National TOD Database
CTOD Partnership

Dedicated to providing best practices, research and tools to support market-based transit-oriented development
Why a TOD Database?

• Revealing the value of transit requires data from many sources
• Need a tool that allows quick warehousing of data for the purpose of creating new knowledge and understanding
• Existing networks weren’t dedicated to producing the tool
Planning Tool for TOD

History of CTOD Database

- Limited information at the transit area
- Initially funded by FTA (2005) then HUD & Surdna
- Tool to measure & project transit demand
- Identifies existing & potential TOD markets & their benefits
Putting the TOD Database to Work

- Map-based website
- **Goal:** Accelerate practice & commitment to high performance TOD
- Make data easily accessible to practitioners

http://toddata.cnt.org/
CTOD TOD Database
(Total = 5,999 Transit Stations)
Station Types

- **Existing**
  - Commuter Rail, commuter Amtrak, BRT with designated right-of-way, ferries

- **Planned**
  - FTA New Starts in Preliminary Engineering phase or beyond, Urban Circulator, TIGER 1&2, other federal funding, locally-funded projects under construction

- **Proposed**
  - FTA New Starts in Project Development phase, locally-funded projects, currently closed stations
User Friendly Features

• One Stop Shop - Nearly 70,000 characteristics for 5,999 stations
• Data on 3 levels:
  – Transit Zone (½ and ¼ mile buffer around each station)
  – Transit Shed (accounts for overlap between Transit Zones)
  – Transit Region
• Presented in standard and custom report formats
• Displayed on a map-based website
• Can be downloaded in Microsoft Word table or Excel spreadsheet
• Station locations can now be downloaded
Data at a Neighborhood Level

- Operates on GIS Platform
- Drills down to the neighborhood using census tracts, block groups and blocks
- Aggregate the data to transit geographies

Census Boundaries don’t align perfectly with Transit Zones, particularly Census Tracts. Census Blocks allow us to really focus on the detailed characteristics of a neighborhood.
Data from Census 2000

- **Summary File 1**
  - Housing units, occupancy status, tenure, household size, race/ethnicity, gender

- **Summary File 3**
  - Income, median value of owner occupied housing, gross rent, vacancy status, vehicle ownership, mode to work, travel time to work

- **Census Transportation Planning Package (CTPP)**
  - Place of residence/work, and origin/destination
New: 2005-09 American Community Survey Data

- Ongoing survey that gathers detailed population and housing data every year
- Replaced the long form of the Census
- 5 Year Estimates are rolling averages of data collected 2005-09
- Aggregated from the Census block group or tract

South Lake Union Trolley in Seattle
EPA Smart Growth
New: Data from Census 2010

- **Summary File 1**
  - Age, sex, race and ethnicity, household relationship and housing tenure
  - Aggregated from Census blocks and tracts

Pasadena light rail del mar station
EPA Smart Growth
Local Employment Dynamics (LED)

- New: Data from On the Map v.5
- Residence area characteristics
  - Count of workers by sector, quarterly earnings, worker age, median distance traveled to work
- Work area characteristics
  - Count of workers where they work by sector
- Median commute distances
  - Derived from origin and destination data

Who lives here (workers)?

How far do workers travel?

½ Mile Transit Zone

Who works here?
Derived Statistics

- **Walkability** (block size)
  - Derived from census Tiger files
- **Mode Split %**
  - For commuters from CTPP
- **Housing and Transportation Affordability**
  - Using CNT’s H+T® Affordability Index
  - **2005-09 H+T data coming in March**
Housing + Transportation Affordability Index

A new standard of affordability

http://htaindex.cnt.org
Standard Reports

Reports
Select a report below or build a custom report:

- Auto and Non-Auto Commute to Work by Industry
- Densities
- Employment (2002 - 2009)
- Household Income
- Housing + Transportation Affordability Index
- Journey to Work
- Journey to Work by Public Transportation
- Population and Employment
- Race
- Tenure
- TOD Typology Variables
- Trends Analysis
- Vehicle Ownership
- Where Workers Live by Occupation
- Where Workers Work by Industry

TOD Report

View as: Table | List
Download as: Word | Excel | CSV

Chicago Transit Region:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 2010:</td>
<td>8,272,768</td>
</tr>
<tr>
<td>Population 2010:</td>
<td>8,588,609</td>
</tr>
<tr>
<td>Jobs 2002:</td>
<td>3,942,118</td>
</tr>
<tr>
<td>Jobs 2009:</td>
<td>3,829,788</td>
</tr>
<tr>
<td>Median Household Income 2010:</td>
<td>52,102</td>
</tr>
<tr>
<td>Median Household Income 2009:</td>
<td>61,502</td>
</tr>
</tbody>
</table>

Note: All data are proportionally aggregated to transit zone, transit shed and transit region geographies.
- Census 2000 Summary File 1 data are aggregated from Census 2000 block groups and tracts
- Census 2000 Summary File 2 data are aggregated from Census 2000 block groups and tracts
- CTPP 2000 data are aggregated from Census 2000 tracts
- Long Term Employment Data (LTED) 2002 - 2005 data are aggregated from Census 2000 blocks
Build Custom Reports
Download Data and Stations

TOD Report

View as: Table | List  Download as: Word | Excel | CSV

<table>
<thead>
<tr>
<th>Buffer</th>
<th>Agency</th>
<th>Line(s)</th>
<th>Station Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Population 2000</th>
<th>Population 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Transit Region</td>
<td>CTA</td>
<td>Brown Line</td>
<td>Southport</td>
<td>41.94744</td>
<td>-87.60019</td>
<td>8,272,768</td>
<td>8,598,809</td>
</tr>
<tr>
<td>Station .5 Mile Transit Zone CTA</td>
<td>Brown Line, Purple Line, Red Line</td>
<td>Belmont</td>
<td>41.93975</td>
<td>-87.65338</td>
<td>23,901</td>
<td>24,139</td>
<td></td>
</tr>
<tr>
<td>Station .5 Mile Transit Zone CTA</td>
<td>Red Line</td>
<td>Addison-Red</td>
<td>41.94742</td>
<td>-87.65362</td>
<td>24,303</td>
<td>28,329</td>
<td></td>
</tr>
</tbody>
</table>

1 Station location, current as of January 1, 2012. Station locations are updated (as necessary) on a quarterly basis which may result in changes in aggregated data.
2 Census 2000 Summary File 1 p001001 aggregated from Census 2000 Blocks
3 Census 2010 Summary File 1 p0010001 aggregated from Census 2010 Blocks
4 2002 LED Work Area Characteristics total aggregated from Census 2000 Blocks
5 2006 LED Work Area Characteristics total aggregated from Census 2000 Blocks
6 Census 2000 Summary File 3 p053001 weighted average from Census 2000 Book Groups
7 American Community Survey 2005-2009 5-Year Estimates b19013_001 aggregated from Census 2000 Block Groups

- Download data to Excel, Word or CSV
- Station locations can be downloaded by region or for the entire US
- Print map and data
Using the **Database** for Economic **Development** to Create Sustainable & **Livable** Communities

San Diego Light Rail Station
EPA Smart Growth

PDX Museum South Safeway 7 Streetcar
EPA Smart Growth
Users of the TOD Database

1,169 Registered Users

- Research, 46%
- Private Development/Planning, 22%
- Governmental Transit Agency, 8%
- Housing Advocacy, 3%
- Governmental Planning Agency (Land Use), 15%
- Transit Advocacy, 6%
## Urban Form Transect

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Jobs</th>
<th>Retail Jobs</th>
<th>Households</th>
<th>T% of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prairie View</strong></td>
<td>447</td>
<td>2</td>
<td>682</td>
<td>21.6%</td>
</tr>
<tr>
<td><strong>Rosemont</strong></td>
<td>2,600</td>
<td>20</td>
<td>126</td>
<td>18.9%</td>
</tr>
<tr>
<td><strong>Damen</strong></td>
<td>5,451</td>
<td>950</td>
<td>8,335</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

- Exurban
- Suburban
- Urban
Transportation Planners
Justifying Reduced Parking in TOD Areas

Los Angeles Parking Study
Planning for Demand
TOD Trends

Total Households
Percent Change 2000 - 2010

Downloaded from the National TOD Database
Data: Census 2000, Census 2010

*Preliminary Findings
TOD Trends

Median Household Income
Percent Change 2000 - 2009

*Preliminary Findings

Downloaded from the National TOD Database
Data: Census 2000, ACS 2005-09
TOD Trends
Average Number of Vehicles available per Household
Percent Change 2000 to 2009

*Preliminary Findings

Downloaded from the National TOD Database
Data: Census 2000, ACS 2005-09
TOD Trends

Percent of Total Regional Jobs Located in Transit Shed
2002 & 2009

Downloaded from the National TOD Database
Data: LED Work Area Characteristics 2002 & 2009

*Preliminary Findings
TOD Trends

Percent of Workers Taking Public Transit to Work 2009

Downloaded from the National TOD Database
Data: Census 2000, ACS 2005-09

*Preliminary Findings
TOD Trends

Percent of Workers Taking Public Transportation, Bicycle or Walking to Work
2009

Downloaded from the National TOD Database
Data: Census 2000, ACS 2005-09

*Preliminary Findings
TOD Trends

Journey to Work, 2009
Seattle Transit Region
- Work at home, 5%
- Other, 1%
- Public transportation, bicycle or walk, 12%
- Vehicle, 82%

Journey to Work, 2009
Seattle Transit Shed
- Work at home, 4%
- Other, 1%
- Public transportation, bicycle or walk, 34%
- Vehicle, 61%
TOD’s Impact on Infill Development
Davis Transit Station in Evanston, IL

Drilling Down to the Transit Zone

Davis Station Transit Zone
- Households (2000-10): 12%
- Jobs (2002-09): 23%

2010 Households = 6,115
2009 Jobs = 21,889

Developed Parking Lots

2000 Aerial Photo (Cook County Assessor)

Current Google Aerial Photo
Suburban Chicago Examples of TOD

Examples of TOD

Transit Zones

- Davis
- Aurora Metra
- Naperville Metra
- Arlington Heights Metra
- Oak Park Metra

Population 2000
Population 2010
2002 Total Jobs
2009 Total Jobs

Region & Region Transit Shed

Transit & Bicycling/Walking are Heavily Utilized at TOD’s

Source: 2000 Census & ACS 2009 5 Year Average Data on Journey to Work Trends
CTOD Contacts

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