Emerging as vibrant places to live, Indianapolis

Many recent books described the trends

But no one has quantified how many people work & live in & around these new 21st century downtowns

- City & town centers
- Anchor Institution Districts
  Universities, college & hospitals
- Urban research & technology parks

That is what we set out to do for 231 major employment centers in the 150 largest cities (defined by jobs) in the U.S.
Challenge: neither U.S. Census Bureau nor Bureau of Labor Statistics has standard definition of “downtown”

Population data aggregated by census tract but there is no agreed-upon definition of residential downtown.

Employment data has only been available county-wide; but not all cities are identical with counties.

Commercial brokerage firms count commercial office space & define central business districts (CBDs) accordingly; but often does not include commercial retail, entertainment or hotel zones.

BIDs & downtown organizations define service areas & areas of influence & concern; these are often only part of CBD.

What got this started: Census Bureau drew a 2 mile radius around Baltimore’s City Hall & called it “downtown.”

Did that for all cities.

Shape of Baltimore’s commercial downtown far from circular. City Hall is not at the center.

What is a downtown neighborhood?

A ring around Baltimore’s real commercial downtown includes very different neighborhoods than a perfect circle.
Similarly, a 2 mile ring around NYC’s City Hall

Figure 6: Two-Mile Radius Around New York City’s City Hall

Misses the fact the NYC has 3 major downtowns

The most dense employment center in United States
With 902,306 jobs & more than ½ million residents

Doesn’t extend north to Midtown Manhattan
Following Ed Glaeser: defined commercial areas by job density

The essence of cities is "the absence of physical space between people & companies. [Cities] are proximity, density, closeness. They enable us to work & play together, & their success depends on the demand for physical connection."

While job density across U.S. averages just 0.05 jobs/acre

Downtown Chicago: 294 jobs per acre

“Sprawling” LA - Downtown: 285 jobs per acre
Center City Philadelphia: 203 jobs per acre

Downtown Houston: 156,000 jobs at 133 jobs/acre

Balance of Houston: low density 2.9 jobs per acre

Downtown Des Moines, Iowa, 42 jobs/acre
Even the lowest density of our 231 job centers 20 times more dense than national average

Started by defining urban commercial places by job density

**Figure 12: Job-Density Thresholds**

<table>
<thead>
<tr>
<th>Category</th>
<th>Jobs Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely High Job Density</td>
<td>&gt; 100</td>
</tr>
<tr>
<td>Very High Job Density</td>
<td>75-99</td>
</tr>
<tr>
<td>High Job Density</td>
<td>50-74</td>
</tr>
<tr>
<td>Moderately High Job Density</td>
<td>25-49</td>
</tr>
<tr>
<td>Moderate Job Density</td>
<td>15-24</td>
</tr>
<tr>
<td>Lower Job Density</td>
<td>&lt; 15</td>
</tr>
</tbody>
</table>

Using Local Employment Dynamics (LED)/On the Map
Product of Census Bureau & State Labor Market Agencies

https://onthemap.ces.census.gov/

Enabled us combine & cross-reference data about firms, jobs & their locations with information about the people who hold those jobs

**What you can learn from LED data**

**Worker Characteristics**

- Age
- Sex
- Ethnicity
- Wages
- Industry
- Educational Attainment

**Geographic Characteristics**

- Where residents of a neighborhood travel to work
- Where employees in job center come from each day
- Who lives & works in same area
Started by visualizing job density citywide in LED

Seattle

Point job density

In GIS created heat maps of job clusters citywide

New York City

Using census tracts standardized boundary definitions across the country
Census tracts with high job density = commercial centers

Checked against land-use in Google Earth
Sent boundaries to as many cities as we could find contacts.
Did we get it right? Made revisions accordingly

Sometimes downtown is clearly bounded by water:
Lower Manhattan

Sometimes by interstate highways: Houston
Memphis: density drops off at the edge

LED enables both a calculation & visualization of where commercial areas begin & end

Philadelphia: transitions to residential

Used standard census tract boundaries to draw the irregular shapes of commercial areas
Categorized three types of urban job centers:

(1) Traditional downtowns. Indianapolis
High-density commercial office buildings, hotels & retail

Overall: 147 such centers (63% of our sample)
Charlotte, N.C.

(2) Anchor institution districts:
Academic, medical & cultural facilities: University City, Phila.

University Circle, Cleveland & MIT in Cambridge, Mass
Counted 47 (21% of our sample)
Texas Medical Center: 87,000 jobs at 71 jobs/acre

Texas Medical Center: Houston

- Education & Health Services
- Professional & Business Services
- Entertainment, Leisure & Hospitality
- Public Administration
- Financial Activities, Real Estate & Information
- Other Services
- Transportation, Utilities & Wholesale Trade
- Retail

90.6%

(3) Included research parks within city boundaries
36 such places (16% of our sample)

All diversifying land-use; no longer just 9-5 centers
Adding arts & cultural venues
Downtowns are active & animated after dark

With music, theater & entertainment

Convention centers & new hotels

Downtown sports facilities
We found 4 types of urban employment patterns:

1. One dominant downtown: Hartford, Ct & Seattle, Wash

2. A dominant downtown + one anchor institution district: Cleveland, Ohio

University City + Center City

Nashville: 2 major areas of concentrated employment
Series of other small nodes; all job locations are important
25% of all jobs are downtown or within one mile.
22% of all workers in the city work downtown.

Places with multiple strong employment nodes:
Atlanta, Houston & LA

Central Houston has at least three employment centers.

Downtown, Uptown & the Medical Center.
(4) Places with decentralized employment, building downtowns for first time: Jacksonville

Calculated employment in 231 job centers - 150 largest cities

Table 1

Calculated job density: commercial core, ½ mile & 1 mile ring

APPENDIX II: TABLES FOR ALL CITIES AND THEIR EMPLOYMENT NODES

Table 2

Calculated for all 231 job centers:
How many people live in commercial core • ½ ring • 1 mile
Calculated what percent of people who live within adjacent residential rings work in those areas.

<table>
<thead>
<tr>
<th>Location</th>
<th>% of Workers Living Within One Mile of Downtown Who Work Within One Mile of Downtown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midtown Manhattan, NY</td>
<td>55.9%</td>
</tr>
<tr>
<td>Downtown Chicago, IL</td>
<td>51.8%</td>
</tr>
<tr>
<td>Downtown Washington, DC</td>
<td>50.5%</td>
</tr>
<tr>
<td>Strip - Las Vegas, NV</td>
<td>50.5%</td>
</tr>
<tr>
<td>Downtown Rochester, MN</td>
<td>50.2%</td>
</tr>
<tr>
<td>Downtown Ann Arbor, MI</td>
<td>49.3%</td>
</tr>
<tr>
<td>Downtown Honolulu, HI</td>
<td>44.5%</td>
</tr>
<tr>
<td>Downtown Portland, OR</td>
<td>43.5%</td>
</tr>
<tr>
<td>Downtown Seattle, WA</td>
<td>41.0%</td>
</tr>
<tr>
<td>Center City - Philadelphia, PA</td>
<td>40.7%</td>
</tr>
</tbody>
</table>

For each place developed a *live-work* ratio.

**Figure 3: Highest Live-Work Percentages**

- The higher the ratio, the shorter the commute.

- Track live-work ratios as you move away from downtown.
Measure gravitational pull of an employment node
Based on adjacent live/work ratios

What we found

America’s 150 largest cities hold 30% of all jobs in the country and the 231 major employment centers within them contain 18.7 million jobs — 14.4% of U.S. employment.
Within a 1 mile around these 231 urban employment nodes
Now live 12.9 million people (4.2% of U.S. population)

4.2% of US population not yet a huge market share
But live-work areas are growing fast

From 2000-2010 populations in/adjacent to downtowns
of 10 largest cities grew 17.2%
While national population grew by 9.7%

Most downtowns grew even more since the 2010 census
Center is growing denser with multi-family housing.

People who live in & around downtowns & anchor institution districts are very well educated. In the live-work zones in the 10 largest cities:

- 63% of those 25 & older have at least BA degree
- 30% professional degree

Knowledge workers drive the new economy.

Report contains detailed maps for 10 largest cities.
Website has detailed profile maps for all 27 cities who supported the project
http://definingdowntown.org/

& tables for all 150 cities: so we can all track progress

The number of downtown resident/workers is small

34,000 Live/Work Center City residents account for just 11% of downtown workforce

47.5% of our workforce (120,000 residents) commute from the surrounding 10-county region

But 42% of the downtown workforce (126,000 residents) come from city neighborhoods outside of downtown

25% of residents from every city neighborhood

Work downtown: 52.5% of jobs held by city residents
Moretti suggests that high-wage innovation workers are drivers of broader economy. Without high-wage jobs; fewer mid & lower wage jobs.

Downtown employment; 37% BA degree or higher
33% jobs require only HS diploma; 30% require an Associates degree.

Can this be sustained?

Live/work places held up much better during recession than car dependent places = optimism.
Has urban growth slowed: 2011-2016 ACS data

Population Growth by County Type
(Within Large Metros Only)

- Urban
- Higher-density suburban
- Lower-density suburban