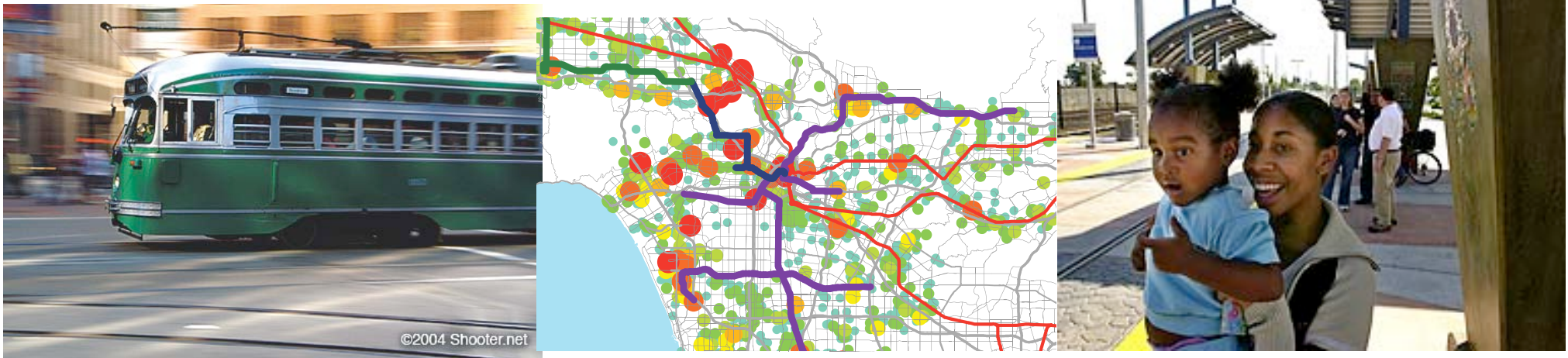


Tools for Performance-Based Transit-Oriented Development

New Partners for Smart Growth Conference, February 3, 2011



***Sam Zimbabwe, Center for Transit-Oriented Development Director
Reconnecting America***

CTOD CENTER FOR TRANSIT-ORIENTED DEVELOPMENT



- *6-year old partnership dedicated to improving practice through technical assistance, research + policy reform*
- *Creating a national marketplace for TOD, working with cities, transit agencies, developers, investors + communities*
- *Developing new tools and collaborative and equitable planning models*
- *On-line Clearinghouse of TOD + Transit Best Practices*

Some Tools

- H+T[©] Affordability Index (CNT Lead)
 - Redefine affordability, but in the mean time find the monetary value of location efficiency
- TOD Database
 - Connect with tons of data for the area around transit stations (actual and planned)
- Developing Performance-Based Station Types
 - Performance bases categorization of transit stations and what intensity of use shows

H+T[©] Affordability Index

6 Neighborhood Variables

Residential Density
Gross Density
Average Block Size in Acres
Transit Connectivity Index
Job Density
Average Time Journey to Work

3 Household Variables

Household Income
Household Size
Commuters per Household



Car Ownership
+
Car Usage
+
Public Transit Usage



**TOTAL
TRANSPORTATION
COSTS**

H+T Broadly Embraced

Urban Markets Initiative




METROPOLITAN POLICY PROGRAM

The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice

By Center for Transit-Oriented Development and Center for Neighborhood Technology

This brief describes a new instrument to quantify, for the first time, the true affordability of housing choices. This brief explains the first section provides a procedure to create the Affordability Index. The index is a seven-county area in the usefulness of this tool as a transportation and housing choice families in each of four different with suggested policy recommendations actors in the housing market, action and land use areas at all

The Housing and Transportation because it prices the trade-offs costs and the savings that derive schools, and work, and that both are available for every transit-oriented neighborhoods in more than policymakers, leaders, and investors about which neighborhoods of their policy and investment c

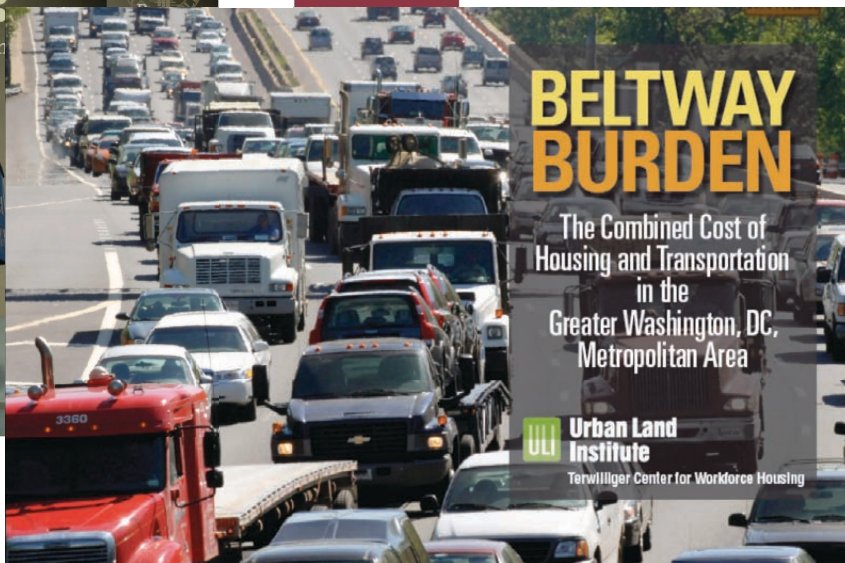
I. Housing and Transportation
The cost of living for an largest are housing and understood as the exterior price of a home. However be too limited. The cost of transportation equation, has become increas

JANUARY 2006 • THE BRIDGES INSTITUTION • URBAN MARKETS INITIATIVE • MARKET INNOVATION BRIEF




A HEAVY LOAD:

The Combined Housing and Transportation Burdens of Working Families





BELTWAY BURDEN

The Combined Cost of Housing and Transportation in the Greater Washington, DC, Metropolitan Area




Urban Land Institute
Terwilliger Center for Workforce Housing



Bringing Bay Area Affordability into Sharper Focus

An H+T™ Analysis



Prepared for: Metropolitan Transportation Commission
Submitted by: Center for Neighborhood Technology
March 2009

Now Available for 337 Metros



True Affordability and Location Efficiency

H+TSM Affordability Index

[Maps](#) [About](#) [Press](#) [Method](#) [Mailing List](#)

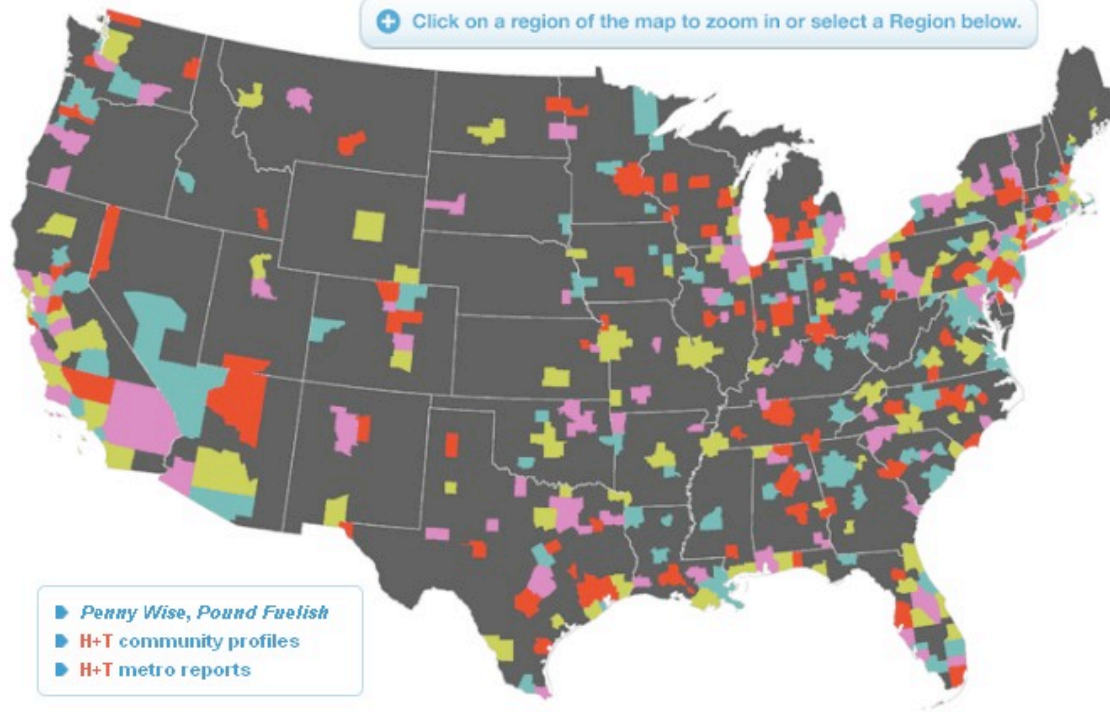
For more information about CNT
please visit the CNT website.



The Housing + Transportation Affordability Index is an innovative tool that measures the true affordability of housing based on its location.

Americans traditionally consider housing affordable if it costs 30 percent or less of their income. The Housing + Transportation Affordability Index, in contrast, offers the true cost of housing based on its location by measuring the transportation costs associated with place.

[+ Click on a region of the map to zoom in or select a Region below.](#)



- ▶ Penny Wise, Pound Foolish
- ▶ H+T community profiles
- ▶ H+T metro reports



Alaska



Hawaii



Puerto Rico

PENNY WISE **POUND FUELISH**

New Measures of Housing + Transportation Affordability



CNT

MARCH 2010

Key H+T Findings

H + T Index reveals hidden transportation costs, providing a true measure of affordability

Compact, mixed use neighborhoods close to jobs, stores, and transit have lower average household transportation costs

Cheaper housing in exurban areas, far from jobs and stores, have high transportation costs

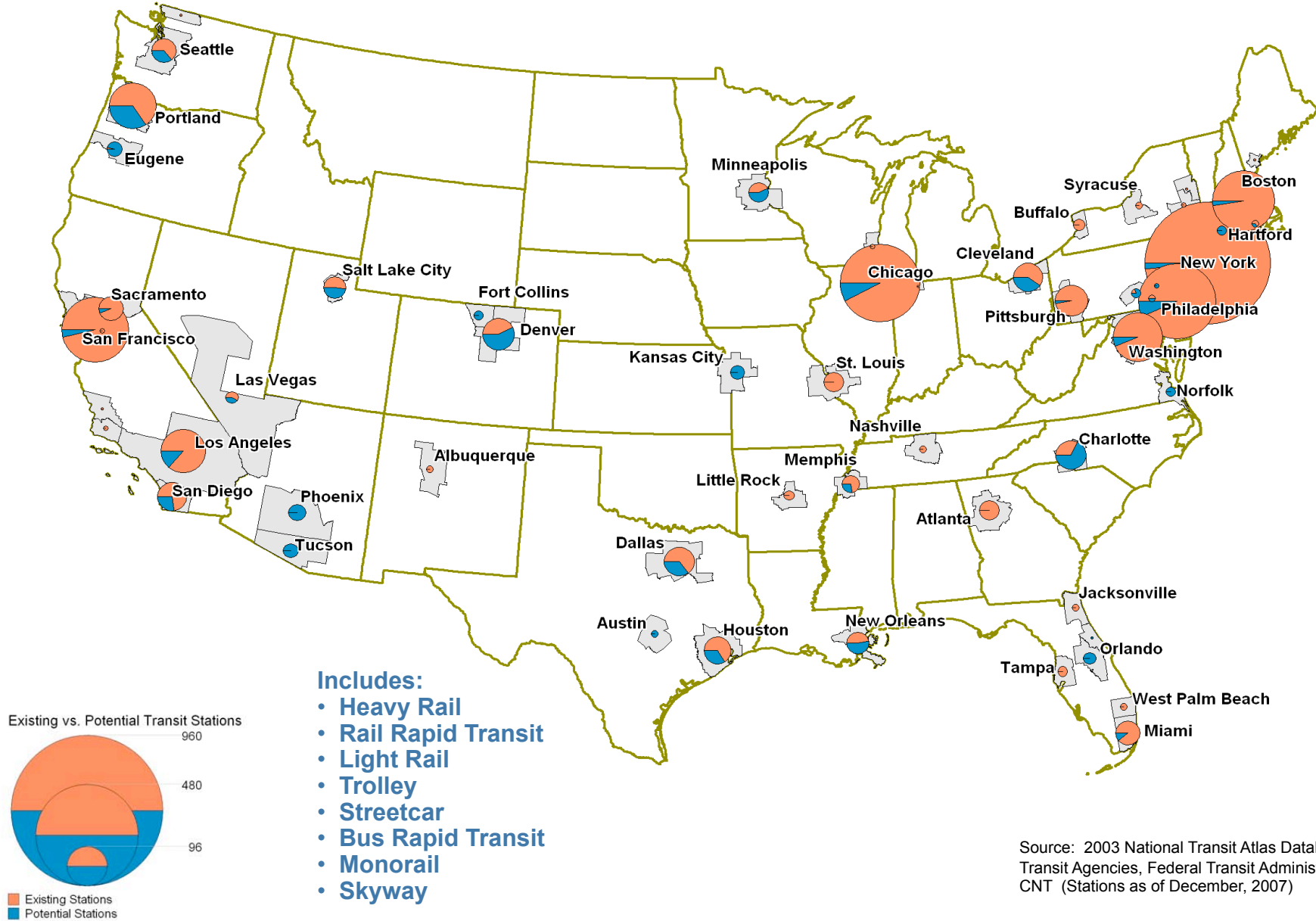


TOD Database Launched in 2010

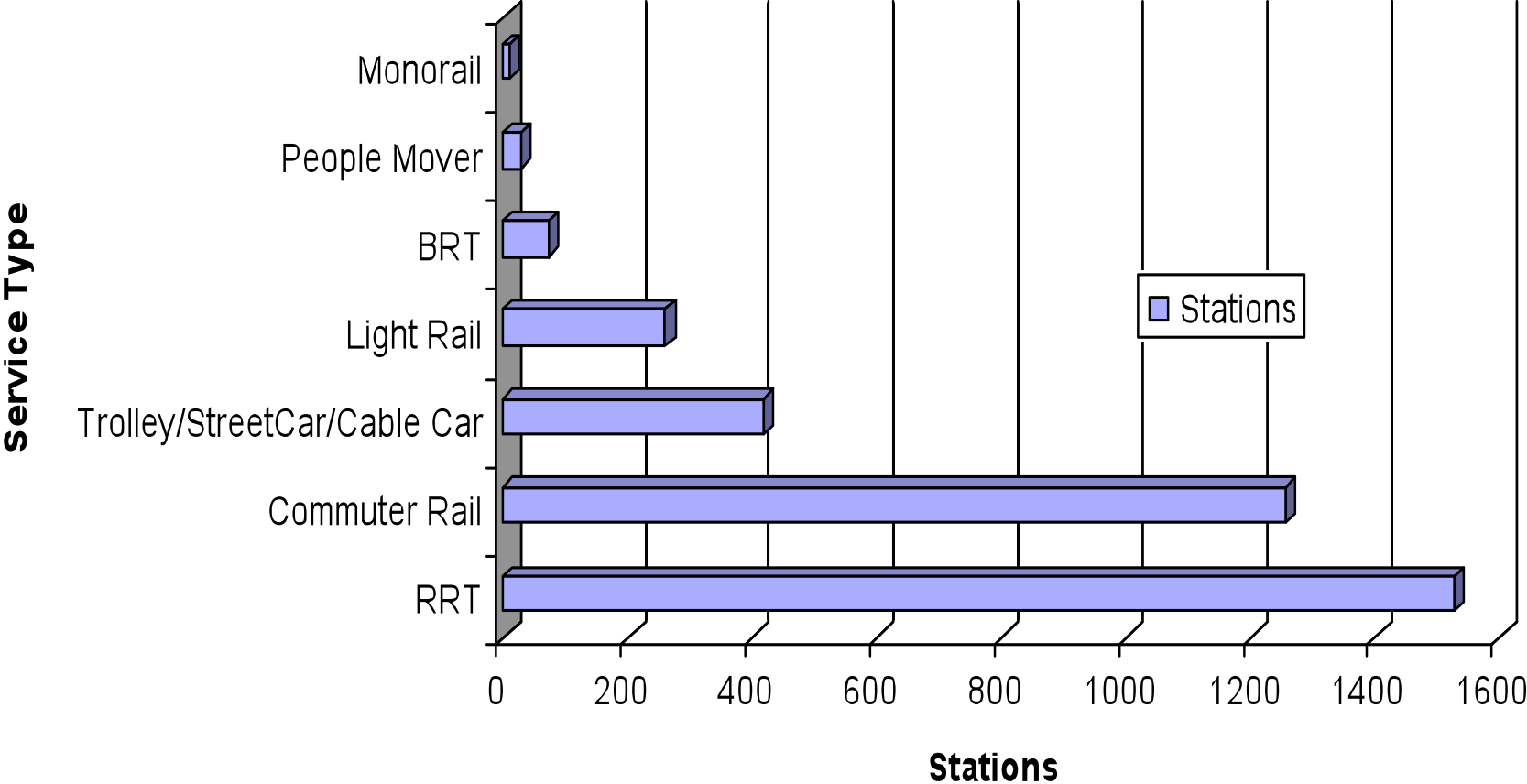
The screenshot displays the TOD Database web application interface. At the top left, the logo for "TOD Database" is shown with a "beta" label and a "Log Out" link. The top right corner features the "CNT" logo. Below the header, there is a navigation bar with a "Region" dropdown menu and a "Transit Zone" selector set to ".25 mile". A legend below the selector identifies symbols for "Selected Station" (blue square), "Station" (blue circle), "Existing Transit" (orange circle), "Potential Transit" (purple circle), and "Transit Region" (red square). The main content area is a map of the United States, with red shaded areas indicating transit regions. Major cities and states are labeled. On the left side of the map, there is a vertical scale bar and a compass. Below the map, there is a "Report" section with buttons for "Data", "Geographies", and "Full Report". At the bottom of the page, there is a copyright notice: "© Copyright 2009-10 Center for Neighborhood Technology · 2125 W North Ave, Chicago, IL 60647 · Tel: (773) 278-4800 · Fax: (773) 278-3840" and a mention of being a "Recipient of the 2009 MacArthur Award for Creative and Effective Institutions".

CTOD TOD Database

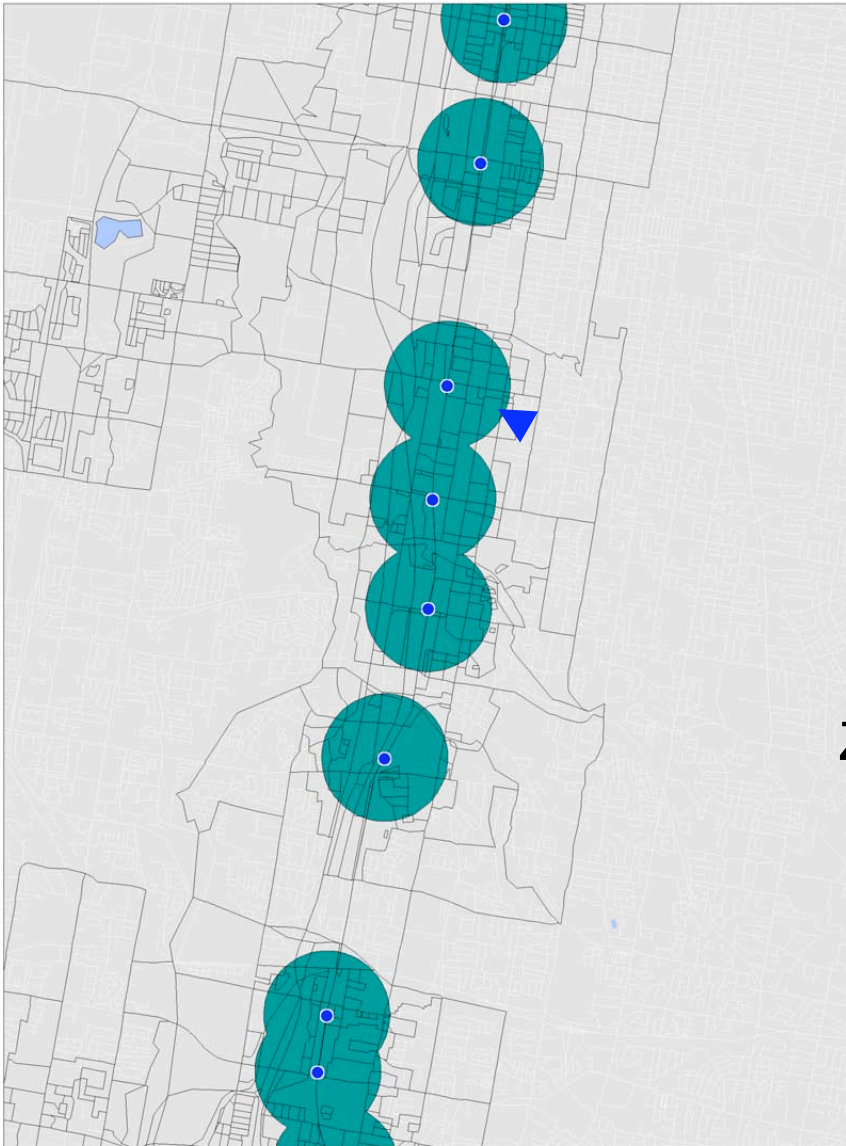
(Total = 4,610 Transit Stations)



Existing Stations Service Type



Data at a Neighborhood Level



- GIS used to proportionally assign the data
- Drilling down to the neighborhood using census tracts, block groups and blocks

Census Boundaries don't align perfectly with Transit Zones, particularly Census Tracts

Blocks allow us to drill down to greater detail

Putting the TOD Database to Work – 2009-10 Upgrades

- Held workshops and webinars for potential users – over 200 reviewers
- Developed hands-on users group
- Collected and incorporated reviewer feedback
- Drafted users guide
- Public Launch – first 2 weeks over 1,200 users, 15,000 reports generated

TOD Database Demo

Home Page

<http://Toddata.cnt.org>

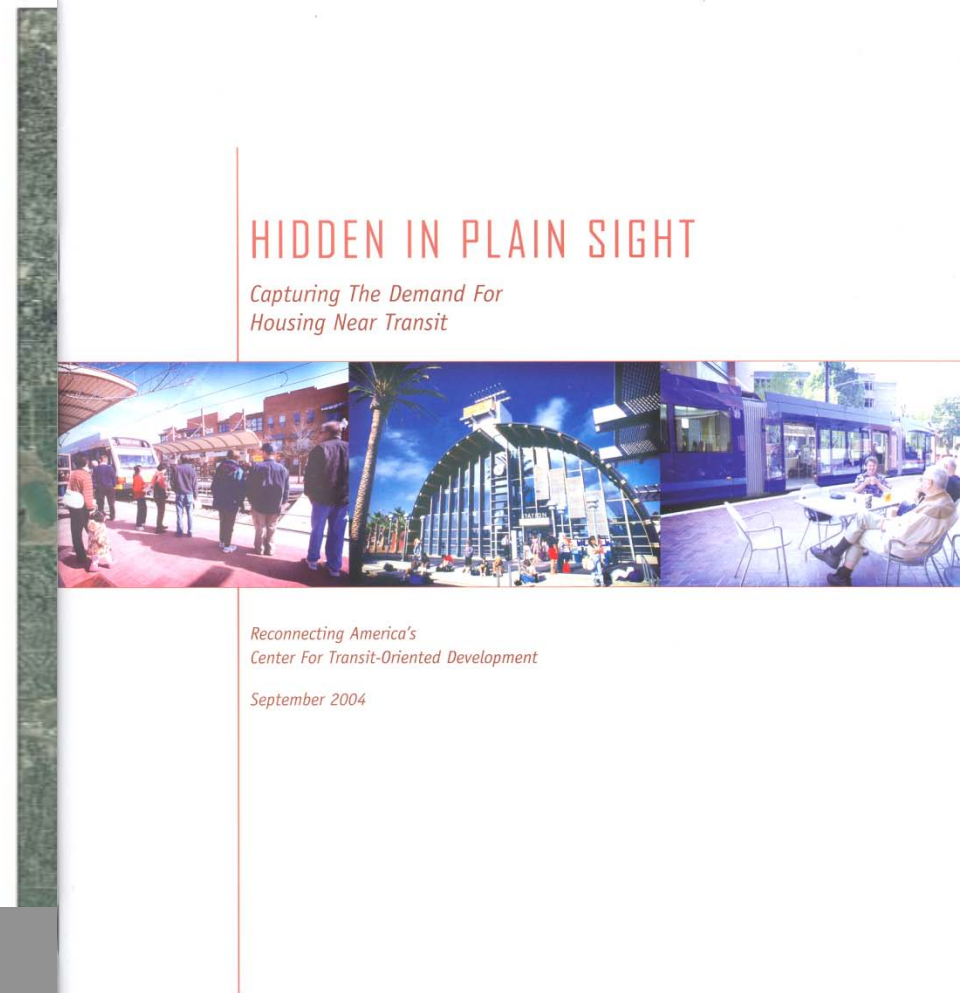
Uses for TOD Database

- National research
 - Soon with demographic trend analysis
- Regional and Local decision-making
 - Regional analysis
 - Station-level analysis
- New data-driven tools

Result

- Neighborhoods near transit today are more racially and economically diverse than the regional average.
- By 2030, estimated that over 14 million households will have a potential demand for living near transit.
- 40% of these households will make less than 50% of median income

Realizing the Potential: Expanding Housing Opportunities Near Transit
by Reconnecting America's Center for Transit-Oriented Development for FTA and HUD



Using the TOD Database: Effect of Hiawatha Line on Employment

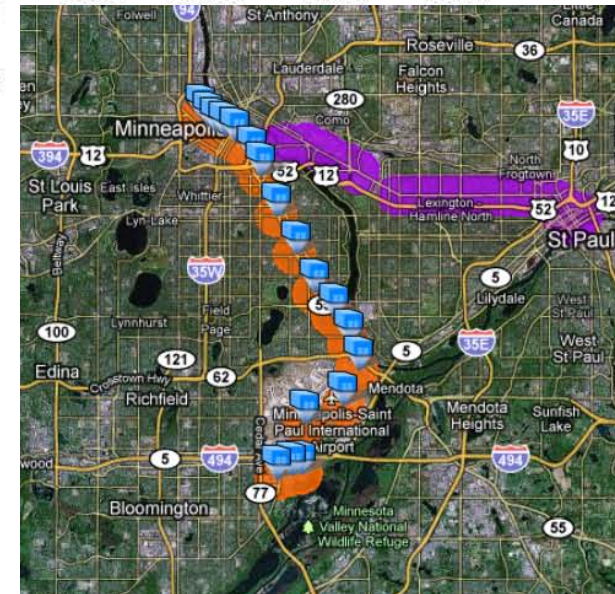
TOD Report

View as: [Table](#) | [List](#) | [Download Table](#)

Buffer	Agency	Line(s)	Station Name	2002 Total Jobs ⁽¹⁾	2003 Total Jobs ⁽²⁾	2004 Total Jobs ⁽³⁾	2005 Total Jobs ⁽⁴⁾	2006 Total Jobs ⁽⁵⁾	2007 Total Jobs ⁽⁶⁾	2008 Total Jobs ⁽⁷⁾	2002 Jobs per Acre ⁽⁸⁾	2008 Jobs per Acre
Minneapolis--St. Paul Transit Region				1,650,511	1,637,950	1,676,990	1,663,395	1,678,232	1,719,271	1,713,021	0.43	
Hiawatha .5 Mile Transit Shed	Metro Transit	Hiawatha	18 Stations	163,625	170,305	177,945	173,486	154,230	178,809	181,952	26.01	
Station .5 Mile Transit Zone	Metro Transit	Hiawatha	28th Avenue	13,983	14,301	12,690	11,326					
Station .5 Mile Transit Zone	Metro Transit	Hiawatha	38th Street	1,241	1,151	1,068	1,013					

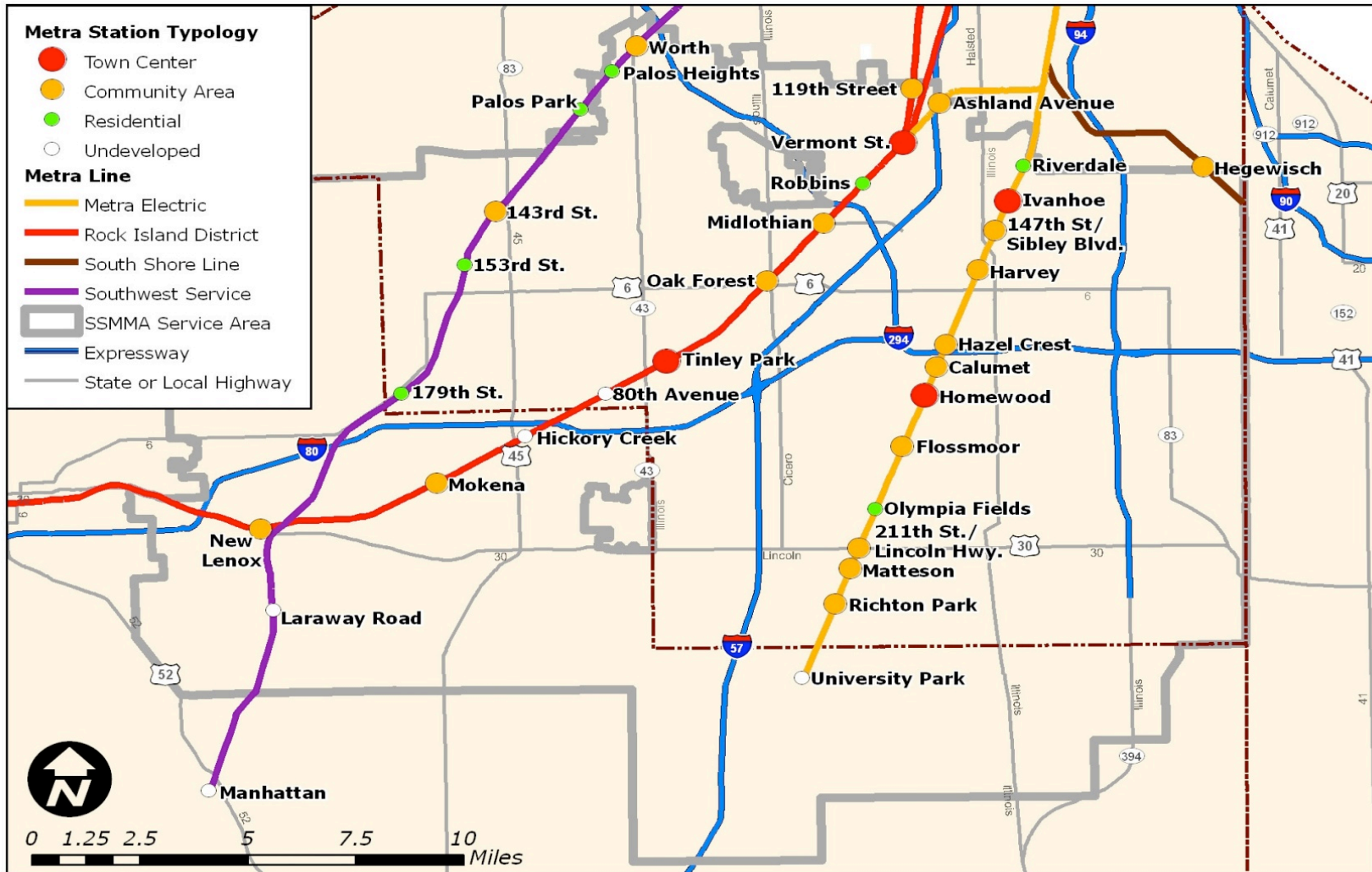
Employment (2002 - 2008) Standard Report

- Hiawatha Line opened in 2004
- More job growth in Transit Shed than Region
- Greater % of Region's jobs are located in the Transit Shed in 2008 than in 2002

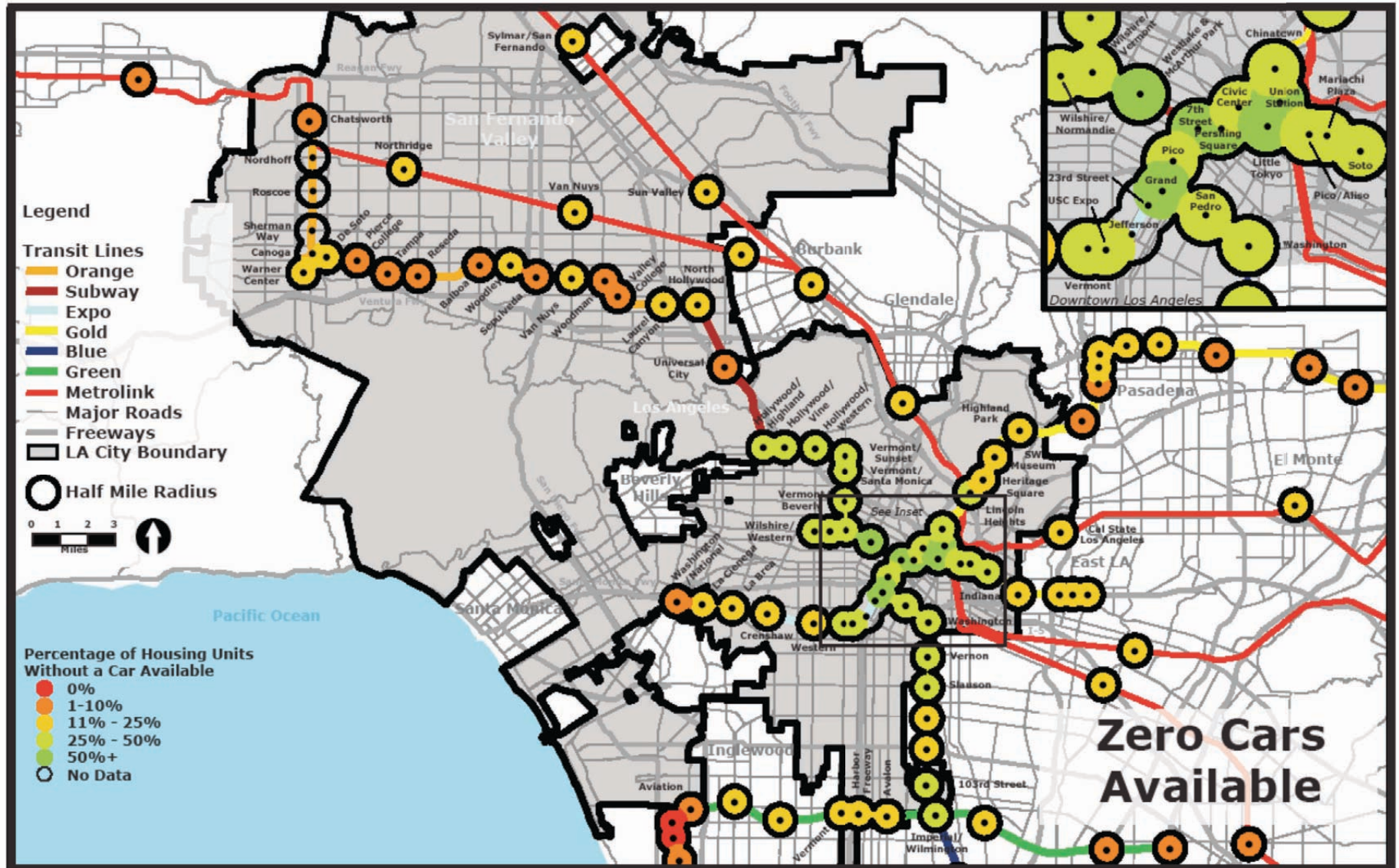


Developing Strategic TOD Plans for Deploying Underutilized Assets

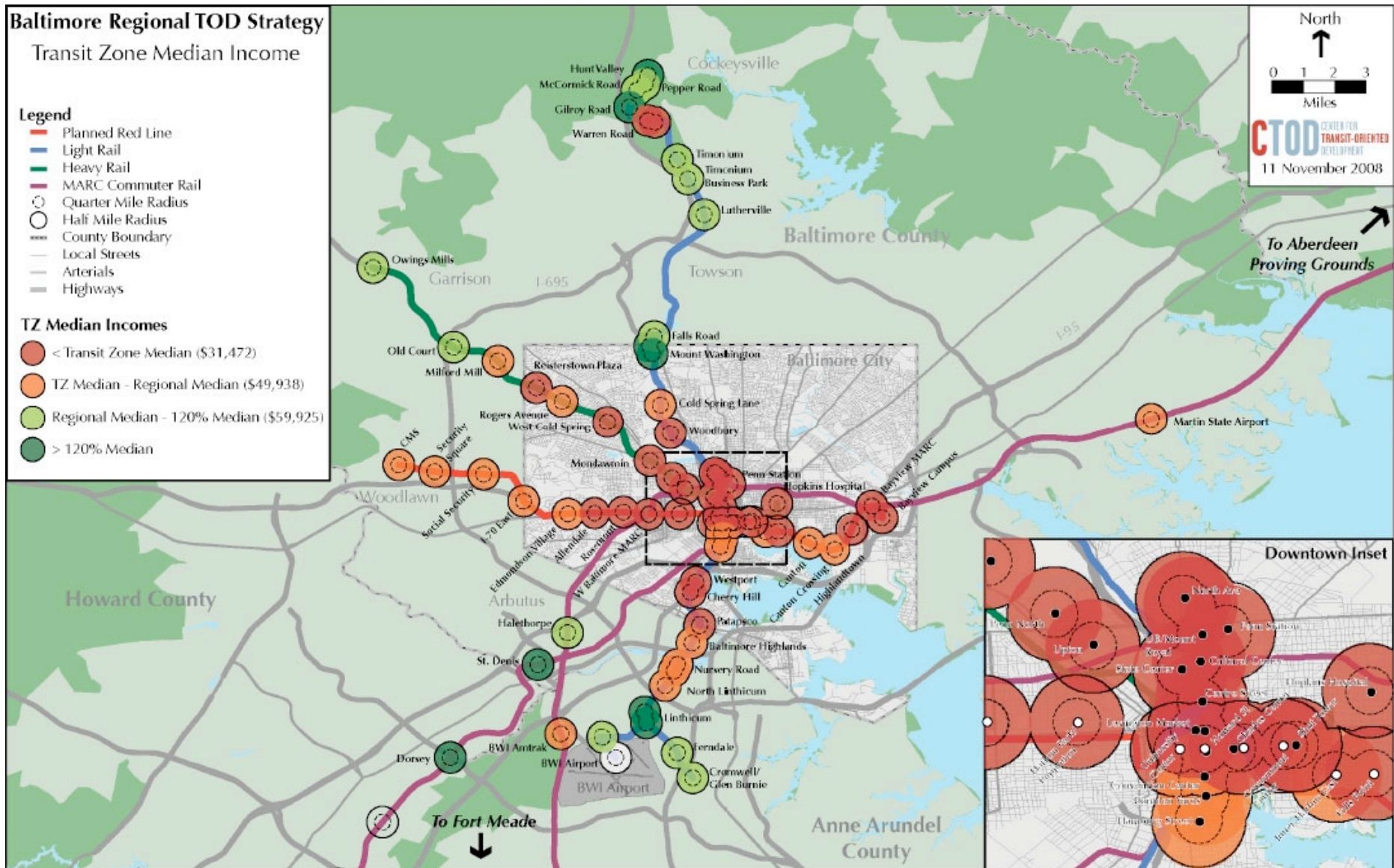
TOD Typology for Chicago's South Suburbs



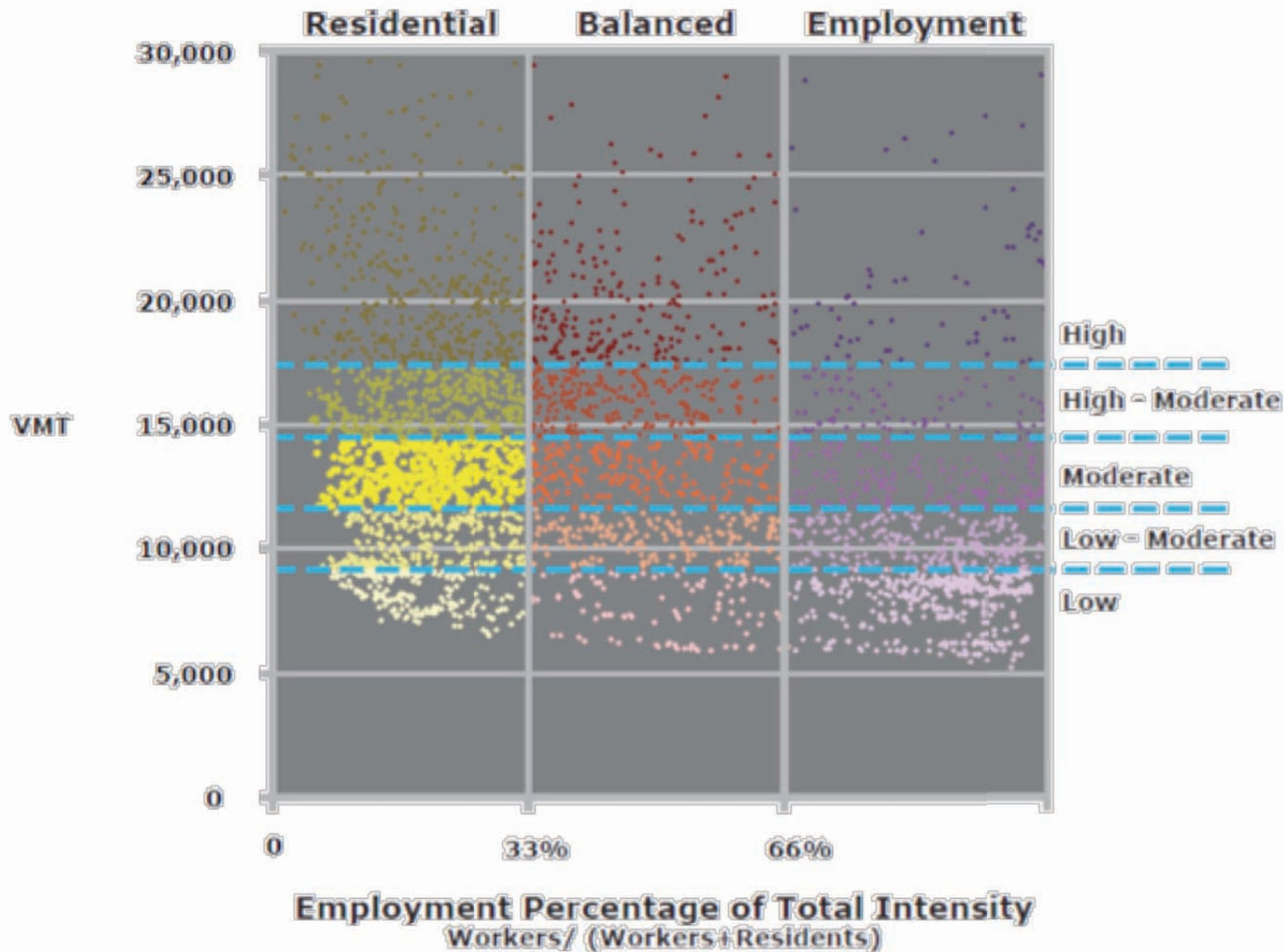
Helping Justify Reduced Parking in TOD Areas



Identifying Regional Disparities & Local Retail Market Potential

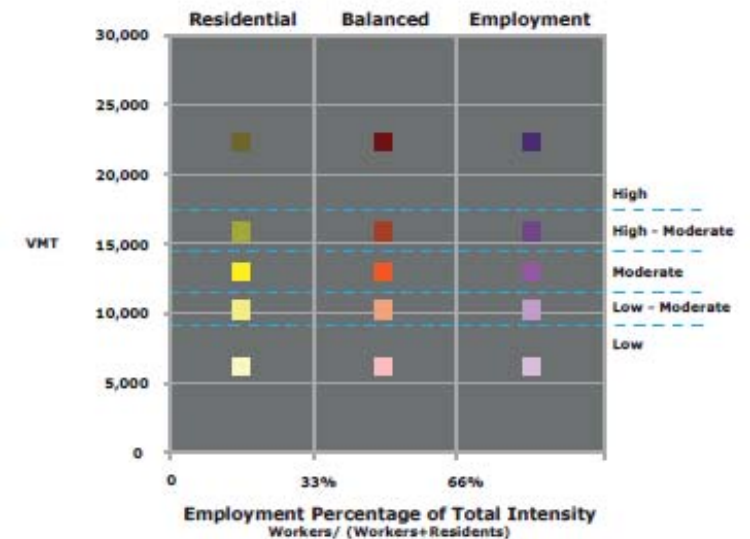
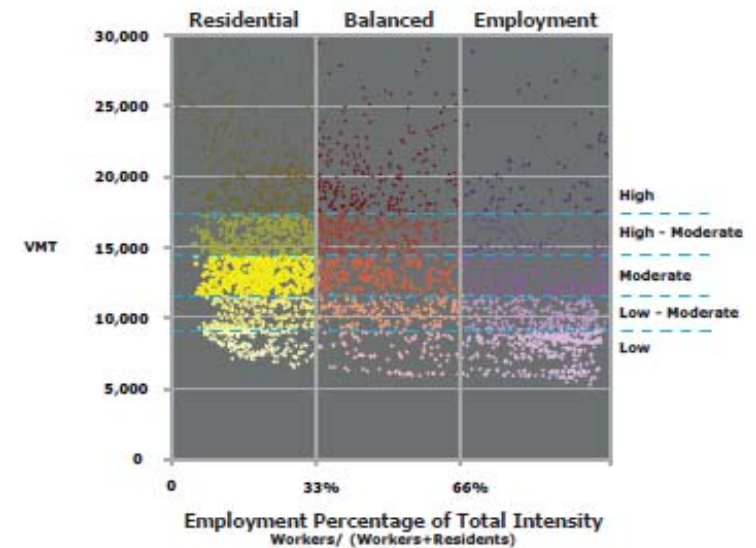


Developing Performance-Based TOD Metrics

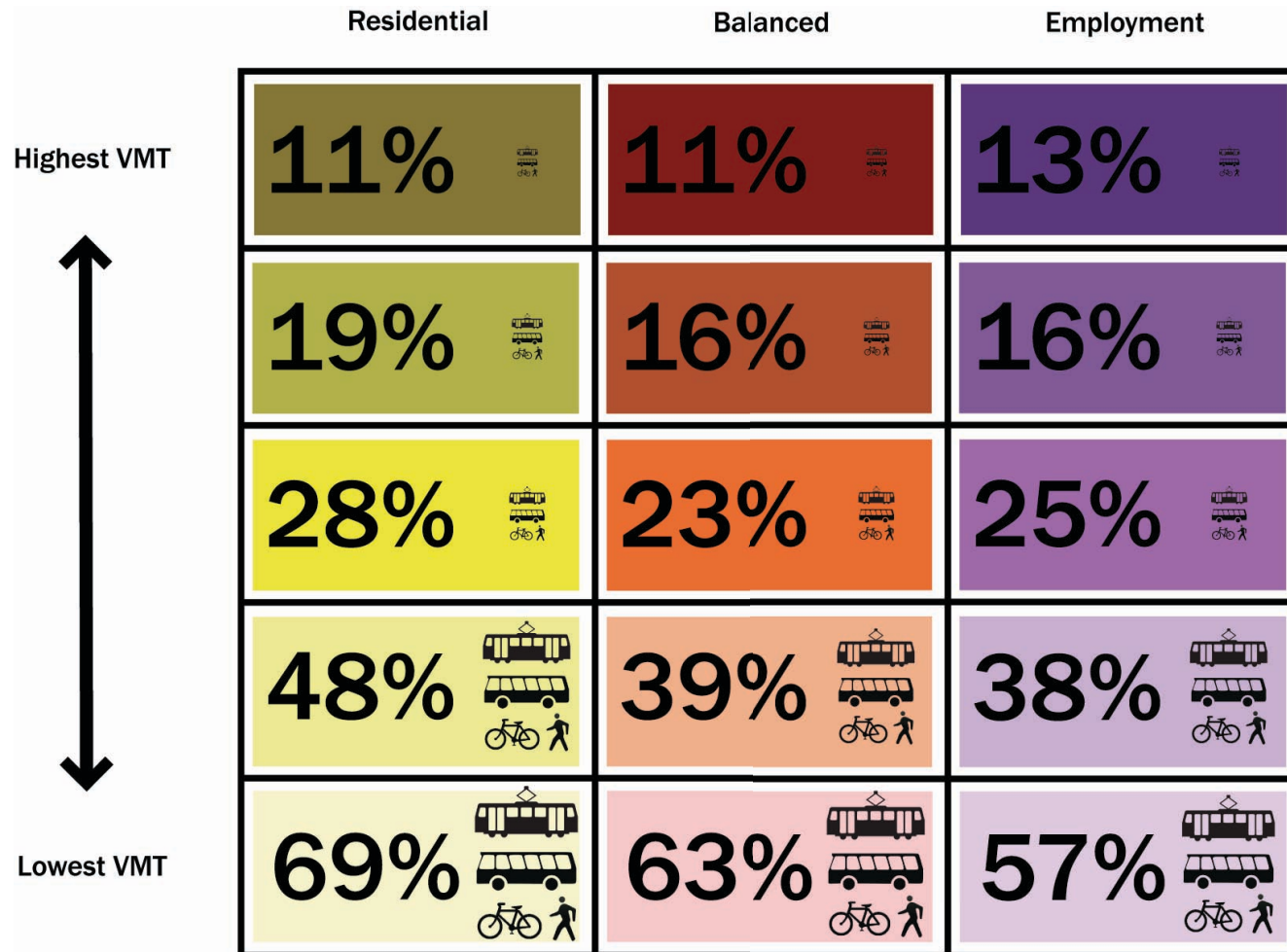


Normative Metrics

- Metrics Construction
 - The average of all stations in each place type
- Normative metric for each type
 - Travel characteristics
 - Transit access
 - Block size
 - Auto Ownership
 - Transportation Cost



Developing Normative Metrics

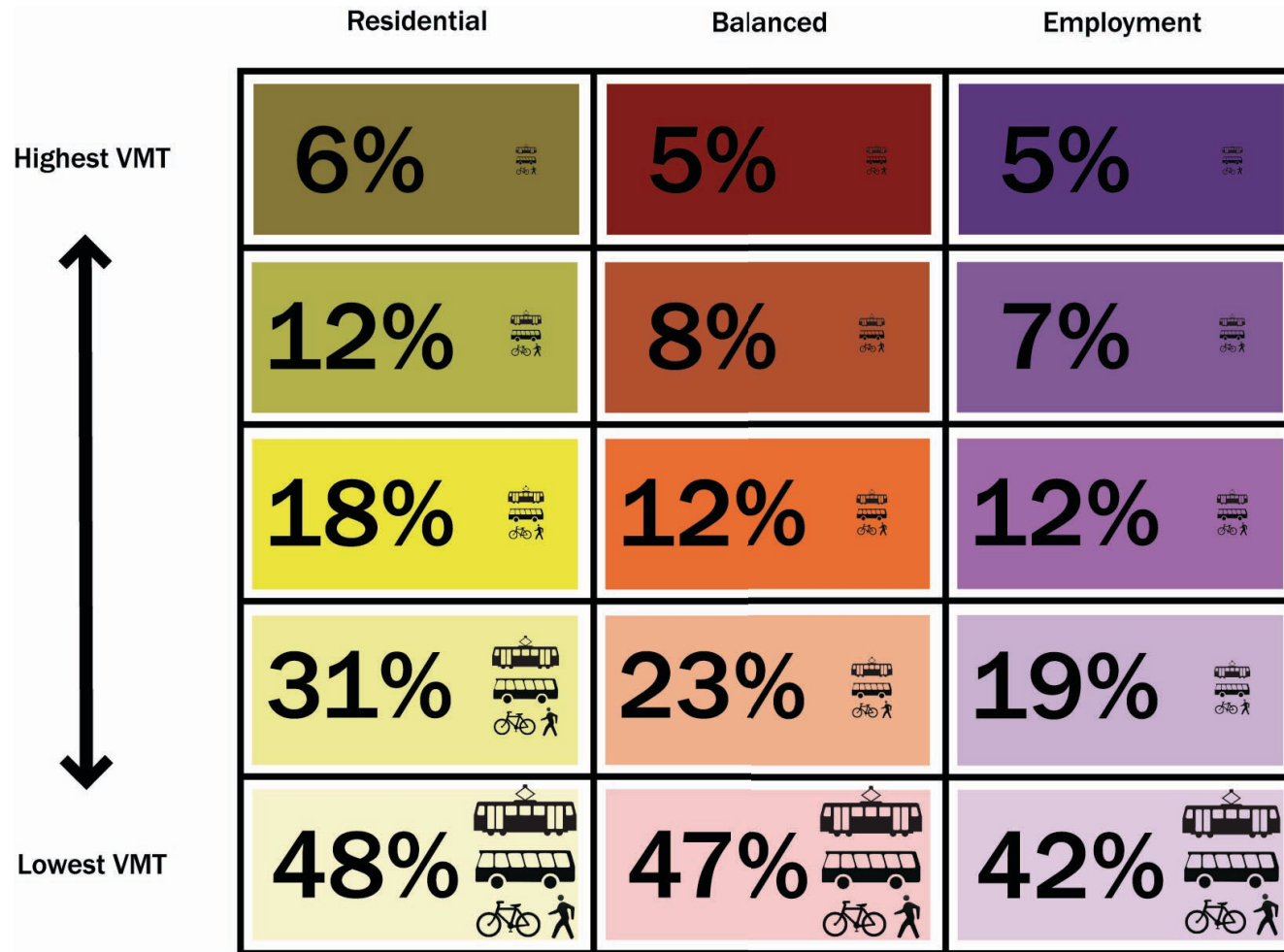


National
Average:
8.2%

Pedestrian/Bike/Transit
Commuter Share
(Residents Traveling to Their Jobs)



Developing Normative Metrics

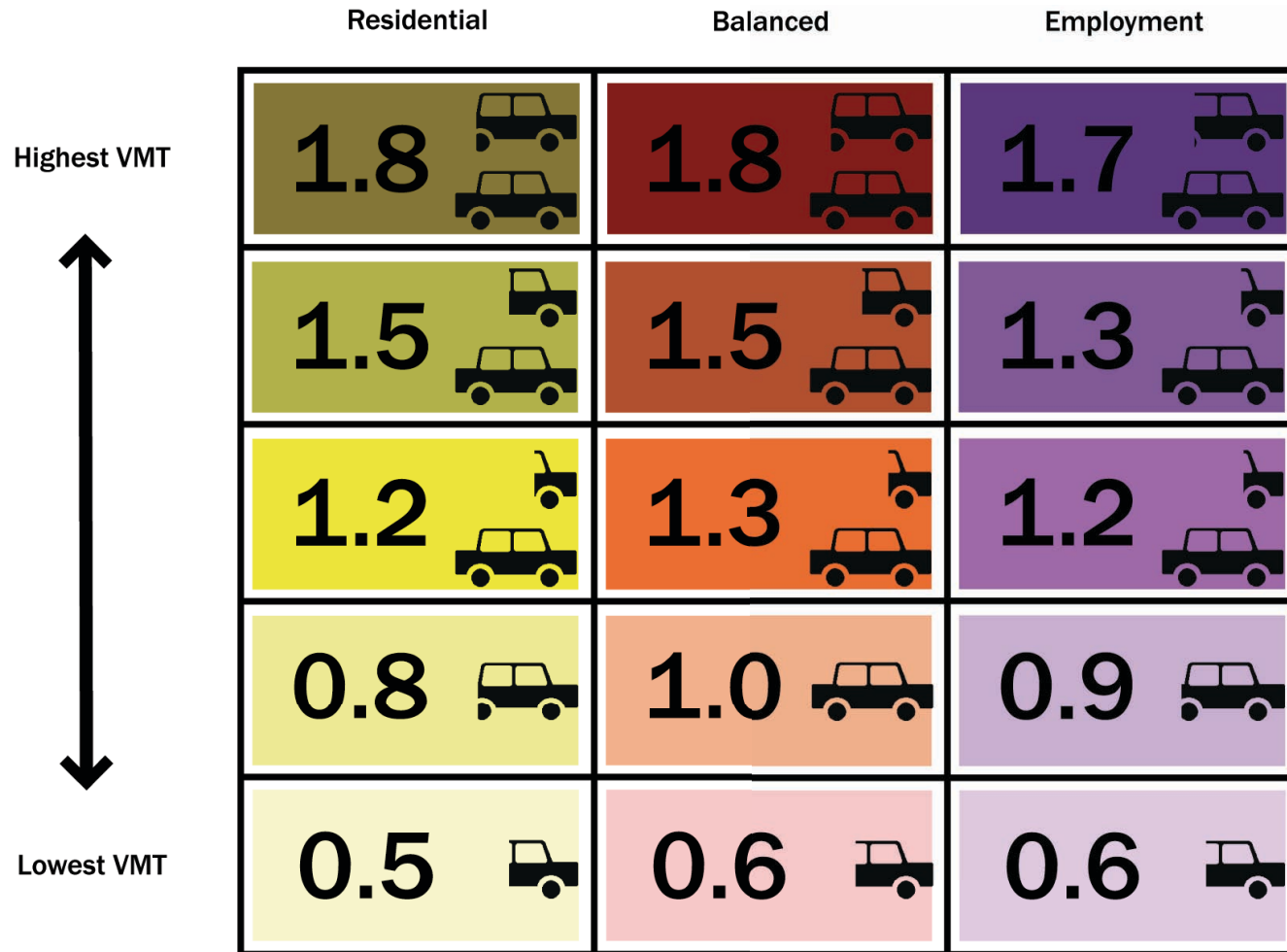


National
Average:
8.2%

Workplace Pedestrian/Bike/Transit
Commuter Share
(Workers Traveling to Their Jobs)



Developing Normative Metrics



National
Average:
1.9

Household Automobile Ownership
(By Residents)

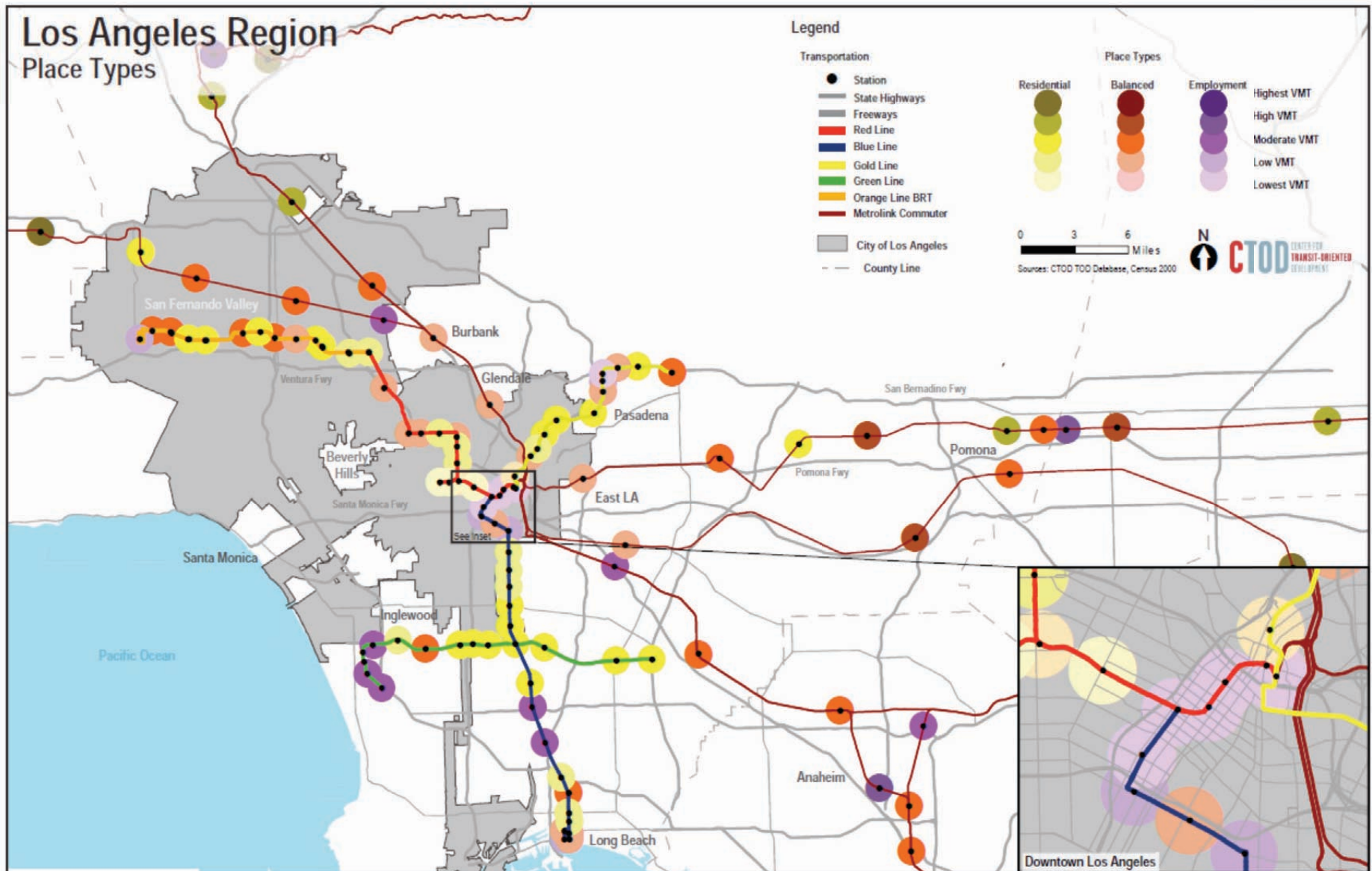


Developing Normative Metrics

	Residential	Balanced	Employment
Highest VMT	\$10,800	\$10,789	\$10,971
	\$9,357	\$9,479	\$9,580
	\$8,237	\$8,644	\$8,557
	\$6,714	\$7,170	\$7,344
Lowest VMT	\$5,038	\$4,792	\$5,349

Household Annual
Transportation Costs
(For Residents)

Evaluating Individual Locations



Evaluating Individual Locations

What factors can lower VMT in East Liberty?



Metric	East Liberty	Compared to Normative Metric
Average Block Size	3.2 acres/block	● (Lower than norm)
Residential Density	15.5 units/acre	● (Higher than norm)
Employment Proximity*	64,760 jobs nearby	● (Lower than norm)
Transit Access Index*	71 transit opportunities	● (Higher than norm)