Defining Downtown Using LED

Lauren Gilchrist
Manager of Research & Analysis
Center City District

June 13, 2013
How did we get involved defining downtown in the first place?

ABOUT THE CENTER CITY DISTRICT & OUR WORK DOWNTOWN
The Center City District is Philadelphia’s largest Business Improvement District (BID)

- Enabled by the PA legislature
- Reauthorized by City Council every 5 years
- $20 million operating budget

220 downtown blocks in the heart of the 5th largest U.S. city
In addition to the provision of basic services, the CCD makes or facilitates capital investments in Center City Philadelphia

More than:

• 893 trees & 72 planters
• 233 pedestrian & vehicular signs
• 222 pedestrian & 132 vehicular lights
• 108 subway navigational signs
...and lots of other field assets
Some of our biggest investments have been in Center City parks and plazas

Coming Summer 2014...
Dilworth Plaza
The CCD also quantifies and tells the story of Center City Philadelphia.
Part of which we do using the LED dataset

We also share best practices with peer institutions and advocate for downtowns across the country.
We are part of a network of more than 1,400 BIDs in the U.S. & Canada

- CCD is one of the largest U.S. BIDs
- All BIDs share the need to quantify downtown and benchmark performance at the sub county level, specifically for:
  - Job trends
  - Residential trends
- This project is a coordinated effort through the International Downtown Association, the trade association of downtown organizations
DEFINING DOWNTOWN

“The Holy Grail of Downtown Research”
This study builds on the work of Dr. Eugenie Birch

- Conducted using local definitions of downtown (though somewhat subjectively defined)
- Analysis of Decennial Census data from 1970-2000
- Characterizes downtown population and household growth rates, as well as some demographic characteristics
- Develops “downtown typologies”
But is motivated by the Census Bureau’s latest report on downtown population

Downtown organizations report spatial mismatch on the following dimensions:
• City hall not located downtown or on outskirts of downtown
• 2-mile radius is too large
• 2-mile radius cuts across significant geographic barriers

These issues:
• May cause an understatement of population growth
• May create misleading narratives about the downtown population and how it’s changed
• Work at odds with locally accepted geographic boundaries for downtown

Study uses 2-mile radius around the city hall of a metropolitan/micropolitan area’s principal city as the definition of downtown.
Attempts to build on our existing understanding of downtown by disaggregating the concepts of commercial and residential downtown

LED is the only metric by which we are able to designate our “commercial downtown”
TESTING WHETHER LED CAN BE USED TO INVESTIGATE LIVE-WORK RELATIONSHIPS

Baltimore: A Case Study
A 2-mile radius is too much; \( \frac{1}{2} \) and 1-mile radii do a slightly better job of reflecting job and housing patterns.
The quick drop-off in employment and residential density is highly apparent.

Baltimore’s Central Business District (CBD)
From the south, looking north
Baltimore’s Central Business District is more concentrated around the Inner Harbor.
Buffering the edges of the CBD yields a more logical pattern for the flow of workers within the CBD and between downtown and its residential neighborhoods.
A fairly clear relationship between Baltimore’s CBD and surrounding neighborhoods emerges.

Map

CBD Census Tract Definitions

- 203
- 302
- 401
- 402
- 1801
- 2201

- % of Workers that **Live & Work** in CBD: **31.7%**
- % of Workers that Live within ½ Mi of CBD Who Work in CBD: **21.1%**
- % of Workers that Live within 1 Mi of CBD Who Work in CBD: **18.6%**
- % of Workers that Live within 1.5 Mi of CBD Who Work in CBD: **17.2%**
Phase I

APPLYING THIS INVESTIGATION METHOD TO OTHER CITIES
We studied 42 cities across the country

Response to changes in:

- Americans’ apparent desire to live closer to places of work
- Growing interest in downtown living
- Rising energy costs
Live/work concentrations are strongest in the Northeast and drop off at a slower rate.
Midwestern cities see some of the sharpest drop-offs around their downtowns
The drop-off in live/work in the Pacific/Mountain region is much like the Northeast.
The South is puzzling! This may be due to lower concentrations of workers living in the CBD to begin with.
Phase II

DEFINING DOWNTOWN USING LED
The next enhancement to this research involves deriving an even subtler set of definitions at the Census Tract level.

- Obtain or derive Commercial Downtown definition for 150 largest cities
- Import LODES data into R and build queries
- Determine:
  - Total workers living in each tract in area surrounding downtown
  - % of each tract’s workers who work in downtown
- Visualize the data in ArcGIS to determine reasonable census tract definitions for residential downtown
- Analyze change in population, households, & other demographic characteristics
- Derive downtown typologies & other relevant generalizations
- Deliver report to IDA World Congress in October 2013

The CCD has received generous support from individual downtown organizations through the International Downtown Association (IDA) to continue this work.
Contact Information

Lauren Gilchrist
Manager of Research & Analysis
Center City District
lgilchrist@centercityphila.org
215-440-5511