Universal Design Walkability Audit: PPAS AU

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Société Logique
design universel | universal design
Canada

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- Non-profit organization, pioneering accessibility since 1981
- Active mainly in the province of Québec, and sometimes in other parts of Canada
- Promotes Universal Design and supports its implementation in all design disciplines
- Provides training, support and advocacy
- Team of 10 professionals: Architects and Urban Planners
- Involved with community organizations: deep understanding of life with functional limitations
- Offers an array of consulting services for the creation of universally accessible spaces
- Produces guides, criteria, evaluation tools and studies
Universal Design Walkability Audit: PPAS AU

New observational tool, available since 2016. It allows to:

• **Evaluate** street characteristics that are favorable or unfavorable for walking

• **Collect** accurate data on the built environment for pedestrians with all abilities

• **Make** systematic and objective observations at street and intersection level

• **Document** the performance in universal accessibility of the public domain

• **Facilitate** and establish portraits and diagnoses, aiming at safe active transportation

• **Create** a reliable database, open to all urban professionals for evidence-based decision-making
The science behind PPAS AU:

Indicators and themes

5 categories of determinants in support of active transportation:

- Characteristics of roads, intersections, traffic-calming devices, pedestrian crossings, and all routes part of a journey
- Conditions and functionality of sidewalks
- Bikeways and physical access to public transit
- Land uses and building maintenance
- Urban safety through environmental devices and landscaping
PPAS AU diagnoses any part of a journey

More than 100 indicators:

<table>
<thead>
<tr>
<th>TRAVERSEE</th>
<th>CHOIX</th>
<th>OUI</th>
<th>NON</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type de revêtement de la traverse :</td>
<td>1.14</td>
<td>1.15</td>
<td>1.15.1</td>
<td>1.15.2</td>
</tr>
<tr>
<td>Asphalte, béton</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavé</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>État du revêtement :</td>
<td>1.15.3</td>
<td>1.15.4</td>
<td>1.16</td>
<td></td>
</tr>
<tr>
<td>Bon</td>
<td>●</td>
<td></td>
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<tr>
<td>Moyen</td>
<td>○</td>
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<tr>
<td>Faible</td>
<td>○</td>
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</tr>
</tbody>
</table>

Passage piéton

<table>
<thead>
<tr>
<th>Type de passage piéton :</th>
<th>1.17</th>
<th>1.18</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 lignes parallèles</td>
<td>1.18.1</td>
<td>1.18.2</td>
</tr>
<tr>
<td>Bandes blanches</td>
<td>●</td>
<td>1.18.2a</td>
</tr>
<tr>
<td>Bandes jaunes</td>
<td>○</td>
<td>1.18.3</td>
</tr>
<tr>
<td>Autres (spécifiez)</td>
<td>○</td>
<td>1.18.3a</td>
</tr>
</tbody>
</table>

Visibilité du marquage au sol :

<table>
<thead>
<tr>
<th>Marquage au sol visible</th>
<th>1.18.3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marquage au sol non visible</td>
<td>1.18.4</td>
</tr>
</tbody>
</table>

Lig. l. d'arrêt

<table>
<thead>
<tr>
<th>Caractéristiques de la ligne d'arrêt :</th>
<th>1.19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marquage au sol visible</td>
<td>●</td>
</tr>
<tr>
<td>À 1 m et plus du passage piéton</td>
<td>○</td>
</tr>
</tbody>
</table>

Durée de la phase protégée :

<table>
<thead>
<tr>
<th>Signal sonore</th>
<th>1.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Éclairage suffisant</td>
<td>○</td>
</tr>
</tbody>
</table>
PPAS AU offers comprehensive results

All information on the quality of the built environment is collected from a pedestrian’s point of view:

- **bon état** (good condition): 63%
- **moyen état** (average): 30%
- **mauvais état** (bad condition): 7%

37%
For the first time, a project like this was carried out:

In close partnership with experts from community and advocacy organizations, public health officials, designers, and municipal stakeholders in city planning.

Working on multiple scales: associating the development of the built environment, healthy lifestyle trends, Vision Zero, sustainability, and universal accessibility.

Using a standardized, objective and quantitative method to collect comprehensive data, as an essential complement to exploratory walks.
What makes PPAS AU successful

The tool’s positive impact is measured on several axes. It:

- **Increased** the consideration of universal accessibility in urban development projects
- **Developed** our partners’ and advocacy organizations’ expertise in collecting conclusive data
- **Prompted** public health authorities to include universal accessibility to their discourse
- **Complements** the training offered to municipal urban planners in 6 neighborhoods
- **Generated** improvements in safety and accessibility of the built environment when used by the city
- **Benefited** directly to 32,900 citizens living with any form of disability within 1 neighborhood
PPAS AU and **sustainable** urban development

“A paradigm shift is now necessary, from a car-oriented to a pedestrian-oriented environment. Included in any part of a journey, walking has countless virtues in terms of health, social participation and personal autonomy. Many organizations have voiced a need to provide accurate data to identify obstacles in terms of walkability.

Our tool allows for the creation of pedestrian infrastructures that are universally accessible, sustainable and safe for active transportation for all citizens, including those with any kind of limitation.”

- Martine Laurin, B. Urb., Urban planning & Accessibility Consultant at Société Logique
Next steps in developing the PPAS AU technology

Implementation of the audit’s mobile app, including:

- Electronic data collection forms
- Real-time notifications
- Geolocation
- Relational database
- Open-access API
- Offline capabilities
- Cross-platform compatibility
PPAS AU: A not-for-profit self-sustaining model

All public organizations may use our audit on large-scale projects:

- Professionals pay for training sessions in order to learn how to use the tool and get an ID code.
- Organizations pay to get expert analysis of the collected data and a complete diagnostic report.
- Third parties may pay a subscription fee to access all data collected on a larger scale.
- Allows sufficient funding for the hosting and the maintenance of open database and mobile app.
- Registered users can use the mobile app, upload and consult their data for free!
Many partners made PPAS AU possible

Special thanks to:
Interested to give it a try?

Contact us:

societelogique.org  

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Our Universal Design walkability audit PPAS AU is available for use in your neighborhood!