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Analysis of the Legal System of Public Building Accessibility in Taiwan

Chih-Yuan Chang^{a,b}

^a Architecture and Building Research Institute, Ministry of the Interior, Taiwan, ^b Executive Masters of Public Administration, Department of Political Science, National Taiwan University, Taiwan

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SUMMARY

The investigator explores the unique situation of the expansion of the system from public buildings to all buildings to be equipped with accessible facilities, the making of building accessibility laws and acts, the reasons for building accessibility law amendment, the evolution of building accessibility laws and acts, complementary measures related to the review, inspection, and random case inspection management of construction permits, and problems encountered at present and the corresponding strategies in 1988–2018. The conclusions are as follows: 1. Pressure from domestic organizations protecting the rights of people with disabilities and international trends in accessibility laws and acts are the major forces prompting the amendment of building accessibility laws and acts in Taiwan. 2. The Ministry of the Interior in Taiwan developed building accessibility laws and acts required by the building legal system of Taiwan based on regulations from the chapter on “Accessible Buildings” in the “Building Design and Construction” section of *Building Technical Regulations*, Complementary measures from construction permit inspection to management and random case inspection have been made as well. 3. To cope with future social evolution, issues including special spatial and functional usage, penalties, disputes, and building design and external environment design interface integration require further improvement.

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1. Introduction

Since Taiwan became an aged society in 2018, the number of seniors over 65 years old has increased steadily.¹

Among countries worldwide, for people with disabilities, the promotion of building accessibility improvement usually begins with new government buildings and public buildings and facilities, and then moves to private buildings and existing public buildings. Accessible housing is usually promoted by encouragement or incentive measures, such as the Americans with Disabilities Act Accessibility Guidelines (ADAAG), before enforcement.

Current building accessibility construction laws and regulations in Taiwan include mainly Chapter 10 “Accessible Buildings” in the “Building Design and Construction” section of *Building Technical Regulations*, as well as “Design Specifications of Accessible and Usable Buildings and Facilities” and “The Operation Directions of Submitting Alternative Improvement Plans for Access-free Facilities in Existing Public Buildings” (Figure 1). “The Inspection Guidelines for Public Building Accessible Facilities, Types of Accessible Facility Construction Drawings for Public Building Construction Permits”, “List of Items to be Labeled in the Specifications”, “Guidelines for Income, Expenditure and Use Management of Building Accessible Facilities and Facility Improvement Funds” and “Public Building Accessible Facility Inspection Operation Guidelines” are comple-

mentary measures regulating construction permit review, inspection, and random case inspection.

Existing studies of Taiwan’s building accessibility legal system can be divided into studies comparing building accessibility systems and studies examining accessibility promotion strategies. Comparing building accessibility systems, Liao (2005) shows Taiwan’s building accessibility regulations are different from the UK, USA, and Japan, because of enforcement conditions, the condition of the country, and the method of implementation.² Yang, Lu and Chang (2014) explored shortcomings related to accessible environment software and hardware and provided suggestions on their planning, design, and maintenance.

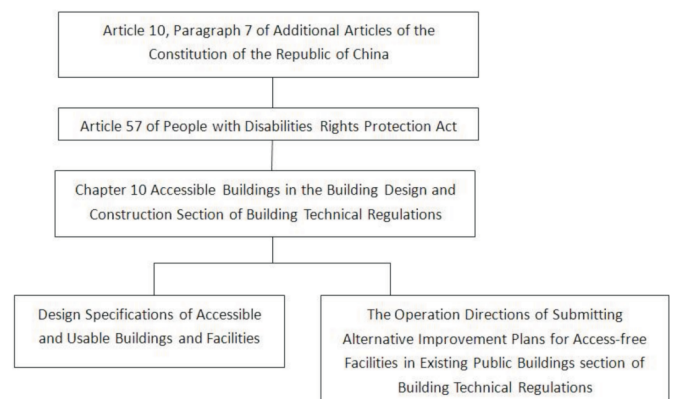


Figure 1. Main framework of Building Accessibility Laws and Acts authorization. Source: summarized was by the investigator.

* Corresponding author. 13F, No.200, Sec. 3, Beisin Rd., Xindian District, New Taipei City 23143, Taiwan (R.O.C.)
E-mail address: Changcy2005@seed.net.tw (C.-Y. Chang)

nance.³ Tzeng (2014) pointed out universal design remains foreign to the housing industry as well as the construction industry.⁴

It can be seen from the studies above that no study has yet analyzed the legal system regarding public building accessibility in Taiwan, especially in terms of the chapter on accessible buildings (Chapter 10) and complementary regulations in *Building Technical Regulations*. The main aim of this study is to analysis of the legal system of public building accessibility in Taiwan.

2. Method

The study design includes these sections: analysis of reasons and evolution for making Building Accessibility Laws and Act and points out several problems arising from the current system and proposes their solutions. The materials are the current building accessibility construction laws and regulations in Taiwan.

The focus of this study is on the evolution of the legal system for building accessibility in Taiwan in 1988–2018. The investigator explores the unique situation of the expansion of the system from public buildings to all buildings to be equipped with accessible facilities, the making of building accessibility laws and acts, the reasons for building accessibility law amendment, the evolution of building accessibility laws and acts, complementary measures related to the review, inspection, and random case inspection management of construction permits, and problems encountered at present and the corresponding strategies.

The study emphasizes the analysis of public buildings; the exclusive space of buildings (such as inside a dwelling unit), outdoor areas that are not part of the building base (such as parks and green space) and road accessibility were not explored in this study.

3. Results

3.1. Analysis of reasons for making Building Accessibility Laws and Acts

The term “people with disabilities” defined by WHO classifies disabled people into six types. This concept was soon adopted by other European countries as well as by the US. In the United Nations General Assembly, year 1981 was proclaimed the International Year of Disabled Persons. The Assembly also set up the mission of “full participation and equality” for building a living environment allowing people with disabilities to fully participate in all social activities.⁵

As countries worldwide are paying more and more attention to the rights of people with disabilities, domestic organizations for disabled people, including the League of Welfare Organizations for the Disabled, National Federation of People with Spinal Cord Injury, and Taiwan Disability-Free Association, have also started to push the Legislative Yuan and other administrative agencies to make related laws and regulations. The *Disability Welfare Act* was drawn up in 1980, and the concept of accessible environments started to flourish. The Act was amended several times, and in 1990, the amendment included the stipulation that public buildings, facilities, activity venues, and transportation should all take accessibility design into consideration and those failing to meet the requirement shall not receive use permits. In 1997, the regulation was added into the Act requiring property owners or the head of the competent authority of existing public buildings that face difficulties making improvement on accessible facilities and equipment to submit an alternative plan to the competent authority of the corresponding level to be reviewed and a time limit set for improvement. Penalties for those failing to make improvement within the time limit were added as

well, and the penalties include suspending the use of the building and fining the property owner or the responsible person of the management agency.⁶

On April 25, 2000, an additional article (Article 10, Paragraph 7) was added to the Constitution, and it states that “the State shall guarantee insurance, medical care, obstacle-free environments, education and training, vocational guidance, and support and assistance in everyday life for physically and mentally handicapped persons, and shall also assist them to attain independence and to develop.”⁷ This declares that constructing an accessible environment is part of the basic national policy of Taiwan.

The Ministry of the Interior presented the White Paper on Protecting the Rights of the Disabled in 2009 and set up the ultimate goal of providing people with disabilities with all services and measures. It is important to note that building accessibility is part of No. 6, building a fully accessible environment.

In response to the above information regarding public building accessible facility improvement in Taiwan, Chapter 10 Accessible Buildings of *Building Technical Regulations* was officially revised and issued on January 1, 2013.⁸ This stipulation demanding new buildings and added building elements to be fully accessible signifies that the laws and acts on people with disabilities have entered a new chapter.

In summary, the initial improvement of the barrier-free environment was slow and the group for the Taiwanese mentally handicapped combined with the power of the legislators, through the pressure on the Construction Department of the Ministry of the Interior; members civil society responsible for the revised Accessibility Act, went to each county and city, took the opportunity to conduct an investigation and has actually explored the accessibility laws and regulations applicable to the social environment of Taiwan. Through reference to the latest international barrier-free design provisions, the government and civil society have been plagued by delays and has been discussed for decades. The law has gradually improved.

3.2. Analysis of evolution of Building Accessibility Laws and Acts

To cope with the aged society, it stipulates that the public space of new buildings and extensions needs to be equipped with accessible facilities to meet the basic needs of different types of users of the buildings, including the elderly, pregnant women and children, rather than people with disabilities only. The chapter is the most important legal basis for building construction and accessibility facility improvement for protecting the rights of people with disabilities. The original title of the chapter was “Public Building Facilities for Handicapped People”, and it was first renamed as “Public Building Facilities for People with Disabilities and then to Accessible Buildings” (Table 1).

The difference between the above three stages are: The first stage is to prepare the relevant provisions before the architectural design and construction of the building technical rules. However, the details of the barrier-free facilities and equipment are not clear, and there was controversy over setting of the guide routes for the blind. The second phase will include improved requirements for the accessibility of facilities at public buildings, so that the rights of the disabled can be protected. The third stage is to fully integrate barrier-free facilities and equipment settings into the new and additional buildings, affecting the architectural design in a far-reaching way.

The key points are analyzed and presented below. Idea of comprehensive accessibility: it is stipulated that both new buildings and added building elements have to be equipped with accessible

Table 1
Chapter 10 Accessible Buildings in the Building Design and Construction section of *Building Technical Regulations*.

	Regulation making and amending time	Name change	Articles made and amended	Key points
Stage 1	December 12, 1988	Public building facilities for handicapped people	A total of 11 articles, from Articles 167 to 177, were made.	Terminology and key accessible facilities required were regulated.
Stage 2	November 27, 1996	Public building facilities for people with disabilities	Article 177, paragraph 1 was added.	Guidelines for the improvement of existing buildings can be set up by the competent authority.
	September 25, 2001	No change	Articles 168, 169, 172, 174, 175 and 177 were amended.	1. The focus of the amendment is on the content of the guiding facilities.
	It was amended on January 21, 2005 and implemented on July 1, 2005.	No change	Article 170 was amended.	2. Adding the applicable scope for public buildings.
	It was amended on March 13, 2008 and implemented on July 1, 2008.	No change	Articles 168, 169, 171–177, and 177.1 were removed, while articles 167 and 170 were amended.	The scope of buildings to be equipped with accessible facilities was broadened.
Stage 3	It was amended on September 8, 2009 and implemented on January 1, 2010.	No change	Article 170 was amended.	Applicable scope for public buildings was added.
	It was amended on October 1, 2012 and implemented on January 1, 2013.	Accessible Buildings	Articles 167–170 amended, while articles 167.1 to 167.7 added.	1. The articles were substantially amended. It is stipulated that new buildings and added building elements have to be equipped with accessible facilities. 2. For Article 170, it was changed to “the applicable scope of existing public buildings”.
	It was amended on March 15, 2018 and implemented on March 15, 2018.		Article 167,167-1, 167-3, 167-4, 167-5, 167-6, 167-7, 170 was amended.	Applicable scope for public buildings was amended. The articles were clear described.

Source: summarized was by the investigator.

facilities. To help people with disabilities enter and exit a building, new buildings and added building elements should be equipped with accessible facilities. This part should be differentiated from the retroactive improvement of existing public buildings. Authorization of detailed design specification of accessible facilities and equipment of new buildings and added building elements are listed in the “Design Specifications of Accessible and Usable Buildings and Facilities”. Information on the standards and quantity of accessible facilities to be installed in a building is linked to other stipulations in other chapters of *Building Technical Regulations* to make the content of accessible facilities regular and comprehensive. For example, it is stipulated that an accessible passage to the entrance / exit of a dwelling unit and of the washroom / lavatory / bathroom, lift, parking space, and stairs that are equipped with accessible facilities should be available. How the passage should be designed is stipulated in the “Design Specifications of Accessible and Usable Buildings and Facilities”.

“Design Specifications of Accessible and Usable Buildings and Facilities” provide general rules and basic regulations on accessible facilities of buildings.⁹ The specifications can be divided into the principles, nine types of accessible facilities and equipment, and the appendices. Each type of accessible facility is further divided into items, and each item has detailed specifications. The text description is also illustrated with figures. Regulations on the setup and conditions of use of accessible facilities are flexible. Appendices are also available for designers to refer to. Take Appendix 3 Facility design Guidelines as an example: it provides guidance on the guiding equipment for people with visual impairments, which resolves the problem of the current lack of relevant regulations present.

The main objective of “The Operation Directions of Submitting Alternative Improvement Plans for Access-free Facilities in Existing Public Buildings” here is to resolve difficulties for existing public buildings to make improvements by allowing alternative facilities to be adopted after they are reviewed and approved by the accessible advisory team of the municipal government or the city / county

government.¹¹ The key features are as follows:

1. The order of priority of accessible facility improvement on existing public buildings with construction permits obtained before July 1, 2008 but failing to meet the accessibility regulations shall be determined by the local building competent authority. Moreover, for special conditions, such as military control, heritage conservation, natural environmental factors and building structure and equipment limitations, that make setting up accessible facilities or equipment at the public building difficult, alternative improvement plans can be adopted.
2. The local building competent authority shall set up the type, the period, and the area for implementing the plan and announce the time limit according to the actual needs of the district.
3. The advisory and review team for public building accessible facility improvement is responsible for determining the types, periods, and areas for implementing the improvement plan as well as the related time limit.
4. Those added ramps or lifts for improvement are restricted by neither the floor area limit for each floor of the building nor the distance limit between the building and its neighboring buildings. They are also exempt from the restrictions on the front yard, back yard and distance between the entrances of the building. They are also not limited by the restriction on the building height.
5. Setting up types of accessible facilities for public buildings and types of improvement. To address the importance of improving barrier-free facilities and responding to actual needs through “needed improvement” and “improvement according to actual needs”, such as improvement of ramps and handrails and entrances for convenience store entrances, and mandatory requirements for gas stations set up accessible toilets.
6. Public building alternative improvements can be divided into specifications-based alternative improvements and performance-based alternative improvements. Specification-based alternative improvements refer to relaxing part of the specifications on building accessible facility design regulations by accepting alternative

plans under the premise of availability, convenience, and safety. Performance-based alternative improvements on the other hand refers to the review team reviewing and approving the function of an alternative improvement measure as a replacement under the premise of protecting the rights of people with disabilities.

In view of frequent building accessible facility design errors and poor construction quality, it is important to enhance the review of building accessible facility construction drawings for the construction permit to ensure the required public building accessible facility drawings are correctly prepared according to the "Design Specifications of Accessible and Usable Buildings and Facilities" to avoid ambiguous labeling and design errors. The list is mainly divided into types of drawings to be labeled and items to be labeled. Major types of drawings that need to be provided include configuration diagrams, floor plans and structure detailed drawings. Structure detailed drawings are further categorized.¹¹

"Guidelines for Income, Expenditure and Use Management of Building Accessible Facilities and Facility Improvement Fund" clearly stipulates methods for managing and using the building accessible facility and equipment improvement fund as well as how the fund should be used for improving and promoting accessible facilities and equipment.¹² The objective of "Public Building Accessible Facility Inspection Operation Guidelines" is to stipulate the applicable scope of facility inspection operation for the building competent authority under the municipal government or the city / county government to perform public building accessible facility inspection.¹³ For implementation, the Construction and Planning Agency of the Ministry of the Interior sets up the public building accessible living environment supervising plan annually where disability welfare organizations and relevant departments, scholars and experts are invited to form a supervising team to supervise public building accessible living environment related businesses. Non-government groups will also be commissioned to offer training seminars for personnel working on public building accessible facility and equipment setup inspection.

4. Discussion

Due to the different conditions in various countries, the barrier-free environment of buildings is not the same, but past studies have pointed out that the United States and Japan established separate accessibility laws for housing and public buildings, which is a big difference.¹⁴ Another feature is Japan's *Law to Promote the Smooth Movement of Elderly People and People with Disabilities*, integrating the barrier-free interfaces of buildings and sidewalks, and the United States will enact detailed regulations on the barrier-free environment at the event venues.¹⁵ This is very different in Taiwan because as Taiwan began to develop barrier-free laws, it did not distinguish between housing and public buildings.

In addition, Article 9 of the *2014 Convention on the Rights of Persons with Disabilities* requires that persons with disabilities have independent living and full participation in all aspects of life,¹⁶ and that persons with disabilities should be able to enter and exit the substantive environment on an equal footing with others, has made substantial progress in improving the barrier-free environment in Taiwan, but it still cannot fully comply with the spirit of the convention. For example, Taiwan has the unique feature of improving the barrier-free environment of the building, but because different government departments are responsible, there is still a big problem with barrier-free improvement between arcades and roads.

The study points out several problems arising from the current system and proposes their solutions:

(1) Problems related to buildings for special use: "The Design Spe-

cifications of Accessible and Usable Buildings and Facilities" is focused on general public buildings;¹³ it is not intended for special spatial and functional cases.

- (2) Problems related to new existing public buildings: Because of technological and social evolution, there are continuous new special usages added to building usage types. Nonetheless, for new usage types added to the applicable scope of existing public buildings, it is important to consider the government's actual implementation capacity and to conduct relevant research. Meanwhile, owing to the difficulty in improving the accessible facilities of existing buildings, the local government currently has gradually provided alternative improvement plan processes, case compilations, reference examples and review rules related to existing public buildings of the industry. For instance, the current Taipei City Construction Management Office has already set up a "Building Accessibility Dedicated Zone", which sets out the "Taipei City's Compilation of Improvement Plan for Facilities Replacement", "Compilation of Alternative Improvement Projects for Existing Public Buildings in Taipei", and etc.. In the future, other counties and cities in Taiwan can learn from these projects.¹⁷
- (3) Dispute related problems: Costs and expenses may arise when installing some types of public building accessible facilities in apartment buildings, and therefore, some property owners of the apartment building or the apartment management committee express their objection, resulting in disputes among residents and between them and the management committee. While improving the overall environmental accessibility, the solution should be accepted by the society as well.
- (4) Problems related to design interface integration: For arcade leveling and setting up the accessible passage between roads, a frequent problem encountered is interface integration among arcades, road slope, and common underground pipelines. In this case, county and city governments should coordinate the relevant competent authorities to overcome difficulties related to environmental accessibility interface integration.

5. Conclusions

The focus of this study is on the evolution of the legal system for building accessibility in Taiwan. Pressure from domestic organizations protecting the rights of people with disabilities and international trends in accessibility laws and acts are the major forces prompting the amendment of building accessibility laws and acts in Taiwan.

To cope with the aged society, it stipulates that the public space of new buildings and extensions needs to be equipped with accessible facilities to meet the basic needs of different types of users of the buildings, including the elderly, pregnant women and children, rather than people with disabilities only. According to the *People with Disabilities Rights Protection Act*, the Ministry of the Interior developed building accessibility laws and acts required by the building legal system of Taiwan based on regulations from the chapter on "Accessible Buildings" in the "Building Design and Construction" section of *Building Technical Regulations*. The specifications provide general rules and basic regulations on accessible facilities of buildings. The main objective of "The Operation Directions of Submitting Alternative Improvement Plans for Access-free Facilities in Existing Public Buildings" is to resolve difficulties for existing public buildings to make improvements by allowing alternative facilities to be adopted after they are reviewed and approved by the accessible advisory team of the municipal government or the city / county government. Complementary measures from construction

permit inspection to management and random case inspection have been made as well.

To cope with future social evolution, issues including special spatial and functional usage, penalties, and building design and external environment design interface integration require further improvement.

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Conflicts of interest

There is no potential financial and non-financial conflicts of interest.

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