Urban Design Audit
Downtown Middletown, Torrington & Waterbury CT
Walkability: measurement of friendliness to walking

- Comfort
- Safety
- Accessibility
Walk Score

- Access/proximity to amenities
- Road connectivity
- Useful for comparison among neighborhoods
Other walkability measures:

- Safety audits/guidelines
- Pedestrian level of service
- Pedestrian behavior surveys
- Sidewalk condition assessments
- Citizen checklists
Designing for pedestrians

- Physical activity
- Streetscape standards
- Safe, convenient infrastructure
- Connectivity
- Land use/urban design
  connection to walking

Measuring design for pedestrians:

- Physical characteristics of streets and edges
- Try to link design to walking behavior
What more can we measure?

- Economic impact of pedestrian activity
- Visibility of planning and policies
- Personal experience of each pedestrian

Why do we measure?

- Identify opportunities—not just give a grade
P1 Connectivity to Surrounding Districts
P1 - Connectivity to Surrounding Districts

P2
Pedestrian & Bicycle Linkages
Peripheral Connectivity

P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

P3 - Parking

Design & Land Use

Safety & Security

W.A.L.Q.

P3 - Parking
Peripheral Connectivity

Enclosure & Engagement Design & Land Use

Safety & Security

W.A.L.Q.

P3 Parking

P2 - Pedestrian & Bicycle Linkages

P1 - Connectivity to Surrounding Districts

P4 Access to Transit
P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

P3 Parking

P4 - Access to Transit

E1
Strong Edges
Peripheral Connectivity

Enclosure & Engagement Design & Land Use

Safety & Security

W.A.L.Q.

P3 Parking

P4 - Access to Transit

E1 Strong Edges

P2 - Pedestrian & Bicycle Linkages

P1 - Connectivity to Surrounding Districts

E2 Direct & Welcome Visitors
P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

P3 - Parking

P4 - Access to Transit

E1 - Strong Edges

E2 - Direct & Welcome Visitors

E3 - Overhead Enclosure
P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

P3 - Parking

P4 - Access to Transit

E1 - Strong Edges

E2 - Direct & Welcome Visitors

E3 - Overhead Enclosure

E4 - Engagement
Peripheral Connectivity
Enclosure & Engagement
Design & Land Use
Safety & Security
W.A.L.Q.
P3 Parking
P2 - Pedestrian & Bicycle Linkages
P1 - Connectivity to Surrounding Districts
P4 - Access to Transit
E1 Strong Edges
E2 - Direct & Welcome Visitors
E3 - Overhead Enclosure
E4 Engagement
S1 Safe Street Crossings
S2 Continuous, Wide Sidewalks
Peripheral Connectivity

Enclosure & Engagement Design & Land Use

Safety & Security

W.A.L.Q.

Parking

P3

P2 - Pedestrian & Bicycle Linkages

P4 - Access to Transit

E1 Strong Edges

E2 - Direct & Welcome Visitors

P E

S1 - Safe Street Crossings

P1 - Connectivity to Surrounding Districts

S2 – Continuous, Wide Sidewalks

P4 - Access to Transit

E3 - Overhead Enclosure

S3 Short Block Lengths

E4 Engagement

S1 - Safe Street Crossings

S3 Short Block Lengths

S2 – Continuous, Wide Sidewalks
Peripheral Connectivity

P3 Parking

P4 - Access to Transit

E1 Strong Edges

E2 - Direct & Welcome Visitors

E3 - Overhead Enclosure

E4 Engagement

P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

S1 - Safe Street Crossings

S2 - Continuous, Wide Sidewalks

S3 - Short Block Lengths

S4 Security

P4 - Access to Transit

E1 Strong Edges

E2 - Direct & Welcome Visitors

E3 - Overhead Enclosure

E4 Engagement

P1 - Connectivity to Surrounding Districts

P2 - Pedestrian & Bicycle Linkages

S1 - Safe Street Crossings

S2 - Continuous, Wide Sidewalks

S3 - Short Block Lengths

S4 Security
D1
Diversity of Uses/Income
D3
Distinctive Buildings & Civic Spaces

P1 - Connectivity to Surrounding Districts
P2 - Pedestrian & Bicycle Linkages
P3 - Parking
P4 - Access to Transit

E1 - Strong Edges
E2 - Direct & Welcome Visitors
E3 - Overhead Enclosure
E4 - Engagement

S1 - Safe Street Crossings
S2 - Continuous, Wide Sidewalks
S3 - Short Block Lengths
S4 - Security

D1 - Diversity of Uses/Income
D2 - Design Coherence
D3 - Distinctive Buildings & Civic Spaces
D4 - Density of Buildings & People

- **P3** Parking
- **P4** - Access to Transit
- **E1** Strong Edges
- **E2** - Direct & Welcome Visitors
- **E3** - Overhead Enclosure
- **E4** Engagement
- **S1** - Safe Street Crossings
- **S2** - Continuous, Wide Sidewalks
- **S3** - Short Block Lengths
- **D1** - Diversity of Uses/Income
- **D2** - Design Coherence
- **D3** - Distinctive Buildings & Civic Spaces
- **D4** - Density of Buildings & People
- **P1** - Connectivity to Surrounding Districts
- **P2** - Pedestrian & Bicycle Linkages
P3 Parking
P2 Pedestrian & Bicycle Linkages
P1 Connectivity to Surrounding Districts

E1 Strong Edges
E2 Direct & Welcome Visitors
E3 Overhead Enclosure
E4 Engagement

P4 Access to Transit

D4 Density of Buildings & People
D3 Distinctive Buildings & Civic Spaces
D2 Design Coherence
D1 Diversity of Uses/Income

S1 Safe Street Crossings
S2 Continuous, Wide Sidewalks
S3 Short Block Lengths
S4 Security

W.A.L.Q.
Peripheral Connectivity
Enclosure & Engagement
Design & Land Use
Safety & Security
1. Identify Assets with the Community

2. Assess Each Street & Block for 16 Indicators

3. Score Using Established Criteria & Metrics

4. Review Results with Community

---

**WALQ: Walkability, Accessibility and Livability Quotient**

- **District has convenient, robust and frequent Local bus service:**
  - Intercity bus service;
  - Para-transit service;
  - Commuter train or trolley;
  - Taxi service;
  - Zip Car (or other shared auto).

- **Within one-half mile (2,600 feet) of the center of the CBD:**
  - 1 = Little to no transit within ½ mile
  - 2 = At least 2 forms of transit available within ½ mile
  - 3 = 3+ forms of transit available within ½ mile w/ robust service (e.g. short headways, many routes)

---

**W.A.I.Q. Color Code**

- **Very Poor:** 1.3 or lower
- **Poor:** 1.4 - 1.5
- **Below Average:** 1.6 - 1.7
- **Marginal:** 1.8 - 1.9
- **Good:** 2.0 - 2.1
- **Very Good:** 2.2 or higher

©2013 CDM Smith Inc. All rights reserved.
Criteria:

- Access to the CBD is free of barriers that restrict or inhibit mobility (e.g. highways, one-way streets, and rivers).
- Surrounding land uses complement the CBD and support walkability.
P1 Connectivity to Surrounding Districts

Criteria:
• Access to the CBD is free of barriers that restrict or inhibit mobility (e.g. highways, one-way streets, and rivers).
• Surrounding land uses complement the CBD and support walkability.

Factors for low score:
• I-84, Rt. 8 and river act as barriers between CBD & neighborhoods
• Many one-way streets in CBD restrict access to businesses.

Score = 1.0
“With your head full of brains and your shoes full of feet, you’re too smart to go down a not-so-good street.”

Seuss, Dr. *Oh, the Places You’ll Go!*
New York: Random House, 1990