

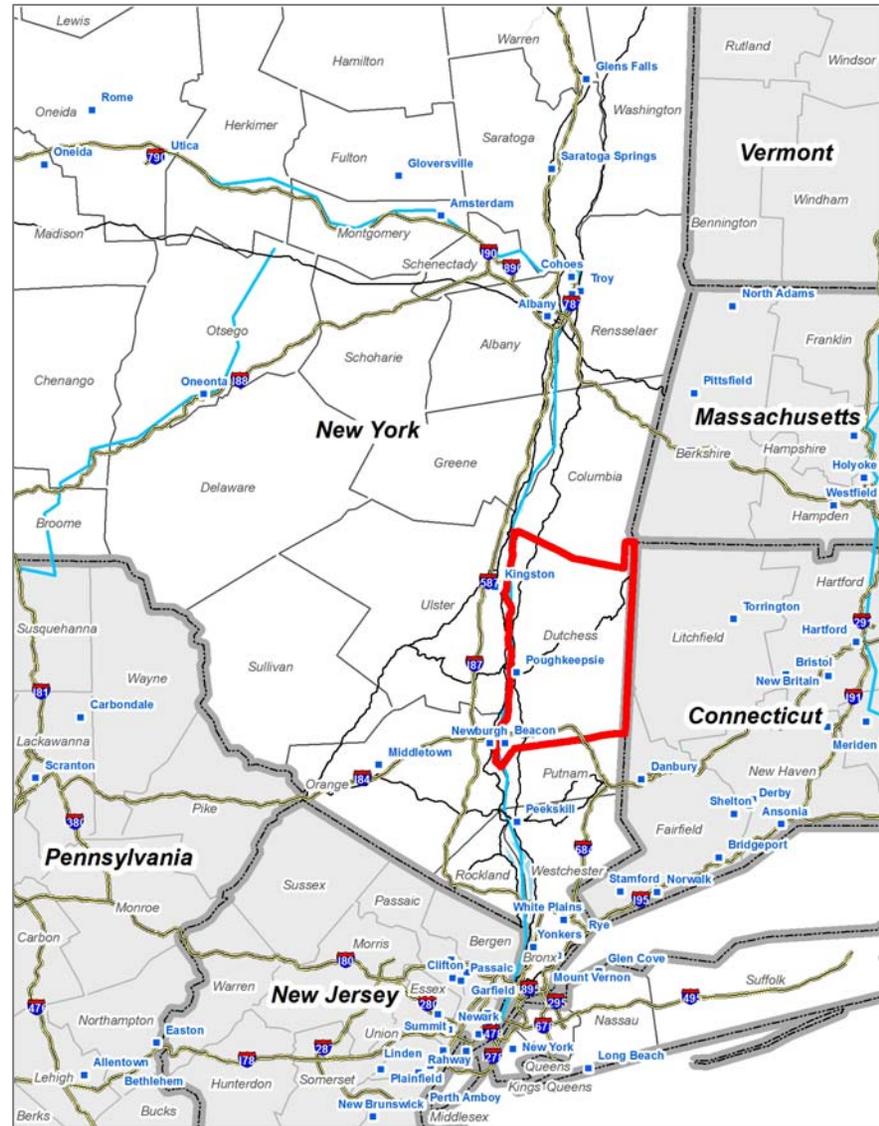
Chapter 3

Regional Perspective

Dutchess County is located at the center of the Hudson Valley, halfway between New York City and Albany. It is at the northern reaches of New York City commuting distance, yet beyond the Hudson Highlands, which cross the Hudson River below Beacon and provide a clear geographic separation from the more built-up counties to the south. Dutchess and its neighboring two counties across the river, Orange and Ulster, are at the heart of the Mid-Hudson Valley region, adjacent to the potential high growth perimeter of one of the largest global markets in the nation. The north-south orientation of the Hudson Valley and its parallel Harlem-Tenmile River Valley in eastern Dutchess have facilitated road and rail connections to major population and employment centers to the south.

Dutchess, Orange, and Ulster counties have a combined population of approximately 850,000,¹ hosting a variety of landscape patterns, from the Catskill Park preserve and other highlands to a mix of natural and agricultural lands, suburbs, and traditional urban centers. The constellations of remaining crossroad hamlets, villages, and cities are connected by a branch-like road system that generally funnels toward the waterfront cities of Poughkeepsie and Beacon in Dutchess, Newburgh in Orange, and Kingston in Ulster. These were the primary ports for the original shipping trade along the Hudson, the sites for ferry crossings, 19th century railroad hubs, and the locations for the area’s three Hudson River bridges.

Figure 3-1. Dutchess County within the Region



Moving Dutchess 2

As State and Interstate highways superseded water and rail as the primary means of transport, the transportation system relied more on cars and trucks, and a decentralized land use pattern of residential subdivisions, highway strip commercial development, and scattered locations for offices and manufacturing. In Orange and Ulster counties, the New York State Thruway has become the central spine, making their economies more convenient for trucking related businesses. Orange County also has Stewart International Airport and long east-west sections of I-84 and Route 17 (future I-86). On the east side of the river, the remaining Hudson and Harlem commuter rail lines, a short segment of I-84, and the scenic Taconic State Parkway are the major transportation linkages in Dutchess County.

Since 2002, Dutchess, Orange, and Ulster counties have coordinated regional transportation planning activities as part of the Mid-Hudson Valley TMA (discussed in Chapter 1). *Moving Dutchess 2*, and the complementary plans for Orange and Ulster counties, expands on this coordination, concentrating in particular on cross-county and regional transportation connections to urban centers, transit-oriented development sites, and major employment destinations. These activities can be viewed in the context of three key focus areas: Regional Land Use Planning, Regional Transit Planning, and Regional Freight Planning

Regional Planning – Bridging Boundaries

Regional planning requires an ongoing exercise in breaking down barriers, both physical and political. The Hudson River is

the centerpiece of the region, not just a borderline between separate counties. The region is united in many ways, by similar environmental features, by overlapping history and traditions, and by mutual economic interests. Many residents travel to other counties for employment, shopping, services, recreation, and entertainment opportunities. For example, It is often more convenient for northern Dutchess residents to shop in Kingston and for Orange and Ulster residents to work at major employers in Dutchess. In addition, regional travelers fly to/from Stewart Airport, hike in the Catskills, and visit historic sites along the Hudson. The three counties also have common challenges, requiring cooperation on regional transportation solutions.

Some barriers to effective regional planning are policy based. New York is a home rule state, where policy-oriented transportation decisions are sometimes made separately from housing, economic development, and environmental considerations. This keeps land use approvals at the local level to simplify the process and allow close public participation, but local land use regulations typically rely on separation and segmentation. Land is partitioned into various zoning classifications that separate residential areas from employment and shopping areas; the environment is segmented into various categories of natural constraints (e.g. wetlands or floodplains) with different rules and regulating agencies, while overlapping governmental responsibilities can fragment the planning process.

The Hudson River Valley Greenway was designed as a voluntary regional planning program for the 13 riverfront

counties to begin to bridge these barriers, promote better governmental communication, and improve intermunicipal cooperation.² The Greenway works from the bottom-up, respecting home rule and relying on incentives and guidelines rather than any state or county requirements. In Dutchess County, 29 of the 30 municipalities have joined the Greenway Compact by cross-referencing *Greenway Connections* into their zoning and subdivision regulations. More than half of these Compact communities have undertaken revisions to their comprehensive plans and zoning laws to help implement the Greenway principles and guidelines, and over \$2 million has been awarded to Dutchess County communities in Greenway-related State grants.

Dutchess, Orange, and Ulster counties are active members of the Greenway program and are moving toward coordinated Greenway Compact plans. The region's economy and transportation needs continue to become more intertwined and the desire for regional planning has grown.

Coordinating Land Use Policies

Three recent innovative policy initiatives at the federal, State, and local levels are promising to replace segmented, department-driven processes with an integrated, whole systems approach more conducive to regional planning and cooperation. Combined, they form an important new framework for *Moving Dutchess 2*, based on sustainable, smart growth, and greenway principles with common goals and characteristics.

As introduced in Chapter 2, the USDOT, HUD, and EPA have begun working together on a Sustainable Communities program “to support metropolitan and multijurisdictional planning efforts that integrate housing, land use, economic and workforce development, transportation, and infrastructure investments.”³ The program's Livability Principles emphasize increasing transportation choices, reducing our dependence on oil, improving air quality and public health, and lowering the combined household cost of housing and transportation. Primary methods include removing barriers to collaboration, more efficiently targeting federal funding toward existing communities, and promoting walkable neighborhoods and transit-oriented development. Dutchess, Orange, and Ulster counties with other partners have used this as an inspiration for long-term regional planning.

At the State level, New York adopted the Smart Growth Public Infrastructure Policy Act in 2010.⁴ Its criteria specifically focus future State funding on existing infrastructure, projects in mixed-use municipal centers, and areas designated for concentrated infill development in adopted local land use plans. The criteria also stress improved public transportation and reduced automobile dependency, diverse and affordable housing, sustainability, and intermunicipal and regional planning. All State infrastructure agencies and authorities must use the ten listed criteria to target State grants and investments toward smart growth locations, thereby minimizing the “unnecessary costs of sprawl development.”

At the local level Dutchess County has introduced a *Centers & Greenspaces* guide as part of the Greenway Compact program. Consistent with historic Hudson Valley landscape patterns, the guide specifically defines smart growth in terms of locating new development in or immediately around existing or emerging centers, either strengthening existing cities, villages, and hamlets or transforming suburban strips or subdivisions into more walkable, mixed-use centers. The Centers and Greenspaces initiative attempts to redesign the spread-out patterns of the last 60 years, which generally feature separated land uses, over-reliance on automobiles, and fragmentation of the natural environment. This regional pattern guide will be linked to an interactive website, with up-to-date digital mapping layers and our best local planning examples where centers have been designed to save greenspaces.

The *Centers & Greenspaces* approach and mapping methodology was initially tested in local comprehensive plan processes for the Villages of Red Hook and Tivoli, the Towns of Red Hook and Rhinebeck, the more suburban Towns of Pleasant Valley and Poughkeepsie, and the City of Beacon. The model featured in the guide is Red Hook, where an Intermunicipal Task Force from the Town and two Villages recommended a new Agricultural Business district to cut back sprawling development potential and protect critical farmland, counterbalanced by a new Traditional Neighborhood Development district to redevelop the South Broadway commercial strip into a walkable, mixed-use area that will reinforce the adjacent Village center. The Town of

Red Hook Centers and Greenspaces plan and zoning amendments were adopted in 2011.

Centers are defined within a ¼- to ½-mile radius, a convenient 10-15 minute walking distance from surrounding residential blocks to a commercial core and potential transit stop. As historic examples, the eight villages in Dutchess County average about a half-mile from center to built-up edge, while cities and larger town centers merge multiple neighborhood centers. Focusing most new development within these compact centers encourages a close-in mix of uses and guarantees that walking, bicycling, and transit are viable alternatives to the automobile. Greenspaces combine farmland, natural areas, and parks or protected lands, forming large continuous “biodiversity blocks” in the countryside. Ecological studies identify greenspaces over 1,000 acres and undivided by roads with more than 25 vehicles per hour as essential for area-sensitive species. Large nearby greenspaces are critical for recreation, food production, wildlife habitat, water quality protection, and other natural cycles and services. Thus, the *Centers & Greenspaces* concept applies a balanced approach to land use, transportation, and ecological concerns, from urban cores to the rural countryside, with simple, straightforward mapping methods.

A major goal for Dutchess, Orange, and Ulster counties, working together as part of the Mid-Hudson Valley TMA, is to integrate the new federal Livability Principles, NYS Smart Growth Infrastructure Act criteria, and Centers and Greenspaces guide and mapping techniques into more structured forms of regional planning. The common theme of

all three initiatives is to focus new development and public funding support toward existing and designated centers, thereby safeguarding rural landscapes, enabling a broader diversity of housing options, and promoting transportation choices within more walkable, transit-oriented neighborhoods. Most development before World War II was built around walkable centers and neighborhoods with businesses and job sites close to housing, schools, and other civic institutions. Re-centering the region is thereby a return to traditional development patterns with a modern overlay of enhanced transportation connections. A regional planning process will also envision the larger landscape and transportation elements as part of an interconnected network, rather than relying on separate land use plans, open space plans, housing plans, and transportation plans, with additional bicycle and pedestrian plans.

The three counties have already cooperated on several regional-scale projects. From 2007-2009 they jointly developed the Three-County Housing Needs Assessment, which quantified out to 2020, the affordability gaps for various household income groups up to 120 percent of area median income and fair-share housing goals down to the town level.⁵ The assessment incorporated smart growth goals, where more housing units are concentrated in and around existing centers with central utilities and transportation infrastructure potential. In Dutchess County the assessment found a substantial affordability gap for both ownership and rental units. The study suggested addressing this important need through the construction of over 9,000 affordable units by 2020.

The three MPOs have also worked cooperatively on a Congestion Management Process since 2005 and more recently on a Regional Travel Time Survey to collect more accurate data about congested corridors. One of the primary challenges in the region is its dependence on automobiles for most trips, fueling a basic suburban paradox: low density levels of development generate high levels of traffic congestion. According to the 2009 National Household Travel Survey, 84 percent of all trips in Dutchess County and 92 percent of trips to work were made in a personal vehicle (car, van, SUV, pickup/truck, RV, and motorcycle).⁶ Only four percent of trips involved bus or rail transit. This dominance of one travel mode makes the regional economy extremely vulnerable to traffic choke points, service disruptions, and gasoline price spikes. It also creates hardships for those who do not drive because of age, income, or disability. To build resilience into the transportation system, a major long-term objective should be to re-center our land use patterns, making walking and bicycling possible and generating the kinds of concentrated development patterns needed to make transit work more efficiently.

Regional Transit

The area's public bus systems serve limited parts of each county, mostly serving major corridors. Due to funding constraints and low population densities, many communities have infrequent transit service or no service at all. Bus routes operating through rural or suburban areas have a difficult time competing with automobiles in the areas of cost, comfort, and convenience. Buses use the same streets as cars and contend

with the same traffic congestion, but have more stops, less flexibility, and typically take longer than private automobile trips. Buses can only attract customers away from cars if they provide regular service, a comfortable ride, and comparable speeds to destinations along direct, express routes.

Bus Rapid Transit (BRT) can be an effective approach in urban areas or as express connections between major centers or employment destinations. BRT combines attributes of a light rail system, such as limited stops at designated stations, prepayment rather than the slow process of paying on the bus, dedicated travel lanes, and traffic signal priority. The primary advantage of bus rapid transit is that it can use existing street infrastructure, so it costs considerably less than new rail lines and takes less time to implement. It can also be built incrementally with more flexibility for future changes. In 2011 the Capital District Transit Authority began a BusPlus rapid transit route between Albany and Schenectady. The system has limited stops and signal priority, but does not use a dedicated bus lane.

Rail systems in Dutchess and Orange offer convenient and reliable commuter access to New York City and points south for portions of these two counties, but provide no east-west linkages or connections to the central cities of Newburgh or Kingston. Metro-North and the Port Authority have been studying several options for improved transit connections between New York City, central Orange County, and Stewart International Airport, including bus rapid transit and a long-term rail extension north from the Port Jervis Line.

Metro-North Railroad has also helped fund a ferry service between the Newburgh waterfront and the Beacon train station to limit local traffic and parking problems, but train service in the region is still oriented toward New York City and dependent on automobile access. A majority of railroad users drive alone to the station and park their cars in all-day parking lots. As a result, local stations are surrounded by seas of parked cars, overwhelming smaller hamlets, dividing the cities of Poughkeepsie and Beacon from their riverfronts, and subjecting local streets to peak hour traffic jams. One of the most efficient and environmentally responsible solutions would be to transform park-and-ride lots around stations into walk-and-ride neighborhoods.

Transit-Oriented Development (TOD)

Transit-oriented development (TOD) is a term that refers to compact, mixed-use, and pedestrian-friendly development within a 10-15 minute walk of a rail station or express bus stop. A TOD has multiple benefits:

1. Reinforces traditional centers, taking advantage of existing infrastructure and civic sites.
2. Mixes commercial, residential, and employment opportunities with multiple means of transportation access.
3. Enables broader housing choices for smaller households, singles, retirees, and commuters.
4. Supports public transit by increasing ridership and the value of transit agency-owned land.

Moving Dutchess 2

5. Replaces dead-all-day station parking lots with high quality economic redevelopment districts.
6. Reduces congestion and pollution by making many trips possible by walking, bicycling, and transit.

In many areas TOD promotes overall housing transportation affordability by allowing households to have smaller units and fewer automobiles. After housing, transportation is the second largest expenditure in the average household budget, well above food, clothing, or health care. Moving from an auto-dependent suburb to a TOD reduces average transportation costs from 25 percent of a household budget to only 9 percent, offering substantial savings in the basic cost of living.⁷

A high percentage of America's greenhouse gases are attributable to sprawling land use patterns, inefficient buildings, and auto-dependency. Even the most energy-efficient houses are not truly green if they produce 10-12 vehicle trips a day, the national average for detached single-family homes.⁸ Compared to spread-out suburban houses, TOD units reduce vehicle trips by 25 to 50 percent and produce far less greenhouse gases.⁹ Compact walk-and-ride neighborhoods are perhaps our best antidote to sprawl, traffic congestion, and environmental pollution.

Dutchess, Orange, and Ulster counties have been working to integrate land use and transportation by encouraging communities to focus new development in priority growth centers along transit routes. In Dutchess County, the Transportation Council has prepared specific illustrative site

plans for rail stations with the greatest TOD potential, including the Hudson River waterfront cities of Poughkeepsie and Beacon and the Wingdale and Tenmile stations in eastern Dutchess.

City of Poughkeepsie TOD Planning – One Example

As an example of TOD planning, in 1997 the Transportation Council, working with a 21-person steering committee and two private consultants, prepared the City of Poughkeepsie Transportation Strategy with federal transportation planning funds. The final report, which included specific illustrative plans and sketches for the waterfront district around the Railroad Station, was unanimously endorsed by the Poughkeepsie Common Council and has been partially implemented in subsequent years. Metro-North built an award-winning parking structure and walkway connections to Main Street and the waterfront with state and federal funding assistance. The City used state Greenway funds to reconstruct the shoreline with a paved promenade, and several former industrial buildings in the area have been redeveloped for mixed commercial, housing, and the Mid-Hudson Children's Museum.

In 2013 the City and Metro-North railroad jointly prepared a TOD Market Study for the train station. The Market Study focused on the commercial and residential possibilities for the train station area and included three development scenarios: a baseline development scenario and two pro-forma scenarios. The baseline scenario showed that the area in and around the train station could support over 965,000 square feet of multifamily residential space (over 1,000 new units) by

Moving Dutchess 2

2025. The Market Study was followed-up in 2014 by the completion of a Waterfront Redevelopment Strategy that identified ways to reconnect the City with the Hudson River. The Waterfront Redevelopment Strategy had three overall goals:

1. Build a Continuous Greenway Trail along the Riverfront.
2. Knit Together Surrounding City Plans and Projects.
3. Create a High-Quality Waterfront Park and Regional Destination Between Main Street, the Railroad Station, and Walkway Elevator.

The Redevelopment Strategy developed an illustrative Plan that included improved park features that benefit Poughkeepsie's residents and businesses, organized around three major objectives (see Figure 3-2):

1. Increasing public access to and along the river.
2. Gaining net greenspace and usable park land.
3. Adding a variety of new attractions and river views.

Specific recommendations include a new pedestrian promenade along the riverfront, a new inland bicycle boulevard that runs parallel to the river, a gateway park plaza that replaces surface parking at the train station, and a new event lawn to support picnicking and special events.

Regional Freight

While planning for freight has been a consideration in the transportation planning process since ISTE, the passage of

the recent transportation legislation, MAP-21, increases the emphasis on freight considerations. MAP-21 is the first transportation legislation that contains a National Policy on Freight and Goods Movement.¹⁰ This includes freight movement as a performance measure.

Though interstate freight is less of an issue in Dutchess County versus Orange and Ulster counties, the PDCTC has begun to focus on the importance of freight movement in the county. In consideration of MAP-21, NYSDOT is in the process of developing a State Freight Plan and a joint advisory committee. Currently there are no dedicated studies or plans that address freight issues amongst the three MPOs; however there is growing interest to develop a regional freight plan. Each of the MPOs participates in the NYSAMPO Freight Working Group which began in 2012.

In the past several years there have been several major operational improvements to the connections between highways, as well as rail crossing improvements. The Mid-Hudson Valley area is at a cross roads between several major interstate highways: I-87, I-84, and Route 17 (future I-86). Trucks pass through from NYC to Montreal or Buffalo on I-87 (New York State Thruway) and I-84 from Pennsylvania into Connecticut. The recent interchange project connecting I-87 to I-84 vastly improved the operation and time it takes for passenger and freight movement alike. Freight trains and oil tankers move along the west side of the Hudson River down from Canada, Chicago, North Dakota, and Albany. In recent years there have been a number of projects programmed in the Statewide Transportation Improvement Program (STIP) to

Moving Dutchess 2

Figure 3-2. City of Poughkeepsie Waterfront Redevelopment Strategy



improve at-grade crossings in the Mid-Hudson Valley using Railway-Highway Crossing Improvement Program (HSIP) funds.

Regional Recommendations

Given these land use and transportation patterns and potential solutions, two top priorities for the three-county TMA should be the development of two regional plans: a Regional Transit Plan and Regional Freight Plan, both of which might be potentially sponsored by the Mid-Hudson TMA or NYSDOT.

The Regional Transit Plan should emphasize express bus, rail, and ferry connections between adjacent counties, urban centers, housing concentrations, transit hubs, and major employment destinations. The Transit Plan would also identify and conceptually design transit-oriented development sites in cities and other major centers where jobs, housing, and transportation can work together to create walkable, mixed-use, transit-friendly neighborhoods. The Transit Plan should incorporate or address the following steps and issues:

1. Regional mapping of existing conditions, major centers, employment destinations, and transportation connections, as well as potential linkages and development sites.
2. Extensive public outreach, promoting education on regional issues and emphasizing public participation during the process.
3. Three-county Centers & Greenspaces mapping, working with local municipalities to identify priority growth centers, priority greenspaces, and greenway connections.
4. Coordination among federal and State agencies and counties to link potential implementation measures with the Livability Principles and Smart Growth Act criteria.
5. The use of access management tools to minimize operational deficiencies, including the use of roundabouts in lieu of signalized intersections at key intersections.
6. Integrate Complete Streets design guidelines to consider pedestrian, bicycle, and transit enhancements for all major centers and transportation projects.
7. Regional transit connections plan that includes bus improvements and rapid transit routes, potential rail extensions, and enhanced ferry or water taxi connections.
8. Transit-oriented development case study projects coordinated with local governments and property owners, including detailed illustrative plans, sections, and sketches, a diversity of uses, incomes, and housing types, community connections, and economic development and job opportunities.
9. An investigation into how alternative fueled vehicles such as natural gas and electric powered vehicles could be supported through coordinating policies and plans, including the integration of supporting infrastructure at TODs, centers, and other suitable areas in the region.
10. Implementation list and schedule for follow-up federal, State, and local action.

The Regional Freight Plan should build upon the ongoing work being done by NYSDOT on the *Statewide Freight Plan*, The

Moving Dutchess 2

Port Authority of NY & NJ *Goods Movement Action Plan*, and previous MPO freight plans such as the PDCTC's 1996 *Goods Movement Plan*. At a minimum, the Regional Freight Plan should meet the following objectives:

1. Create a better understanding of the regional freight network and freight issues, to include an inventory of existing operations across all modes (e.g. truck, rail, barge, and air).
2. Establish a dialog with freight operators, shippers, receivers, and customers.
3. Identify key issues and potential solutions for improving freight operations in the region.
4. Understand the MPO-related implications of various freight solutions and studies being undertaken by other planning organizations and agencies in the TMA.

¹ U.S. Census Bureau, 2010 Census, <http://www.census.gov/2010census/>.

² Hudson River Valley Greenway, *Overview & Mission*, 2011, <http://www.hudsongreenway.state.ny.us/AbouttheGreenway/OverviewandMission.aspx>.

³ HUD-DOT-EPA, *Partnership for Sustainable Communities*, June 16, 2009, <http://www.sustainablecommunities.gov/toolsKeyResources.html>.

⁴ Environmental Conservation Law § 6-0103, *NYS Smart Growth Public Infrastructure Policy Act*, 2010, http://assembly.state.ny.us/leg/?default_fld=&bn=+A08011%09%09&Summary=Y&Actions=Y&Text=Y.

⁵ Dutchess, Orange, and Ulster County Planning Departments, *A Three-County Regional Housing Needs Assessment*, February 2009, <http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/tcrhassessment.pdf>.

⁶ Federal Highway Administration, *2009 National Household Travel Survey*, October 2011, <http://nhts.ornl.gov/>.

⁷ Center for Transit Oriented Development, *Realizing the Potential: Expanding Housing Opportunities Near Transit*, April 2007, <http://ctod.org/pdfs/2007RealizingPotential.pdf>.

⁸ Institute of Transportation Engineers, *Trip Generation Manual*, 9th ed., 2012.

⁹ Cervero, Robert and Arrington, G.B., *Vehicle Trip Reduction Impacts of Transit-Oriented Housing*, *Journal of Public Transportation*, Vol. 11, No. 3, 2008, <http://www.nctr.usf.edu/jpt/pdf/JPT11-3Cervero.pdf>.

¹⁰ Federal Highway Administration, *MAP-21 Significant Freight Provisions*, September 12, 2013, <http://www.fhwa.dot.gov/map21/factsheets/freight.cfm>.