

## **Accessibility Analysis of Public Locations Near Akademia WSB**

*Accessibility Evaluation of Urban Infrastructure for People with Disabilities.*



**Author: Gisselle Juliana Botina Márquez**  
**Institution: Akademia WSB**  
**Project: Accessibility Field Evaluation**  
**Location: Dąbrowa Górnicza, Poland**  
**Date: 17/03/2026**

## 1. Introduction

Urban accessibility is an essential component of inclusive cities. Public infrastructure and services should allow people with disabilities to move independently and access transportation, commercial services, cultural institutions and recreational areas without barriers.

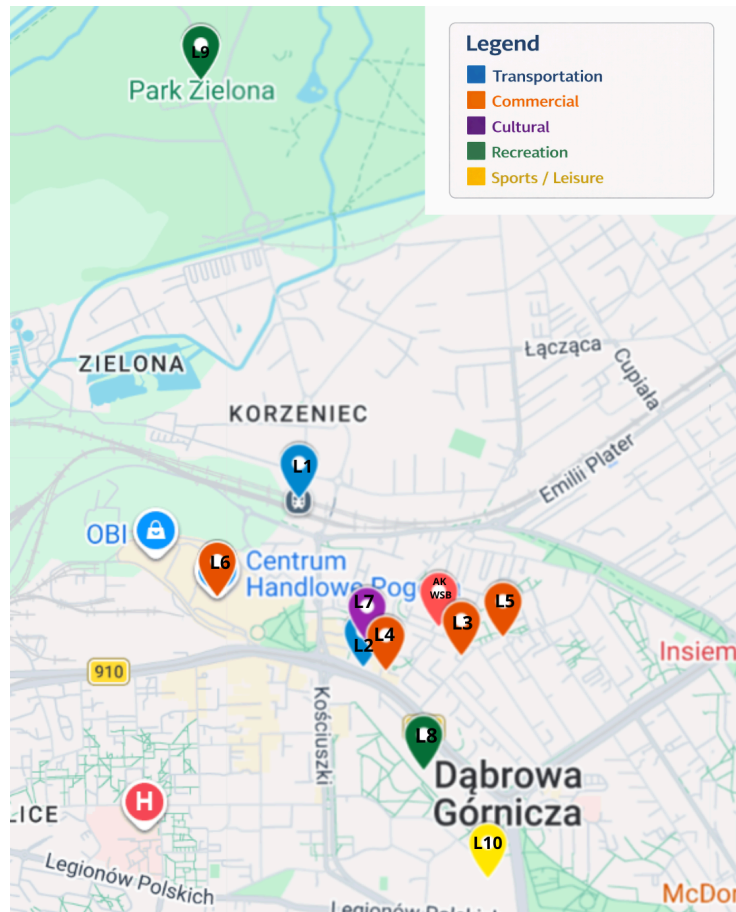
The aim of this project is to evaluate the accessibility conditions of selected public locations located near Akademia WSB in Dąbrowa Górnicza, Poland. The analysis focuses on identifying the presence of accessibility infrastructure such as wheelchair ramps, elevators, tactile paving, accessible information systems and adapted public facilities.

Ten locations representing different types of urban infrastructure were selected for this study, including transportation nodes, commercial establishments, cultural institutions and public parks. Each location was evaluated through field visits, direct observation and photographic documentation.

## 2. Study Area

The selected locations are situated within the urban area of Dąbrowa Górnicza, close to Akademia WSB. Most of the evaluated locations can be reached within a short distance from the university. The farthest location included in the study can be reached in approximately **17 minutes by bus or 30 minutes on foot**, which allowed the evaluation to focus on places that are realistically accessible for students and residents.

Location ID	Location Name	Category
L1	PKP Railway Station (Dąbrowa Górnicza)	Transportation
L2	Main Bus Stop (PKZ)	Transportation
L3	Żabka Grzegorza Augustynika 7	Commercial
L4	Żabka Górników Redenu 2	Commercial
L5	Piekarnia Cukiernia	Commercial
L6	Pogoria Shopping Center	Commercial
L7	PKZ – Palace of Culture of the Zagłębie	Cultural
L8	Park Hallera	Recreation
L9	Park Zielona	Recreation
L10	Nemo Aqua Park	Sports / Recreation



### Additional Locations Observed

During the field visits, additional locations were observed in the surrounding area. These locations were not included in the main dataset but may provide additional context regarding accessibility conditions in the area.

#### These include:

- Sports centers located near Park Hallera
- Additional local stores and pharmacies
- Other convenience stores (Żabka) in the area
- Local service establishments

### 3. Methodology

This section describes the methods used to evaluate the accessibility conditions of selected public locations near Akademia WSB in Dąbrowa Górnicza.

The evaluation was conducted through field visits, direct observation, and photographic documentation. During each visit, accessibility features and potential barriers were recorded using a structured accessibility checklist.

The collected data was organized in an Excel dataset to allow comparison between different types of urban infrastructure.

## Data Collection

During each visit, accessibility conditions were observed and documented using a structured checklist. Photographs were taken to record accessibility infrastructure and potential barriers.

### Data Collection Method

Method	Description
Field Visits	Direct observation of accessibility conditions
Photographic Documentation	Photos taken to document accessibility features and barriers
Structured Checklist	Accessibility evaluation using predefined criteria
Dataset Compilation	Data organized and processed in Excel

### Accessibility Evaluation Criteria

Each location was evaluated using a checklist composed of accessibility indicators grouped into several categories.

These indicators were selected to assess the most relevant accessibility conditions in public urban spaces.

### Accessibility Evaluation Categories

Category	Example Criteria
Physical Accessibility	Step-free entrance, ramps, elevators
Mobility & Surface	Pavement condition, maneuvering space
Service Accessibility	Accessible counters or service points
Visual Accessibility	Braille signage, tactile paving
Hearing Accessibility	Audio announcements or hearing assistance systems

## Accessibility Evaluation Values

Value	Interpretation
Yes	Accessibility feature fully available
Partial	Accessibility feature present but limited
No	Accessibility feature not available
N/A	Criterion not applicable to the location

Criteria marked as Not Applicable (N/A) were excluded from the final score calculation.

## Accessibility Score Calculation

To compare accessibility conditions between locations, an accessibility score was calculated using a weighted numeric system.

Each response value was converted into a numeric value:

## Score Conversion

Response	Score
Yes	1
Partial	0.5
No	0

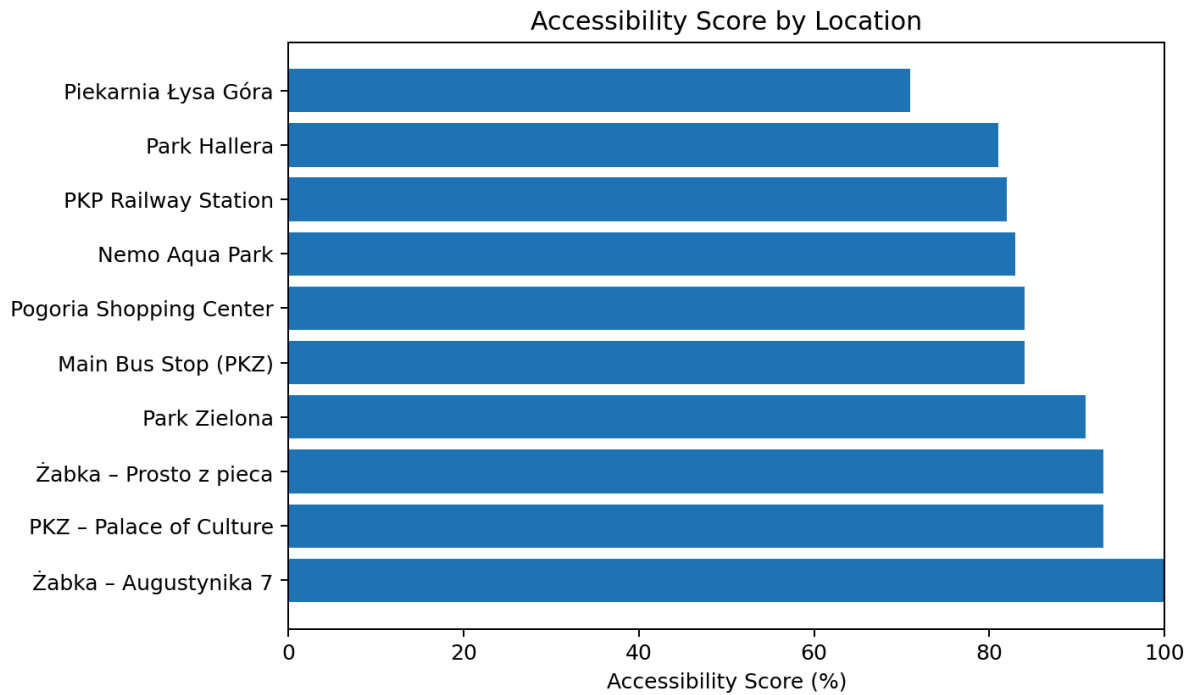
The accessibility score for each location was calculated using the following formula:

$$\text{Accessibility Score} = (\text{Sum of obtained values} / \text{Maximum applicable score}) \times 100$$

This method allows the calculation of an accessibility percentage, facilitating comparison between locations with different characteristics.

## 4. Results

This section presents the results obtained from the accessibility assessment carried out in the selected public locations near Akademia WSB in Dąbrowa Górnicza. The results are presented through a comparative overview of all evaluated locations and individual visual assessment sheets for representative case studies.



#### 4.1 Comparative Accessibility Overview

##### Accessibility Score by Location

Rank	Location	Accessibility Score	Level
1	Żabka – Augustynika 7	100%	High
2	PKZ – Palace of Culture	93%	High
3	Żabka – Prosto z pieca	93%	High
4	Park Zielona	91%	High
5	Main Bus Stop (PKZ)	84%	High
6	Pogoria Shopping Center	84%	High
7	Nemo Aqua Park	83%	High
8	PKP Railway Station	82%	High
9	Park Hallera	81%	High
10	Piekarnia Łysa Góra	71%	Moderate

The comparative analysis shows that most evaluated locations achieved relatively high accessibility scores. Retail locations such as Żabka – Augustynika 7 and large public facilities such as PKZ – Palace of Culture achieved the highest accessibility scores. Park Zielona also demonstrated strong accessibility conditions among public recreational areas.

## 4.2 Individual Accessibility Assessments

### 4.2.1 PKP Railway Station



#### Accessibility Summary

Indicator	Result
Location	PKP Railway Station
Type	Transport infrastructure
Accessibility Score	82 %
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Elevator access	Yes
Physical Accessibility	Accessible toilet	Partial
Mobility & Surface	Circulation space	Partial
Mobility & Surface	Accessible parking	Yes
Visual Accessibility	Braille signage	Partial
Visual Accessibility	Tactile guidance	Yes
Hearing Accessibility	Audio announcements	Yes
Hearing Accessibility	Hearing loop	Yes

#### Strengths

- Elevators connecting platforms
- Audio announcements for passengers

#### Weaknesses

- Limited tactile guidance for visually impaired users
- Lack of signage at all exits



#### 4.2.2 Main Bus Stop (PKZ)



#### Accessibility Summary

Indicator	Result
Location	Main Bus Stop (PKZ)
Type	Transport infrastructure
Accessibility Score	84 %
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free boarding area	Yes
Mobility & Surface	Pedestrian access	Yes
Visual Accessibility	Information signage	Yes
Visual Accessibility	Tactile guidance	Partial

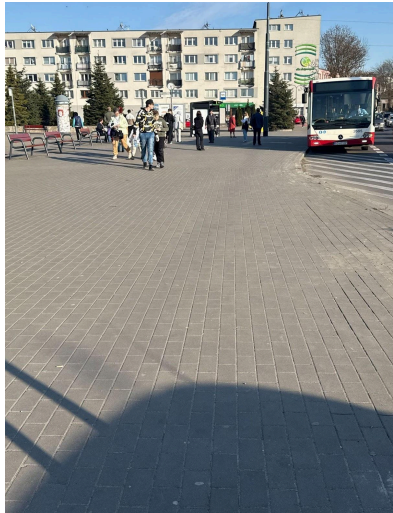
#### Strengths

- Accessible bus boarding area
- Clear passenger information systems
- Smooth pedestrian circulation

#### Weaknesses

- Limited tactile pavement guidance

**Photographic Evidence**



### 4.2.3 Pogoria Shopping Center



#### Accessibility Summary

Indicator	Result
Location	Pogoria Shopping Center
Type	Commercial building
Accessibility Score	84 %
Accessibility Level	High

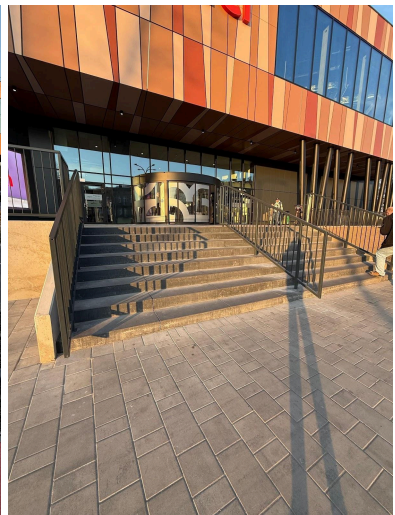
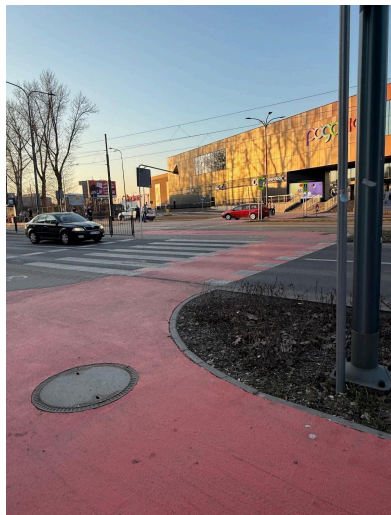
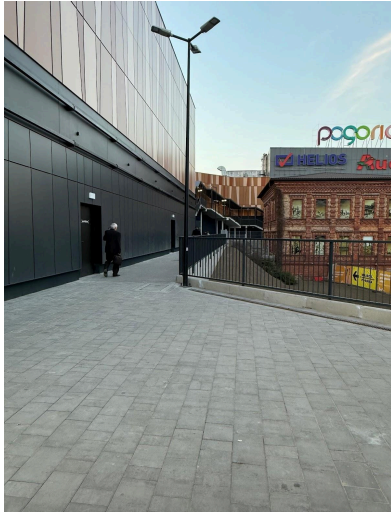
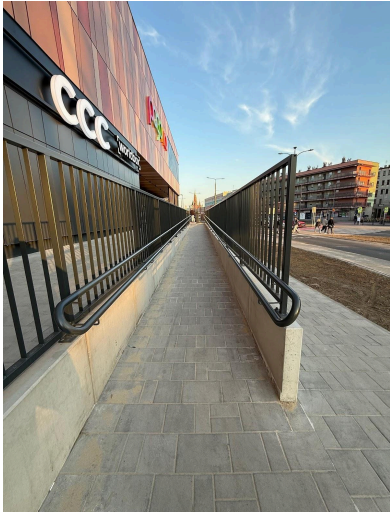
#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free entrance	Yes
Physical Accessibility	Accessible toilets	Yes
Mobility & Surface	Interior circulation space	Yes
Mobility & Surface	Floor condition	Yes
Visual Accessibility	Tactile guidance	Partial
Visual Accessibility	Accessibility signage	Yes

#### Strengths

- Step-free entrance
- Elevators connecting floors
- Wide internal corridors

# Photographic Evidence



#### 4.2.4 Nemo Aqua Park



#### Accessibility Summary

Indicator	Result
Location	Nemo Aqua Park
Type	Recreational facility
Accessibility Score	83%
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Accessible toilets	Yes
Mobility & Surface	Circulation space	Yes
Visual Accessibility	Tactile guidance	Partial
Visual Accessibility	Accessibility signage	Yes
Visual Accessibility	The orientation is intuitive and clear.	Yes

#### Strengths

- Help is clearly offered or indicated
- Spacious circulation areas

#### Weaknesses

- Limited tactile guidance elements

# Photographic Evidence



#### 4.2.5 PKZ – Palace of Culture



#### Accessibility Summary

Indicator	Result
Location	PKZ – Palace of Culture
Type	Cultural institution
Accessibility Score	93 %
Accessibility Level	High

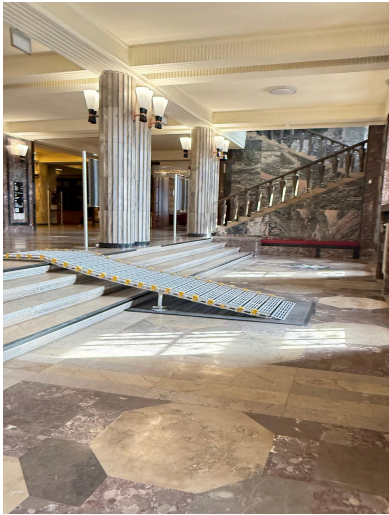
#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free entrance	Yes
Physical Accessibility	Ramp access	Yes
Physical Accessibility	Accessible toilet	Yes
Mobility & Surface	Circulation space	Yes
Visual Accessibility	Clear accessibility signage	Yes

#### Strengths

- Step-free entrance
- Spacious circulation areas

# Photographic Evidence



#### 4.2.6 Park Zielona



#### Accessibility Summary

Indicator	Result
Location	Park Zielona
Type	Public park
Accessibility Score	91%
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Mobility & Surface	Accessible pedestrian paths	Yes
Mobility & Surface	Surface condition	Yes
Mobility & Surface	Maneuvering space	Yes
Visual Accessibility	Accessibility signage	Partial

#### Strengths

- Accessible pedestrian paths
- Smooth surfaces on main routes
- Good circulation space

#### Weaknesses

- Some secondary paths partially accessible

**Photographic Evidence**



#### 4.2.7 Park Hallera



#### Accessibility Summary

Indicator	Result
Location	Park Hallera
Type	Public park
Accessibility Score	81%
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Mobility & Surface	Pedestrian paths	Yes
Mobility & Surface	Surface condition	Partial
Mobility & Surface	Circulation space	Yes
Visual Accessibility	Accessibility signage	Partial

#### Strengths

- Accessible main pedestrian paths
- Wide circulation areas

**Photographic Evidence**



#### 4.2.8 Żabka – Grzegorza Augustynika 7



#### Accessibility Summary

Indicator	Result
Location	Żabka – Grzegorza Augustynika 7
Type	Retail store
Accessibility Score	100%
Accessibility Level	High

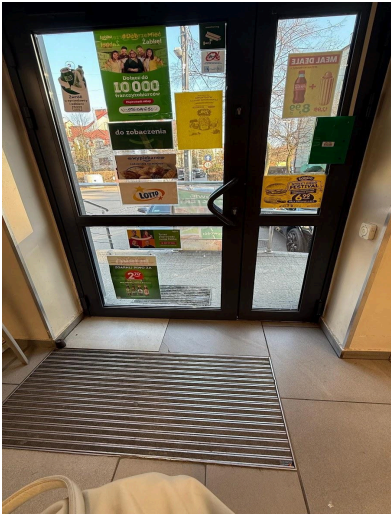
#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free entrance	Yes
Physical Accessibility	Door width	Yes
Service Accessibility	Accessible service counter	Yes
Mobility & Surface	Interior maneuvering space	Yes
Mobility & Surface	Floor stability	Yes

#### Strengths

- Step-free entrance
- Adequate door width
- Accessible service counter
- Stable floor surface

Photographic Evidence



#### 4.2.9 Żabka Górników



#### Accessibility Summary

Indicator	Result
Location	Żabka – Prosto z pieca
Type	Retail store
Accessibility Score	93%
Accessibility Level	High

#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free entrance	Yes
Mobility & Surface	Interior circulation space	Partial
Service Accessibility	Accessible service counter	Yes
Mobility & Surface	Floor stability	Yes
Visual Accessibility	Tactile guidance	Partial

#### Strengths

- Step-free entrance
- Accessible interior layout
- Stable floor surface

#### Weaknesses

- Limited accessibility infrastructure in internal corridors

#### 4.2.10 Piekarnia, Cukiernia Łysa Góra



#### Accessibility Summary

Indicator	Result
Location	Piekarnia, Cukiernia Łysa Góra
Type	Local retail business
Accessibility Score	71%
Accessibility Level	Moderate

#### Accessibility Assessment

Category	Key Criteria	Result
Physical Accessibility	Step-free entrance	Yes
Mobility & Surface	Interior maneuvering space	Partial
Service Accessibility	Counter accessibility	Yes
Mobility & Surface	Floor condition	Partial

#### Strengths

- Basic entrance accessibility

**Photographic Evidence**



## 5. Conclusion

This study evaluated the accessibility conditions of selected public locations near Akademia WSB in Dąbrowa Górnicza through field observations and a structured accessibility checklist.

The results indicate that **most evaluated locations demonstrate relatively good accessibility conditions**, particularly large public buildings and commercial facilities such as PKZ Palace of Culture, Pogoria Shopping Center and Nemo Aqua Park. These locations provide step-free entrances, elevators and wider circulation areas that facilitate access for users with reduced mobility.

Public parks also presented generally accessible environments due to wide pedestrian paths and open circulation spaces.

However, the analysis also identified **several accessibility limitations**, particularly in smaller retail businesses and some transport environments. These limitations mainly include restricted maneuvering space, limited tactile guidance systems and the absence of specialized accessibility infrastructure for users with sensory impairments.

Overall, the study highlights the importance of **continuing to improve accessibility conditions in urban environments** in order to promote inclusive and barrier-free public spaces for all users.