Agenda

01 Study goals
02 Data
03 Findings
04 Discussion
“A good city is like a good party – people stay longer than really necessary, because they are enjoying themselves.”

- Jan Gehl, Danish urban designer
Study Goals

• Capture the state of public life in Central Square

• Investigate relationships between site conditions and patterns of activity

• Identify opportunities to unleash Central Square’s potential as a flourishing place for people
Data Collected

- Site Conditions
- People Moving
- People Lingering
Evaluation Framework

- Data
- Experiments & improvements
- Insights
- Refined strategies
Grounding Assumptions

• Tree canopy, seating, and storefront conditions contribute to stationary activity
• Pedestrian volume increases chance of stationary activity (if the conditions are right)
• Data limitations
The Data
### Types of Data Collected:
Seating Capacity and Storefronts

<table>
<thead>
<tr>
<th>Seating Capacity and Storefront Conditions Worksheet</th>
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<td><strong>Date:</strong> 7/16/19</td>
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<td><strong>Day of Week:</strong> Thursday</td>
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<tr>
<td><strong>Time Started:</strong> 12:30 PM</td>
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<th>Public fixed</th>
<th>Public secondary</th>
<th>High activity uses</th>
<th>Civic, institutional, etc. uses</th>
<th>Low activity uses</th>
<th>Notes</th>
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*Storefront key:
- High activity uses (retail, personal business service, café, restaurant, drinking establishment, entertainment use, barber shop, dry cleaner, print shop, etc.)
- Civic, institutional, religious, or social services (government use, post office, library, community center, student center, religious building, educational use, social service center, museum)
- Low activity use (office, medical clinic, financial office, bank, residential use, childcare facility, real estate agency)

*For public secondary seating, mark one of the following approximate ranges to indicate capacity: 0, 1-4, 5-10, 11-20, 21-40, 40+*
Types of Data Collected:
Seating Capacity and Storefronts

<table>
<thead>
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<th>Types of Seating</th>
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<td>Moveable</td>
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<td>Fixed</td>
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<td>Secondary</td>
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</table>

**Seating Capacity and Storefront Conditions Worksheet**

<table>
<thead>
<tr>
<th>Date</th>
<th>7/16/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of Week</td>
<td>Thursday</td>
</tr>
<tr>
<td>Time Started</td>
<td>12:30 PM</td>
</tr>
<tr>
<td>Temperature</td>
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<tr>
<td>Clouds</td>
<td>Clear</td>
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<tr>
<td>Precipitation</td>
<td>None</td>
</tr>
<tr>
<td>Time Completed</td>
<td>1:30 PM</td>
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</table>

<table>
<thead>
<tr>
<th>Zone</th>
<th>Seating Capacity</th>
<th>Storefront Conditions*</th>
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<tbody>
<tr>
<td>15</td>
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</table>

*Storefront key:
- High activity uses (retail, personal/business service, café, restaurant, drinking establishments, entertainment use, barber shop, dry cleaner, print shop, etc.)
- Civic, institutional, religious, or social services (government use, post office, library, community center, student center, religious building, educational use, social service center, museum)
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*For public secondary seating, mark one of the following approximate ranges to indicate capacity: 0, 1-4, 5-10, 11-20, 21-40, 40+*
Storefront Density | "High Activity" Storefront Types

High activity storefronts include uses like cafes, restaurants, bars, dry cleaners, entertainment, barber shops, dry cleaners, etc.
Tree Canopy Coverage | Site Conditions

Documenting the environment of our public spaces can help us understand what qualities of the public realm are perceived to be inviting by the public.

### Types of Data Collected:
Pedestrian Flow

#### Pedestrian Count Worksheet

<table>
<thead>
<tr>
<th>Hour 1</th>
<th>Hour 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Time</td>
<td>Position</td>
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<tr>
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<td>1</td>
</tr>
<tr>
<td>12:10</td>
<td>2</td>
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<tr>
<td>12:17</td>
<td>3</td>
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<tr>
<td>12:25</td>
<td>4</td>
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<tr>
<td>12:35</td>
<td>5</td>
</tr>
<tr>
<td>12:59</td>
<td>6</td>
</tr>
</tbody>
</table>

Reminder: spend exactly five minutes counting pedestrians at each position. That gives you five minutes to walk to the next position.

Weather key: temperature (cold, cool, warm, hot), clouds (clear, partly cloudy, mostly cloudy, overcast), precipitation (none, a few drops, less than 5 mm rain, more than 5 mm rain)
Pedestrian Flow: Estimated Averages

Example of Pedestrian Activity Data Estimated - Midday in Central
Pedestrian Volume | Estimated average over all surveys
Understanding how people move through a study area can provide a critical baseline for interpreting stationary activity.

Types of Data Collected:
Stationary Activity

| Zone # | Group # | Male | Female | Other/Unknown | Gender
|--------|---------|------|---------|---------------|--------|
| 0-12   |         | 1    | 0       | 0             | 0.0%
| 13-18  |         | 1    | 0       | 0             | 0.0%
| 19-24  |         | 1    | 0       | 0             | 0.0%
| 25-30  |         | 1    | 0       | 0             | 0.0%
| 31-36  |         | 1    | 0       | 0             | 0.0%
| 37-42  |         | 1    | 0       | 0             | 0.0%
| 43-48  |         | 1    | 0       | 0             | 0.0%
| 49-54  |         | 1    | 0       | 0             | 0.0%
| 55-60  |         | 1    | 0       | 0             | 0.0%
| 61-66  |         | 1    | 0       | 0             | 0.0%
| 67-72  |         | 1    | 0       | 0             | 0.0%
| 73-78  |         | 1    | 0       | 0             | 0.0%
| 79-84  |         | 1    | 0       | 0             | 0.0%
| 85+    |         | 1    | 0       | 0             | 0.0%

<table>
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<tr>
<th>Age Range</th>
<th>Standing - private</th>
<th>Sitting - pub. movable</th>
<th>Sitting - pub. fixed</th>
<th>Sitting - ground/object</th>
<th>In sun</th>
<th>Lined down</th>
<th>Notes on groups/individuals</th>
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<th>Phone/Laptop etc.</th>
<th>Playing</th>
<th>Physical recreation</th>
<th>Waiting for transit</th>
<th>Selling</th>
<th>Canvassing/soliciting</th>
<th>Working (other)</th>
<th>Performing</th>
<th>Smoking</th>
<th>Panhandling</th>
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| Time Started Page | 12:00 | Page # | 2 |
| Time Completed Page | 12:24 |
### Stationary Activity Survey Overview

Average number of surveys collected per zone in each square:

<table>
<thead>
<tr>
<th></th>
<th>Morning 8:00 – 9:30 AM</th>
<th>Midday 12:00 – 1:30 PM</th>
<th>Evening 5:30 – 7:00 PM</th>
<th>Total surveys</th>
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<tbody>
<tr>
<td>Central</td>
<td>1</td>
<td>2.4</td>
<td>2.4</td>
<td>5.8</td>
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<tr>
<td>Harvard</td>
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<td>2.5</td>
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<tr>
<td>Kendall</td>
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<td>1</td>
<td>0.5</td>
<td>2.5</td>
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<tr>
<td>Porter</td>
<td>1</td>
<td>1.4</td>
<td>1.5</td>
<td>4</td>
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</tbody>
</table>
Number of Groups | Morning + Midday Study Periods

Public Realm Evaluation: Cambridge, MA

Averages by Square
- Porter: 0.33 groups
- Kendall: 0.19 groups
- Harvard: 0.60 groups
- Central: 0.71 groups

Findings
Findings by Block
1369 Coffeehouse (Block)

- 8 people lingering on average
- Private seating is highly utilized (13%)
- Private seating feels open to public and is mixed with public seating
- **Recommendation**: replicate this kind of seating elsewhere
730 Tavern (Block)

- 5 people lingering on average
- Highest amount of private seating (62)
- Only 3% of private seating is occupied
- **Recommendation**: storefront intensity could support 1369-style public/private seating mix
Leader Bank (Block)

- 1 person lingering on average
- No high-activity storefronts
- Stationary activity is lowest of all zones on Mass Ave
Carl Barron Plaza

• 18 people lingering on average
• Twice as much activity as second most active zone
• Centrality, canopy, and seating capacity set the plaza apart from other zones
Central Square Florist (Block)

- 9 people lingering on average
- Zone with third highest stationary activity, despite lowest tree canopy coverage along Mass Ave zones studied
- Two thirds of people lingering are waiting for the bus
CVS (Block)

- 9 people lingering on average
- 92% are waiting for the bus
- Notable lack of tree canopy (second lowest of all zones studied on Mass Ave)
H-Mart (Block)

- 2 people lingering on average
- Surprisingly low stationary activity (about 25% of similar zones), despite:
  - Some of highest pedestrian volumes (300-1000 per hour)
  - Central location
  - High storefront intensity
- Most “privatized” block (16 private seats and 0 public seats), but seating was empty during every observation
- **Recommendation**: conditions support significant public seating (or public/private)
Target (Block)

- 7 people lingering on average
- Highest pedestrian volumes across the four squares (250-1500 per hour)
- Second most “privatized” block: 34 private vs. two benches.
- One of two “coziest” blocks in Central: richly textured storefront experience; good tree canopy

**Recommendation:** significantly more public seating
Harvard Square Eyecare (Block)

- 3 people lingering on average
- Low activity likely due to:
  - Unengaging, repetitive, and inactive storefront experience
  - Low seating capacity (2 benches)
Middle East (Block)

- 8 people lingering on average
- Highest pedestrian volumes across the four squares (250-1500 per hour)
- Third most “privatized” block: 54 private vs. two benches.
- One of two “coziest” blocks in Central: richly textured storefront experience; good tree canopy
- **Recommendation**: add public seating
Site Qualities
Tree Canopy Coverage | Site Conditions

Documenting the environment of our public spaces can help us understand what qualities of the public realm are perceived to be inviting by the public.

The percentage of study area covered by tree canopy

0% 0% 3.4% 8% 12% 18% 22% 30% 41% 55% 88% (min) (max)

Each color bin represents 10% of values

Zone Averages by Square
Porter 15% of zone
Kendall 24% of zone
Harvard 21% of zone
Central 22% of zone

City-wide average
On average, 21% of each zone is covered by tree canopy.

Publicly Provided Seating Capacity

Includes public moveable, public fixed, and public secondary (built into landscape) seating types.

Public Realm Evaluation: Cambridge, MA

Primary Seating Capacity
Includes public moveable and public fixed seating types

Zone Averages by Square
Porter 2.7 seats
Kendall 16 seats
Harvard 11 seats
Central 14 seats

City-wide average
On average, public spaces are provided with primary seating for 12 people.

Storefront Density | All Storefront Types

Documenting the environment of our public spaces can help us understand what qualities of the public realm are perceived to be inviting by the public.

On the building facade adjacent to the study area, the number of storefront entrances per 100 feet of facade.

Each color bin represents 10% of values

Zone Averages by Square
- Porter: 2.5 storefronts
- Kendall: 0.8 storefronts
- Harvard: 2.5 storefronts
- Central: 2.0 storefronts

City-wide average
- On average, there are 1.7 storefronts per 100 ft of building facade

Storefront Density | "High Activity" Storefront Types

High activity storefronts include uses like cafes, restaurants, bars, dry cleaners, entertainment, barber shops, dry cleaners, etc.

On the building facade adjacent to the study area, the number of "High Activity" storefront entrances per 100 feet of facade.

Each color bin represents 10% of values.

Zone Averages by Square
- Porter: 1.6 storefronts
- Kendall: 0.3 storefronts
- Harvard: 2.3 storefronts
- Central: 1.1 storefronts

City-wide average
On average, there are 1.2 high activity storefronts per 100 ft of building facade.

Stationary Activity
Number of Stationary Individuals | Morning + Midday Study Periods

Public Realm Evaluation: Cambridge, MA

Average number of stationary people counted in zone

Zone Averages by Square
- Porter: 1.0 people/zone
- Kendall: 2.1 people/zone
- Harvard: 2.8 people/zone
- Central: 4.1 people/zone

Each color bin represents 10% of values

Groups

Larger circles symbolize higher average count of individuals.
Darker shading symbolizes higher percentage of individuals in groups.

Average Count of Individuals

- 5
- 10
- 15
- 20

Average Percentage of Individuals in Groups

- 0% - 9%
- 9% - 18%
- 18% - 30%
- 30% - 45%
- 45% - 67%
Conversing Larger circles symbolize higher average count of individuals. Darker shading symbolizes higher average percentage of individuals perceived to be conversing.

<table>
<thead>
<tr>
<th>Average Percentage of Individuals Conversing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 13%</td>
</tr>
<tr>
<td>13% - 24%</td>
</tr>
<tr>
<td>24% - 34%</td>
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<tr>
<td>34% - 44%</td>
</tr>
<tr>
<td>44% - 74%</td>
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</table>

<table>
<thead>
<tr>
<th>Average Count of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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</table>

Portion Conversing
Women | Morning + Midday Study Periods

Documenting who uses our public spaces can help us understand how they invite or attract different user groups.


Cambridge = 50.6% female
Women, Children, and Seniors

Larger circles symbolize higher average count of individuals.

Darker shading symbolizes higher percentage of individuals perceived to be older than 65, younger than 18, or women.

**Average Count of Individuals**
- 5
- 10
- 15
- 20

**Average Percentage of Women, Children, or Seniors (perceived)**
- 4% - 22%
- 22% - 36%
- 36% - 43%
- 43% - 52%
- 52% - 67%
Standing | Morning + Midday Study Periods

By documenting people’s postures, public life data can help illuminate where the seating supply does not meet current demand.

Zone Averages by Square
- Porter: 58% of people
- Kendall: 59% of people
- Harvard: 40% of people
- Central: 44% of people

City-wide average: 50% of stationary people are standing

Discussion
Discussion

• What insights do you take from this data?

• How might we support a flourishing public life in the square?

• What have you learned from temporary changes during COVID?