOH-DBM-DA Joint Circular No. 01-14	
	Mental Health Registry	A registry of people who have been attended to and/or served, the respective kinds of mental illness or disability, duration and result of the treatment, and patients/service profile.	Mental Health Act (RA 11036)	
	Universal Health Care programs	Contains policies and programs undertaken to strengthen and broaden existing health policies to support universal health care implementation	Universal Health Care Act (RA 11223)	
	Disease Surveillance	Report on cases of infection or exposure to outbreak/pandemic/epidemic or any health event of public concern.	IRR of the Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act (RA 11332) 2020 Revised IRR of RA 11332	
	HEALTH			

APPENDIX

1

NATIONALLY MANDATED DATASETS FOR LOCAL GOVERNMENT

SECTOR	DATASET	DESCRIPTION	LEGISLATION/ AGENCY DIRECTIVE
BUSINESS	Business Establishments	A list of business establishments issued a business licence, clearance, permit, certification, or authorization including information of applicant or requesting party by various local government departments, such as local taxes and clearances, building clearance, sanitary permit, zoning clearance, and other specific LGU requirements, including the fire clearance.	Promoting Ease of Doing Business and Efficient Delivery of Government Services, Amending for the Purpose R.A. No. 9485 (RA 11032)
	Fisheries Information	A database of who the fisherfolk are in the LGU, their equipment such as boats, nets, etc., where they conduct fishing, where they sell their catch, etc.	Adopting a National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing, and for Other Purposes, Executive Order No. 154
ENVIRONMENT	Mining Industry	A database of local ordinances and contracts related to mining for review of the Mining Industry Coordinating Council	Institutionalising and Implementing Reforms in the Philippine Mining Sector, Executive Order No. 79
	Retiring Government Employees	A database of government officials and employees who shall compulsorily retire in the next succeeding fiscal year	RA 10154 & Implementing Rules and Regulations of Republic Act No. 10154 (An Act Requiring All Concerned Government Agencies to Ensure the Early Release of the Retirement Pay, Pensions, Gratuities and Other Benefits of Retiring Government Employees)
LABOR	JobStart Program Registry	A database of all registrants under the Jobstart Philippines Act, and employers who are willing to facilitate qualified registrants for the program	JobStart Philippines Act (RA No. 10869)
	Healthcare Workers	A database of healthcare workers in the LGU to identify those eligible for life insurance, accommodation, transportation, and meals.	Implementing Guidelines on the Provision of Life Insurance, Accommodation, Transportation, and Meals to Public and Private Health Workers under RA 11494, DOH Administrative Order No. 0054-20
AGRICULTURE	Labor Market Information	A registry of establishments operating in the locality, present number and nature of jobs, projection of jobs that the establishment will offer in the next five (5) years	PESO Act (RA 8759), as amended by Rep. Act No. 10691
	Local Producers	A masterlist of farmers, farmworkers, and rice cooperative and associations who are eligible beneficiaries of agriculture programs	Liberalizing the Importation, Exportation and Trading of Rice, Lifting for the Purpose the Quantitative Import Restriction on Rice (RA 11203)
	Coconut Farmers	A registry of coconut farmers and their organization	Coconut Farmers and Industry Trust Fund Act (RA 11524)
	Corn Production	A database of corn farms and corn production in the LGU	General Guidelines on the Implementation of the Fall Armyworm (FAW) Management Project under the Bayanihan to Recover as One Act (RA 11494), DA Memorandum Order No. 26-21

SECTOR	DATASET	DESCRIPTION	LEGISLATION/ AGENCY DIRECTIVE
SOCIAL SERVICES	Pantawid Pasada Program	A database of all tricycle drivers within the LGU eligible for Public Transport Assistance Program	Instituting the Public Transport Assistance Program — Pantawid Pasada, Executive Order No. 32
	Enhanced Comprehensive Local Integration Program	A database of former rebels/extremists in their locality or spotted in the locality.	This is the Revised IRR of AO No.10, s. 2018 entitled: Centralizing All Government Efforts for the Reintegration of Former Rebels and Creating for the Purpose an Inter-Agency Task Force aimed at empowering individual former rebels, former violent extremists, their families and communities.
	Emergency Subsidies Beneficiaries	A list of citizens in the locality who have received emergency subsidies under the Bayanihan to Recover as One Act.	Special Guidelines on the Implementation of the Provisions of Republic Act No. 11494 or the "Bayanihan to Recover as One Act" Concerning DSWD, DSWD Memorandum Circular No. 030-20
PUBLIC UTILITIES ENERGY	Energy Consumption	Includes the amount of energy consumption by the LGU	DOE DEPARTMENT CIRCULAR NO. DC2019-11-0014, Implementing Rules and Regulations of Republic Act No. 11285 (Energy Efficiency and Conservation Act)
	MULTIPLE	Human Rights Violations	A database of extra-legal killings, enforced disappearances, torture, and other grave violations of the right to life, liberty, and security of persons that might have occurred in that locality as wells as cases of trafficking in persons.
Traffic Violations		A database of traffic violation receipts issued by the LGU.	IRR of RA 10930, An Act Rationalizing and Strengthening the Policy Regarding Driver's License amending Section23 of the Land and Transportation and Traffic Code (RA 4136)
Urban Development		A database of areas that were subject to housing and urban development, and further, what the nature of the development was.	IRR of Department of Human Settlements and Urban Development Act (RA 11201)
Gender		A database of sexual harassment in streets and public spaces.	Safe Spaces Act (RA 11313)
Fire Prevention and Safety		Database of establishments and homes, within which those who comply or not comply with fire safety measures are marked accordingly.	Revised IRR of the The Fire Code of the Philippines Of 2008 (RA 9514)
Alternative Learning System (ALS)		Database of ALS learners (out-of-school children in special cases and adults), both prospective and current.	Alternative Learning System Act (RA 11510)

APPENDIX 2

DATA PROCESSING TEMPLATE

(FULL VERSION AVAILABLE UPON REQUEST)

DATASET NAME	YEAR	FILE NAME	FILE TYPE	SHEET NAME	COLUMN NAME	COLUMN DATA TYPE	ENUM VALUES	VALID RANGE	NO. OF RECORDS	NO. OF NULL VALUES
GUIUAN REGISTERED FISHERFOLK	2015	GUIUAN REGISTERED FISHERFOLK	XLSX	FISHERFOLKS_NAME-10_29_2015 - C	BARANGAY	STRING	N/A	N/A	5383	0
GUIUAN REGISTERED FISHERFOLK	2015	GUIUAN REGISTERED FISHERFOLK	XLSX	FISHERFOLKS_NAME-10_29_2015 - C	FRID	STRING	N/A	N/A	5383	0
GUIUAN REGISTERED FISHERFOLK	2015	GUIUAN REGISTERED FISHERFOLK	XLSX	FISHERFOLKS_NAME-10_29_2015 - C	NAME	STRING	N/A	N/A	5383	0
GUIUAN REGISTERED FISHERFOLK	2015	GUIUAN REGISTERED FISHERFOLK	XLSX	FISHERFOLKS_NAME-10_29_2015 - C	GEN	STRING	M/F	N/A	5383	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	BUSINESS NAME (DTI, SEC, OR CDA)	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	BUSINESS TYPE (SINGLE PROPRIETOR, PARTNERSHIP/ CORPORATION, OR COOPERATIVE)	STRING	SINGLE PROPRIETORSHIP, CORPORATION, COOPERATIVE	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	REGISTRATION NO.	INT	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	DATE ISSUED	DATE	N/A	1940-02-01 TO 2021-08-09	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	PERMIT NO.	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	STATUS OF REGISTRATION (NEW OR RENEW)	STRING	NEW, RENEWAL	NEW, RENEWAL	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	DATE APPLIED	DATE	N/A	2021-01-06 TO 2021-08-09	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	DATE ISSUED	DATE	N/A	2021-01-06 TO 2021-08-10	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	OWNER'S NAME	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	BUSINESS ADDRESS	STRING	N/A	N/A	1458	0

DATASET NAME	% NULL VALUES	NO. OF INVALID VALUES	% INVALID VALUES	% TOTAL INVALID+ NULL	COMMENTS	DO THE VALUES NEED TO BE PROCESSED OR CLEANED?	IF YES, DESCRIBE NATURE OF PROCESSING OR CLEANING DONE.	IS IT A PII COLUMN? DOES IT (POTENTIALLY) NEED TO BE MASKED?	FINAL VARIABLE NAME	FINAL VARIABLE TYPE
GUIUAN REGISTERED FISHERFOLK	N/A	0.00%	0.00%	0.00%		NO			BARANGAY	STRING
GUIUAN REGISTERED FISHERFOLK	N/A	0.00%	0.00%	0.00%		NO		YES	FRID	STRING
GUIUAN REGISTERED FISHERFOLK	N/A	0.00%	0.00%	0.00%		NO		YES	NAME	STRING
GUIUAN REGISTERED FISHERFOLK	N/A	0.00%	0.00%	0.00%		NO		NO	GEN	STRING
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		YES	BUSINESS NAME (DTI, SEC, OR CDA)	STRING
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		YES	BUSINESS TYPE	STRING
REGISTERED BUSINESSES	N/A	0.55%	0.00%	1.10%		NO		YES	REGISTRATION NO.	INT
REGISTERED BUSINESSES	0000-00-00, 0642--04-08	0.55%	0.21%	0.62%		NO		NO	DATE ISSUED	DATE
REGISTERED BUSINESSES	N/A	0.07%	0.00%	0.07%		NO		YES	PERMIT NO.	STRING
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		NO	STATUS OF REGISTRATION	STRING
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		NO	DATE APPLIED	DATE
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		NO	DATE ISSUED	DATE
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		YES	OWNERS NAME	STRING
REGISTERED BUSINESSES	N/A	0.07%	0.00%	0.00%		NO		YES	BUSINESS ADDRESS	STRING

APPENDIX 2

DATA PROCESSING TEMPLATE

(FULL VERSION AVAILABLE UPON REQUEST)

DATASET NAME	YEAR	FILE NAME	FILE TYPE	SHEET NAME	COLUMN NAME	COLUMN DATA TYPE	ENUM VALUES	VALID RANGE	NO. OF RECORDS	NO. OF NULL VALUES
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	LINE OF BUSINESS	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	CAPITAL INVESTMENT	FLOAT	N/A	0 TO 3000000	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	GROSS SALES	FLOAT	N/A	0 TO 101734855	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	SIZE OF BUSINESS (MICRO, SMALL, MEDIUM, OR LARGE)	STRING	MICRO, SMALL, MEDIUM, LARGE	MICRO, SMALL, MEDIUM, LARGE	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	OR NUMBER	INT	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	CONTACT NO.	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	EMAIL ADDRESS	STRING	N/A	N/A	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	NO. OF EMPLOYEE MALE	INT	N/A	1 TO 292	1458	0
REGISTERED BUSINESSES	2021	REGISTERED BUSINESSES	XLSX	WORKSHEET	NO. OF EMPLOYEE FEMALE	INT	N/A	1 TO 22	1458	0
BARANGGAY PROFILES	2015	BRGY. PROFILE MSWD 2	XLSX	BP2015	NO	INT	N/A	1 TO 60	60	0

DATASET NAME	% NULL VALUES	NO. OF INVALID VALUES	% INVALID VALUES	% TOTAL INVALID+ NULL	COMMENTS	DO THE VALUES NEED TO BE PROCESSED OR CLEANED?	IF YES, DESCRIBE NATURE OF PROCESSING OR CLEANING DONE.	IS IT A PII COLUMN? DOES IT (POTENTIALLY) NEED TO BE MASKED?	FINAL VARIABLE NAME	FINAL VARIABLE TYPE
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%		NO		NO	LINE OF BUSINESS	STRING
REGISTERED BUSINESSES	0	0.00%	93.42%	0.00%		NO		NO	CAPITAL INVESTMENT	FLOAT
REGISTERED BUSINESSES	0,29	0.00%	50.07%	43.48%		NO		NO	GROSS SALES	FLOAT
REGISTERED BUSINESSES	N/A	43.48%	0.00%	43.55%		NO		NO	SIZE OF BUSINESS	STRING
REGISTERED BUSINESSES	N/A	0.07%	0.00%	0.07%	MULTIPLE OR NUMBERS	NO		YES	OR NUMBER	INT
REGISTERED BUSINESSES	N/A	0.00%	0.00%	0.00%	MULTIPLE CONTACT NUMBERS	NO		YES	CONTACT NO.	
REGISTERED BUSINESSES	N/A	0.00%	0.00%	3.29%		NO		YES	EMAIL ADDRESS	INT
REGISTERED BUSINESSES	N/A	3.29%	0.00%	0.00%		NO		NO	NO. OF EMPLOYEE MALE	INT
REGISTERED BUSINESSES	N/A	92.73%	0.00%	0.00%		NO		NO	NO. OF EMPLOYEE FEMALE	INT
BARANGGAY PROFILES		0.00%		0.00%		NO		NO	NO	

PH 3D



Data-Driven Development in the Philippines



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