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Research Paper

Assessment of Access in the Barrier-Free Facilities for Persons with Disabilities (PWD) in the Municipality of Guimba

Ariel Francis E. Bognot[1], Mary Fei J. Wy[2], Estrelita L. Bernardo[3], Rick Donald S. Manzon[4]

[1-2] *Student, Graduate School, Nueva Ecija University of Science and Technology, Cabanatuan City 3100, Nueva Ecija, Philippines*
[3-4] *Subject Adviser, Graduate School, Nueva Ecija University of Science and Technology, Cabanatuan City 3100, Nueva Ecija, Philippines*
Corresponding Author: Ariel Francis E. Bognot

ABSTRACT: *Batas Pambansa 344 or known as the "Accessibility Law" is an Act to Enhance the Mobility of Disabled Persons by Requiring Certain Buildings, Institutions, Establishments and Public Utilities to install Facilities and Other Devices. One of its enactments was to provide barrier-free facilities for persons with disabilities (PWDs).*
As the country is rapidly increasing its population, infrastructures play as one of major role in its development. It provides facilities and services to caters the needs of the masses (e.g., social services, health care, and foodservices). Though the most of the needs and services of the common masses are being catered by the facilities, the needs of person with disability to be provided a barrier-free access in the facilities in most cases are being neglected. The purpose of this study is to understand and asses the problems on why the mobility of PWDs in Guimba, Nueva Ecija especially on its public structures and facilities are still prevalent and what possible actions that needs to be done to reduce these issues.
KEYWORDS: *Mobility, PWDs, Public structures, Public facilities*

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I. INTRODUCTION

As the country is rapidly increasing its population, infrastructures play as one of major role in its development. It provides facilities and services to caters the needs of the masses (e.g., social services, health care, and foodservices). Though the most of the needs and services of the common masses are being catered by the facilities, the needs of person with disability to be provided a barrier-free access in the facilities in most cases are being neglected. According to the World Health Organization (WHO) global report in 2011, more than a billion people are estimated to live with some form of disability, or about 15% of the world's population which is higher than the suggested figure of 10% in 1970. In the 2010 survey conducted by the Census of Population and Housing (CPH), of the 92.1 million household population in the country, 1.44 million persons or 1.57 percent had disability. Different public structures and/or facilities especially those built in the 1990s and early 2000s are often not designed for easy access of PWDs. Accessibility is defined as having no criteria that impede the use of facilities or what is coined as "barrier-free facilities" either by handicapped or nondisabled citizens (BP 344). PWD is defined to be "those suffering from restriction of different abilities, as a result of a mental, physical or sensory impairment, to perform an activity in the manner or within the range considered normal for a human being" (RA 7277).

According to the Batas Pambansa 344 or commonly known as the Accessibility Law is an act to enhance the mobility of disabled persons by requiring certain Buildings, Institutions, Establishments and Public utilities to install barrier-free facilities and other devices. According to Republic Act (RA) 7277 Chapter 6

Section 25, "the State shall ensure a barrier-free environment for PWDs in private, public buildings and other establishments mentioned in Batas Pambansa 344 or Accessibility Law".

There are current efforts in the country to provide easy access for PWDs. In 2017, PS Resolution No. 534 was headed by former Sen. Leila de Lima in the senate committee to conduct an inquiry, in aid of legislation, on the status of the implementation of BP344 and RA7277 (Magna Carta for Disabled Persons). DILG Memorandum Circular No. 2017-119 was released and provides guidelines in the establishment of the Persons with Disabilities Affairs Office (PDAO) in every province, city and municipality. The PDAO headed shall give full support to the improvement of the PWD total well-being and their integration into the mainstream of society. This is to ensure that the policies, programs and services for PWDs are implemented at the local level for them to fully participate in building an inclusive society for all.

This study aims to assess the mobility of PWDs in major public structures and facilities in Guimba, Nueva Ecija. The Municipality of Guimba is a 1st class municipality in Nueva Ecija with a population of 127,653 (PSA, 2020). It is having total equity of ₱1.466 billion (COA Annual Financial Report, 2021). In a municipality of high income and population with thriving economy, PWD accessibility should be considered.

PWDs in Guimba

A total of 1,407 Persons with Disabilities are registered in Guimba. As seen in Table 1, it shows the statistics per disability type according to Municipal Social Welfare and Development – Persons with Disability Affairs Office (MSWD – PDAO) of Guimba as of 2022.

	Barangay	Speech	Intellectual	Learning	Othopedic	Hearing	Visual	Mental	Psychosocial	Chronic Illness	Multiple
1	Agcano				4						1
2	Ayos Lomboy		1		6		1				
3	Bacayao	1	1		16		3	9	1		9
4	Bagong Barrio				7		6				3
5	Balbalino	1			4			1			1
6	Balingog East		1		7		3	3	3		4
7	Balingog West								1		
8	Banitan				1		1	1			1
9	Bantug	3	1	2	20		2	7	3		4
10	Bulakid				1			1			1
11	Bunol	2	1		20	2	7	6	5	1	6
12	Caballero		2		5			2	1		1
13	Cabaruan				6	1	2	1		1	1
14	Caingin Tabing Ilog	2			2		2				2
15	Calem				4				1	1	1
16	Camiing				12		3		1		3
17	Cardinal	1			2	1			1		1
18	Casongsong	1			5	1		1	1		2
19	Catimon				5	1	3	1		1	1
20	Cavite	2	2		37	2	5	6	6	6	3
21	Cawayan Bugtong	3	1	1	28	3	7	3	3	2	4
22	Consuelo			1	4	1			2		1
23	Culong				2			2			1
24	Escano				5		2	1			
25	Faigal				1	1	1		1		
26	Galvan				4				1		1
27	Guiset	4	1	1	10	2	4	1		2	
28	Lamorito				8		1	4	1		
29	Lennec	2	2	1	15		4	2	3	1	1
30	Macamias				7				1	1	
31	Macapabellag				2			2			
32	Macatcatuit	1	2		10	1	3	3	1	2	3
33	Manacsac	2			25	1	5	4		3	10
34	Manggang Marikit				15		4	6	1	3	3
35	Maturanoc	3	3		49	3	13	12	1	5	10
36	Maybubon			1	7			1	1	2	
37	Naglabrahan							1	1	2	
38	Nagpandayan		1	1	23	1	7	3	3	1	2
39	Narvacan I	3	1	1	15	1	1		1		2
40	Narvacan II						2		2		
41	Pacac	2	1	2	16	1	1	2	2	4	9
42	Partida I				6					1	1
43	Partida II	2			3	3				1	
44	Pasong Inchic				12		1	1	2	2	2
45	St. John District				14	5	3	1	4	2	4
46	San Agustin	1			2		1	1	1	1	3
47	San Andres				5	1		3	1	1	2
48	San Bernardino			1	3		1	2			1
49	San Marcelino	1			7	1	2	1			
50	San Miguel	2			14	1	7	11	2	4	
51	San Rafael	1		1	12		3	4		1	
52	San Roque				29	5	5	7	3	3	4
53	Santa Ana	1			7			1		2	
54	Santa Cruz	1	1		20	2	3	3	1	3	1
55	Santa Lucia	3	1	1	10		5	2	1	2	1
56	Santa Veronica District	2	1		32	2	8	6	3	6	3
57	Santo Cristo District	6	1		11	6	9	2	5	1	1
58	Saranay District	3			25		5	6	2	3	6
59	Sinulatan	1	1		8	3	3	8	1	1	1
60	Subol				4				1		
61	Tampac I	2	1		6		3		1		2
62	Tampac II, III	1			13		2		1		1
63	Triala	2		1	7		3	3		2	1
64	Yuson	2			4			1	1		
	Total	**64**	**27**	**15**	**664**	**52**	**157**	**149**	**79**	**74**	**126**

Table 1: PWD Statistics per Barangay

Out of all the PWDs in Guimba, around 47.19% are orthopedic or physically disabled.

National and Local laws for PWDs

Rights of PWDs in Cainta are protected by the laws the local government has passed. Some of which are anti-ridicule, free hospitalization and express lanes in different public and private establishments. As such, different laws and ordinances are passed, both national and local, in order to set minimum standard designs for accessibility, to protect the rights and give additional benefits to PWDs.

	Laws	**Summary of content**
NATIONAL	Batas Pambansa 344	Known as "Accessibility Law", this law sets the minimum requirements for accessibility of PWDs in buildings, public transportation and facilities (e.g., sidewalks, ramps, elevators).
	Presidential Decree 1509	A decree that creates the National Commission Concerning Disabled Persons under the Office of the President that will propose policies, conduct comprehensive and continuing studies, prepare and adopt long-term plans and ensure participation and involvement all for the benefit of PWDs.
	Republic Act 7277	Known as "Magna Carta for Disabled Persons", this act states the different rights of PWDs in employment, health, and education, political and civil rights and the compliance with BP 344.
	Republic Act 9442	An act amending Republic Act 7277. Some of its provisions are granting PWDs with at least 20 per cent discount on public transportation and all services in all establishments, additional benefits for retirees with disabilities, and prohibitions in mockery of any PWD in any form.
	Republic Act 10070	Establishing Institutional Mechanism to Ensure the Implementation of Programs and Services for Persons with Disabilities in every Province, City and Municipality
	Republic Act 10366	An Act Authorizing the Commission on Elections to Establish Precincts Assigned to Accessible Polling Places Exclusively for Persons with Disabilities and Senior Citizens.
	Republic Act 10754	An Act Expanding the Benefits and Privileges of Persons with Disability (PWD)" and the Execution of Its Implementing Rules and Regulations.
	DILG Memorandum Circular No. 2010 – 103	Establishment of Persons with Disability Affairs Office in every province, city and municipality that will ensure policies, plans, and programs, and ensure implementation of RA 10070, BP 344 at

		local level all for the benefit of PWDs.
	DILG Memorandum Circular No. 2017 – 119	Guidelines for the Establishment of Persons with Disability Affairs Office (PDAO) and the conduct of the Person with Disabilities general assembly.
LOCAL	Ordinance No. 5-S-2015	An Ordinance adopting RA10070 or an Act Establishing an Institutional Mechanism to ensure the Implementation of Programs and Services for Person with Disabilities and Organizing and Establishing a Person with Disability Affairs Office (PDAO) in the Municipality of Guimba, Nueva Ecija and Providing Appropriations for the implementation thereof.
	Resolution No. 109-S-2020	Resolution Adopting Executive Order No. 31 Series of 2020, Entitled "Organizing the Municipal of Guimba Council for the Welfare of Persons with Disabilities".

Table 2: Different National and Local Laws for PWDs

Public Structures and Facilities in Guimba

The different public structures and facilities in Guimba are (all of which were evaluated in this study based on different national and international standards and the best practices from around the world):

1. Municipal Hall Building – Houses the local executive branch and most of the municipal agencies. It primary provides for conducting local government business, services and activities, and related public services.
2. Sangguniang Bayan Building – Houses the local legislative branch of the municipality. It is responsible for passing ordinances and resolutions for the administration of the municipality.
3. Rural Health Unit (RHU) – Main Health Care Facility of the municipality. Provides outpatient care facility to the residents of the municipality such as rural health services and routine laboratory services.

1.1. STATEMENT OF THE PROBLEM

Generally, this study aims to assess the mobility of persons with disability in the main public structures and facilities of the Municipality of Guimba and determine if the provision of the municipality to provide barrier-free facility is sufficient.

Specifically, the study aims to answer the following questions:

1. Is the provision of barrier-free facilities by the Municipality of Guimba sufficient to address the mobility of the PWDs?
2. Is the provision of barrier-free access in the three main facilities sufficient to address the mobility of the PWDs in terms of:
   2.1. Parking;
   2.2. Sidewalks/ Walkways/ Ramps;
   2.3. Entrance; and
   2.4. Hallways/ Corridors/ Interiors

1.2. SCOPE AND LIMITATION OF THE STUDY

This study was conducted in order to assess and if possible, improve the mobility of PWDs in the Municipality of Guimba. This study is also intended not just for PWDs but also for those having difficulty in terms of mobility such as but not limited to pregnant women, senior citizens, and person accompanying children. The scope of this study focuses on the three (3) main facilities of the municipality which are (1) Municipal Hall; (2) Sangguniang Bayan Hall (SB); and (3) Rural Health Unit (RHU). In addition, this study will help in the implementation of the codes and standards set by the National Building Code (PD 1096) and the Accessibility Law (BP 344).

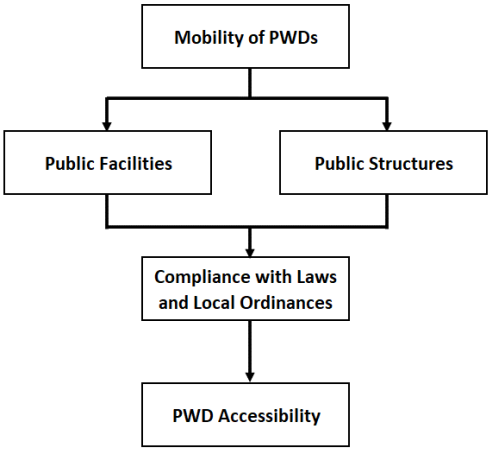


Figure 1: Mobility of PWDs

II. REVIEW OF RELATED LITERATURE

Foreign Studies

In the Questionnaire for Accessibility Audit to Assess the Accesibility of College/University Campus to the Students with Disabilities in Higher Education by Anjali Jagtap (2017) she stated that "It is recommended to note down the positive and negative aspects pertaining to accessibility and supportive technology for the students with disabilities. A detailed report should be prepared after analysing a response to every item of the questionnaire. Report should specifically mention the lack of awareness; facilities etc and suggest the measures to be taken. Also, the appropriate resources for procuring certain grants, facilities, available technologies can be recommended by the researcher undertaking such audit."

Mariam Jamaludin et. al, on their study Accessibility in Buildings of Tourist Attraction: A case studies comparison states that, "This study assessed the accessibility of three public buildings of tourist attraction in Malaysia; Berjaya Times Square, Museum of History and Ethnography Malacca (Stadthuys), and Central Market Kuala Lumpur. With the Malaysian government promotion of a caring society, buildings of tourist attraction should be accessible to the person with disabilities (PWD). Both exterior and interior spaces of these buildings should be able to cater the need of PWDs. Site observation, facilities simulation done by PWDs, and interviews were conducted to assess the buildings' accessibility. From the findings, buildings that have been built earlier are less accessible than the newer buildings."
(https://www.sciencedirect.com/science/article/pii/S1877042812003795)

Local Studies

Justine Brylle Pajarin et. al., on their study Assessment of Mobility of Persons with Disabilities (PWDs) in Cainta, Rizal stated that "This study aims to address the problems on the mobility of PWDs. Set in Cainta as the location, it involves both qualitative (survey questionnaires for PWD and non-PWD, as respondents) and quantitative assessment (pedestrian facilities and public transportation vehicles). The researchers determined from these methods that the respondents gave more importance to safety than the other factors affecting mobility. Common problems encountered in using transportation vehicles and facilities were also enumerated. Results show that the transportation facilities and vehicles are poorly designed for PWDs. PWDs have limited choices on their use of transportation vehicles and facilities and have experienced difficulties in boarding and alighting vehicles. There are many obstructions on transportation facilities, especially on sidewalks, that impede seamlessness of their travel from one point to another. The researchers gave recommendations on the designs and layouts of transportation vehicles and facilities in order to improve mobility of PWDs in the municipality."

III. METHODOLOGY

The researchers used a quantitative approach to learn and assess the mobility of the PWDs in the public structures in the municipality of Guimba. The researchers utilized deductive reasoning in which the researcher defined the study's purpose, collected data through questionnaires, assessment of minimum requirements and the findings when statistical treatments were applied. The information was collected between April to May 2023. All information through surveys were gathered from Persons with Disabilities only. Afterwards, conclusions were made by the researchers to complete the study. In this study, purposive sampling or judgmental sampling was used to select samples from the different strata of the population. Purposive sampling is a non-probability sampling in which researcher choose people of the population to participate in their surveys based on their judgement. This survey sampling technique demands researchers to be familiar with the goal of their studies to correctly choose and approach qualified respondents for interviews performed via questionnaire. The researcher used a sample size with 95% confidence level, and 5% margin of error. The sample size is about 75 Persons with Disability and 6 PDAO staffs. The study was initiated by the researcher, who at the time of the study is designated in the Municipal Engineering Office. The researcher sent a formal request and directly discussed to the Person with Disability Affairs Office (PDAO) to conduct the study. The researchers used this to ensure the confidentiality and integrity of the questionnaire collection process. The researcher used a 4-point Likert scale that intends to evaluate the assessment of the mobility of PWDs in the main public structures and facility of the municipality. In addition, it was already stated to the respondents that their responses would remain confidential and purely for research purposes only. The respondents were informed of the critical nature of their response to the study and clarifies certain words so that respondents can complete the questionnaire fully aware of their responsibilities as the study's subject. The survey conducted by the researcher was divided into two groups which targets the two demographics that are focused in this study. There is a total of 21 questions for each demographic, which properly assess the mobility of PWDs in the main structures and facilities of the municipality. Table 3 was used by the researcher to interpret the results of the survey where X is the value of the result.

SCALE	INTERPRETATION
$1.00 \leq x < 1.75$	Strongly Disagree
$1.75 \leq x < 2.50$	Disagree
$2.50 \leq x < 3.25$	Agree
$3.25 \leq x < 4.00$	Strongly Agree
SCALE	**INTERPRETATION**

Table 3: Scale and Interpretation of Results

IV. RESULTS

This section presents the analysis of the collected data through the survey via questionnaire. The survey results are presented on Likert scale is considered an interval scale. The mean is very significant. From (4) Strongly Agree; (3) Agree; (2) Disagree; and (1) Strongly Disagree with 4 scales indicating STRONGLY AGREE, AGREE, DISAGREE and STRONGLY DISAGREE. All the survey data were usable and none had to be discarded.

Table 4: Types of respondents

Persons with Disability	PDAO Staff	Total PWD respondents
75 (92.59%)	6 (7.41%)	81 (100%)

Source: *Questionnaire*

As per Table 4, the survey consists of 92.59% Persons with Disability, and 7.41% PDAO staff.

4.1. MUNICIPAL HALL BUILDING

Table 5: Municipal Hall Building Assessment

	N	4	3	2	1	Mean	Interpretation
ITEM 1	81	75	6	0	0	3.93	Strongly Agree
ITEM 2	81	65	16	0	0	3.80	Strongly Agree
ITEM 3	81	73	8	0	0	3.90	Strongly Agree
ITEM 4	81	64	14	3	0	3.75	Strongly Agree
ITEM 5	81	45	36	0	0	3.56	Strongly Agree
ITEM 6	81	9	45	21	6	2.70	Agree
ITEM 7	81	56	25	0	0	3.69	Strongly Agree
ITEM 8	81	81	0	0	0	4.00	Strongly Agree
ITEM 9	81	70	11	0	0	3.86	Strongly Agree
ITEM 10	81	8	64	7	2	2.96	Agree
ITEM 11	81	13	61	7	0	3.07	Agree
ITEM 12	81	43	36	2	0	3.51	Strongly Agree
ITEM 13	81	78	3	0	0	3.96	Strongly Agree
ITEM 14	81	66	11	2	2	3.74	Strongly Agree
ITEM 15	81	79	2	0	0	3.98	Strongly Agree
ITEM 16	81	18	58	5	0	3.16	Agree
ITEM 17	81	57	24	2	0	3.75	Strongly Agree
ITEM 18	81	18	58	5	0	3.16	Agree
ITEM 19	81	70	11	0	0	3.86	Strongly Agree
ITEM 20	81	29	49	3	0	3.32	Strongly Agree
ITEM 21	81	81	0	0	0	4.00	Strongly Agree
Valid N (listwise)	81					**3.60**	**Strongly Agree**

Table 5 shows the assessment of the respondents in the Municipal Hall Building. Majority of the respondents Strongly Agreed that the Municipal Hall Building provides adequate accessibility to PWDs in terms of barrier-free access to its Parking, Entrance, Sidewalks, Walkways, Ramps, Hallways/Corridors and Restrooms.

Respondents also recommended that since the Municipal Hall Building has 2nd floor, a lift or an elevator is needed for the ease of access and mobility of the PWDs in case there are transactions needed in the offices in the 2nd floor.

4.2. SANGGUNIANG BAYAN BUILDING

Table 6: Sangguniang Bayan Building Assessment

	N	4	3	2	1	Mean	Interpretation
ITEM 1	81	75	6	0	0	3.93	Strongly Agree
ITEM 2	81	70	11	0	0	3.86	Strongly Agree
ITEM 3	81	78	3	0	0	3.96	Strongly Agree
ITEM 4	81	74	7	0	0	3.91	Strongly Agree
ITEM 5	81	54	27	0	0	3.67	Strongly Agree
ITEM 6	81	0	0	14	67	1.17	Strongly Disagree
ITEM 7	81	0	0	7	74	1.09	Strongly Disagree
ITEM 8	81	23	48	10	0	3.16	Agree
ITEM 9	81	0	0	17	64	1.21	Strongly Disagree
ITEM 10	81	47	29	5	0	3.52	Strongly Agree
ITEM 11	81	0	0	32	49	1.40	Strongly Disagree
ITEM 12	81	51	29	1	0	3.62	Strongly Agree
ITEM 13	81	70	11	0	0	3.86	Strongly Agree

ITEM 14	81	0	0	19	62	1.23	Strongly Disagree
ITEM 15	81	75	6	0	0	3.93	Strongly Agree
ITEM 16	81	67	14	0	0	3.83	Strongly Agree
ITEM 17	81	34	43	3	1	3.36	Strongly Agree
ITEM 18	81	67	14	0	0	3.83	Strongly Agree
ITEM 19	81	0	7	45	29	1.73	Strongly Disagree
ITEM 20	81	31	48	1	1	3.35	Strongly Agree
ITEM 21	81	0	0	6	75	1.07	Strongly Disagree
Valid N (listwise)	81					**2.89**	**Agree**

Table 6 shows the assessment of the respondents in the Sangguniang Bayan (SB) Building. Though most of the respondents agreed that the SB Building provides accessibility to PWDs, many respondents Strongly Disagreed that the building does not provide adequate accessibility in terms of barrier-free access to its Entrance, Walkways, Ramps, Hallways/Corridors and Restrooms.

Respondents also recommendation in SB Building that although the building has a walkway and ramp, it is still not safe for PWDs and senior citizen given that is does not conform with the standard.

4.3. RURAL HEALTH UNIT (RHU) FACILITY

Table 7: Rural Health Unit Facility Assessment

	N	**4**	**3**	**2**	**1**	**Mean**	**Interpretation**
ITEM 1	81	74	7	0	0	3.91	Strongly Agree
ITEM 2	81	76	5	0	0	3.94	Strongly Agree
ITEM 3	81	79	2	0	0	3.98	Strongly Agree
ITEM 4	81	65	16	0	0	3.80	Strongly Agree
ITEM 5	81	69	12	0	0	3.85	Strongly Agree
ITEM 6	81	80	1	0	0	3.99	Strongly Agree
ITEM 7	81	0	0	37	44	1.46	Strongly Disagree
ITEM 8	81	67	14	0	0	3.83	Strongly Agree
ITEM 9	81	81	0	0	0	4.00	Strongly Agree
ITEM 10	81	78	3	0	0	3.96	Strongly Agree
ITEM 11	81	21	60	0	0	3.26	Strongly Agree
ITEM 12	81	59	22	0	0	3.73	Strongly Agree
ITEM 13	81	73	8	0	0	3.90	Strongly Agree
ITEM 14	81	37	44	0	0	3.46	Strongly Agree
ITEM 15	81	79	2	0	0	3.98	Strongly Agree
ITEM 16	81	79	2	0	0	3.98	Strongly Agree
ITEM 17	81	75	6	0	0	3.93	Strongly Agree
ITEM 18	81	78	3	0	0	3.96	Strongly Agree
ITEM 19	81	80	1	0	0	3.99	Strongly Agree
ITEM 20	81	73	8	0	0	3.90	Strongly Agree
ITEM 21	81	81	0	0	0	4.00	Strongly Agree
Valid N (listwise)	81					**3.75**	**Strongly Agree**

Table 7 shows the assessment of the respondents in the Rural Health Unit Facility. Majority of the respondents Strongly Agreed that the RHU Facility provides adequate accessibility to PWDs in terms of barrier-free access to its Parking, Entrance, Sidewalks, Walkways, Ramps, Hallways/Corridors and Restrooms.

V. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1. FINDINGS

Based on the data gathered and analyzed, majority of the respondents strongly agreed that the Municipal Hall Building and the RHU Facility provides adequate accessibility to PWDs in terms of barrier-free access in its Parking, Entrance, Sidewalks, Walkways, Ramps, Hallways/Corridors and Restrooms. This provided safety in their mobility and well-being when accessing the municipal building and the health facility. The SB Building on the other hand, though many agreed that it provides accessibility to PWDs, many respondents Strongly Disagreed that the building does not provide adequate accessibility in terms of barrier-free access to its Entrance, Walkways, Ramps, Hallways/Corridors and Restrooms. Further improvement is needed in the SB Hall building.

Factors affecting the mobility in the Municipal Hall Building

The Municipal Hall Building was constructed in the early 1990s. BP 344 in that time was not yet fully implemented. In 2008, the Implementing Rules and Regulations (IRR) for BP 344 was released by the National Agency to provide minimum requirements for barrier-free access for PWDs and in 2019 the municipality constructed an alternative entrance to adhere with BP 344 as seen in Figure 2.

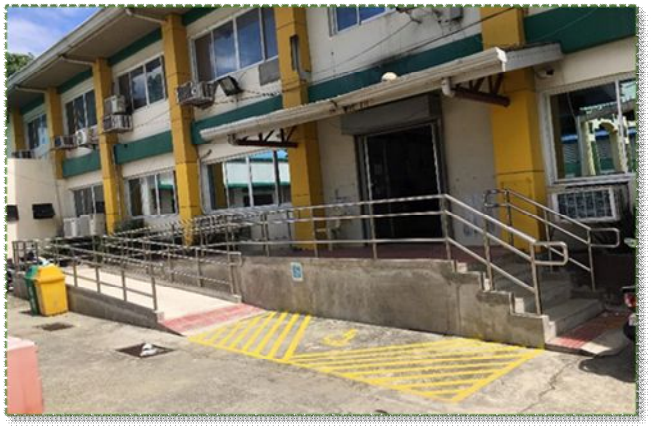


Figure 2. Alternative Entrance with Ramps and Stairs adhering to the BP344

In the survey, it was seen that base from the respondents, a need of a lift or an elevator is needed in the municipal building as it has a 2nd floor.

Stairs	Minimum Requirements
	☒ Tread surfaces are made of slip-resistant material. ☐ Slanted nosings are used to projecting nosings. Open stringers are avoided. ☐ The leading edge of each step on both the runner and riser is marked with a paint or non-skid material that has a color and gray value which is in high contrast to the gray value of the rest of the stairs. ☐ A tactile strip 0.30 m. wide shall be installed before hazardous areas such as sudden changes in floor levels and at the top and bottom of stairs.

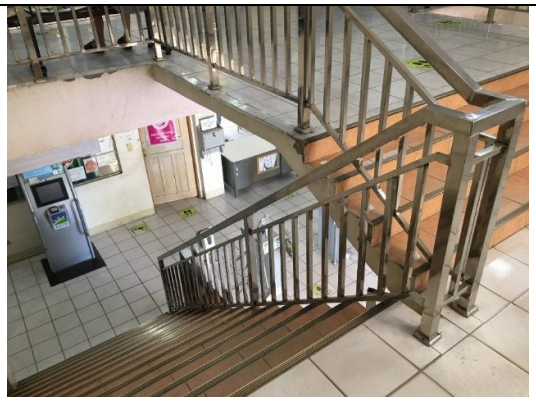
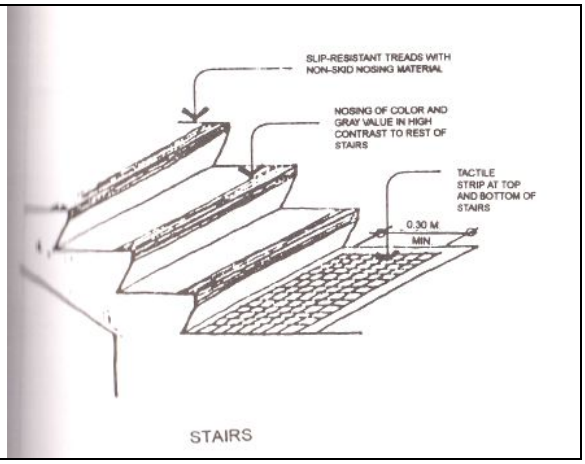
	

Table 8. Staircase in the Municipal Hall Building

As seen in Table 8, the stairs at most are not fully compliant with BP 344. The stairs have slip resistant treads with non-skid material but the staircase does not have a tactile strip or tiles in the top and bottom of the stairs.

Factors affecting the mobility in the Sangguniang Bayan Building

The Sangguniang Bayan Building was constructed in the early 2000s where it houses the legislative branch of the municipality. In the survey, it was seen that base from the respondents, the SB building is not fully compliant with the minimum requirements of BP 344 in terms of its Entrance, Walkways, Ramps, Hallways/Corridors and Restrooms.

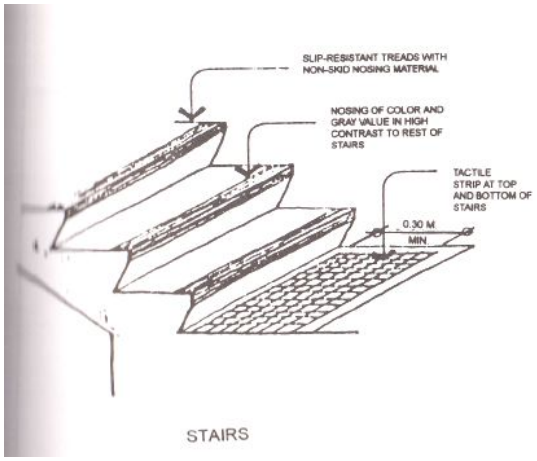
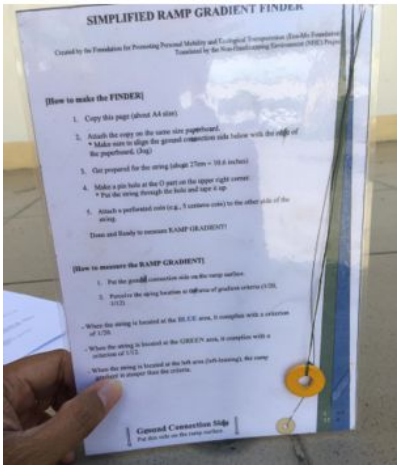
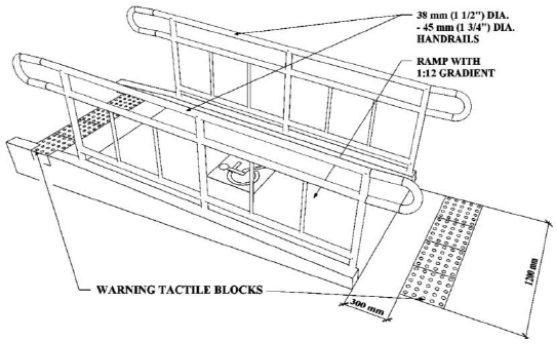
Stairs	**Minimum Requirements**
 	☐ Tread surfaces are made of slip-resistant material. ☐ Slanted nosings are used to projecting nosings. Open stringers are avoided. ☐ The leading edge of each step on both the runner and riser is marked with a paint or non-skid material that has a color and gray value which is in high contrast to the gray value of the rest of the stairs. ☐ A tactile strip 0.30 m. wide shall be installed before hazardous areas such as sudden changes in floor levels and at the top and bottom of stairs. 

Table 9. Staircase in the Entrance of Sangguniang Bayan Building

As seen in Table 9, the stairs in the entrance are not compliant with BP 344. The stairs do not have slip resistant treads with non-skid material and the tiles used are glazed which are not water resistant. It does not have a tactile strip or tiles in the top and bottom of the stairs to serve as warning tiles.

Ramps and Handrails	**Minimum Requirements**
 	For Ramps: ☐ Changes in level have ramp, except when served by a dropped curb, an elevator or other mechanical device. ☐ Ramps shall have a minimum clear width of 1.20 m. ☐ The maximum gradient is 1:12. ☒ The length of a ramp does not exceed 6:00 m. if the gradient is 1:12. If applicable, longer ramps whose gradient is 1:12 are provided with landings not less than 1.50 m. ☐ A level area not less than 1.80 m. is provided at the top and bottom of any ramp. ☐ Handrails are provided on both sides of the ramp at 0.70m. and 0.90 m. from the ramp level. ☐ Ramps are equipped with curbs on both sides with a minimum height of 0.10 m.  For Handrails: ☐ Handrails are installed at both sides of ramps and stairs and at the outer edges of dropped curbs. Handrails at dropped curbs are installed beyond the width of any crossing so as not to obstruct pedestrian flow. ☒ Handrails are installed at 0.90m and 0.70m above steps or ramps. Handrails for protection at great heights are installed at 1.0m to 1.06m. ☐ A 0.30 m long extension of the handrail are provided at the start and end of ramps and stairs. ☐ Handrails that require full grip have a dimension of 30mm to 50 mm. ☐ Handrails attached to walls have a clearance no less than 50mm from the wall. Handrails on ledges should have a clearance not less than 40mm.

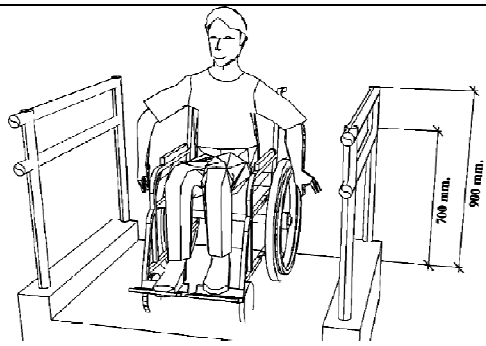
	

Table10. Ramps and Handrails in the Sangguniang Bayan Building

Table 10 shows the Ramps and Handrails in the SB Building which are not compliant with the minimum requirements of BP 344. The Handrail provided is only in one side compared with the requirement of two. The ramps' clear width is insufficient (less than 1.20m) and the gradient is steep. The materials also used in the ramp is not water resistant and no tactile blocks in the top and bottom area to serve as warning signs.

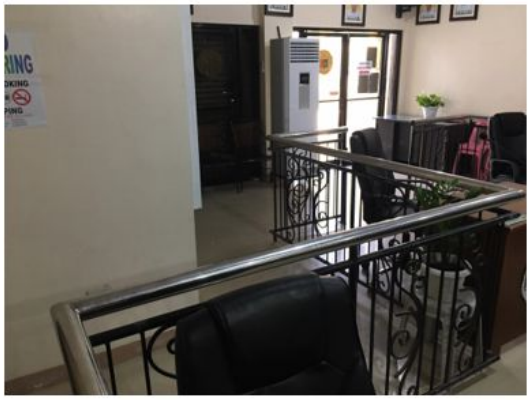
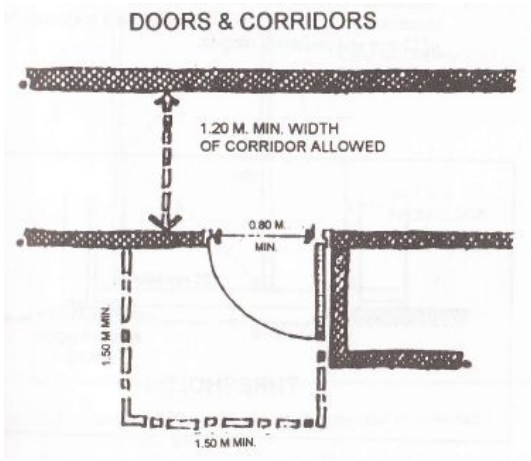
Corridors	**Minimum Requirements**
 	☐ Have a minimum clear width of 1.20 m. Waiting areas and other facilities or spaces do not obstruct the minimum clearance requirement. ☐ Recesses or turnabout spaces are provided for wheelchairs to turn around or to enable another wheelchair to pass. These spaces have a minimum area of 1.50m x 1.50m and are spaced at a maximum of 12.00 m. ☐ Turnabout spaces are provided at or within 3.50 m. of every dead end. ☐ Maintained level and provided with a slip-resistant surface. 

Table 11. Corridors in the Sangguniang Bayan Building

Table 11 shows the Corridors in the SB Building which are not compliant with the minimum requirements of BP 344. It is less than the minimum width of 1.20m and there are obstructions in the corridors that impedes the mobility of the PWDs.

Restroom	**Minimum Requirements**
	☒ Permit easy passage of a wheelchair and allow the occupant to enter a stall, close the door and transfer to the water closet from either a frontal or lateral position. ☐ Accessible water closet stalls have a minimum area of 1.70 x 1.80mts. One movable grab bar and one fixed to the adjacent wall are installed at the accessible water closet stall for lateral mounting. Fixed grab bars on both sides of the wall are installed for stalls for frontal mounting. ☐ A turning space of 2.25 sq.m. with a minimum dimension of 1.50 m. for wheelchair is provided for water closet stalls for lateral mounting. ☐ All accessible public toilets shall have accessories such as mirrors, paper dispensers, towel racks and fittings such as faucets mounted at heights reachable by a person in a wheelchair. ☐ At least one (1) accessible water closets on each floor level or on that part of a floor level accessible to the disabled where the total number of water closets per set on that level is 20 OR at least two (2) where the number of water closets exceeds 20. ☐ The signage for men's washroom door is an equilateral triangle with a vertex pointing upward, and those for women shall be a circle. The edges of the triangle is 0.30 m long as should be the diameter of the circle. These signages should at least be 7.5 mm thick and the color and gray value of the doors. The words "men" and "women" or the appropriate stick figures appear on the washroom doors for the convenience of the fully sighted. ☐ Maximum height of water closets is 0.45 m. Flush controls have a maximum height of 1.20 mts. ☐ Maximum height of lavatories is 0.80 m. with a knee recess of 0.60 - 0.70 m. vertical clearance and 0.50 m. depth. ☐ Urinals have an elongated lip or through type. The maximum height of the lip is 0.48 m.

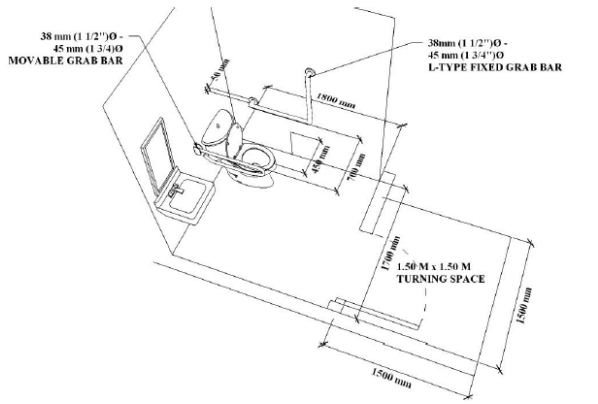
	

Table12. Common Restroom in the Sangguniang Bayan Building

Table 12 shows the Common Restroom in the SB Building which is not compliant with the minimum requirements of BP 344. There are no railings and grab bar in the toilet and wash area. There is also no turn around spaces for PWDs in wheelchair in the restroom.

5.2. CONCLUSIONS

Based on the results of the survey and analysis of each structure and facilities of the municipality, it can be concluded that out of the three facilities, the Rural Health Unit Facility is considered as a "PWD Friendly Facility" and can provide barrier-free access to the PWDs without any obstruction especially to its services. The Municipal Hall Building is also a "PWD Friendly Structure" and can provide barrier-free access to the building but with limitation in access when going to the 2nd floor due to no availability of lift or an elevator. The Sangguniang Bayan Building on the other hand does not fully adhere in the implementation of BP 344 to provide barrier-free access to the PWDs. A necessary improvement and renovation in the building is needed for it to be compliant.

5.3. RECOMMENDATIONS

1. The Rural Health Unit is already a "PWD Friendly Facility" and only need to sustain and maintain its facility to provide barrier-free access to the PWDs.
2. Provision of a lift or an elevator is needed for the Municipal Hall Building so as to provide barrier-free access to PWDs on the 2nd Floor Area. It is recommended to include the provision of lift or an elevator in the Comprehensive Development Plan (CDP), Local Development Investment Plan (LDIP), Annual Investment Plan (AIP), and Plans, Programs and Actions (PPAs) of the Municipality thru its 20% Development Fund.
3. Renovation of the Ramps, Walkways, Stairs, Corridors, and Restroom are needed by the Sangguniang Bayan Building so as to provide barrier-free access to PWDs. It is recommended to include the renovation of the SB Building in the Comprehensive Development Plan (CDP), Local Development Investment Plan (LDIP), Annual Investment Plan (AIP), and Plans, Programs and Actions (PPAs) of the Municipality thru its 20% Development Fund.

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