Providing Data to Inform Plans and Assess Performance
Integrated Planning and Zoning Process
Topics

Got Land Use?

> City’s need for land use data
> PCPC development of YR2010 base

Inform *Philadelphia2035* Citywide Vision and District Plans

> Initial citywide analysis
> Targeted applications in ongoing districts plans

Assess *Philadelphia2035* Performance

> Challenges and initial approaches
> Potential applications for land use data
Integrated Planning and Zoning Process
Evolving Incrementally, with Long Timelines …

NEW ZONING CODE
Started May 2007, effective August 2012, Zoning Revision Process in development …

COMPREHENSIVE PLANNING PROCESS
Started May 2008, Citywide Vision June 2011, District Plans ongoing …

CITIZENS PLANNING INSTITUTE
Started April 2010, pilot November 2010, Training ongoing …
Got Land Use?

Flexible description of the city’s physical development
  > Type, location, gross and net intensity
  > Ability to classify at varying levels of detail

Parcel-based
  > Relate to parcel-level zoning
  > Aggregate to sub-city geographies

Affordable and supportable
  > No extra staff or consultants

Relatable to other data
  > Population and Housing
  > Jobs and Income
  > Transportation
  > Energy and Environment
Got Land Use?

Previous citywide comprehensive plan in 1960
  > No saved land use records

Previous PCPC citywide land use survey in 1970
  > Archived on paper, computer print outs

Regional land use data (DVRPC)
  > Not at parcel level

City tax parcel maps
  > Not consistent enough with city’s other parcel data

Preceding plans by PCPC, other agencies, and consultants
  > Inconsistent classifications

*What is medium density residential, anyway?*
Got Land Use?

Best Practice Review

Other cities use traditional classification systems, modified to capture locally significant characteristics (e.g. programs, ownership, type of structure)

- Residential
- Commercial
- Institutional
- Industrial
- Parks and Open Space
- Vacant
Got Land Use?

Best Practice Review

APA – Land Based Classification System (LBCS) refines traditional classifications into five “dimensions”

> Activity – actual use based on observable characteristics
> Function – type of establishment
> Structure – building characteristic
> Site – utilization and suitability
> Ownership – rights and responsibilities

http://www.planning.org/lbcs/

LinkedIn.com APA - LBCS User Group
Got Land Use?

Best Practice Review

Land use attributes should be captured as part of regular, ongoing administrative processes.

- City’s deployment of GIS and trained staff

- City’s Office of Property Assessment (OPA) includes a “Building Code” for each of city’s property accounts.
  > could consolidate codes into proxies for LBCS “Activity”
  > BONUS: accounts include estimates of gross floor area

- Philadelphia Water Department refinements of parcel lines
  > requires very accurate lines for new storm water billing
Got Land Use?

Best Practice Review

Land use data should allow for comparison between existing, past, and future conditions, and with other spatial data.

• 1970 PCPC land use survey
  > remarkably similar to APA-LBCS “Activity” dimension
  > enable 1970-2010 citywide comparison

• North American Industrial Classification System (NAICS)
  > can relate “Activity” to data on establishments and jobs

• Residential distinctions in Census data and Building Codes
  > “units in structure”, “3 stories or less in height”
Inform *Philadelphia2035* Citywide Vision

PCPC 2010 Land Use

<table>
<thead>
<tr>
<th>1 DIGIT</th>
<th>1 DIGIT Description</th>
<th>2 DIGIT Description</th>
<th>2 DIGIT Abbrev</th>
<th>3 DIGIT</th>
<th>3 DIGIT Description</th>
<th>Detailed Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Residential</td>
<td>11</td>
<td>RLD</td>
<td>111</td>
<td>Residential Detached</td>
<td>typically R1 to R2, one hshld, 5% of res parcels</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>112</td>
<td>Residential SemiDetached</td>
<td>typically R3 to R4, one hshld, 13% of res parcels</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>113</td>
<td>Res. Condo 1 - 1.5 story</td>
<td>Bldg Code 510, 516, 520</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>119</td>
<td>Other RLD</td>
<td>E.g., accessory use to 111 or 112</td>
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<tr>
<td>12</td>
<td>Residential Medium Density</td>
<td>RMD</td>
<td>121</td>
<td>Residential Rowhouse</td>
<td>typically R9 to R10, one household, 65% of res parcels</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>122</td>
<td>Residential Detached Conv to Apts/Condo &lt;=3st</td>
<td>&lt;= 3 stories. Note: story distinction is to correspond to general guidance in zoning (ZCC proposed 3E) and applicable building code (ICC-International Residential Code)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>123</td>
<td>Residential SemiDetached Conv to Apts/Condos &lt;=3st</td>
<td>&lt;= 5 units, &lt;= 3 stories</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>124</td>
<td>Residential Rowhouse Conv to Apts/Condos &lt;=3st, &lt;= 5 units</td>
<td>&lt;= 5 units, &lt;= 3 stories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>125</td>
<td>Apt. House/Condos 2-4, Units incl Duplex or Quad &lt;=3st</td>
<td>&lt;= 5 units, &lt;= 3 stories. May include apartment complexes of comparable residential medium density</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>129</td>
<td>Other RMD</td>
<td>E.g., accessory use to 121 or 122</td>
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<tr>
<td>13</td>
<td>Residential High Density</td>
<td>RHD</td>
<td>131</td>
<td>Apt. House 3 Units+</td>
<td>&gt; 5 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>132</td>
<td>Residential Detached and SemiDetached Conv to Apts/Condos &gt;3st, but &lt;=5 units</td>
<td>&lt;= 5 units, &gt; 3 stories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133</td>
<td>Residential Rowhouse Conv to Apts/Condos &gt; 3 stories, &lt;= 5 units</td>
<td>&lt;= 5 units, &gt; 3 stories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
<td>Hotel/Motel</td>
<td>Motels, hotels, B&amp;Bs, boarding homes, rooming houses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>136</td>
<td>Residential Care Facility</td>
<td>Nursing home, personal care facility, rest home, life care, retirement home. NOT hospital or clinic (see Civic). Res Grp Qtrs.</td>
</tr>
</tbody>
</table>
Inform
Philadelphia2035
Citywide Vision

PCPC 2010 Land Use
Inform *Philadelphia2035* Citywide Vision

1970 to 2010 Trend

Population
- > 22% decrease
- > 21% decrease in net residential density (persons/res ac)

Employment
- > 30% decrease
- > 35% decrease in net job density (jobs/job-producing ac)

Development Pattern
- > 4,000 acres developed near the edges of the city
- > comparable amount of land left underutilized or vacant around the urban core
Inform *Philadelphia2035* Citywide Vision

2010 to 2035 Forecast

Demand

> + 100,000 people, + 40,000 jobs

Supply - Acres underutilized and susceptible to change

> 5,800 acres, about 7% of land area,
> vacant land, vacant and deteriorated buildings
> non-accessory parking lots

“*What Ifs*” CommunityViz® GIS test for “Smart Growth” options

> city has sufficient land to absorb forecasted growth
> more than 2,000 acres still remain underutilized in 2035
> still need management of interim and long-term vacancy
RENEW

1. Create improved access to our waterfronts
2. Expand access to neighborhood parks and recreation
3. Dilworth Plaza
4. Support sensitive development that preserves and enhances Philadelphia’s multi-faceted past
5. Elevate public demand for good design in the public realm
6. Centennial District Master Plan
7. Enhance and improve the walkable form with buildings and spaces that have appropriately scaled heights, massing, and setbacks
8. Reading Viaduct
9. Expand tourism programs to highlight Philadelphia’s cultural and historic heritage and to increase spending on heritage tourism
10. Frankford Creek
11. Delaware Waterfront
12. Increase tree coverage equitably across the city
13. Complete, expand, and connect watershed parks and trails in the city and the region
14. Improve air quality within the city and the region
15. Improve the quality and management of our water and wetland resources

- Primary Trail Network
- Gateway Improvement
Inform *Philadelphia2035* District Plans

**Purpose of District Plans**

- Advance Philadelphia2035 goals
- **Recommend future land use/guide zoning revisions**
- **Focus Areas**
  - Capital facilities planning
  - Enhance the public realm
  - Improve community health
  - Coordinate neighborhood plans
  - Involve the public

[www.phila2035.org]
Inform *Philadelphia2035* District Plans

“All Hands on Deck!!”

District by district **confirmation** of land use for each district

More detailed (3-digit) data

> Generate field maps

> Coordinate field work and data inputting

> Identify and resolve data issues

> Compile data and maps

> Perform analyses
Inform *Philadelphia2035* District Plans

Land Use Field Map - Central
Inform *Philadelphia2035* District Plans

Existing Land Use Map – Lower Northeast
Inform *Philadelphia 2035* District Plans

Existing Land Use Chart – University/Southwest

**Land Use by Percent Acre**

- Residential Medium: 23%
- Civic/Institution: 16%
- Transportation: 11%
- Residential High: 9%
- Park/Open Space: 7%
- Cemetery: 6%
- Residential Low: 6%
- Vacant: 5%
- Industrial: 5%
- Active Recreation: 5%
- Commercial Consumer: 3%
- Commercial Business/Professional: 2%
- Commercial Mixed Residential: 2%
- Culture/Amusement: 0%
- Water: 0%
Inform *Philadelphia2035* District Plans

Zoning Not Consistent With Land Use – Central District
## Inform Philadelphia2035 District Plans

### Zoning Not Consistent With Land Use – University/Southwest

<table>
<thead>
<tr>
<th>2-Digit Description</th>
<th>3-digit</th>
<th>Land Use (3-digit)</th>
<th>Compatible Zoning Districts</th>
<th>Estimated Acres</th>
<th>Land Use Found Non-Conforming with Current Zoning</th>
<th>Concentration in Neighborhoods by Leading Acreage</th>
<th>Concentration in Zoning Districts by Leading Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential High Density</td>
<td>131</td>
<td>Apt. House 5+ Units</td>
<td>RM-1, RM-2, RM-3, RM-4, RMX-3, CMX-3, CMX-4, CMX-5</td>
<td>52</td>
<td>Spruce Hill (28%), Powelton Village (17%), Walnut Hill (15%)</td>
<td>RTA-1 (47%), RSA-3 (25%), I-2 (15%)</td>
<td>RSA-3 (97%)</td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td>123</td>
<td>Residential Semi-Detached Conv. To Apts. ≤3 Stories</td>
<td>RTA-1, RM-1, CMX-3, CMX-4, CMX-5</td>
<td>32</td>
<td>Cedar Park (42%), Garden Court (35%)</td>
<td>RSA-3 (97%)</td>
<td></td>
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<tr>
<td>Residential Low Density</td>
<td>112</td>
<td>Residential Semi-Detached</td>
<td>RSA-1, RSA-2, RSA-3, RSA-4, RM-1, CMX-1</td>
<td>27</td>
<td>Spruce Hill (29%), Cedar Park (21%), Powelton Village (19%)</td>
<td>RTA-1 (73%), RSA-5 (23%)</td>
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<tr>
<td>Residential Medium Density</td>
<td>121</td>
<td>Residential Rowhouse</td>
<td>RSA-4, RSA-5, RM-1, CMX-1</td>
<td>25</td>
<td>Bartram (), Cedar Park (21%), Powelton Village (19%)</td>
<td>CMX-2 (32%), RSA-2 (27%)</td>
<td></td>
</tr>
<tr>
<td>Commercial Mix</td>
<td>231</td>
<td>Commercial Store/Office</td>
<td>CMX-1, CMX-2, CMX-2.5, CMX-3, CMX-4, CMX-5, RMX-1, RMX-2, RMX-3, IRMX</td>
<td>25</td>
<td>University City (62%), Spruce Hill (27%)</td>
<td>SP-INS (62%), RM-4 (23%)</td>
<td></td>
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<tr>
<td>Civic/Institution</td>
<td>411</td>
<td>Health Care</td>
<td>CMX-2, CMX-2.5, CIMX-3, CMX-4, CMX-5, CA-2, SP-INS</td>
<td>23</td>
<td>University City (76%), West Powelton (15%)</td>
<td>RSA-2 (67%), RM-4 (21%)</td>
<td></td>
</tr>
</tbody>
</table>
**FOCUS AREA > Sports Complex Vision**

Philadelphia is the only city or region with all four major sports franchises to have their venues collocated in the same complex. This creates major circulation challenges especially on multiple-event days. Unlike other cities where new sports venues have been located downtown or in revitalizing areas, Philadelphia’s stadium “glamour shots” show seas of surface parking and the skyline in the distance. Parking is necessary to the success of the sports complex, but limits the economic benefits of being home to four major sports franchises.

XFINITY Live!, a restaurant and shopping complex, is the first non-sports-related venue to be built within the Sports Stadium zoning district. The first phase of XFINITY Live! impacts parking only slightly as the Spectrum was torn down to make room for this phase. The full development will impact parking greatly as it includes approximately 250,000 square feet of stores, entertainment, restaurants, and a 300-room hotel.

This sports complex plan includes the total 350,000 square foot XFINITY Live! proposal and shows how any additional development at the sports complex can be designed in an efficient manner that considers parking, transit, and vehicular circulation. This development scenario supports the sports complex as a metropolitan subcenter and neighborhood center as recommended in THiVE.

Infrastructure recommendations include new roadways that help disperse traffic and create better connections to highways. Improvements are also proposed for the I-95, and other transit routes in CONNECT.

Urban design recommendations including a street grid and a thoughtful public realm are also included in this study as described in RENEW. The “SP-STA master plan zoning district is a crucial tool for implementing the vision for the sports complex.”

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**Short-Term Vision:**
Energize existing public space through programming

**Medium-Term Vision:**
Create new streets

**Long-Term Vision:**
Make the sports complex a destination beyond scheduled events

XFINITY Live!, together with mixed-use development on the north side of Pattison Avenue and along Broad Street, will create a vibrant, walkable sports complex transit-oriented development.

- XFINITY Live! under Construction, 2011
- XFINITY Live! Phase II
- Commercial
- Residential
- Structured Parking, replacing surface lot parking

FUTURE vision of Patterson Avenue, looking east
- Formalized vending space could activate the sidewalk
- A parking garage with ground floor commercial space could define the street

Night market Philadelphia, 2011

By encouraging licensed vendors, music, and other street-level activities along Patterson Avenue between RTA Station and the sports venues, a grand promenade and a sense of place will be created.

By extending the street grid through the Sports Stadium District, urban-rural development parcels are created and highway access improved.
FOCUS AREA > Parkside Industrial Park Vision

Improving Parkside Avenue

Fronting the historic Centennial District, Parkside Avenue has numerous vacant lots, inappropriate land uses, and is a wide, fast moving roadway with few pedestrian crossings. Consistent with the scale of the East Parkside Historic District, three- to four-story mixed-use development coupled with a traffic-calming median can bring new residents and businesses to the edge of one of Philadelphia’s largest and most significant urban parks.

Attracting New Industry

Until the 1970s, the area bounded by Parkside Avenue, Belmont Avenue, the AMTRAK/SEPTA rail right-of-way, and 52nd Street was occupied by a large rail yard for the Pennsylvania Railroad. The site has been redeveloped as an industrial park. In their Industrial Land Use Study, the Philadelphia Industrial Development Corporation (PIDC) recommends continued development of light industrial uses at this site. By extending Leidy Avenue, a clear break can be made between industrial land uses and future mixed land uses adjacent to the park. Additionally a Leidy Avenue extension improves vehicular access without overburdening Parkside Avenue.
Inform Philadelphia 2035 District Plans

Future Land Use – West Park

The West Park District is forecast to see modest growth over the next 10 years. These proposed changes to the land use of the district take into account not only places where the zoning and land use currently do not match but also where best to place growth and how best to utilize land that is available. Taking into account the recommendations from the Citywide Vision as well as previously existing plans and community feedback, this proposal looks to distribute density around areas of concentrated transit access, capital facilities, and cultural amenities. The Future Land Use Map reflects the recommendations of the THRIVE, CONNECT, and RENEW chapters of this plan and the expansion and consolidation of commercial corridors. In addition, the map shows existing vacant and under-utilized land used for new and exciting purposes.
Assess *Philadelphia2035* Performance

### 3 Themes and 9 Elements

> **THRIVE**
> Neighborhoods
> Economic Development
> Land Management

> **CONNECT**
> Transportation
> Utilities

> **RENEW**
> Open Space
> Environmental Resources
> Historic Preservation
> Public Realm

### 25 Topics with Goals

**Implementing Agencies**

- Commerce Department
- Economic Development
- Dept of Public Property
- Office of Housing and Community Develop
- Philadelphia Redevelopment Authority
- Phila Industrial Development Corp
- School District of Philadelphia
- Philadelphia Parks and Recreation
- Health and Opportunity
- Public Safety

- Transit
- Complete Streets
- Streets and Highways
- Airports, Seaports, and Freight Rail
- Consumption, Capacity, and Condition
- Broadband Infrastructure

- Watershed Parks and Trails
- Waterfronts
- Neighborhood Parks and Recreation
- Air Quality
- Water Quality
- Tree Cover
- Cultural, Historical Resources
- Heritage Tourism
- Development Patterns
- Urban Design

- Mayors Office of Transportation and Utilities
- Philadelphia Water Department
- Philadelphia Gas Works
- SEPTA
- Delaware Valley Regional Planning Corp
- PennDOT

- Philadelphia Water Department
- May Office of Arts, Culture, Creative Economy
- Philadelphia Parks and Recreation
- Mayor’s Office of Sustainability
- Delaware River Waterfront Corporation
- Schuylkill River Development Corporation
Assess *Philadelphia2035* Performance

Overarching Benefits – *Philadelphia2035* Citywide Vision

**Economic**
- Tax Base
- Property Values
- Land Utilization
- State of Repair
- Travel Times
- Poverty

**Health and Well-Being**
- Access to Opportunity
- Transportation Safety
- Affordability
- Chronic Disease
- Obesity

**Environment**
- Air Quality
- Water Quality
- Resilience to Natural Hazards
- Consumption of Non-Renewable Energy
Assess *Philadelphia2035* Performance

**Assessment is a balancing act**

**Control and accountability for outcomes**
- Understand constituencies: public, “electeds”, funders
- Set appropriate expectations for the plan, and planners
- Communicate short-term progress on long-term goals

**Availability of performance data**
- Process measures - easy
- Changes in human and physical conditions – less easy

**Availability of time and financial resources to assess and report**
- Dilemma … use limited resources to *do*, or track?
Assess *Philadelphia2035* Performance

Current activity

> Align w *Administration Goals*

Outcome—People choose to live and stay in the city

> % decrease in projects before ZBA

> Annual “Progress Report”, selected examples of implementation

> “Making it Happen” sections of District Plans

> *Philadelphia2035* “Exchange Meetings” with partner agencies
Assess *Philadelphia2035* Performance

Potential broader applications of land use data …

> Economic Benefits
  Tax Base/Poverty … commercial, industrial, culture and rec., …
  Underutilization … conversion of vacants and parking to …

> Health & Well-Being Benefits
  Access ……………… access to fresh food, parks, trails

> Environmental Benefits
  Natural Hazards … land uses in areas of risk
Assess *Philadelphia2035* Performance

Potential relationships between land use or other data . . . .

- Residential – # households, sq. ft. per unit, du/ac
- Employment - # jobs, sq. ft./job by sector, jobs/ac
- Fiscal Impact – service demands, tax generation
- Transportation – trip/parking generation, mode, time
- Energy – BTUs per sq. ft. from buildings & transport
- Environment – emissions from buildings & transport
- Urban Design – existing vs. potential build-out
Assess *Philadelphia2035* Performance

Potential broader applications of land use data

> **Question:** Do “typical” levels of land use utilization correspond to other data sources?
Assess *Philadelphia2035* Performance

Potential broader applications of land use data

> **Answer:** Qualified “Yes”, at citywide level

Gross Floor Area
(1 digit level)

- 780m sq. ft. residential
- 140m sq. ft. commercial
- 114m sq. ft. industrial
- 102m sq. ft. civic/institution
- 33m sq. ft. transportation
- 8m sq. ft. culture/amusement

Gross Floor Area **→** Net Available Area **→** Vacancy Rates **→** Net Occupied Area