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Moving Communities Forward

Transportation as Catalyst for Community Economic Development

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16. Abstract (Limit: 200 words)

This study presents frameworks and methods for assessing economic development impacts of well-designed transportation projects. A literature review and on-site inspections of U.S. case studies provided lessons learned, best practices, and metrics for assessing outcomes.

Project *site* matters, whether greenfield locations or redevelopments, and whether projects are in fast-growing metro areas, stable ones, or areas losing population and resources. Prevailing land prices and regulatory environments set limits on what can be accomplished.

Economic development differs from *real estate development*. Economic development brings resources into fuller production of valued goods and services such that overall benefits exceed overall project costs over time. It is often accompanied by real estate development; sometimes real estate development provides a catalyst for economic development.

Projects can be implemented at locations from downtown to the outer suburbs; distance from the core can affect conditions for project success. A project can be implemented in elite, upper-middle class, middle class, working class, or poor areas–with choice of sector influencing prospects for success.

A well-designed project improves the community's balance sheet–enhancing assets, diminishing liabilities, and increasing net benefits to the community over time. It is important to distinguish *absolute change* from *change relative to metropolitan-wide measures*.

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Transportation as Catalyst for Community Economic Development

Report #2 in the Series: Moving Communities Forward

Final Report

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Preface

Well-designed transportation projects demonstrate the potential to shape a community in ways that go far beyond the project's original purposes. Anecdotal evidence and advocacy exist on behalf of the benefits of well-designed transportation projects on communities, yet there is little organized quantifiable or qualitative data, nor is there a comprehensive guide for communities to maximize or integrate the diverse benefits that well-designed transportation projects can bring.

Recognizing this lack of data about the role of design in transportation, Congress authorized a study in Section 1925 of the 2005 Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) to achieve two goals: (1) begin to measure how well-designed transportation projects can bring multiple enhancements to communities in terms of economic development, health and the environment, visual identity and design, public participation, and public safety; and (2) provide communities, designers, transportation officials, and policymakers a set of principles and practices to adapt to their unique situations and needs.

The *Moving Communities Forward* research team employed a case study-based approach, analyzing nearly 30 transportation projects that represent a broad spectrum of regions, demographics, and project types. The research team identified key principles and practices that designers and others can use—in the context of their unique situation and environment—to realize multiple enhancements to their communities.

Funding for the study was derived from a grant to the American Institute of Architects (AIA) from the Federal Highway Administration (FHWA), authorized by Congress in SAFETEA-LU. In 2006, the AIA selected the Center for Transportation Studies (CTS) at the University of Minnesota to conduct the pioneering research study.

To address the interdisciplinary issues raised by the study, CTS assembled a research team drawn from multiple fields. Research was allocated to five research projects; a sixth project synthesized the study's key findings into a single document highlighting major themes and recommendations:

1. Promoting Economic Development
2. Improving Health and the Environment
3. Designing Great Places
4. Fostering Civic Participation
5. Making Communities Safer
6. Study Synthesis

Results of this research are available in a series of reports on the *Moving Communities Forward* Web site: www.movingcommunitiesforward.org. The site also includes a summary report submitted by the FHWA to Congress in September 2007. The Web site is part of a coordinated outreach effort designed to share the research findings and recommended practices with transportation and design professionals, policymakers, and the public.

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The American Institute of Architects (www.aia.org) is the voice of the architectural profession and the resource for its members in service to society. As AIA members, more than 80,000 licensed architects in over 300 state and local chapters express their commitment to excellence in design and livability in our nation's buildings and communities. Members adhere to a code of ethics and professional conduct that assures the client, the public, and colleagues of an AIA-member architect's dedication to the highest standards in professional practice.

ABOUT THE CENTER FOR TRANSPORTATION STUDIES

The Center for Transportation Studies' (www.cts.umn.edu) mission is to serve as a catalyst for transportation innovation through research, education, and outreach. CTS works with University of Minnesota faculty in over 25 disciplines to advance knowledge in a variety of transportation-related research areas. In 1997, CTS first became involved with transportation and urban design issues in its leadership of a major interdisciplinary effort, the Transportation and Regional Growth Study, which produced new understandings of the relationship between transportation and growth in the Twin Cities area. CTS has also worked closely with the Minnesota Department of Transportation and local governments in advancing Context Sensitive Design/Solutions practices through the development of training courses and web resources, which have helped Minnesota to be recognized by FHWA and AASHTO as a leading state in applying Context Sensitive Design/Solutions.

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Executive Summary:

Economic Impacts of Well-Designed Transportation Projects: Defining and Measuring Outcomes and Best Practices

This report reviews the necessary and sufficient circumstances and practices through which well-designed transportation projects can promote community economic development.

There are five distinct steps in the process of describing and measuring the economic impacts that accompany a transportation project:

(1) define what is meant by **economic development** in the context of transportation projects, and distinguish it from land development;

(2) define the full range of **costs and benefits** of transportation projects;

(3) evaluate **net benefits** of transportation projects–i.e., benefits minus costs;

(4) define appropriate **geographical frameworks** for analysis of transportation projects; and

(5) define **temporal frameworks** for analysis of transportation projects.

On the basis of our review of the literature and our examination in the field of a series of case studies, we distilled a series of lessons learned, best practices, and metrics for assessing outcomes.

Lesson: Project *site*-its footprint-matters.

- For example, does the project use an undeveloped greenfield site, or is it a redevelopment? Does the design of the project provide appropriate access to riders? Does the design of the project direct patron traffic to associated businesses?

Lesson: Project *situation*-its setting or relative location-matters.

- Projects are designed and implemented in diverse metropolitan areas. Some are placed in slow-growth metropolitan areas. Some are placed in metro areas experiencing modest growth, and some are set in fast-growth metro areas.
- Local growth rate affects resources available for project implementation. In fast-growth settings, there is growth to allocate; the question is where to put it? In slow-growth or declining areas, expansion in one setting means contraction in other settings.
- Prevailing land prices and development densities set limits.
- Ease of linkage of a project with other destinations influences project prospects.

Lesson: Economic development differs from real estate development.

- Economic development means that unused or underused resources come into fuller production of valued goods and services such that overall benefits exceed overall project costs over time.
- Economic development may or may not involve real estate development, although in some cases real estate development can be a catalyst for economic development.

Lesson: Projects are implemented in different parts of a metro area-and distance from the core affects conditions for success.

- Downtown–usually a high density zone, with old structures and frequently with dated infrastructure;
- Inner-city–residential and commercial areas are old and often obsolete; often with many unassimilated newcomers;
- Outer parts of central city–newer, but aging, typically built at moderate densities;
- Inner suburbs–newer than most parts of the central city, but showing signs of age, with stable or declining populations, and real estate wealth appreciating at below-average rates;
- Outer suburbs–the location of current and recent growth.

Lesson: Projects can be implemented in different sectors of a city/metro area, but the sector selected affects prospects for project success.

- Elite sectors are rich, stable, and predictable; projects undertaken here can almost never fail.
- Middle- and upper-middle class sectors feature medium densities of households and abundant discretionary disposable incomes, so investors can be confident that projects have a decent chance to succeed.
- Working-class areas and poor areas are risky, and continuing outside help of several kinds will be needed to bring project to completion and to sustain it.

Lesson: The appropriate geographical framework for assessing the economic impact of a project normally extends well beyond the immediate site of the project.

- A community transportation project is deployed within a specific geographical setting (e.g., a building, a block, a corridor, a neighborhood), yet each setting in turn exists within a series of ever wider spatial frameworks (e.g., city, county, metro area, state) with which it is intimately linked in various ways.

Lesson: A well-designed project can improve the community's balance sheet–enhancing assets and diminishing liabilities–while increasing the flow of net benefits to the community over time.

- Honest assessment of a well-designed community transportation project uses the idea of the balance sheet and the net annual cash flow from the project.
- Improvements in one location should not come at the expense of other places, nor should the annual flow of benefits come from the drawing down of community assets.

Lesson: It is essential when evaluating changes in a project area to distinguish absolute change from change relative to the metropolitan setting.

- Household incomes in 1989 and 1999 in and near the project area should be compared with metro averages to determine whether the area is holding its own, rising in rank, or slipping.
- Housing values 1990 and 2000 should be compared with metro averages over time to determine whether the area is holding its own, rising in rank, or slipping.
- Share of housing units that are owner-occupied in 1990 and 2000 can be a measure of wealth accumulation within the neighborhood if property values are rising.
- Proportion of households in 2000 who lived elsewhere in 1995 is a measure of neighborhood stability, which may be associated with residents' commitment to the place's future.
- Changes in local job counts and job types can be a useful measure of economic impact–provided jobs are not merely relocated from another site in the same metro area.
- New public and private investment in infrastructure and real estate is a measure of development activity, but needs to be distinguished from economic development.

Lesson: Vision matters in defining realistic goals, and instilling them in others.

- In Arlington County, East St. Louis, and Chicago, planners and citizens have been able to envision futures that were different from the present, plan for them, and then work to make them happen.

Lesson: Consistent community or organizational leadership matters to sustain efforts over the years.

- In Los Angeles and Oakland, civic leadership engaged the community in planning and executing projects, and in building community capacity for the future.
- In Salt Lake City, sustained effort by city leadership over an extended period was needed to bring the project to fruition.

Lesson: Available investment funds "up front" matter, followed by a consistent stream of further investment and maintenance money.

- In Dallas, Arlington County, and Atlanta, financing mechanisms have been put in place to assure that the projects will continue to have adequate support.

Lesson: Successful outcomes require sustained activity over decades.

- The projects in Dallas, Arlington County, and Oakland all have involved continuous planning, re-planning, and community engagement with persistent attention to the future as their contexts have changed over time.

Chapter 1:

Introduction

There are two ways in which transportation projects, appropriately designed, can promote community economic development:

1) by providing access to jobs, services, and shopping areas for transit-dependent communities, and

2) by providing a catalyst for or support of associated economic development.

Access to jobs means income and access to credit for residents of a community. Both are necessary to support local economic development. Households cannot become homeowners if they do not qualify for mortgage loans, and they cannot do so without employment. Disposable income within the community is required to support the growth of local retailing and services. Transportation facilities must be designed to provide access and minimize barriers to ridership for transit-dependent populations. Increased ridership on a well-designed and well-placed transit link will lead to better and more frequent service, and as well as benefit the transit provider and enhance community mobility.

In this era of shrinking transportation dollars, communities are wise to "think development" when thinking about transit. [1] Transportation facilities of many kinds can be designed in ways that integrate, support, or provide a catalyst for associated economic activity that benefits the local community. Benefits may include rationalizing land use, enhancing land value and tax revenues, providing jobs and needed services to the community, and attracting capital from outside the community. Capital can flow into the community as investment dollars or as "sales to the rest of the world"—facilitating production and distribution of goods and services for which there is a market outside of the community. The design of transportation facilities or improvements is critical to the success of such developments, to assure their centrality, accessibility, usability, and "fit" within the relevant market.

There are two ways to evaluate the economic impacts of well-designed transportation projects:

First is the design *process* itself:

- Did it consider the economic impacts of the project over a range of *temporal* frameworks--immediate (less than a year), short-term (2-5 years), long-term (over 5 years)?
- Did it consider the economic impacts of the project over a range of *spatial* frameworks or scales--local, neighborhood, citywide, metro-wide, regional?
- Was the cost-benefit analysis of the project comprehensive?

The other way to evaluate pertains to *outcomes* of the project, and ways in which the project promotes community economic development after it is built and operating, considered over the short and long term:

- **employment** changes
- changes in **land-use** impacts
- changes in **property values**
- changes in **property tax revenues** at and near the project site
- reduction in the **demand for government services** after the property is redeveloped—e.g., police and fire protection, and citizens' perceptions of safety in the area.

Project *site* and s*ituation*

Each transportation-related development project takes place within a specific geographical setting. The characteristics of both the site (the footprint or location) and the situation (its relative location and surroundings) of a project affect how it is designed, planned and executed, and whether it succeeds in promoting community economic development.

Three attributes of site and situation exert significant influence on the degree to which a project yields positive economic benefits for communities:

Site:

(1) Does the project use **undeveloped** land, or is it a **redevelopment**?

(2) Does the design of the project provide appropriate **access** to riders?

(3) Does the design of the project direct **patron traffic** to the associated businesses?

Situation:

(1) What are the metropolitan area's population and economy **growth** rates?

(2) What conditions and trends exist in local **land prices** and **development densities**?

(3) What is the project's **centrality**; that is, its linkages with other destinations on the transportation system?

The rate of growth of the local economy affects chances for success. Some transportation-related development projects are deployed in fast-growing areas, some in slow-growth areas, and some in areas in decline. Project success usually is a direct function of local growth rates.

The growth environment makes a difference in the ease with which projects can go forward. In a fast-growth setting, an expanding volume of public and private capital is available to spend or invest. At the other extreme, in areas of decline, spending directed to one locale usually means spending painfully reduced elsewhere.

New development vs. redevelopment makes a difference. Some transportation-related development projects are deployed on "greenfield" sites, while others involve redevelopment of existing sites. The politics, legalities and economics of new development differ from those involved in redevelopment, as recent Supreme Court cases dealing with eminent domain vividly illustrate.

Land prices and density of existing development make a difference. The higher the cost of land, the greater the level of expected benefits must be to justify a project. The greater the local density, which is a consequence of limited land supply in the face of demand, the harder it will be to develop at a scale to justify the land cost.

We selected case studies to include differences in (**Table 1**):

(1) local growth rates: (a) fast-growing metro areas (e.g., Atlanta & Dallas); (b) metros with moderate growth (e.g., Los Angeles, Minneapolis-St. Paul); and (c) slower growth (e.g., Chicago, St. Louis);

(2) ages of prior development: (a) featuring redevelopment vs. new development: inner-city (Chicago, Oakland), outer city (Atlanta, Dallas), inner-suburban (E. St. Louis, Arlington County), and outer suburban (Minneapolis-St. Paul); and (b) old centers engulfed by suburbanization (Arlington Heights, Plano); and

(3) density and land-price regimes, highlighting differences between: (a) upper-middle-class metropolitan sectors, (b) middle-class sectors, and (c) working-class sectors.

Real estate **development and** ***economic*** **development**

Professionals in the land development industry, the transportation industry, and local government often equate economic development with real estate development. Economic development is a broader phenomenon. It may or may not involve real estate development, although in certain cases real estate development can be a catalyst for economic development.

When the design of a transportation project promotes community economic development, it means that unused or underused resources come into fuller production of valuable goods and services such that overall benefits exceed overall project costs over time.

- "overall," refers to *net* outcomes, that is, taking direct and indirect costs into consideration along with benefits.
- "valuable" means consideration of things that are valued in monetary terms as well as those that cannot be monetized easily, if at all.
- "community," can mean a sector of society, a geographical setting from the local to the global, or both.
- "time" means the relevant temporal frameworks for evaluating a project's impacts–ranging from short-term (months or years) to decades.

The political environments within which projects are proposed, planned and implemented involve community values that are frequently discussed and debated first in financial terms, but they also involve cultural, aesthetic and historical elements that are hard to price, but carry exceptional importance. Certain goods and services can be valued within present and future markets using money prices, price indices, interest rates, discount rates, and present values of future monetary values.

Table 1. Settings for Transportation/Development Case Study Sites

	Metropolitan Statistical Area (MSA) or Metropolitan Division (MD)* Population Growth Rate, 1990-2000 (%)**		
Location in Metro Area	**Slow-Growth Areas**	**Modest-Growth Areas**	**Fast-Growth Areas**
Downtown		**Fruitvale Station**, Oakland, CA (14.9%)	**Plano Station**, Plano, TX (29.4%) **Intermodal Hub**, Salt Lake City, UT (26.1%)
Inner City	**Emerson Park Station**, East St. Louis, IL (4.6%) **Pulaski Station**, Chicago, IL (11.2%)		
Outer city	**LANI sites**, Los Angeles, CA (7.4%)		**Lindbergh City Center**, Atlanta, GA (38.4%) **Mockingbird Station**, Dallas, TX (29.4%)
Inner Suburb		**Ballston-Clarendon corridor**, Arlington, VA (16.3%)	
Outer Suburb	**Downtown Arlington Heights**, Chicago, IL **CenterPoint Logistics Park**, Joliet, IL (11.2%)	**Southwest Station**, Eden Prairie, MN (16.9%)	
Metropolitan Growth Rates in Case Study Settings	•*St. Louis*: 4.6% •*Los Angeles-Long Beach-Glendale*: 7.4% •*Chicago-Naperville-Joliet*: 11.2%	•*Oakland-Fremont-Hayward*: 14.9% •*Washington-* •*Arlington-Alexandria*: 16.3% •*Minneapolis-St. Paul-Bloomington*: 16.9%	•*Salt Lake City*: 26.1% •*Dallas-Fort Worth-Arlington*: 29.4% •*Atlanta-Sandy Springs-Marietta*: 38.4%

Data source: Bureau of the Census. *MD=Metropolitan division—a constituent of an MSA. **MSA average population growth rate, 1990-2000: 14.0%. MSA or MD population growth rate given for each project site.

Other goods and services such as public goods (e.g., roads, parks), natural resources (e.g., clean air, national forests), or monuments and settings of historic or cultural significance (e.g., the Boston Common, Monticello) are produced, maintained and consumed outside of the market, and involve private benefits and societal values that are harder to measure.

Improving the community balance sheet, while increasing the flow of net benefits to the community

There are two approaches for assessing the extent to which economic development has occurred. The first considers the community's "balance sheet" and assesses the assets, liabilities and their values that are newly created by a well-designed transportation project.

Economic development projects can also enhance the value of the existing stock of assets, but occasionally projects can undermine their value. For example, an abrupt expansion of the neighborhood housing stock as part of a development project may over-supply the local market and undermine prices of housing, depending on local demand conditions. The same may occur when new office space is added to a local market.

The second approach evaluates "cash flow," and considers only the annual financial costs and benefits expected to follow from the implementation of a development proposal. But the new localized cash flow may represent a *gross* rather than a *net* increase for the wider community. For example, retail sales at a new commercial component of the project may be accompanied by declines in sales at competing facilities.

A well-designed community transportation project improves the community balance sheet, while increasing the flow of net benefits. Honest assessment of a well-designed community transportation project uses the balance sheet *and* the net cash flow approaches simultaneously.

Failing to do so means hiding or camouflaging half the story of projected impacts. Overlooking or ignoring important transportation project impacts can, and often does, lead to deterioration of fixed assets, costly depreciation of built environments, or irreparable damage to natural environments even though short-term cash flow is sustained or even enhanced.

Appropriate geographical frameworks for assessing economic impacts

Defining appropriate geographical boundaries of "the community" is an essential step in framing and then assessing the contents of the community's balance sheet, as well as for measuring the benefits received and the cost incurred when a project is undertaken.

A community transportation project is deployed within a specific geographical setting (e.g., a building, a block, a neighborhood), yet each setting in turn exists within a series of ever-wider spatial frameworks (e.g., city, county, metro area, state, etc.) with which it is intimately linked in various ways.

Any transportation project, whether it is an Interstate highway extension, an airport expansion, a park-and-ride facility for an express bus, or a mixed-use transit-oriented development, will have impacts on locations beyond the footprint of the project.

Benefits reaped at one location may come partially at the expense of other locales, thereby reducing overall net benefits. An honest assessment of net benefits depends on carefully defining appropriate geographical boundaries of the project's impact areas.

Appropriate temporal frameworks for assessing economic impacts

Every community transportation project must be evaluated and deployed with regard to a specific time horizon–usually many years or decades. Well-designed transportation projects should be expected to last at least a generation.

Benefits reaped in one time period may come partly at the expense of an earlier or later era, thereby affecting net benefits. That is why the specification of an appropriate temporal framework for planning is crucial.

Spending (for present goods and services that are used and used up in the short term) and investing (in service-producing assets for use over the long term) are not the same. The temporal framework is crucial when the economic impacts associated with a well-designed transportation project are assessed within the context of a community balance sheet and cash flow analysis.

Investments made today are expected to produce a stream of benefits during the years ahead. Estimates of how long that stream of benefits will last, how valuable they will prove to be for people in the future, and their present value when discounted from the future, help us determine the degree to which present investments make sense considering other spending and investing to which current resources can be deployed.

Chapter 2:

Transportation Projects and Community Enhancement: Measuring Impacts

David Forkenbrock's work at the University of Iowa has suggested three frameworks for measuring the local economic impacts of transportation projects: [2]

Framework 1: Measuring changes in traveler costs due to transportation projects, and methods for estimating. [3] After a project is put into use, costs rise for some travelers and users, and fall for others, in several ways:

- increased/decreased *travel times* to destinations for different users
- increased/decreased *travel distances* for different users
- improved *safety* for some system users
- occasionally reduced safety for some, e.g., pedestrians
- possibly reduced *vehicle operating costs*—smoother, more direct routes
- higher speeds may increase per-mile costs

Framework 2: Measuring changes in the economy and economic development effects of transportation projects: methods for estimating benefits and costs. [4]

The Federal Highway Administration (FHWA) has worked with contract researchers to develop the Highway Economic Requirements System (HERS) since 1999. The aim of the system is to help agencies

select highway improvement projects based on benefit-cost analyses of various improvement options. The user of the HERS can specify any one of three objectives:

(1) Maximize *net present value* of all benefits of highway improvements subject to specified funding constraints during the period.

(2) Minimize the *cost of improvements* needed to achieve a specified goal for the performance of a highway system at the end of the funding period.

(3) Implement all improvements with a benefit-cost ratio greater than some specified threshold value.

Framework 3: Measuring economic impacts and development at the local level due to transportation projects: defining development attributes. [5]

When measuring economic impacts and development at the local level due to transportation projects, it is important to distinguish authentic new activity from simply relocated activity. For example, when assessing the expansion of jobs and income in a specific project corridor or study area, there are two types of development activity:

- *generative* (i.e., expansion through productivity improvements; in other words, net gains for the economy of the kind that economists normally consider in national income analysis), and
- *redistributive* (i.e., local benefits that are derived from the transfer of investment and other economic activity from outside areas into the study area).

This kind of cost-benefit analysis yields different answers depending on the spatial and temporal scales of analysis. To calculate an answer that will be useful in making a decision about whether to proceed on a project, analysts must make assumptions about spatial scale (e.g., how wide an area to consider?) and temporal scale (e.g., how long will the payout period be; what kind of discount rates to use calculating present value of future benefits?).

Framework 4: Measuring changes on the land--economic development/land development at the local level due to transportation projects: methods for measurement and/or forecasting. [6]

Several more-or-less standard methods from simple to highly complex may be used for carrying out analysis and forecasts of economic impacts of a proposed project, in order to decide whether to proceed or not–i.e., build vs. no build. [7] Researchers, policy makers and planners are interested mainly in whether a project will expand the number of jobs and income earned within a project area or corridor. If their focus is solely on the project area itself, they may not be concerned whether the project's impacts are *generative*, that is arising from improvements in factor productivity, or *redistributive*, whereby local benefits result from the transfer of investment and business activity from another location into the project area.

The measurement of impacts that we believe are a consequence of a transportation project is a tricky matter, because we cannot observe directly all of the essential structures and interactions within the system we call the local economy. We can observe only some of its manifestations. Methods used to predict the economic development impacts of transportation projects range from impressionistic and qualitative surveys to quantitative measurements and complex models of the local economy.

The Role of census data and the American Community Survey (ACS)

Some of the data from the census can be used to track trends in and around the areas of transit projects, but for land development and other activity since 2000, the 1990 and 2000 data provide only *background* that can be used when later data become available from the American Community Survey.

Census 2000 was the final occasion for the Census Bureau to collect detailed population, family, household and housing information using the traditional long-form questionnaires as part of the decennial census. This change means that beginning in 2010 the Bureau will no longer collect such data from approximately one-of-six housing units. In its place, the Bureau inaugurated the American Community Survey (ACS), from which roughly comparable long-form data are being gathered. The ACS is a continuous Census Bureau project that surveys annually a national sample of housing units that is somewhat smaller than the former one-in-six decennial sampling rate. The new sampling rate will be about 3 million housing units per year, covering about 2.5 percent of all households, and will survey 12.5 percent (i.e., one-in-eight) of all occupied and unoccupied housing units over any given five-year period.

The ACS got underway in January 2005, with an initial mail distribution of 250,000 questionnaires. In each subsequent month an additional sample of 250,000 housing units is surveyed. Survey of persons living within group quarters was planned to begin in January 2006. A permanent staff of survey professionals monitors responses and does the follow-up when questionnaires are not returned. The Census Bureau believes that the use of professionals on a continuous basis yields higher-quality responses than have been available from previous decennial long-form returns when temporary census workers staffed the effort.

Data tables for population and housing from the ACS are expected to be similar in content to Census 2000 Summary File 3 (SF3) tables, available for census tracts on the Census Bureau web site (**http://www.census.gov**). Yearly estimates will be available for geographic area summary levels for places with populations greater than 65,000 in 2006 and beyond. Annual ACS estimates for areas with populations between 20,000 and 65,000 will be three-year averages, and will become available in 2008. Small-area census tract and block group estimates will be five-year averages (calculated from 60 monthly samples) beginning in 2010. Land use and transportation planners will eventually have access to higher-quality and more timely data for their purposes, although many transportation planning agencies may not have the resources to recalibrate their models more frequently than on a decennial basis.

On the positive side, because surveys are carried out every month, data from the ACS will be more current than data from the decennial census. But confidentiality rules regulate the trade off between the *size of the area* for which data are needed and the *timeliness* of the data. For large areas (e.g., states) yearly estimates will be available from the ACS. For small areas (e.g., census tracts), five years of survey data will be needed before estimates can be released. Nevertheless, for purposes of assessing selected economic impacts of transportation projects, the new ACS data should be superior to the former decennial data in both accuracy and timeliness.

Public Use Microdata Samples (PUMS files) of individual household records (compiled for areas much larger than tracts in order to maintain confidentiality) will change in character, with the inauguration of the ACS and the elimination of the long-form decennial questionnaire. PUMS files permit the construction of cross-tabulations of different combinations of housing, household, and population variables of interest to the researcher and analyst. Such tailor-made tabulations can be helpful in assessing characteristics and trends in the settings of transportation projects, although the size of the areas and populations for which such assessments are possible are much larger than a census tract or set of tracts adjacent to a project. For large cities or counties, on the other hand, the PUMS files can often be a useful data source for evaluating the economic and demographic settings within which a project is located.

The Census Bureau plans to release data in August of each year based on samples collected through the

previous December. For example, the three-year averages mentioned above (for places with 20,000 to 65,000 population) will be based on samples collected in the 36-month period from January 2005 through December 2007 and will become available in August 2008. The following August, a new three-year average will be released based on samples collected over the period 2006-2008. The small-area census tract and block group estimates will be calculated from 60 monthly samples collected from January 2005 through December 2009, and are planned to be released in August 2010. The carrying out of the ACS by the Census Bureau according to current plans depends on Congressional approval and continuing appropriations, which are not certain. What *is* certain is that there will be no long-form questionnaire in the 2010 census.

If the ACS proceeds according to Census Bureau plans through 2009, then it will be possible for the Bureau to compile and publish PUMS files based on the 60 months of surveys carried out between 2005 and 2009. If that happens, then cross-tabulations of various sorts will be possible. [8]

Chapter 3:

Case Studies

Selection and Analysis

Several criteria were considered when selecting case studies for examination with regard to the *economic impact* of transportation projects as illustrated by various *best practices* in design:

(1) There are different ***types of transportation projects*** that could be examined: light rail, intermodal, highway, bus, and auto.

(2) There are different ***kinds of physical settings and sites***: projects might be sited within redevelopment areas in central cities, at a city's edge, in an inner or outer suburb, or beyond the urban core.

(3) There are different kinds of settings regarding prevailing ***local growth rates*** and levels of economic vitality, which influence what might be possible given the resources potentially available (**Table 2**). Projects in settings with steady population increase can be expected to draw new users. Projects in declining areas might languish.

(4) There are different ***regions of the country***, and ***types of regions*** with different histories, traditions, local cultures and climates. Auto-dependent Los Angeles provides different challenges for transportation enhancements from those found in small cities in the Midwest.

(5) There are various forms of "joint development" involving ***legal and financial arrangements*** that connect transit authorities with various combinations of federal agencies, state departments of transportation, counties, cities, business associations, individual businesses, and public and private development.

(6) Finally, the ***time frame*** for evaluating the economic development impacts of a transportation project can be as short as a year or two, or extend out over many years or decades; for example, radial or circumferential Interstate highways built in the 1960s and still serving metropolitan areas today.

Table 2. Metropolitan Area Populations (millions) and Decadal Changes (%)

	1960	1970	1980	1990	2000	Δ 50s (%)	Δ 60s (%)	Δ 70s (%)	Δ 90s (%)
Arlington County, VA: Rosslyn-Ballston Corridor: **Washington-Arlington-Alexandria DC-MD-VA MD**	**2.11**	**2.91**	**3.06**	**3.22**	**3.73**	36.7	37.9	5.2	**16.3**
Atlanta: Lindbergh MARTA Station: **Atlanta-Sandy Springs-Marietta, GA MSA**	**1.17**	**1.60**	**2.03**	**3.07**	**4.25**	39.9	36.8	26.9	**38.4**
Chicago: Pulaski-Garfield Park CTA Station; Arlington Heights Village Commuter Rail: **Chicago-Naperville-Joliet, IL MD**	**6.22**	**6.97**	**7.10**	**8.18**	**9.10**	20.1	12.1	1.9	**11.2**
Dallas: Mockingbird DART Station; Plano DART Station: **Dallas-Ft. Worth-Arlington, TX MSA**	**1.74**	**2.38**	**2.97**	**3.99**	**5.16**	45.7	36.8	24.8	**29.4**
Los Angeles: Boyle Heights; Fairfax Village; Jefferson Corridor; Leimert Park; North Hollywood; Whittier Boulevard: **Los Angeles-Long Beach-Glendale, CA MD**	**6.04**	**7.04**	**7.48**	**11.27**	**12.37**	54.4	16.6	6.2	**7.4**
Eden Prairie: Southwest Transit (BRT) Station: **Minneapolis-St. Paul-Bloomington, MN-WI MSA**	**1.60**	**1.97**	**2.11**	**2.54**	**2.97**	28.8	23.1	7.1	**16.9**
Oakland: Fruitvale BART Station: **Oakland-Fremont-Hayward, CA MD**	**2.65**	**3.11**	**3.25**	**3.69**	**4.12**	24.2	17.4	4.5	**14.9**
Salt Lake City: Intermodal Transit Hub: **Salt Lake City-Ogden, UT, MSA**	**.58**	**.71**	**.94**	**.77**	**.97**	39.3	22.4	32.4	**26.1**
St. Louis: Emerson Park MetroLink Station: **St Louis, MO-IL MSA**	**2.14**	**2.41**	**2.36**	**2.58**	**2.70**	19.8	12.6	-2.1	**4.6**

Change 1950 to 1960 is based on SMA definitions as of 1960, and census calculations published following Census 1960. 1960, 1970, and 1980 data based on SMSA definitions as of 1980 [from State & Metro Area Data Book 1982]. 1990 and 2000 data from Census Bureau Web site, with population counts by MSA as defined 30 Dec. 2003, which are aggregates of "metropolitan divisions" where the MSA is composed of constituent divisions. This means that 1990 counts are sometimes not comparable to 1980 counts; e.g., Salt Lake City. MD: Metropolitan Division (a constituent of an MSA.) Data source: U.S. Bureau of the Census. Percentage change 1990s, from Census Bureau Web site. Other calculations by the authors.

Inner cities: catalytic redevelopment

Pulaski/Lake Station, Chicago, IL

Among Chicago's several residential sectors, the city's South Side and West Side contain the largest concentrations of low-income and ethnic-minority populations. The impoverished West Garfield Park neighborhood of the city lies five miles west of the Central Business District (CBD), halfway to the city limits (**Figure 1**). The Pulaski Station is located on the Chicago Transit Authority's Green Line elevated rail link through the West Side.

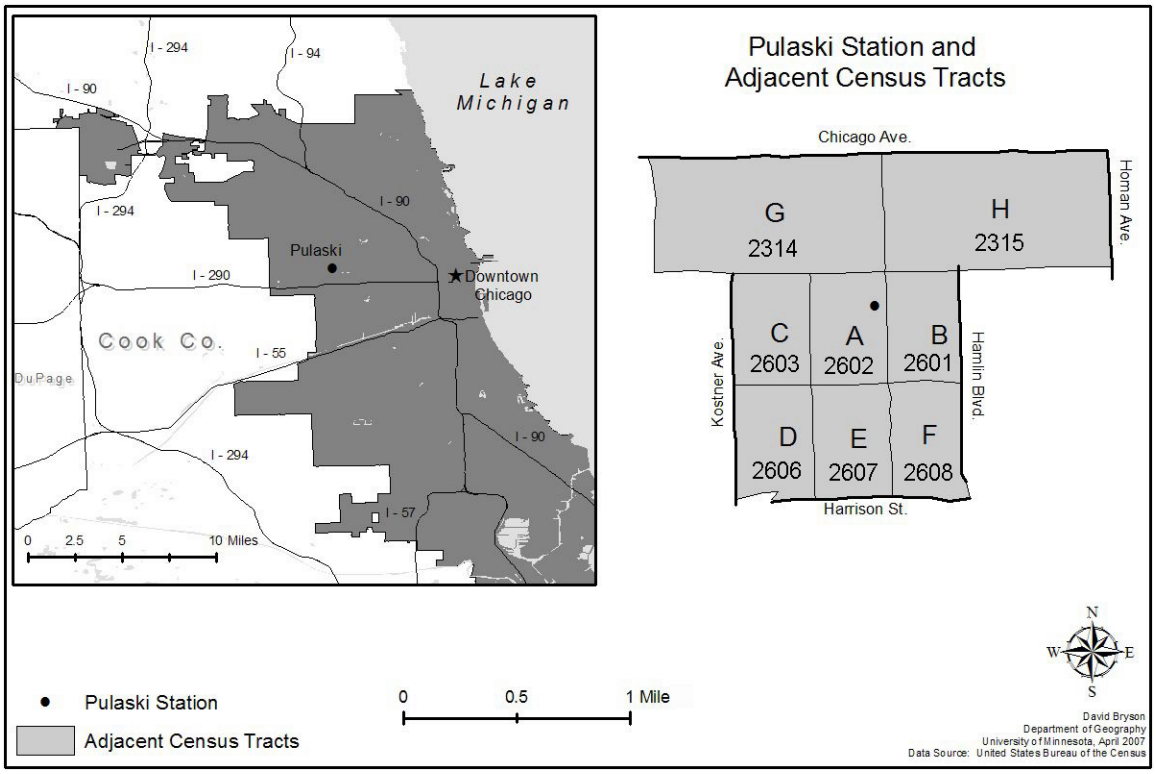


Figure 1. Pulaski CTA Station and Adjacent Census Tracts. Tract letters correspond to Table 3.

The Pulaski Station is heavily used by local residents and by commuters coming to work at nearby jobs, but the prospects for transit-oriented development at and near the station are constrained by the economic circumstances of the neighborhood compared with more attractive settings elsewhere in the city and the metro area.

In 1992 the Chicago Transit Authority (CTA) proposed closing the Green Line. Community organizations lobbied to keep a transit stop in the neighborhood for access to jobs, and for leverage for other credit (mortgage loans) based on likelihood of local disposable income from employment.

In 2001, a new station opened at Lake and Pulaski. The station connects directly at platform level with a 23,000-square-foot commercial and community center of Bethel New Life a faith-based social service agency.

Table 3.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Pulaski Station, Central City Chicago, IL

Adjacent Census Tracts		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
G	2314.00	NA	NA	NA	NA	NA	NA	NA	NA
H	2315.00	15,385	27,283	47,100	80,500	314	449	8,593	7,650
B	2601.00	20,987	19,531	57,000	95,800	207	263	1,182	1,456
A	2602.00	16,250	36,500	50,000	90,700	342	499	1,760	1,538
C	2603.00	16,681	19,837	43,800	106,300	309	392	2,227	2,144
D	2606.00	16,699	32,716	40,000	100,000	333	481	3,719	3,218
E	2607.00	14,750	21,435	42,900	86,800	322	483	2,812	2,619
F	2608.00	15,605	27,083	61,300	NA	319	455	2,789	2,665
Chicago City		30,707	42,724	78,700	132,400	377	543	2,783,726	2,895,964
Cook County		39,296	53,784	102,100	157,700	411	582	5,105,067	5,376,741
Chicago-Naperville-Joliet IL MSA (g)		42,153	60,367	103,100	159,000	417	589	8,065,633	9,157,540

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
G	2314.00	NA	NA	NA	NA	NA	NA	NA
H	2315.00	.36	.45	.46	.51	.75	.76	.89
B	2601.00	.50	.32	.55	.60	.50	.45	1.23
A	2602.00	.39	.60	.48	.57	.82	.85	.87
C	2603.00	.40	.33	.42	.67	.74	.67	.96
D	2606.00	.40	.54	.39	.63	.80	.82	.87
E	2607.00	.35	.36	.42	.55	.77	.82	.93
F	2608.00	.37	.45	.59	NA	.76	.77	.96
Chicago City		.73	.71	.76	.83	.90	.92	1.04
Cook County		.93	.89	.99	.99	.99	.99	1.05
Chicago-Naperville-Joliet IL MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.14

Data Source: U.S. Bureau of the Census; calculations by the authors. MSA as defined by OMB 6 June 2003. NA: data not available.

The CTA moved the station west one block to a site where the "green" building for Bethany New Life could be anchored to transit. A second-level skywalk entry from the train station to the multi-story Bethel New Life building improved access to services there. Loans were provided for small businesses on the ground floor of the Bethel building.

The center has a covered pedestrian bridge from the building's second floor to the station's outbound platform. Opened in 2005, the building is intended as a hub of activity in West Garfield Park and an anchor for further development in the area. The census tracts that provide patronage for the Pulaski station are generally sparsely populated, low-income, losing population, and filled with owner-occupied and rental housing that features prices and rent levels well below city and metro averages. Bethel New Life has some housing replacement in the nearby neighborhood, but only indirectly related to local transit services (bus vs. train to jobs).

The area adjacent to the Pulaski Station is affected by the limited growth of the Chicago area and the diversion of population and economic activity into suburban areas. Low-income, inner-city areas have a hard time competing with the attractive growth points elsewhere in the metro area, but recent evidence is encouraging.

Chicago's population exceeded 3.5 million in the 1950s, then steadily declined until 1990 when the downward trend began reversing. Metropolitan Chicago has seen only modest population and economic growth since 1990 (**Table 3**). Trends in the ratios for the 1990s may mean that despite competitive national and international economic challenges confronting the metropolitan area in general, where growth has been steady but only modest, the City of Chicago and its neighborhoods may be stabilizing after decades of competition from suburban expansion. All but one of the eight tracts adjacent to the station lost population in the 1990s, yet there are subtle signs of improvement. Income ratios and housing value ratios rose during the 1990s in most tracts, as did rent ratios.

The ratios that compare tract measure with metro meridians in 1989/1990 with corresponding measures in 1999/2000 provide a convenient and meaningful way of assessing the relative strengths of family incomes and housing values as the entire area grows and changes. On the basis of these ratios and their trends during the 1990s, we conclude that the Pulaski Station area is holding its own. Most ratios were stable, or improved.

The Neighborhood

The community's 185-acre namesake, Garfield Park, was developed in 1869 as Central Park, one of three large parks and linking boulevards of the West Park System. Today, as part of the Chicago Park District, the renamed park provides open space for neighborhood residents.

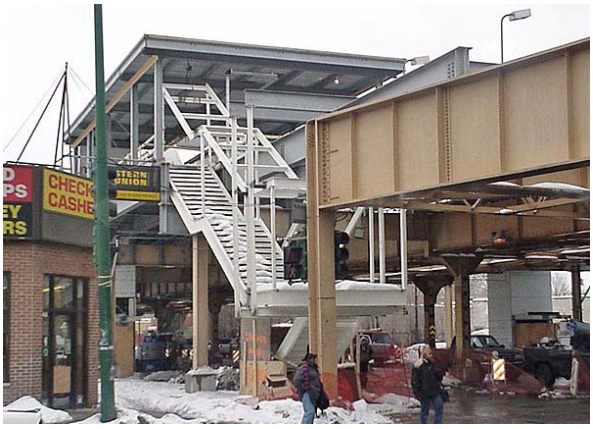
Many parcels within the West Garfield Park neighborhood have been abandoned or neglected, and in some cases the property has been razed but not redeveloped. The neighborhood has not attracted much new investment in recent decades, and so many cleared parcels have remained empty for years.

Bethel New Life

The offices and services of the community development organization Bethel New Life are housed on the second floor of their new building, including a day-care center, medical clinic and pharmacy, and employment and training center. Space for small businesses is available at street level.

The "L" Green Line station platform connects to the building's 2nd-floor entry.
(Photo: Graham Garfield, www.Chicago-L.org)

The Bethel New Life Center is a "green" building, featuring photovoltaic cells to make the building more energy self-sufficient, recycled materials, and a living rooftop garden. (Photo: Graham Garfield, www.Chicago-L.org)



The Pulaski/Lake station and Bethel New Life building, from street level.
(Photo, left: Graham Garfield, www.Chicago-L.org)

Bethel New Life has worked to redevelop affordable rental housing by renovating existing apartment buildings—a transitional step for some on the path to home ownership.

Bethel New Life also has developed affordable infill single-family housing on a number of vacant parcels, and assists first-time buyers to find mortgage financing.

Emerson Park Station, East St. Louis, IL

East St. Louis, IL, is an old industrial suburb of St. Louis, MO. Emerson Park is a 55-block neighborhood just northeast of downtown East St. Louis **(Figure 2**). The economic and demographic situation facing East St. Louis and the Emerson Park neighborhood by the time of Census 2000 was only the most recent chapter in a long siege of difficulties that the greater St. Louis area had faced following World War II. St. Louis had been one of America's great industrial and transportation powerhouses throughout the first two-thirds of the 19th century, but it was eclipsed by Kansas City as a railroad center when water transportation was superseded in importance during and after the Civil War. On the industrial front St. Louis was displaced by Chicago by 1900.

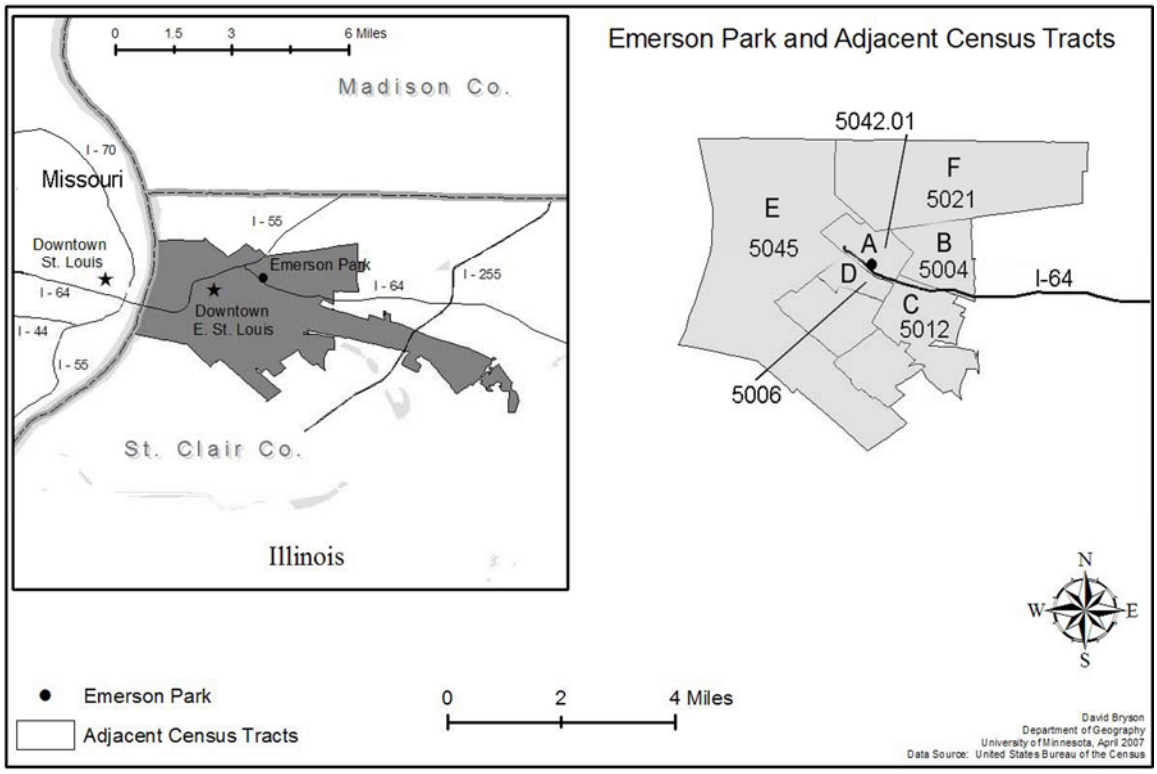


Figure 2. East St. Louis, IL, MetroLink Station and Adjacent Census Tracts. Tract letters correspond to Table 4.

Despite the industrial stimulus in support of World War II, the populations of St. Louis and East St. Louis peaked in the decade following 1945, then confronted a long period of demographic and economic challenges from competitors elsewhere in the country, and from the outer suburban fringes of both cities. East St. Louis, with a population of over 82,000 in 1950, was especially hard hit when the chemical industry along the Mississippi River consolidated, automated, and eventually relocated most of its operations, eliminating the city's major employment base.

By the 1990s, the downtown business landscape was overbuilt and under-patronized, and inner-city residential neighborhoods looked like ghost towns. Most individuals and households that could afford to leave had done so. Those left behind reported incomes well below metro averages (**Table 4**). Income ratios fell well below metro averages in 1990 and in 2000. As tract populations dropped below Census Bureau criteria, tract consolidation followed.

Some migrants relocated to the outer suburbs of St. Clair County or other parts of the metro area, while some left the metro area altogether in pursuit of opportunities elsewhere. The already small population of East St. Louis dropped by almost a quarter during the 1990s.

The long-term decline of the city wiped out the effective demand for building new housing and undermined enthusiasm for maintaining the existing stock, so the value of the housing stock dropped. The low housing-value and contract-rent ratios suggest the desperate economic circumstances of the tracts in and around the Emerson Park MetroLink station.

On the other hand, a close inspection of the ratios reveals what may be modest evidence of a stabilization of the plight of the city and the tracts in Emerson Park. Although the income ratios, housing ratios and contract-rent ratios remain low, in most cases they *rose* during the 1990s. Some of that rise can certainly be attributed to efforts to rejuvenate the neighborhood, which may be a harbinger of better days ahead.

A MetroLink light rail station was planned for Emerson Park. The community, led by the Emerson Park Community Development Corporation (CDC), lobbied to have the station sited where it could do the most good, i.e., on the north side of Interstate 64, across from the original planned site.

The station serves the inner-city Emerson Park community. A neighborhood organization with sustained leadership since 1990 used the planning and building of the light rail station to organize the neighborhood, link low-income and unemployed residents with job opportunities in the Greater St. Louis area, and undertake a series of transit-oriented low- and moderate-income housing projects for local residents.

Two park-and-ride lots next to the station in the crime-ridden neighborhood had to be built in view of security monitors, for people to feel confident in using them. One lot is beyond the view of the security guard who monitors the station platform, so many people avoid it and park on the residential street, within the guard's view.

Small-scale retailing is part of station design. The station, retailing, and the nearer park-and-ride lot all are in clear view of the housing, which adds to security. The station and park-and-ride are clearly visible from the highway, providing ease of access.

Improved housing was one of Emerson Park's most pressing needs. Most of the stock needs replacement. The transit station helped persuade lenders to finance mortgages, by providing access to jobs for local residents of a community where economic opportunity had long since abandoned the area. Since the first houses went up, other developers have become more willing to move in. There are one or two small service retailers in the transit station retail space. Beyond that, the community needs basic retailing like small grocers, pharmacies, and neighborhood services.

Table 4.—Family Incomes, Housing Values, and Contract Rents, with Ratios Comparing Tract, City and County Data with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Emerson Park MetroLink Station, East St. Louis, IL

		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
B	5004.00	11,533	24,306	22,200	38,200	125	253	3,640	2,297
D	5006.00	11,506	19,688	20,800	33,500	208	301	1,958	1,273
C	5012.00	21,982	37,281	27,400	43,200	226	312	5,698	4,298
F	5021.00	NA	31,481	31,200	44,900	NA	293	2,097	2,412
	5024.03	NA	Put in 5021 in 2000	37,500	NA	NA	Put in 5021 in 2000	10	NA
	5041.00	12,035	Put into 5045 in 2000	19,500	NA	113	Put in 5045 in 2000	1,212	NA
A	5042.01	9,063	29,375	15,800	27,900	175	256	1,780	819
	5044.00	5,294	Put in 5045 in 2000	20,000	NA	99	Put in 5045 in 2000	1,226	NA
E	5045.00	Not in 1990 Census	15,783	NA	31,000	Not in 1990 Census	178	NA	5,853
City of E. St. Louis		15,975	24,567	26,400	41,800	183	265	40,944	31,530
County- St. Clair		31,939	47,409	55,500	77,700	285	379	262,852	256,082
St Louis, MO-IL MSA (g)		38,146	54,113	70,000	99,400	320	420	2,444,099	2,603,607

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
B	5004.00	.30	.45	.32	.38	.39	.60	.63
D	5006.00	.30	.36	.30	.34	.65	.72	.65
C	5012.00	.58	.69	.39	.43	.71	.74	.75
F	5021.00	NA	.58	.45	.45	NA	.70	1.15
	5024.03	NA	NA	.54	NA	NA	NA	NA
	5041.00	.32	NA	.28	NA	.35	NA	NA
A	5042.01	.24	.54	.23	.28	.55	.61	.46
	5044.00	.14	NA	.29	NA	.31	NA	NA
E	5045.00	NA	.29	NA	.31	NA	.42	NA
City of E. St. Louis		.42	.45	.38	.42	.57	.63	.77
County- St. Clair		.84	.88	.79	.78	.89	.90	.97
St Louis, MO-IL MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.07

Data Source: U.S. Bureau of the Census; MSA as defined by OMB, 6 June 2003. NA: data not available. Calculations by the authors.

A three- to five-year plan developed with help from the University of Illinois is being implemented. Progress is slow but positive; the CDC is committed to the long term. The current leadership has been present since 1990.

There is no major competition for housing and economic development in the area, but local government cooperation and support are absent. Successful replacement of dilapidated housing provides vivid evidence of progress, but also stimulates land speculation that raises land prices and slows progress. Planning and Community Development Corporation activity is ongoing, flexible, and responding to changing conditions and opportunities. There is no apparent competition with the CDC and partner organizations, or displacement issues for the local population. Households are being moved one by one from substandard housing to new replacement units.

A significant number of new housing units have been built in Emerson Park since Census 2000. The MetroLink station provides resident workers access to employment elsewhere in the metro area on both sides of the river. Recent trends seem modestly positive, and certainly some of the trend can be attributed to the advantages offered by the transit access, new housing developments in Emerson Park, and the promise of better days ahead.

Community in Ruins

A number of houses have burned down and their ruins have been left standing. Adding to the bleakness of the terrain, a recent ice storm killed many of the area's old trees.

On a few occupied residential blocks, houses of former industrial workers stand, as islands of survival amid a sea of decay.

A few occupied houses stand adjacent to the local utility plant, a remnant of a once robust working-class community.

Normal municipal services are scarce in Emerson Park. Litter is pervasive on empty lots. The community has taken it upon itself to clear many streets of litter and trash.

Downtown

Downtown East St. Louis saw its heyday and peak of commercial activity before WWII. As jobs and population suburbanized, the formerly grand buildings downgraded their functions, deteriorated, and eventually were abandoned. Today, many stand vacant, and others house low-budget retailing and social services.

The downtown light rail station and park-and-ride lot. There are just a few large employers in the central business district, including police headquarters and an educational services building. The skyscraper in the background (right), just at the edge of the main retail district, has no windows.

The Emerson Park MetroLink Station

The Emerson Park MetroLink transit station platform.

In the small mall behind the train platform, a few storefronts and kiosks await small businesses. A dry cleaner and café currently occupy the space. The CDC aims to bring in small shops and services that will serve commuters, as they transfer from the train to their cars.

One of two park-and-ride lots adjacent to the Emerson Park transit station. This lot is in view of station security. There is a second lot beyond the overpass, which is less heavily used by commuters due to security concerns. Instead, many commuters park on residential streets.

Neighborhood Renewal

The Emerson Park Community Development Corporation (CDC) obtained and renovated this building, which now houses CDC offices and services, plus a charter high school for local children, where basic skills are taught along with marketable skills—such as construction skills acquired through the "Youth Build" program, in which students participate in constructing affordable housing in the community. The mural was painted by the students, and celebrates their pride in their achievements.

The Emerson Park Community Development Corporation (CDC) has worked with the city and a number of developers to build new housing in the most deteriorated sections of the neighborhood. This development is directly across the street from the light rail station.

New housing across from the MetroLink station. Commuters park in the street in view of station security monitors.

New townhouses in Emerson Park, about one block from the station, across the street from the Community Center building.

Parcel-by-parcel and block-by-block, the efforts of the CDC are restoring the Emerson Park neighborhood to livability. This has been made possible by the enhanced access to jobs and income that the MetroLink station provides. (cover photo)

Fruitvale Transit Village, Oakland, CA

Fruitvale is a major mixed-use development, sited on land owned by Bay Area Rapid Transit (BART), next to a station that serves central Oakland (**Figure 3**). Oakland is the major city of 400,000, on the east side of San Francisco Bay, with Berkeley to the northwest, San Leandro to the southeast, and Alameda (island) to the southwest. Greater Fruitvale is a two-and-a-half-square-mile area bounded by 14th Avenue to the west, the Oakland Estuary to the south, High Street to the east and Interstate 580 to the north. The Fruitvale Village development lies at the intersection of a major NW-SE thoroughfare (International Blvd) and NE-SW Fruitvale Avenue link to Alameda. In earlier decades, this transit intersection was the major outlying retail center in Oakland.

BART broke ground in the 1960s for a rail transit station at Fruitvale, intending to promote economic development in the area. Surface parking was provided on BART land next to the intermodal BART station.

In 1991 BART planned a parking ramp, to be located between the BART station and commercial activity along International Boulevard at Fruitvale. The neighborhood council vigorously objected to ramp siting that would have cut off the BART station from the neighborhood. They forced its relocation, and engaged BART in the Fruitvale Village redevelopment project.

Sustained neighborhood leadership beginning in the 1960s, coupled with BART's willingness to work with the neighborhood on behalf of economic development and real estate development that provides steady cash flow to BART from land rents, meant that other investors were able and willing to join BART and invest in Fruitvale Village, tapping part of the neighborhood market that would otherwise go elsewhere.

The project has become a national model for successful transit-oriented design in a high-density inner-city neighborhood with a large, stable, working-class population and significant disposable income. Fruitvale Village is a reminder that community redevelopment is a complex process requiring sustained local leadership that takes vision, time, and funders that are flexible and patient as the process unfolds over decades.

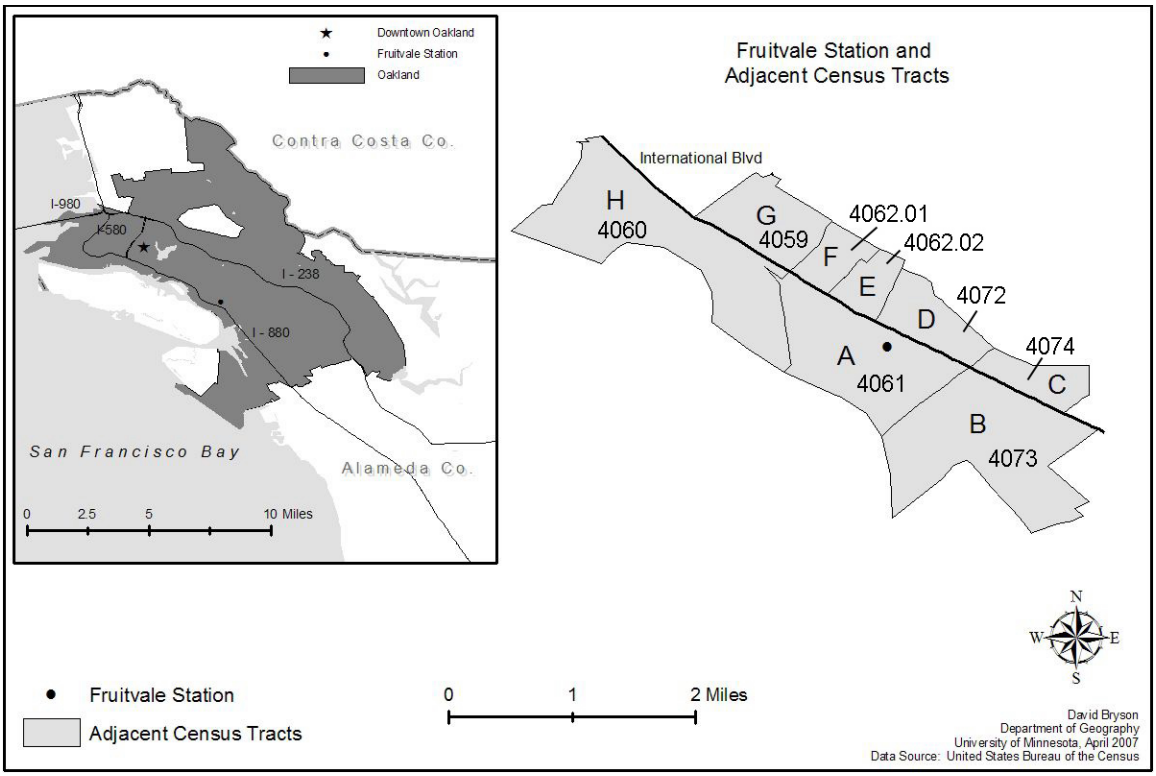


Figure 3. Fruitvale BART Station and Adjacent Census Tracts. Tract letters correspond to Table 5.

The San Francisco-Oakland metro area population grew steadily in the 1990s at 11.4 percent, comparable to Chicago, Los Angeles, and Minneapolis-St. Paul (**Table 5**). The income, housing-value, and rent ratios in tracts surrounding the Fruitvale BART station in south central Oakland were almost all below .50 for Census 1990, and in the subsequent decade they matched the trends for the city of Oakland and generally declined to still lower levels. In fact, all of the rent ratios for the adjacent tracts as well as for the city of Oakland dropped below 1990 levels.

According to the 2000 Census, the population of the Fruitvale was 46,182. Given Fruitvale's neighborhood demographics, this count represents an underestimate. A recent independent study places the Fruitvale population count at 48,063, which is even higher than the 2004 Census trend projection of 47,449. By Census figures, Fruitvale's population increased by 15 percent between 1990 and 2000, more than twice that of the City of Oakland, which increased by only 7 percent. Fruitvale is the most densely populated neighborhood in the city, comprising about 4.5 percent of Oakland's total land area but housing 12 percent of Oakland's total population. [9] It also is the most diverse neighborhood in a diverse city, with 49 percent Latino, 19 percent Asian, and 20 percent African-American. In 1999, 49 percent of households in the area earned less than $30,000 annually, compared with 28 percent in Alameda County.

Alameda County and the entire metro area grew briskly during the 1990s, which means that there was an expansion of new housing built and upward pressure on the prices of the existing housing stock. However in typical metropolitan growth regimes, it is the newer and more desirable existing housing that gains in market value at a faster rate than the existing, less-desirable housing. In this competitive environment, much of Oakland older, inner-city housing stock—both owner-occupied and rental—fares less well.

Table 5.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Fruitvale BART Station, Oakland, CA

		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
	Adjacent Census Tracts	1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
G	4059	22,143	28,423	111,700	140,600	412	541	7,302	7,883
H	4060	22,976	31,625	115,600	144,900	419	563	3,114	3,655
A	4061	26,843	36,327	85,100	130,800	443	613	3,407	4,301
F	4062.01 ('00) 4062 (pt.) ('90)	16,753	25,579	118,600	113,700	427	495	*9,192	5,802
E	4062.02 ('00) 4062 (pt.) ('90)	16,753	34,019	118,600	153,500	427	538	9,192	5,084
D	4072	23,007	29,982	117,700	144,800	414	530	6,350	7,132
B	4073	27,396	28,913	82,400	114,200	511	587	1,980	2,423
C	4074	24,700	33,073	101,300	130,700	419	583	3,571	4,157
	Oakland- City	31,755	44,384	177,400	235,500	486	631	372,242	399,477
	Alameda County	45,037	65,857	227,200	303,100	570	784	1,279,182	1,443,741
	San Francisco-Oakland-Fremont MSA (g)	48,317	71,333	257,700	353,500	636	899	6,253,311	7,039,362

	Adjacent Census Tracts	Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
G	4059	.46	.40	.43	.40	.65	.60	1.08
H	4060	.48	.44	.45	.41	.66	.63	1.17
A	4061	.56	.51	.33	.37	.70	.68	1.26
F	4062.01 ('00) 4062 (pt.) ('90)	.35	.36	.46	.31	.67	.55	**1.18
E	4062.02 ('00) 4062 (pt.) ('90)	.35	.48	.46	.43	.67	.60	**1.18
D	4072	.48	.42	.46	.41	.65	.59	1.12
B	4073	.57	.41	.32	.32	.80	.65	1.22
C	4074	.51	.46	.39	.37	.66	.65	1.16
	Oakland- City	.66	.62	.69	.67	.76	.70	1.07
	Alameda County	.93	.92	.88	.86	.90	.87	1.13
	San Francisco-Oakland-Fremont MSA	1.00	1.00	1.00	1.00	1.00	1.00	1.13

Data source: U.S. Bureau of the Census; MSA as defined by OMB 6 June 2003. * 4062.01 and 4062.2 (in 2000) combined in order to calculate rate of increase of 4062 (in 1990). **Population of 4062 in 1990 was 9,192. Calculations by the authors.

During 2002, the median sales price for homes in Fruitvale's zip code increased by 43 percent. [10] Over the past decade, the commercial vacancy rate decreased from over 50 percent to less than 1 percent. The City of Oakland has seen an increase in its business, sales, and property tax revenues. Approximately 300 jobs have been created as a result of the Fruitvale Village development.

On the basis of census evidence, we see no clear indication that the availability of BART transit service at Fruitvale station for nearby residents or for park-and-ride commuters is associated with improvements in the income and housing ratios, although BART service may have kept ratios from dropping more than they did. It seems plain, though, that commercial and housing developments in the immediate vicinity of the station have been dramatic, although we have no way to know if the improvements at Fruitvale Village came at some cost to commercial enterprises elsewhere in central Oakland.

The Community

The Fruitvale community is heavily Latino and working-class, with low turnover of modest but well-kept single-family homes.

Fruitvale Village TOD

Fruitvale Village is a mixed-use, transit-oriented development that includes retail, office, and housing. Its distinctive gateway into the complex strengthens a sense of identity for the whole Fruitvale community.

The Fruitvale Village TOD includes a park-and-ride ramp and some short-term surface parking for cars, as well as bicycle parking and transfer facilities for bus riders. The ramp initially was planned to sit between the light rail station and the retail complex. Moving the site of the parking facility to allow direct access from the train to the retail, office and housing was critical to the success of the project.

The Fruitvale Village TOD is bordered by the Fruitvale commercial district, which also has been recently renovated.

Los Angeles Neighborhood Initiative (LANI)

The Los Angeles Neighborhood Initiative (LANI) was started by the city in 1994, as a 30-month demonstration project, to build community capacity for economic development in deteriorated areas of Los Angeles. Following the 1992 riots in the city's South Side, LANI worked with the U.S. Department of Transportation, Los Angeles Community Redevelopment Agency, and the Los Angeles Transit Partnership—an advocacy group focused on transportation-dependent neighborhoods.

LANI identified eight neighborhoods that appeared to have potential for stabilization and improvement. Some of these areas had a larger proportion of transit-dependent population than the city as a whole; in others, making transit use safer and more appealing for current users, and increasing transit ridership, were goals.

LANI describes itself as "a catalytic program dedicated to jump-starting community-driven neighborhood revitalization and improving transit access in challenged Los Angeles communities." [11] By providing some minimal funding and dedicated technical assistance, the city empowered the communities to become self-reliant and continue development efforts, by linking LANI efforts to other programs.

The core of LANI's funding is from the Federal Transportation Administration (FTA), Livable Communities program, and Intermodal Surface Transportation Efficiency Act (ISTEA) monies. The criteria for receiving LANI support included transit dependency, some existing physical and social capital, and local political support for the initiatives.

The city established a "Recognized Community Organization" (RCO) in each neighborhood, building on existing community organizations and bringing in businesses, commercial property owners, residents, and local institutions. The program provided technical support, training, and funding for enhancements around existing transit facilities. The small projects themselves were the means by which LANI hoped to accomplish larger goals within each community, of building consensus, building image, and building capacity. [12] If capacity for continuing improvement could be strengthened and expanded within each neighborhood through these organizations, they could become permanent vehicles for ongoing revitalization. [13] This is why LANI targeted neighborhoods that appeared already to have potential for achieving these goals.

Within a year of inception, each RCO had completed a project plan that defined the specific physical improvements to be implemented in 1995, as well as longer-term plans for job creation and larger capital projects.

These enhancements were meant to create an environment around transit corridors and nodes that would attract additional investment to the neighborhoods. Cooperation in design and planning of the streetscapes also has led to organization of local merchants' associations. Transforming abandoned and deteriorating streetscapes into attractive, welcoming and safe places for commuters has encouraged further economic development.

From among sixteen community applicants for the pilot project, eight were selected. Of our case studies, all but Fairfax were in the initial eight. Each of the eight neighborhoods received $250,000, along with free office space for their operations. The City of Los Angeles contributed $800,000, and Los Angeles County added $200,000 for county transit stores and transit shelters. Use of federal funds was restricted to public space improvements around bus stops. Neighborhoods used the money for general cleanup and graffiti removal, landscaping, sidewalk improvements, and installation of bus shelters, signage, gateways, kiosks, banners, street lighting, and trash receptacles. Using the bus system typically meant waiting at an undistinguished curbside bus stop with narrow sidewalks and few amenities, inches away from speeding traffic, and often with security risks. So, the initial targets of LANI's efforts focused on turning some of these bus stops into centers of community life.

The difference in the physical upgrades and the community capacity building introduced by LANI, compared with common community development approaches, may be thought of as emphasizing "place prosperity" over "people prosperity," and an "asset-based" rather than strictly "need-based" assessment at the outset. This approach introduces tensions for public policy. Briefly, some argue that targeting places rather than people can benefit the wrong people, e.g., landlords, and can limit the opportunities of residents who remain in the community. Others assert that assistance to individual households, while perhaps more accurately targeting need, can lead to welfare dependency. LANI's approach seeks to help communities gain control of local resources through ownership, financial management, networking, and access to government. Similar to the impetus behind Empowerment Zones and Enterprise Communities, programs like LANI can succeed in capitalizing on local assets by involving communities in long-term visioning and implementation. [14]

Efforts were targeted at four major bus lines, and four rail corridors adjacent to MetroRail stations. The targeted communities varied in their assets, needs, and potential, and the balance among these determined how they proceeded to use LANI's assistance. Some emphasized consensus building—building social capital and networks of trust and reciprocity. Others began by using the short-term visible improvements to restore pride and confidence in the neighborhood (image building); and some emphasized capacity building—leveraging existing resources with outside funds by joining in public-private partnerships. Limited LANI funds were leveraged with other public and private money, to fund new bus shelters and information kiosks, along with money to maintain them. The immediate, visible results were catalysts for longer-term efforts. The new facilities made the commercial corridors more attractive, along with new lighting, trees, and other landscaping projects that trained youth in gardening, and street banners, outdoor music festivals, and small parks adjacent to the transit stops with sculpture, murals, community gardens, and the like.

LANI's target neighborhoods are in diverse parts of the city. The program now serves 17 neighborhoods, building community consensus, providing transit and pedestrian improvements, revitalizing business districts, greening urban areas, and developing and supporting community organizations. The different contexts of these neighborhoods have led to differing rates and styles of improvement, as noted in the case studies below. The basic approach, however, of leading communities from consensus (through community organizations) to image building (through physical improvements) to capacity building (through training and technical assistance) has generally succeeded in turning decline into stabilization and gradual improvement.

In each LANI project, the transit services are fixed; the effort has been to improve the appearance of project areas to enhance community identity, to get communities to work together on behalf of the neighborhood futures, and link neighborhood residents more effectively with the city council and mayor’s office.

Design elements are mainly bus shelters, small green spaces, street banners, business facades, and other cosmetic improvements. Budgets are extremely modest, and used mainly for aesthetic improvements that can engage residents. Neighborhood organizations vary in the quality and energy of the leadership.

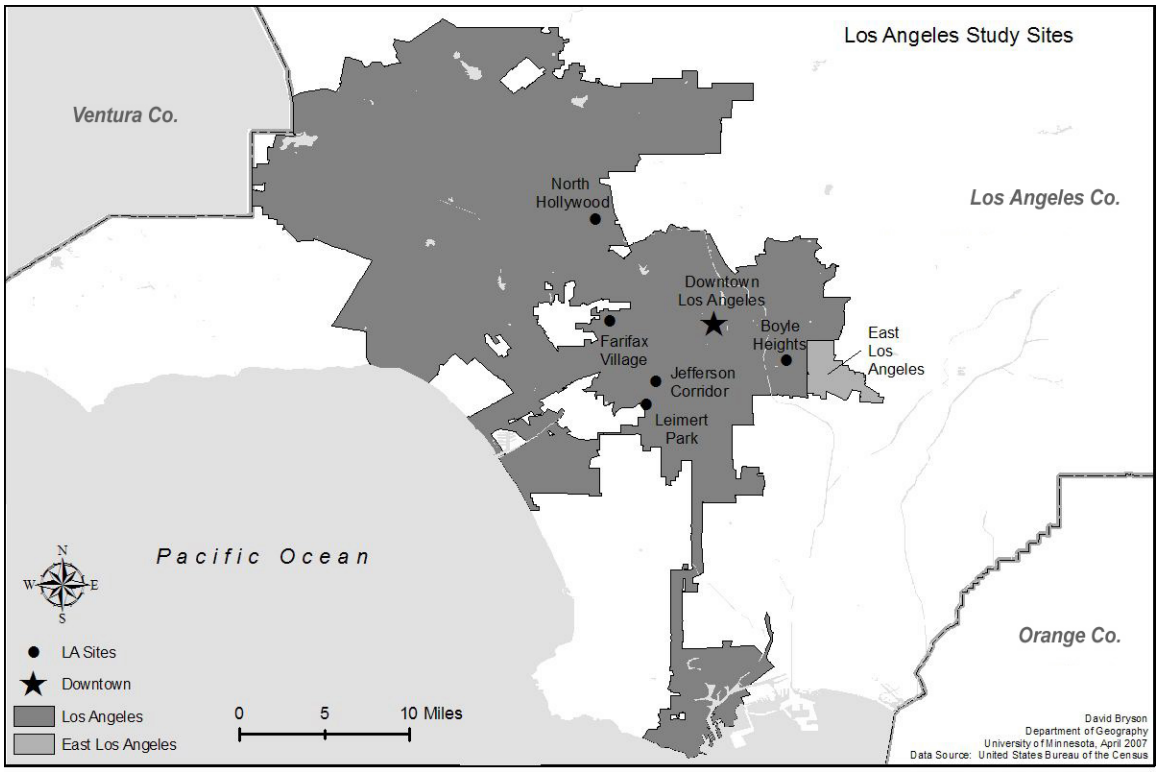


Figure 4. Los Angeles Neighborhood Initiative (LANI) Case Study Neighborhoods

Of the 17 neighborhoods receiving assistance from LANI, we chose to highlight five, based on their geographic distribution across Los Angeles County, the diversity of their ethnic and racial composition and income levels, and the different challenges they faced in enhancing community development with "catalytic" LANI funds and technical assistance (**Figure 4**).

Boyle Heights

Boyle Heights is one of the first suburbs of Los Angeles—an exclusive residential enclave in the 1920s, with industrial land uses encroaching after WWII (**Figure 5**). Successive waves of immigrants moved through the area; by the 1950s, half of the population was Mexican-American. The efforts of this neighborhood in eastern Los Angeles at revitalization with LANI support have centered on leveraging the now nearly 95-percent Latino identity within the area, making it visible and celebrating it through façade upgrades, street banners, and ethnic festivals.

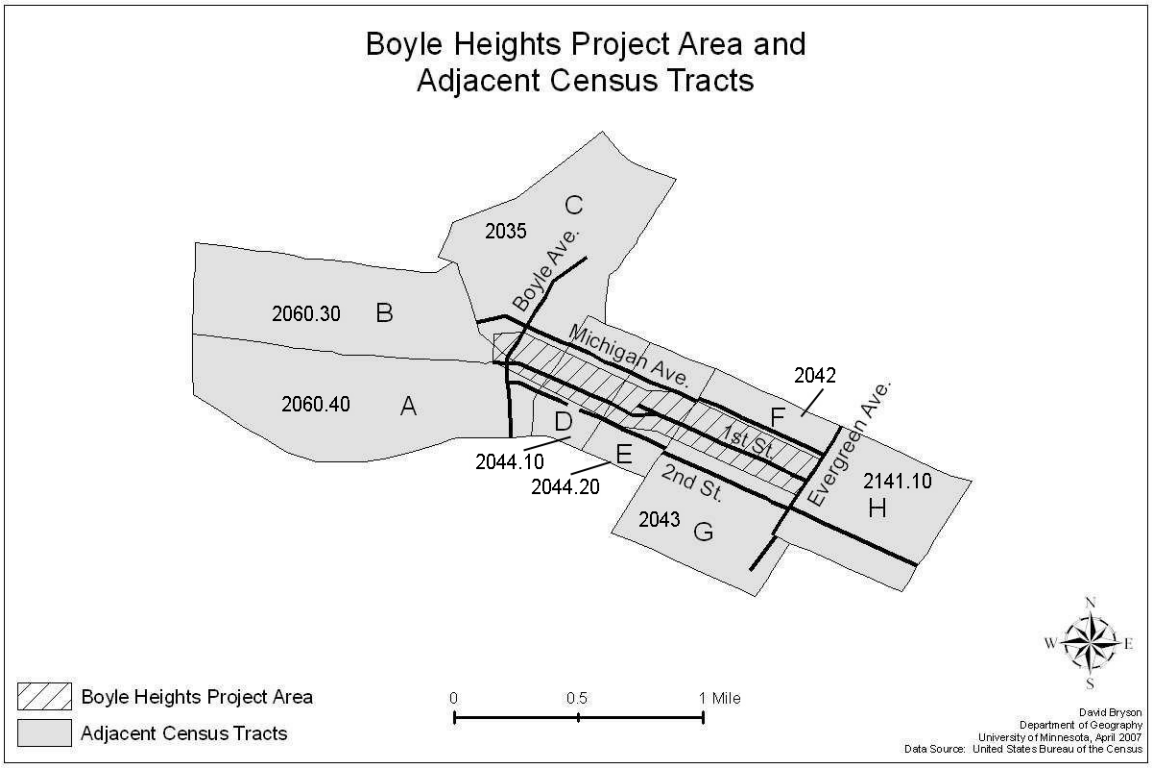


Figure 5. Boyle Heights Project Area and Adjacent Census Tracts. Tract letters correspond to Table 6.

Using LANI funds, the neighborhood created a mini-civic center that houses a police station, library, youth and immigration organizations, and a pocket park that has been designated a "transit mall". Improving both the safety and aesthetic environment for the bus transit that many neighborhood residents depend upon also was a strategy for strengthening the appeal of local businesses to automobile traffic. Pedestrian access also was improved through decorative crosswalks and intersection improvements. Now, there are no commercial vacancies on the main thoroughfare. Some chain stores have appeared, and some rental housing has been built.

Data in **Table 6** reflect certain aspects of the area in 1990 and change during the preceding decade in Boyle Heights census tracts compared with changes in (1) the entire City of Los Angeles, (2) Los Angeles County, and (3) in the wider metropolitan area. Boyle Heights is a working-class area just east of downtown Los Angeles, with tract income medians about half those of the city, county, and metro area. The steady growth of the Los Angeles area puts

Table 6.--Family Incomes, Housing Values, and Contract Rents compared with Metro Averages, 1989-1990 and 1999/2000, in and near Boyle Heights, a LANI Project Area, Los Angeles, CA

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)
C	2035.00	22,355	26,927	144,600	160,100	408	488
H	2041.10 ('00) 2041.00 ('90)	24,194	29,472	124,400	139,300	415	513
F	2042.00	20,959	24,519	112,100	168,500	392	489
G	2043.00	22,541	28,496	136,900	143,500	392	495
D	2044.10 ('00) 2044.00 ('90)	*17,886	24,297	152,900	166,600	404	523
E	2044.20 ('00) 2044.00 ('90)	17,886	19,789	152,900	166,700	404	459
B	2060.30 ('00) 2034.00 (90')	11,421	27,969	206,300	314,300	239	601
A	2060.40 ('00) 2045.00 ('90)	15,589	27,750	113,300	143,100	324	444
Los Angeles City		34,364	39,942	244,500	221,600	544	612
Los Angeles County		39,035	46,452	226,400	209,300	570	643
Los Angeles MSA (g)		41,132	50,645	211,700	203,300	588	667

		Income Ratio		Housing Value Ratio		Contract Rent Ratio		Population			% Owner Occupied	
Adjacent Census Tracts		1989 a ÷ g	1999 b ÷ g	1990 c ÷ g	2000 d ÷ g	1990 e ÷ g	2000 f ÷g	1990	2000	2000 Pop ÷ 1990 Pop	1990	2000
C	2035.00	.54	.53	.68	.79	.69	.73	4,134	3,931	.95	19	18
H	2041.10 ('00) 2041.00 ('90)	.59	.58	.59	.69	.71	.77	6,120	3,117	**	34	32
F	2042.00	.51	.48	.53	.83	.67	.73	4,001	3,280	.82	13	14
G	2043.00	.55	.56	.65	.71	.67	.74	5,082	4,995	.98	24	26
D	2044.10 ('00) 2044.00 ('90)	.43	.48	.72	.82	.69	.78	*6,949	2,472	.90	12	15
E	2044.20 ('00) 2044.00 ('90)	.43	.39	.72	.82	.69	.69	*6,949	3,782	.90	12	9
B	2060.30 ('00) 2034.00 ('90)	.28	.55	.97	1.55	.41	.90	3,761	898	**	2	8
A	2060.40 ('00) 2045.00 ('90)	.38	.55	.54	.70	.55	.67	6,200	3,391	**	7	7
City		.84	.78	1.15	1.09	.93	.92	3,485,398	3,694,834	1.06	39	39
County		.95	.92	1.07	1.03	.97	.96	8,863,164	9,519,338	1.07	48	48
MSA		1.00	1.00	1.00	1.00	1.00	1.00	14,531,529	16,373,645	1.13	54	45

Data Source: U.S. Bureau of the Census. *Tract 2044 in 1990 was divided into two tracts for Census 2000. ** Cannot be calculated; tracts were divided after Census 1990. Calculations by the authors.

demand pressure on the existing housing stock, which raises housing values and rent levels faster than incomes.

Between 1990 and 2000, some census tracts were subdivided and relabeled, making certain comparisons and trends difficult or impossible to assess. Overall, however, we see that in the 1990s the income ratios, housing-value ratios, and contract-rent ratios generally rose in those tracts where explicit comparisons are possible. Most of the housing in and around the Boyle Heights project area is rental rather than owner-occupied, so the typical household residents do not capture the capital gains from rising real estate prices, which have been substantial in the Los Angeles area since the early 1990s. In strong real estate markets where owner-occupancy rates are high, the prospects for neighborhood improvement and reinvestment are much brighter.

It is now several years past Census 2000, and the full effects of LANI's initiatives in Boyle Heights since then should have had time to take root. The next round of detailed census tract data will suggest the degree to which the positive trends that were hinted at during the 1990s will have continued.

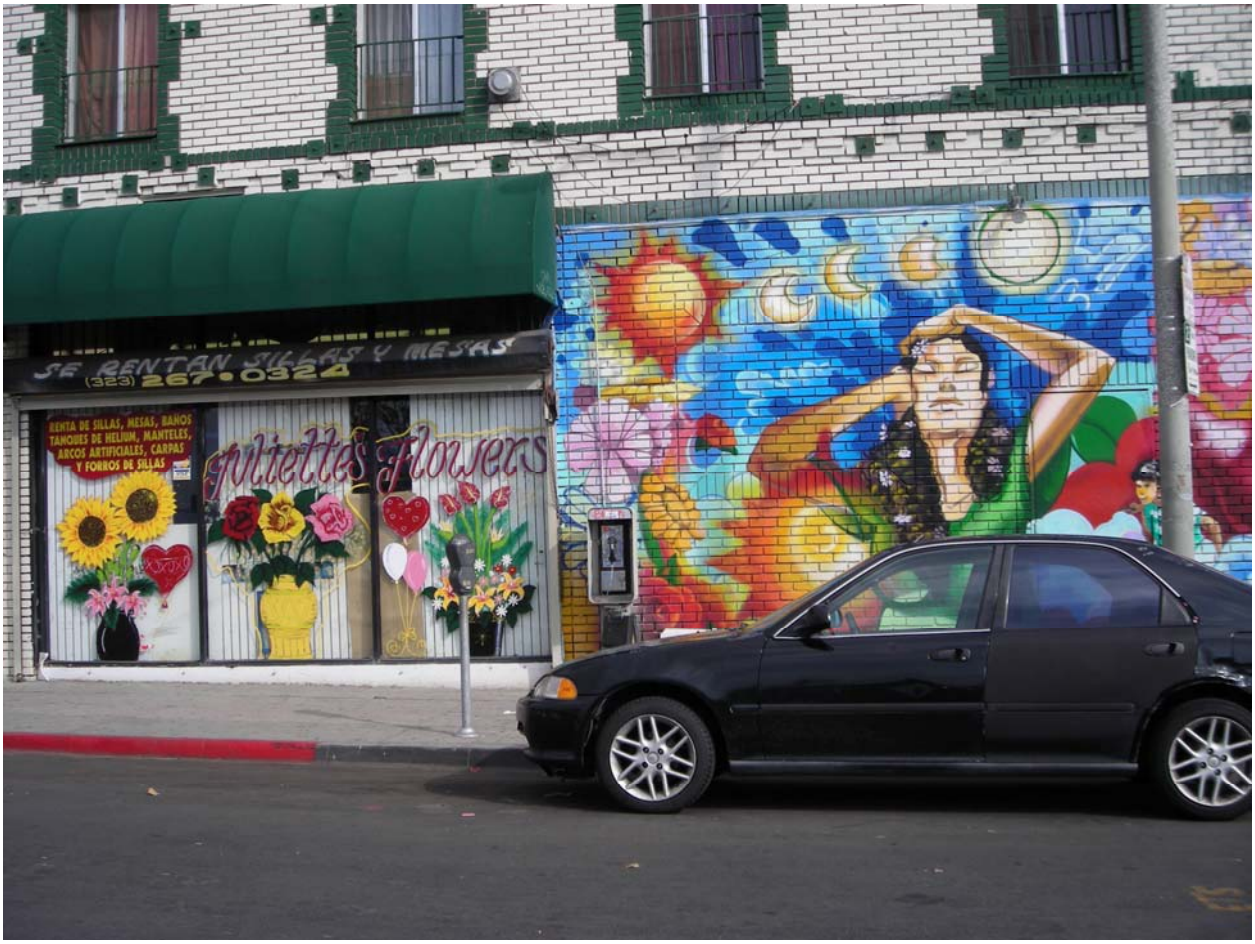
The Community

A decorative mural celebrates the Latino heritage of the Boyle Heights community.

The retail activity in Boyle Heights is oriented toward serving local clientele. Storefront facades are a diverse array of styles.

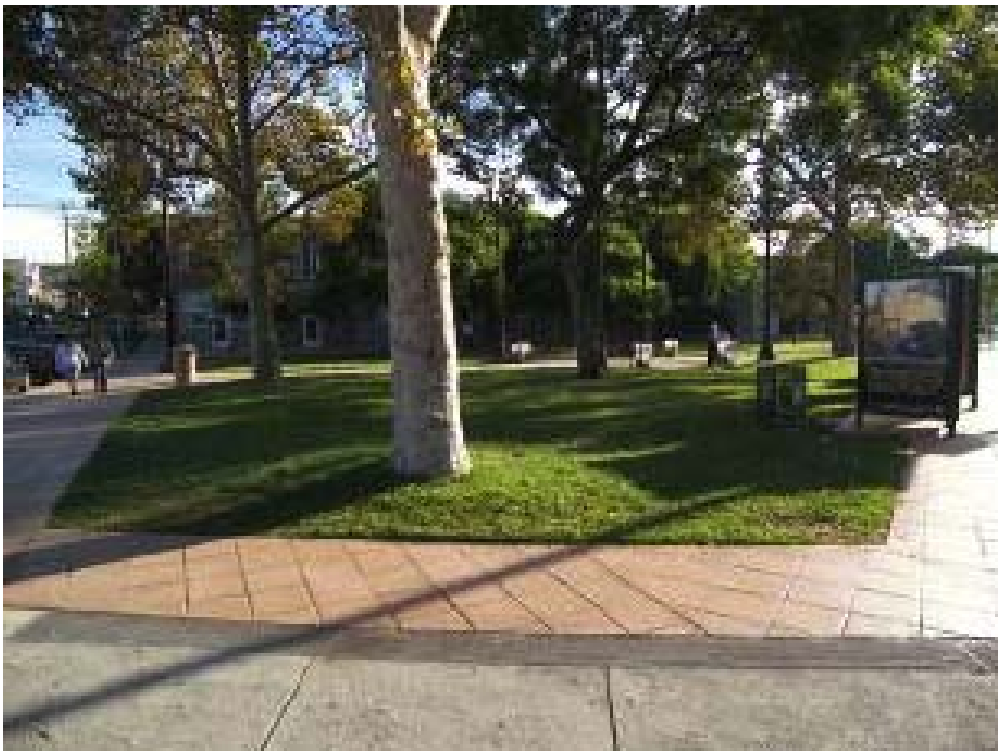
The residential population of Boyle Heights is working class and small business owners. The housing stock is modest but well maintained.

LANI Investments



Small grants to upgrade storefront facades brighten the streetscape and add to the sense of community identity.

The highlight among LANI enhancements is the transformation of the interaction of Chicago and First Street, from a noisy and hazardous bus stop into the Boyle Heights Transit Park.
(Photos: Los Angeles Neighborhood Initiative)



The additions of a bus shelter and information kiosk, lighting and signage, landscaping, colored concrete, benches, trash receptacles, and a drinking fountain make bus ridership safer and more attractive.
(Photo above: Los Angeles Neighborhood Initiative)

The Transit Park developed around the bus stop adds to the attractiveness of the streetscape, enhancing the area's potential for new investment.

Jefferson Corridor

Jefferson Boulevard bisects an historically African-American community, with a strong presence of local institutions—churches, schools, libraries, businesses—that anchor the economy of the area (**Figure 6**).

The population has become more diverse in recent decades, with 60 percent African-American and 30 percent Latino residents (**Table 7**). Median family income is low (about $35,000), and unemployment is high (46 percent), as is transit-dependence (15 percent).

The opportunity to calm traffic and revitalize the streetscape of Jefferson Boulevard is the main focus of LANI. The LANI initiative here has been slower to take root than elsewhere, as the local leadership has not yet coalesced around community capacity building. While efforts continue to work with local leaders, the community has invested about $800,000 in new lighting, bus shelters, benches, and information kiosks, a community entry monument, new trees and street banners, decorative crosswalks, general cleanup of the area, and a new art park, around which eight new businesses have appeared.

The census tracts along the Jefferson Avenue corridor had median incomes and average rent levels well below city, county and metro averages in Census 1990 and Census 2000.

With one exception (tract 2214) the tracts' 1990 housing values were generally below average, but were trending upward briskly during the decade. The extent to which rising housing values imply a general improvement in the wealth position of local households depends on the degree of home ownership.

Among the dozen tracts with part or all of their housing within the LANI project site, the percentage of owner occupancy ranged from 14 to 51 percent with three of them at or above the metro median. This level of home ownership could be interpreted as a promising sign for LANI objectives in the Jefferson Avenue project area. Population increases in almost all tracts during the 1990s are consistent with the other data and imply promising prospects for LANI's initiatives in the area.

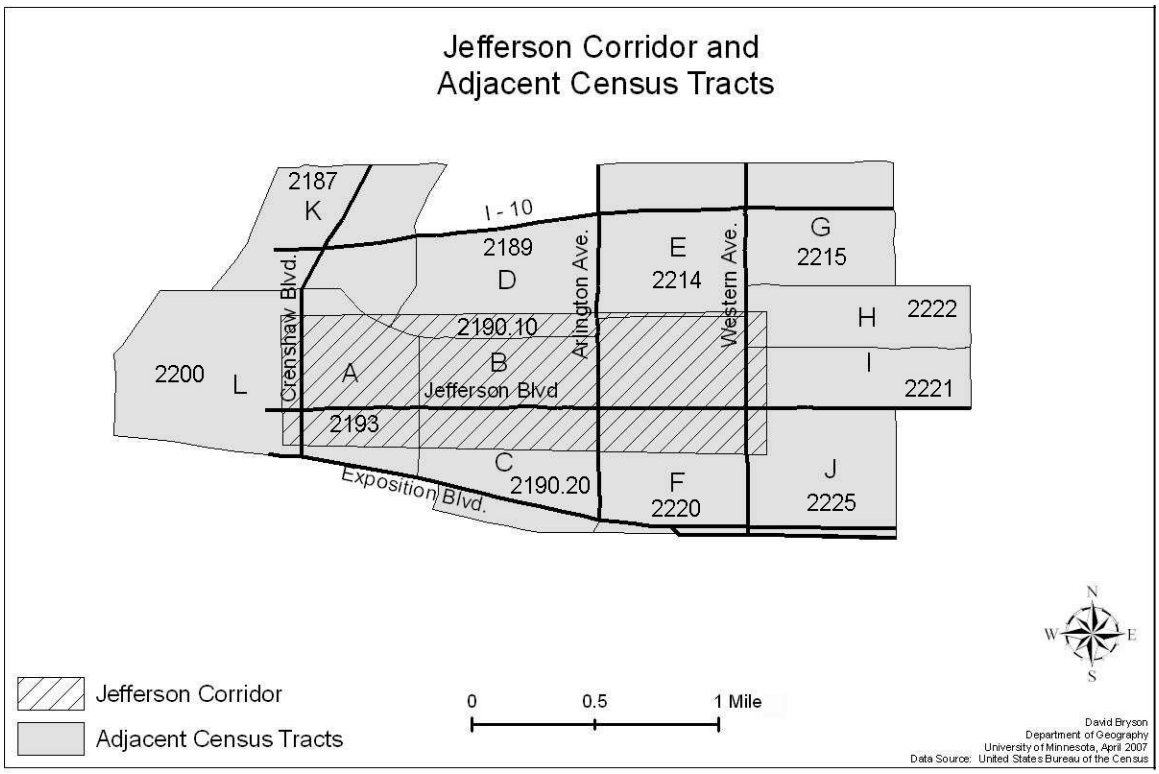


Figure 6. Jefferson Corridor Project Area and Adjacent Census Tracts. Tract letters correspond to Table 7.

Table 7.--Family Incomes, Housing Values, and Contract Rents compared with Metro Averages, 1989-1990 and 1999/2000, in and near Jefferson Avenue Corridor, a LANI Project Area, Los Angeles, CA

		Median Family Income		Median Value of Owner- Occupied Housing		Median Contract Rent	
	Adjacent Census Tracts	1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)
K	**2187.00**	21,433	33,333	199,200	207,800	441	510
D	**2189.00**	26,056	26,431	158,800	207,300	468	537
B	**2190.10 ('00) 2190.00('90)**	*26,227	34,891	*126,500	154,300	*443	506
C	**2190.20 ('00) 2190.00('90)**	*26,227	33,496	*126,500	153,800	*443	571
A	**2193.00**	25,729	28,456	122,500	143,400	403	451
L	**2200.00**	29,673	35,852	132,800	153,100	430	514
E	**2214.00**	22,500	22,601	223,500	256,500	398	463
G	**2215.00**	21,250	26,379	165,100	175,500	407	461
F	**2220.00**	21,970	32,615	117,800	153,400	424	540
I	**2221.00**	21,458	28,382	143,900	163,100	421	524
H	**2222.00**	21,066	25,181	164,800	184,900	401	490
J	**2225.00**	20,071	28,858	116,600	150,600	413	518
	Los Angeles City	34,364	39,942	244,500	221,600	544	612
	Los Angeles County	39,035	46,452	226,400	209,300	570	643
	Los Angeles- MSA (g)	41,132	50,645	211,700	203,300	588	667

		Median Family Income		Median Value of Owner-Occupied Housing		Median Contract Rent		Population		2000 Pop ÷ 1990 Pop	Percent Owner-Occupied	
	Adjacent Census Tracts	1989 a ÷ g	1999 b ÷ g	1990 c ÷ g	2000 d ÷ g	1990 e ÷ g	2000 f ÷ g	1990	2000		1990	2000
K	**2187.00**	.52	.66	.94	1.02	.75	.76	4,136	4,255	1.03	30	30
D	**2189.00**	.63	.52	.75	1.02	.80	.81	5,131	5,432	1.06	16	16
B	**2190.10 ('00) 2190.00('90)**	.64	.69	.60	.76	.75	.76	6,516	2,605	1.07	47	51
C	**2190.20 ('00) 2190.00('90)**	.64	.66	.60	.76	.75	.86	*	4,362	1.07	*	48
A	**2193.00**	.63	.56	.58	.71	.69	.68	3,413	3,489	1.02	27	26
L	**2200.00**	.72	.71	.63	.75	.73	.77	4,961	5,162	1.04	39	38
E	**2214.00**	.55	.45	1.06	1.26	.68	.69	4,262	4,350	1.02	18	17
G	**2215.00**	.52	.52	.78	.86	.69	.69	5,712	5,145	.90	14	14
F	**2220.00**	.53	.64	.56	.75	.72	.81	6,329	7,314	1.16	44	45
I	**2221.00**	.52	.56	.68	.80	.72	.79	3,698	3,738	1.01	29	32
H	**2222.00**	.51	.50	.78	.91	.68	.73	4,065	3,878	.95	21	22
J	**2225.00**	.49	.57	.55	.74	.70	.78	4,264	4,437	1.04	32	35
	City	.84	.79	1.15	1.09	.93	.92	3,485,398	3,694,834	1.06	39	39
	County	.95	.92	1.07	1.03	.97	.96	8,863,164	9,519,338	1.06	48	48
	MSA	1.00	1.00	1.00	1.00	1.00	1.00	14,531,529	16,373,645	1.07	54	45

Data Source: U.S. Bureau of the Census. * Tract 2190 in 1990 was divided into two tracts for Census 2000. Calculations by the authors.

The Community

Jefferson Boulevard is a busy 4-lane through street, with little aesthetic appeal, and not very pedestrian-friendly.

Residences in the Jefferson Park community are well maintained, middle-class, and mostly pre-WWII-vintage bungalows.

LANI Investments

Much of the investment in Jefferson Corridor focused on building community identity, with visible public improvements such as street banners and enhanced pedestrian lighting (left), and a community gateway monument (right).
(Photos: Los Angeles Neighborhood Initiative)

Other improvements to the streetscape enhanced both appearance and safety, such as decorative pedestrian crosswalks. (Photos: Los Angeles Neighborhood Initiative)

Leimert Park

The population of the four census tracts including and adjacent to Leimert Park is predominantly African-American in composition (**Figure 7**).

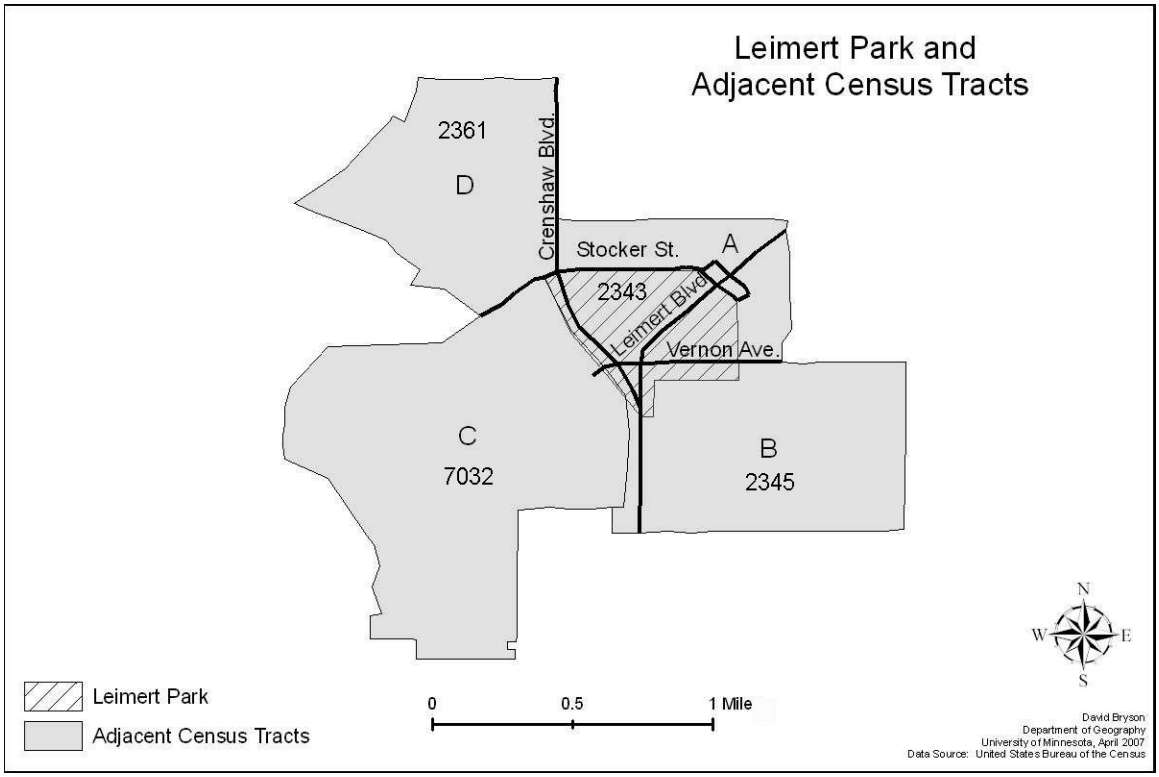


Figure 7. Leimert Park Project Area and Adjacent Census Tracts. Tract numbers correspond to Table 8.

At the heart of tract 2343 is the Leimert Park neighborhood, a LANI project area and one of the most prosperous African-American communities in the Los Angeles area (**Table 8**). In this tract, 3,909 of 4,262 residents in 2000 (92 percent) were members of middle-income African-American households, living in housing with a median value close to city and metro averages. The Leimert Park neighborhood lies just east of and immediately adjacent to the prosperous, post-war residential developments of View Park-Windsor Hills (tract 7032) and the up-scale Baldwin Hills mall. At the northwest edge of Leimert Park is the nearby Crenshaw Plaza shopping mall, a 1940s-era shopping center that was recently revitalized (Wal-Mart added; Macy's left–then returned) in response to the wealth and robust purchasing power in the area.

Income and housing value ratios for the four tracts generally rose during the 1990s, especially in tract 7032. It is likely that the Leimert Park neighborhood benefits from proximity to that prosperous, high-demand area, where owner-occupancy exceeded 80 percent in 1990 and 2000. Above-average median housing values in tract 7032 had their value ratio rise from 1.37 to 1.43, while the income ratio also rose. It is income trends and wealth effects such as those within and near Leimert Park that help produce positive outlooks for neighborhoods.

Table 8.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to Leimert Park, A LANI Project Area, Los Angeles, CA

		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
A	2343.00	28,885	46,709	184,600	218,100	478	579	4,242	4,262
B	2345.00	25,597	39,550	118,500	144,900	440	538	5,237	5,373
D	2361.00	25,536	22,384	189,800	188,900	451	522	5,236	5,172
C	7032.00	58,336	82,536	290,200	289,800	553	642	5,792	5,513
Los Angeles City		34,364	39,942	244,500	221,600	544	612	3,485,398	3,694,834
Los Angeles County		39,035	46,452	226,400	209,300	570	643	8,863,164	9,519,338
Los Angeles-Riverside-Orange County, CA CSMA (g)		41,132	50,645	211,700	203,300	588	667	14,531,529	16,373,645

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
A	2343.00	.70	.92	.87	1.07	.81	.87	1.00
B	2345.00	.62	.78	.56	.71	.75	.81	1.03
D	2361.00	.62	.44	.90	.93	.77	.78	.99
C	7032.00	1.42	1.63	1.37	1.43	.94	.96	.95
Los Angeles City		.84	.79	1.15	1.09	.93	.92	1.06
Los Angeles County		.95	.92	1.07	1.03	.97	.96	1.07
Los Angeles- Riverside-Orange County, CA CSMA		1.00	1.00	1.00	1.00	1.00	1.00	1.13

Data Source: U.S. Bureau of the Census; calculations by the authors. MSA as defined by OMB, 6 June 2003.

The Community

Leimert Park is a residential area of well maintained middle-class homes.

The Baldwin Hills-Crenshaw Plaza Mall is anchored by the only Wal-Mart in the City of Los Angeles. The store opened in 2003 in the space vacated by Macy's department store in 1998. Macy's has recently returned to the mall, marking a renewed confidence in the consumer purchasing power of the community.

LANI Investments

Leimert Plaza Park, bordering Crenshaw and Leimert Boulevards and Vernon Avenue, serves as a gateway to the neighborhood, and as a venue for concerts and other cultural events that celebrate the area's rich history. The tower of the historic Vision Theater is visible on the left.

A fountain serves as a landmark and centerpiece for the park.

A new bus shelter bordering Leimert Plaza Park, along with improved signage, an information kiosk, trash receptacle and enhanced lighting have made bus transit safer and more appealing.

Redeveloped shopping plazas face Leimert Plaza Park.
(Photo: *Save Leimert*)

The Leimert Park Village Farmers' Market venue was created in the parking lot of the historic Vision Theater at 43rd Street and Degnan Boulevard.

Fairfax Village

This LANI project is an effort in street-based place-making ("The Grove") and revitalization, leveraging the drawing power of the Farmer's Market and the Fairfax Avenue historic Jewish business district (**Figure 8**). A comparison with the Boyle Heights project highlights the extreme diversity among LANI project areas, and how projects are tailored to the needs and opportunities of different geographical settings.

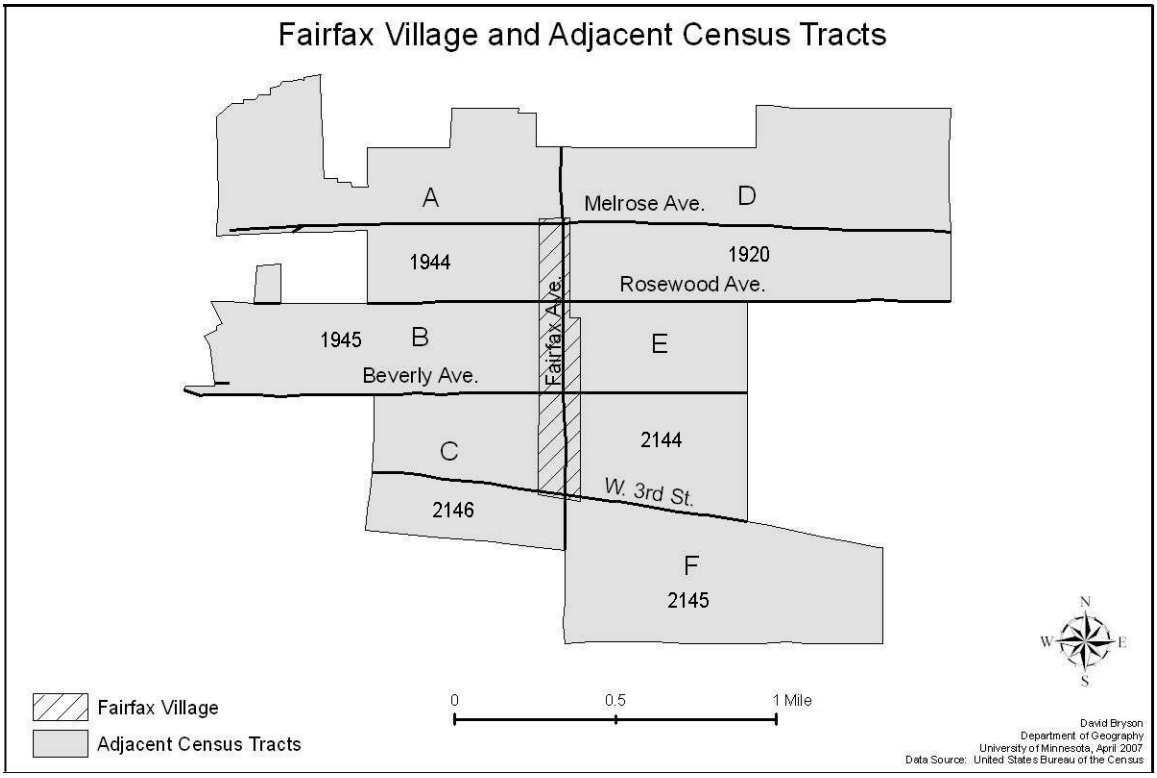


Figure 8. Fairfax Village Project Area and Adjacent Census Tracts. Tract letters correspond to Table 9.

Census data for the six census tracts in and around Fairfax Village disclose population and housing circumstances that differ in important respects from those of Boyle Heights, and imply promising outcomes for LANI initiatives in the area (**Table 9**). For one thing, the population in Fairfax Village is highly stable. Most residents in 2000 had lived there five years earlier. The percentage living elsewhere in 1995 was under 10 percent in all tracts but one, and in that one (tract 2145) it was only 13.2 percent. In contrast, in the Boyle Heights area in 2000, all but one tract reported percentages between 43 percent and 62 percent, which was similar to the average for the city of Los Angeles (50.5 percent).

Table 9.--Family Incomes, Housing Values, and Contract Rents compared with Metro Averages, 1989/1990 and 1999/2000, in and near Fairfax Village, a LANI Project Area, Los Angeles, CA

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)
D	1920.00	40,347	47,821	334,100	342,600	599	782
A	1944.00	33,665	39,615	373,300	398,200	682	867
B	1945.00	52,538	76,037	404,000	435,900	670	742
E	2144.00	34,539	61,797	208,300	875,000	669	933
F	2145.00	43,554	56,547	443,800	310,500	815	1,130
C	2146.00	56,010	54,722	386,800	440,200	660	830
Los Angeles-City		34,364	39,942	244,500	221,600	544	612
Los Angeles County		39,035	46,452	226,400	209,300	570	643
Los Angeles- MSA (g)		41,132	50,645	211,700	203,300	588	667

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent		Population		2000 Pop ÷ 1990 Pop	% Owner Occupied	
Adjacent Census Tracts		1989 a ÷ g	1999 b ÷ g	1990 c ÷ g	2000 d ÷ g	1990 e ÷ g	2000 f ÷ g	1990	2000		1990	2000
D	1920.00	.98	.94	1.58	1.69	1.02	1.17	5,092	5,319	1.04	37	34
A	1944.00	.82	.78	1.76	1.96	1.16	1.30	6,282	5,782	.92	19	22
B	1945.00	1.28	1.50	1.91	2.14	1.14	1.11	2,268	2,263	1.00	55	50
E	2144.00	.84	1.22	.98	4.30	1.14	1.40	3,169	2,962	.93	8	4
F	2145.00	1.06	1.12	2.10	1.53	1.39	1.69	6,779	8,569	1.26	1	1
C	2146.00	1.36	1.08	1.83	2.17	1.12	1.24	2,530	2,515	.99	30	27
Los Angeles-City		.84	.78	1.15	1.09	.93	.92	3,485,398	3,694,834	1.06	39	39
Los Angeles County		.95	.92	1.07	1.03	.97	.96	8,863,164	9,519,338	1.06	48	48
Los Angeles-MSA		1.00	1.00	1.00	1.00	1.00	1.00	14,531,529	16,373,645	1.07	54	45

Data Source: U.S. Bureau of the Census. Calculations by the authors.

A second important difference between the two LANI areas is in the percentage of housing units that are owner-occupied. In Boyle Heights, the share varied from 7 to 32 percent, but six of the eight tracts were under 20 percent. In Fairfax Village, the share ranged from 1 to 50 percent in 2000, but housing and rent ratios all exceeded 1.00, and were well above city and county averages.

In other words, this is a prosperous area, with renters paying above-average rents, and owner occupants presumably sharing in the appreciation of housing values. The tract that had the fastest population growth in the 1990s (tract 2145) also had the lowest share of owner occupancy, implying the completion and occupancy of new high-priced rentals units, further evidence of capital investment being drawn into the area.

The Community

Fairfax Village is the historic center of Los Angeles's Jewish community. Fairfax Avenue still is home to many Jewish-owned businesses that cater to the local clientele.

The Farmers Market at 3rd and Fairfax, which opened in 1934, still operates on a smaller scale. Much of its parking lot has been given over to The Grove, an outdoor festival mall.

LANI improvements in Fairfax Village include new median landscaping and gateway sign, decorative crosswalks and sidewalks, and enhanced pedestrian street lights.
(Photo: Los Angeles Neighborhood Initiative)

North Hollywood

This area is near Burbank, University Studios, and Warner Brothers; it has a large arts district to the south (artists' residences, studios, galleries, etc.), and so attracts actors and artists who wish to live in proximity to such institutions, and who need low-rent loft and studio space (**Figure 9**).

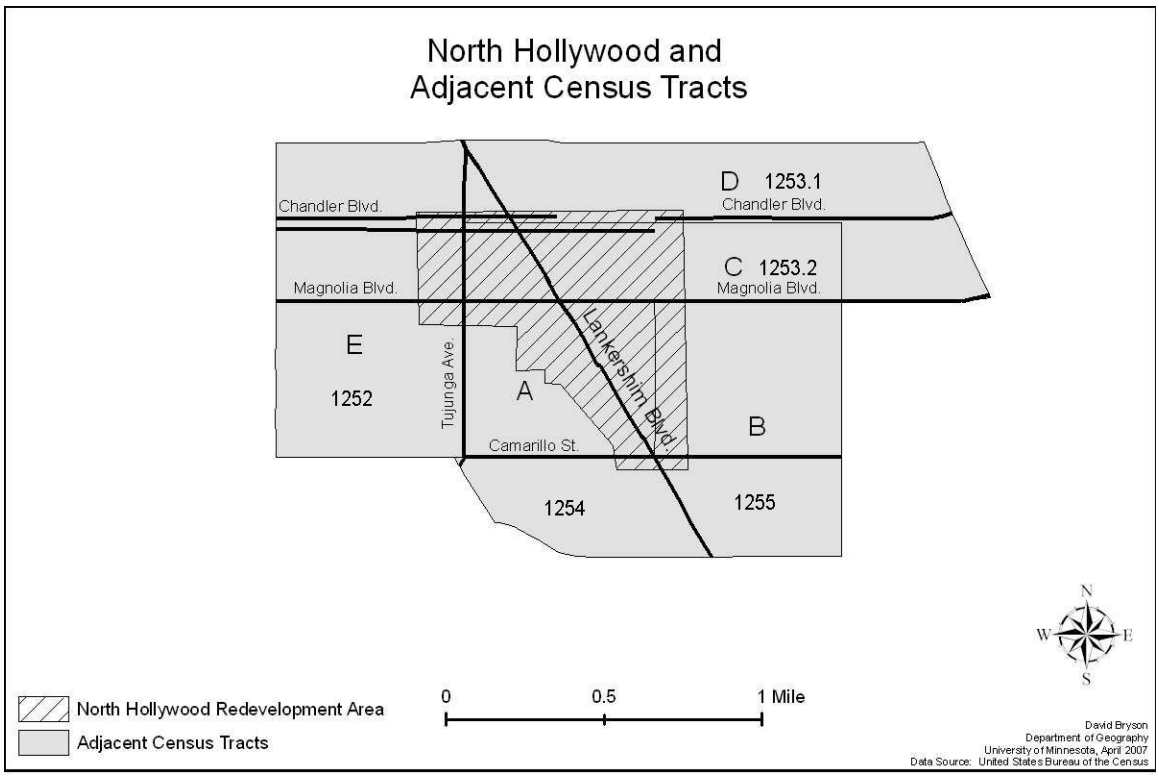


Figure 9. North Hollywood Project Area and Adjacent Census Tracts. Tract letters correspond to Table 10.

The LANI initiative predicted that North Hollywood would be capable of leveraging its arts capacity for community economic development. Near the terminus of the Red Line light rail station, occupying 740 acres around Lankershim Boulevard, the community used transportation mediation funds to create the NoHo Transit Arts Park, at the intersection of Lankershim and Magnolia Boulevards. The Recognized Community Organization (RCO) built the arts park, and put out a Request for Proposals (RFP) for a coffee cart. Deluxe Catering responded to the RFP, wishing to use the park as an adjunct space and develop a restaurant next door. To maintain the park, the RCO entered into an expanded lease agreement with the Los Angeles Community Redevelopment Agency (CRA) (the property owners). CRA would lease the property and maintain it. The RCO put in $80,000; the restaurant added $60,000. The park became a gathering place, along with the restaurant's patio. The Arts Park is built around a bus stop on one of the busiest transit lines in the Los Angeles County Metropolitan Transportation Authority (MTA).

The North Hollywood LANI project area is largely within tracts 1253.2 and 1254 (**Table 10).** These tracts, in turn, lie within a cluster of tracts that share similar and modest characteristics–median incomes slightly below metro averages, levels of owner-occupancy ranging from 5 to 32 percent in 2000, and average to below-average median rents. The percentages of populations living elsewhere in 1995 (51 to 69 percent) are above the metro average (50 percent), which is consistent with the profile of a mainly renter population.

None of the tracts lost population in the 1990s, and tract 1253 in 1990, which was subdivided for Census 2000 (and contains the rail transit station), saw its population jump by 28 percent, with new housing construction.

Table 10.--Family Incomes, Housing Values, and Contract Rents compared with Metro Averages, 1989/1990 and 1999/2000, in and near North Hollywood, a LANI Project Area, Los Angeles, CA

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)
E	1252.00	38,897	45,929	288,700	281,800	557	634
D	1253.1 ('00) 1253 ('90)	21,689	32,166	193,900	186,900	503	533
C	1253.2 ('00) 1253 ('90)	21,689	26,667	193,900	130,300	503	593
A	1254.00	35,216	40,813	270,800	274,300	635	671
B	1255.00	35,820	47,336	267,400	271,700	630	694
Los Angeles City		34,364	39,942	244,500	221,600	544	612
Los Angeles County		39,035	46,452	226,400	209,300	570	643
Los Angeles MSA (g)		41,132	50,645	211,700	203,300	588	667

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent		Population		2000 Pop ÷ 1990 Pop	% Owner Occupied	
Adjacent Census Tracts		a ÷ g	b÷ g	c ÷ g	d ÷ g	e ÷ g	f ÷ g	1990	2000		1990	2000
E	1252.00	.95	.91	1.36	1.39	.95	.95	3,358	3,445	1.03	32	32
D	1253.1(00') 1253 (90')	.53	.64	.92	.92	.86	.80	6,583	3,984	1.28	19	29
C	1253.2(00') 1253 (90')	.53	.53	.92	.64	.86	.89	*	4,425	1.28	12	5
A	1254.00	.86	.81	1.28	1.35	1.08	1.01	6,499	7,498	1.15	22	13
B	1255.00	.87	.93	1.26	1.34	1.07	1.04	5,924	5,948	1.00	22	21
Los Angeles-City		.84	.79	1.15	1.09	.93	.92	3,485,398	3,694,834	1.06	39	39
Los Angeles County		.95	.92	1.07	1.03	.97	.96	8,863,164	9,519,338	1.06	48	48
Los Angeles-MSA		1.00	1.00	1.00	1.00	1.00	1.00	14,531,529	16,373,645	1.07	54	45

Data Source: U.S. Bureau of the Census. * Tract 1253 in 1990 was divided into two tracts for Census 2000. Calculations by the authors.

NoHo Transit Arts Park

The transformation of a busy intersection bus stop from a noisy, unpleasant and dangerous experience (left) to a pleasant, shaded, friendly and safe transit facility (right) was a catalyst for additional development in the neighborhood. The success of the Transit Arts Park drew new businesses to the intersection. An outdoor coffee bar in the park behind the bus shelter is a venue for concerts and arts fairs year-round. (Photos: Los Angeles Neighborhood Initiative)

North Hollywood Red Line LA-CMTA Station and TOD

Entrance to the North Hollywood Red Line METRO station. (Photo: Jim Horne, West Coast TNDs)

New housing at the park-and-ride for the North Hollywood Red Line station.

New high-density housing developments have multiplied all around the METRO station.
(Photos: Jim Horne, West Coast TNDs and Los Angeles Community Redevelopment Agency)

Real estate investment has increased as early redevelopments in housing and arts facilities have drawn new, higher-income populations to the community. (Photos: Jim Horne, West Coast TNDs)

Lessons from LANI

Each of the LANI neighborhoods had to pursue all three of LANI's goals: consensus building, image building, and capacity building. Each prioritized these elements differently. North Hollywood and Boyle Heights enhanced their images through physical improvements. In North Hollywood, the RCO chair developed external linkages with the MTA and other outside financial organizations. Strong leadership within the community's RCO enabled it to build trust, and helped the community to reach consensus. The RCOs in Jefferson Corridor and Leimert Park managed to bridge existing "social gaps." They experienced early conflict and dissension, but made good progress toward building consensus.

Part of the challenge for some LANI neighborhoods was to overcome the long-standing social stigma that had become attached to their place-identity. Boyle Heights was characterized as part of unincorporated East Los Angeles, although it is in fact within the Los Angeles city limits. Jefferson Corridor was associated with South Central L.A. and the legacy of civil unrest there. These two neighborhoods, along with Leimert Park, each managed to capitalize on its rich cultural and ethnic heritage and local social values, to project a different, more positive identity to the world. Disinvestment and redlining also had left the communities with untapped purchasing power, as investors had long looked at the places instead of the people who lived in them.

North Hollywood, Jefferson Corridor, and Boyle Heights developed new parks and plazas. Several were able to leverage significant funds beyond LANI's initial investment: Boyle Heights ($900,000); Jefferson Corridor ($115,000); Leimert Park ($800,000); and North Hollywood ($1 million).

The quick and highly visible results of the physical upgrades helped to restore a sense of local pride in these places, and served as a catalyst for leveraging further investment. Safer shopping streets and higher-quality goods attracted more business. Areas with stronger consensus could concentrate funds strategically on maximum-impact projects, such as the North Hollywood Arts Park. Leimert Park and Jefferson Corridor chose a mix of both neighborhood-wide and more focused, visible parks and plazas.

Jefferson Corridor renamed its community. Leimert Park realized its shared vision as a major hub of African-American culture in Los Angeles, by building an African-American cultural center. North Hollywood created a recreational hub, and introduced jazz festivals and cultural festivities year-round. Boyle Heights built Mariachi Plaza to celebrate its Latino heritage. The community also razed a building to expand the police parking lot to a street intersection, making it much more visible, and crime was greatly reduced.

The enhanced perception of physical conditions in the neighborhoods increased people's use of public space and improved the local image, which encouraged residents to participate in social events, to gather publicly, and develop new emotional attachments to their communities. Leimert Park, Boyle Heights, North Hollywood, and Jefferson Corridor have been most successful in these efforts, among LANI neighborhoods. Jefferson Corridor and Leimert Park had a critical mass of physical and social capital at the outset. North Hollywood had solid social and physical assets, and was able to leverage outside funds.

The experience of these neighborhoods affirms the complementarity of physical and social capital, the significance of social capital for community economic development, and the role of local "spatial design" principles in building that social capital. [15]

Whittier Boulevard

The revitalized and flourishing Whittier Boulevard corridor, the Main Street of unincorporated East Los Angeles, is an older, dense commercial spine serving the unincorporated lower-income area of East Los Angeles that forms a traditional heart of the Latino community in the Los Angeles area. Extending for more than a mile, the corridor, bounded by Burger Avenue on the west and Atlantic Boulevard on the east, has few commercial vacancies, and serves as the retail hub for local residents.

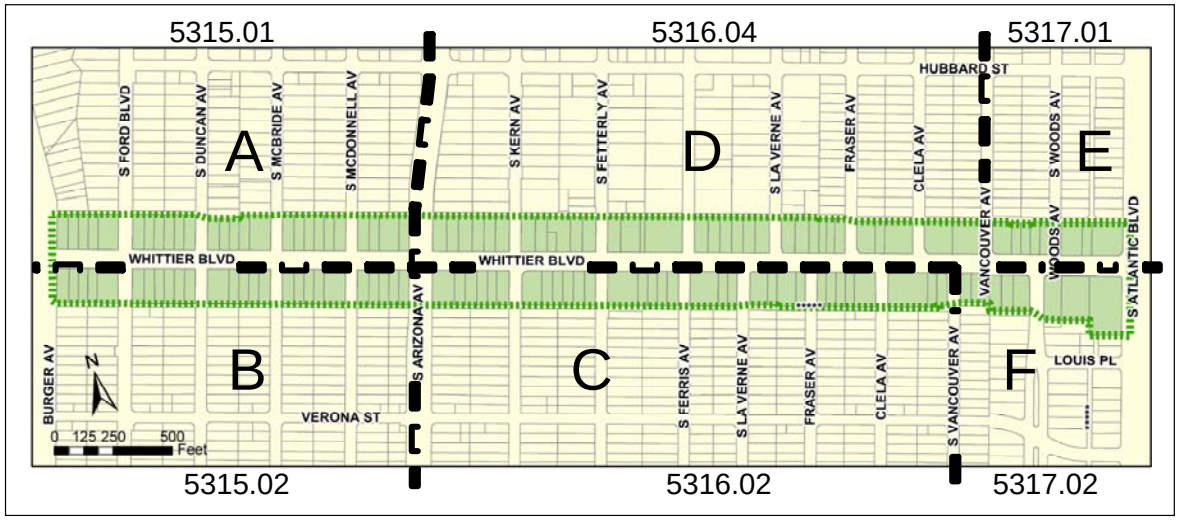


Figure 10. Whittier Boulevard Project Area and Adjacent Census Tracts. Tract letters refer to Table 11.

Source: Community Development Commission of the County of Los Angeles; Los Angeles County Assessors Office and Thomas Brothers Maps, 2004. Census Tract overlay by the authors.

The boulevard was a thriving commercial strip through the 1950s, then aging and deterioration set in. A monumental entry arch at the west end of the boulevard, "El Arco," helped stimulate façade upgrades and leveraged Latino identity, leading to a commercial revival that tapped local spending power.

Six 1990 tracts contained the Whittier Boulevard Community Revitalization Area (**Figure 10**). One large tract (5316.01) was subdivided (forming 5316.03 and 5316.04) for Census 2000 (**Table 11**). The 1990 tracts contained 32,156 persons, rising to 32,908 in 2000—an increase of just over 2 percent.

This is a stable, working-class, largely Hispanic area. About four out of five residents speak Spanish at home. Income ratios were stable or declining in the 1990s, but housing value ratios rose, and rent ratios were mixed. Although incomes and housing values are both rising, housing values rose at a faster rate during the 1990s. The percentage of owner-occupied housing units, already low compared with metro and county averages, rose in only one tract in the 1990s.

As a result of the revitalization project, the attractive appearance and commercial vitality of life along Whittier Boulevard matches the stability and modest prosperity of the residential areas adjacent to it. Today there are few vacancies, and the strip is the hub for local shoppers. A long-planned extension of the light rail Red Line to Whittier Boulevard and two stations would be a major catalyst for further improvements.

Table 11.--Family Incomes, Housing Values, and Contract Rents compared with Metro Averages, 1989/1990 and 1999/2000, in and near Whittier Boulevard Community Revitalization Area, East Los Angeles, CA

		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)
A	5315.01	23,339	28,682	140,600	153,600	506	594
B	5315.02	19,005	29,318	134,100	147,700	501	566
C	5316.02	24,018	23,118	139,100	153,600	458	503
D	5316.04	*22,691	25,317 **30,052	*146,000	153,000 **151,400	*505	550 **577
E	5317.01	27,453	30,226	151,300	160,300	496	599
F	5317.02	21,703	24,043	149,200	163.600	462	537
Los Angeles City		34,364	39,942	244,500	221,600	544	612
Los Angeles County		39,035	46,452	226,400	209,300	570	643
Los Angeles-Riverside-Orange County, CA CSMA (g)		41,132	50,645	211,700	203,300	588	667

Adjacent Census Tracts		Median Family Income		Median Value of Owner Occupied Housing		Median Contract Rent		Population		2000 Pop ÷ 1990 Pop	% Owner Occupied	
		1989 a ÷ g	1999 b ÷ g	1990 c ÷ g	2000 d ÷ g	1990 e ÷ g	2000 f ÷ g	1990	2000		1990	2000
A	5315.01	.57	.57	.66	.76	.86	.89	7,321	7,634	1.04	.34	.32
B	5315.02	.46	.58	.63	.73	.85	.85	3,190	3,367	1.06	.27	.29
C	5316.02	.58	.46	.66	.76	.78	.75	4,456	4,407	.99	.41	.27
D	5316.04	*.55	.50 **.59	*.69	.75 **.74	*.86	.82 **.87	*7,171	3,742 **3,539	1.02	*.33	.28 **.36
E	5317.01	.67	.60	.71	.79	.84	.90	5,199	5,546	1.07	.47	.38
F	5317.02	.53	.47	.70	.80	.79	.81	4,819	4,673	.97	.30	.28
Los Angeles City		.84	.79	1.15	1.09	.93	.92	3,485,398	3,694,834	1.06	39	39
Los Angeles County		.95	.92	1.07	1.03	.97	.96	8,863,164	9,519,338	1.06	48	48
Los Angeles-Riverside-Orange County, CA CSMA		1.00	1.00	1.00	1.00	1.00	1.00	14,531,529	16,373,645	1.07	54	45

Data Source: U.S. Bureau of the Census. Calculations by the authors.
What is now Tract 5316.04 formed one part of Tract 5316.01 in 1990, which was subdivided into 5316.03 and 5316.04 for Census 2000. *Tract 5316.01. **Tract 5316.03

Much of the Whittier Boulevard revitalization focused on solidifying and celebrating the identity of the corridor. This gateway arch defines the boundary of the renewed section of the boulevard.

Street banners also help to celebrate the identity of the Whittier Boulevard community.

Outer City/Suburb: Redevelopment to Enhance Rent Capture and Transit Ridership

Lindbergh City Center, Atlanta, GA

Lindbergh City Center is an ambitious 47-acre transit oriented development project in the city of Atlanta, north of the CBD along fashionable Peachtree Ridge, halfway to the city limits, in the most prosperous sector of the city (**Figure 11**). The project symbolizes that major development was moving back into the central city, which had not been a focus for major real estate development for many years.

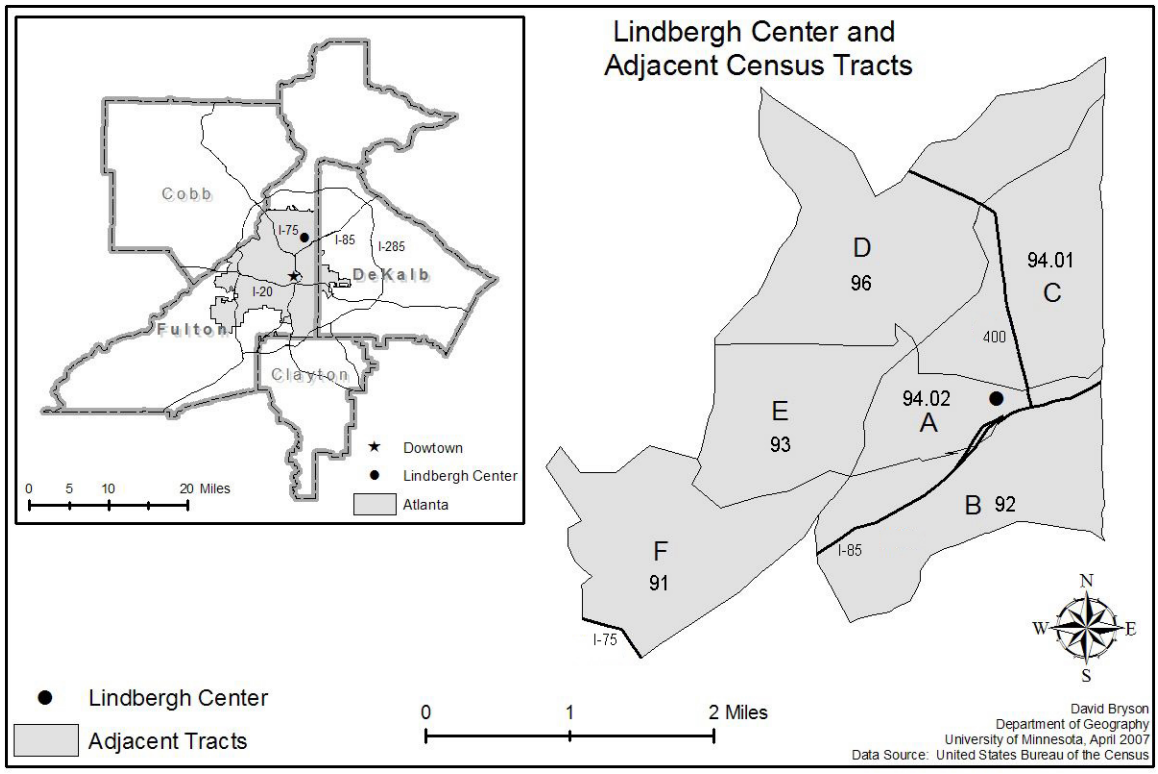


Figure 11. Lindbergh Station and Adjacent Census Tracts. Tract letters correspond to Table 12.

Table 12.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Lindbergh Station, Atlanta, GA

Adjacent Census Tracts		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
F	9100	69,121	85,951	245,200	461,400	497	717	6,176	7,235
B	9200	46,429	64,688	123,200	230,500	415	675	3,005	4,055
E	9300	51,069	106,672	171,300	339,300	483	846	4,577	4,751
C	94.01	61,464	83,710	157,900	291,800	813	946	3,421	6,078
A	94.02	26,786	31,023	150,000	No Data	434	793	2,879	4,172
D	9600	58,440	93,906	190,700	372,100	462	769	7,255	8,564
City Wide		25,173	37,231	71,200	130,600	342	518	394,017	416,474
County-Fulton		36,582	58,143	97,700	180,700	396	612	648,951	816,006
County-DeKalb		41,495	54,018	91,600	135,100	468	671	545,837	665,865
Atlanta-Sandy Springs-Marietta, GA MSA (g)		41,618	59,313	89,800	135,300	441	644	2,833,511	4,112,198

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
F	9100	1.66	1.45	2.73	3.41	1.13	1.11	1.17
B	9200	1.12	1.09	1.37	1.70	.94	1.05	1.35
E	9300	1.23	1.80	1.91	2.51	1.10	1.31	1.04
C	94.01	1.48	1.41	1.76	2.16	1.84	1.47	1.78
A	94.02	.64	.52	1.67	No Data	.98	1.23	1.45
D	9600	1.40	1.58	2.12	2.75	1.05	1.19	1.18
City Wide		.60	.64	.79	.97	.78	.80	1.06
County- Fulton		.88	.98	1.09	1.34	.90	.95	1.26
County-DeKalb		1.00	.91	1.02	1.00	1.06	1.04	1.22
Atlanta-Sandy Springs-Marietta, GA MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.45

Data Source: U.S. Bureau of the Census; MSA as defined by OMB, 6 June 2003. Calculations by the authors.

The project is located near an old industrial complex, adjacent to an aging shopping mall, with low-income housing to the east and high-income neighborhoods to the west and north.

Among the case studies included in this report, the Metropolitan Atlanta Rapid Transit Authority (MARTA) Lindbergh Station area, north of downtown Atlanta, stands out for two reasons: it is located within one of the fastest-growing metropolitan areas in the country, and sits within the city's northern sector along Peachtree Ridge, the most prosperous sector of the city and region. Both of these location attributes contribute to the economic and land development prospects for the station and nearby land parcels.

The Atlanta metro area was ranked first in population added 2000-2005 (+670,000) (**Table 12**). The area's population grew by over 38 percent in the 1990s, with fast growth and vigorous real estate development throughout the sector, spilling out into Atlanta's northern suburbs in Fulton and DeKalb counties. As metropolitan growth continues apace, industrial land and low-density development in this northern sector has come under intense development pressure, pushing land prices steadily higher. A low-income housing area east of the Lindbergh Station is being replaced by middle-priced and upper-middle priced housing.

Commercial development in the area originally catered to a mixed market. Recently the low- and moderate-priced housing east across the thoroughfare is being displaced to make way for upscale housing, and older, low-ticket retail is being replaced by an upscale shopping center as the area continues to gentrify, replacing railroad-based and industrial land uses with high-rent residential, commercial and office activity. Adjacent to the station is a Transit-Oriented Development (TOD), featuring commercial, office, and high-density housing. A former shopping center of modest pretensions, which catered to the income and tastes of former neighborhood residents, has been replaced by an upscale development and additional high-density housing.

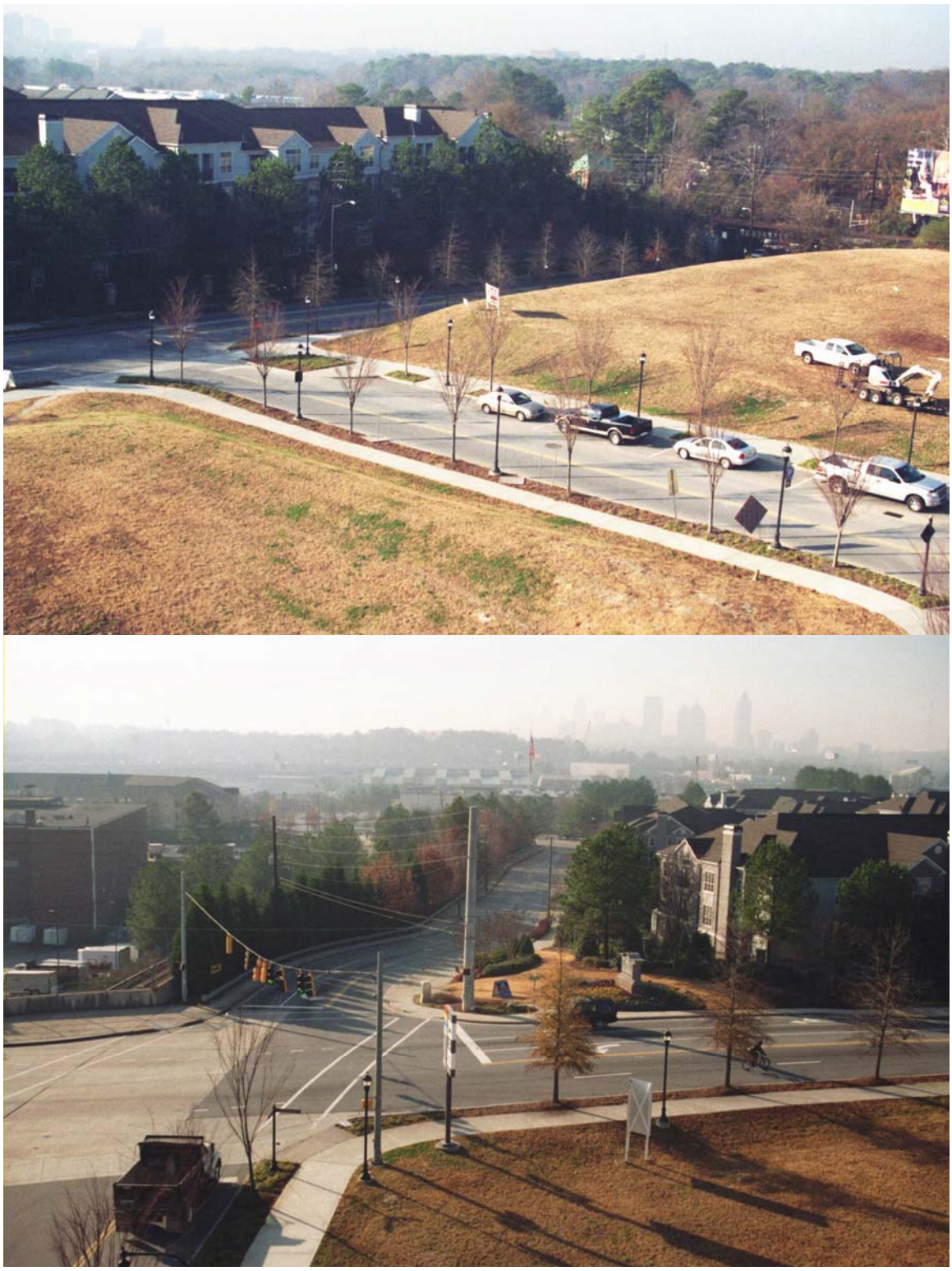
Neighborhood change during the 1990s, in relative income and relative wealth in census tracts adjacent to Lindbergh Station, are reflected in family incomes and housing values, both compared with metro averages. All but one census tract near Lindbergh in 1990 (the exception being the tract with low-priced housing and minority population) had median family incomes above the metro median in 1990. By the time of Census 2000, the ratios still exceeded 1.00, and in two cases had risen. But the dramatic increases were those of housing values–an indirect measure of household wealth—where all the ratios rose, some of them dramatically. The point is that the flourishing transit-oriented development at and near Lindbergh Station is partially due to the overall growth of the Atlanta area and the station's location within a favored sector.

The station was located when MARTA was planned in the 1960s; land development at Lindbergh Station taps commuter demand and local purchasing power. From its start in the mid-1960s, MARTA had planned for TOD on land acquired for right-of-way and its operational needs. The original station was upgraded with retailing, pedestrian redesign and housing in order to increase transit ridership, create a destination, and upgrade rent capture on land. The project benefited from a single developer with unified vision. Bell South planned to consolidate its office activity here, and MARTA decided to locate its headquarters here.

Intense demand for land for development and redevelopment is driving the process at Lindbergh. The development that follows creates a destination (offices, shopping), which stimulates additional rounds of development nurtured by Atlanta's overall growth and by

Lindbergh's location in trendy north Atlanta. But, this intense upscale development around Lindbergh Station would not occur in the lower-income sectors of the Atlanta metro area.

The Community



Lindbergh Station is located in the sprawling Atlanta metropolitan region. From the top of the parking ramp, the views to the southeast (top) and south (bottom) show room for further transit-oriented development.

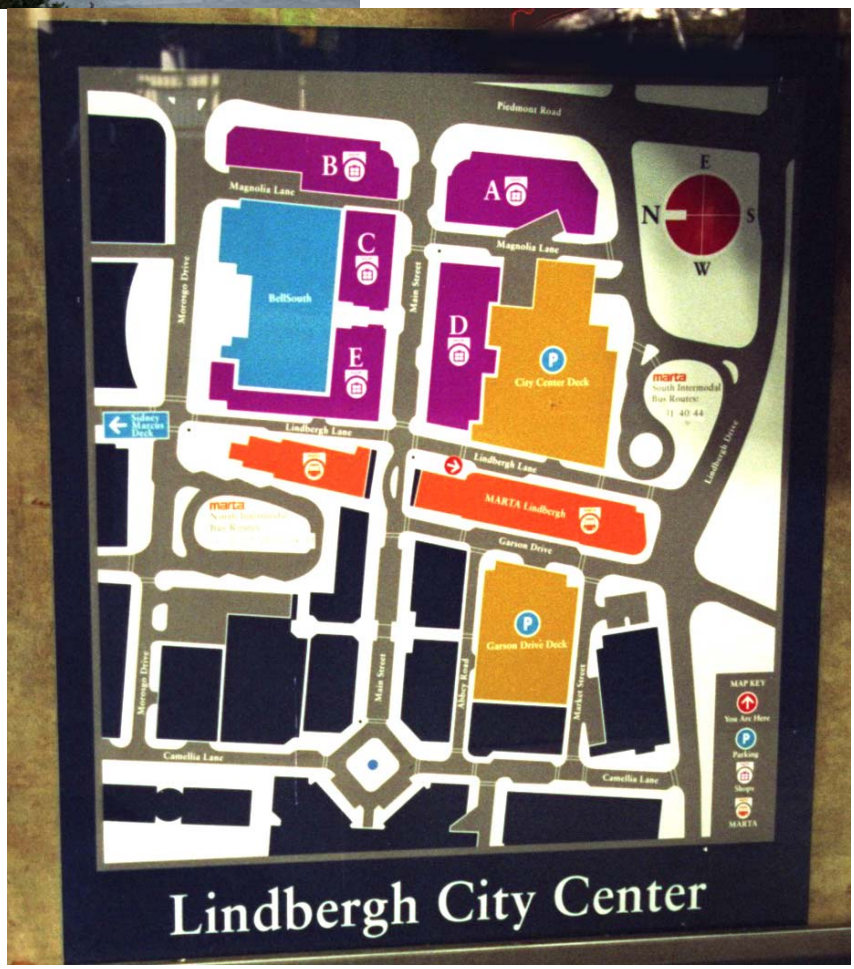
Small businesses across Piedmont from Lindbergh Station and adjacent to a new shopping center, catering to nearby residents of low-income housing, which is steadily being replaced.

Vacant restaurant facing Piedmont Avenue, which stands vacant awaiting removal and replacement with higher-density use.

Low-income housing near Lindbergh Station, slowly being replaced by new, higher-priced apartments and condos.

Lindbergh METRA Station and City Center TOD

Entrance to the train platforms at Lindbergh Station.



Layout of the Lindbergh MARTA station, Bell South buildings, and the City Center TOD.

Bell South office towers rise above Lindbergh Station and adjacent commercial activity.

Advertising along Piedmont at Lindbergh Station

New mixed-use, pedestrian-friendly streetscape adjacent to Bell South towers.

Vacant shopping center next to low-income housing, with new roadway serving new shopping. Day laborers from nearby housing line the street looking for short-term jobs.

New housing along Main Street at Lindbergh Station.

Bell South office towers at Lindbergh Station dwarf obsolete restaurant facing Piedmont Avenue, which stands vacant awaiting removal and replacement with higher-density use.

Small businesses across Piedmont from Lindbergh Station and adjacent to a new shopping center, catering to nearby residents of low-income housing.

New housing along Main Street at Lindbergh Station.

New housing adjacent to new shopping center and across Piedmont from Lindbergh Station.

Mockingbird Station, Dallas

This Dallas Area Rapid Transit (DART) light-rail station is located at the intersection of Mockingbird Lane, a major east-west arterial, and the Central Expressway (US75). The site is four miles north of the Dallas CBD, halfway to the city limits, in the most prosperous city-suburban sector of the metro area, with TOD adjacent to the station (**Figure 12**).

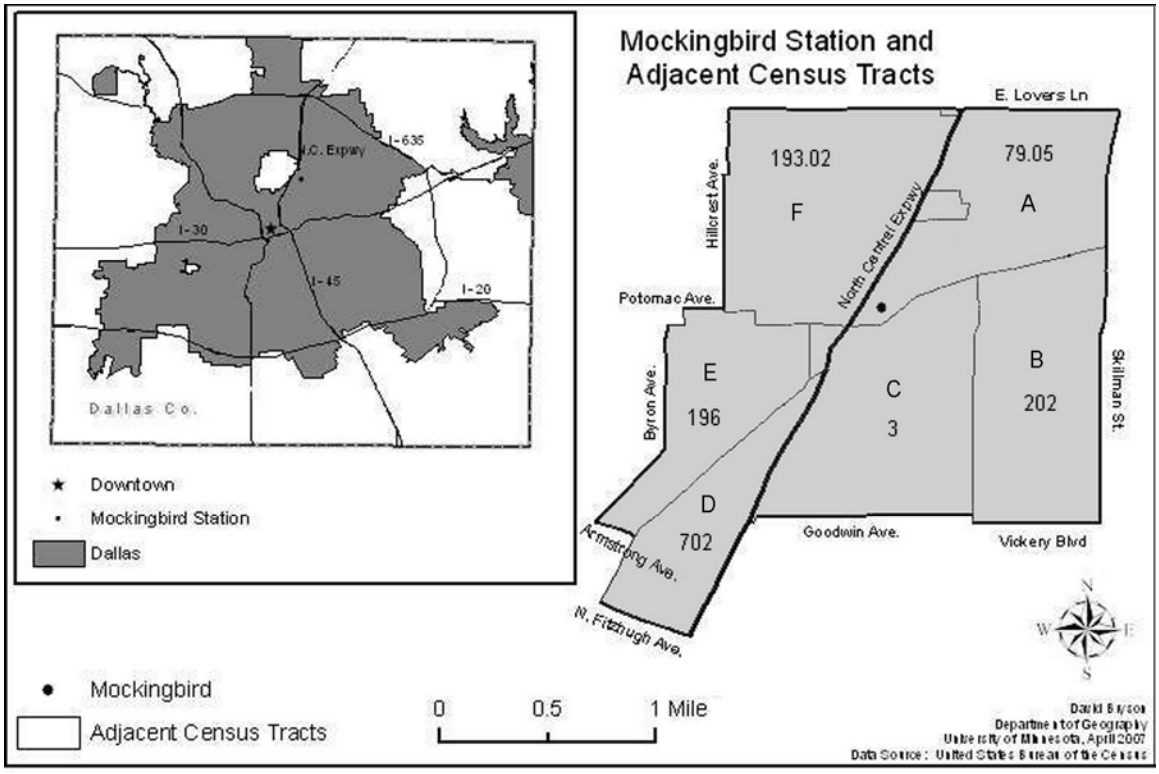


Figure 12. Mockingbird Station and Adjacent Census Tracts. Tract letters correspond to Table 13.

This upgraded DART rail station is surrounded by upscale chain-store development, offices, and housing. It captures market from adjacent Southern Methodist University, and serves as a park-and-ride to downtown Dallas. The area is a destination as well as a transfer point, due to festival retailing. An arts/movie house, restaurants, and a plaza create space for evening and weekend activity.

Dallas was the 36th-fastest-growing U.S. metro area in the 1990s (29.3 percent), and ranked second in population added 2000-2005 (+658,000) (**Table 13**). In the 1990s, median

Table 13.—Family Incomes and Housing Values Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Mockingbird DART Station, Dallas, TX

Adjacent Census Tracts		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
A	007905	31,958	50,556	66,300	71,900	483	732	4,094	5,068
B	000202	47,708	78,608	100,700	180,200	443	751	3,291	3,321
C	000300	49,792	89,703	122,500	222,300	494	775	3,183	4,751
D	000702	22,286	38,281	131,300	253,100	383	743	2,909	3,669
E	019600	103,711	187,194	445,800	653,000	494	680	2,304	2,431
F	019302	50,099	86,623	172,300	450,000	511	666	5,991	5,947
City of Dallas		31,925	40,921	78,800	89,800	375	551	1,006,877	1,188,580
County- Dallas		36,982	49,062	79,200	92,700	389	570	1,852,810	2,218,899
Dallas-Ft. Worth, TX MSA (g)		38,829	55,016	78,700	100,000	383	564	3,885,415	5,221,801

Data Source: U.S. Bureau of the Census. MSA as defined by OMB 6 June 2003.

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
A	007905	.82	.91	.84	.72	1.26	1.30	1.24
B	000202	1.23	1.43	1.28	1.80	1.16	1.33	1.01
C	000300	1.28	1.63	1.56	2.22	1.29	1.37	1.49
D	000702	.57	.70	1.67	2.53	1.00	1.32	1.26
E	019600	2.67	3.40	5.66	6.53	1.29	1.21	1.06
F	019302	1.29	1.57	2.19	4.50	1.33	1.18	.99
City of Dallas		.82	.74	1.00	.90	.98	.98	1.18
County- Dallas		.95	.89	1.01	.93	1.02	1.01	1.20
Dallas-Ft. Worth MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.34

Data Source: U.S. Bureau of the Census; MSA as defined by OMB 6 June 2003. Calculations by the authors.

family income in the Dallas metro area rose 42 percent; in the city of Dallas, 28 percent, but in the six tracts adjacent to Mockingbird, it rose from 65 to 80 percent.

Some of the income increases can be attributed to population increase as newcomers with higher incomes took up residence in the three tracts that grew by 25 to 50 percent during the decade. All but one census tract posted average family incomes higher than metro averages in 1990, and all tracts had posted increases in their income ratios by the time of Census 2000.

How much of the population and income increases should be attributed to transit-oriented development near Mockingbird station cannot be known, but it is clear that the station lies in the traditionally most-highly desired sector of the city, adjacent to a major university, and has continuously attracted population and capital investment that adds to its luster compared with other sectors of the city and metro area. The striking increases in average housing values are an important indicator of demand for housing in the areas adjacent to the Mockingbird station.

At the same time, the DART station provides an important transportation advantage for local residents, students and park-and-ride commuters, adding patronage for the station and for the DART system. Transit services at the station, real estate development adjacent to the station, plus the population, income, and wealth increases in tracts adjacent to the station all reinforce one another.

DART, a Regional Transit Authority (RTA), works contractually with the City of Dallas, 12 other municipalities, and with private developers to plan and develop land adjacent to stations. Cities volunteer to join the RTA. DART, the cities, and developers coordinate activity to provide the densities needed to make rail transit work. City members of DART levy 1 percent extra sales tax, which yields $320 million for DART; cities outside the DART compact use their 1 percent for economic development.

DART does not initiate land development at stations, but works with developers and municipalities to make development work to support DART and the communities. Metro station developers come to DART with their proposals. In Mockingbird's case, Ken Hughes came in; a warehouse was for sale, and he planned loft housing and parking. DART replied: "think bigger," and an expanded unified plan resulted.

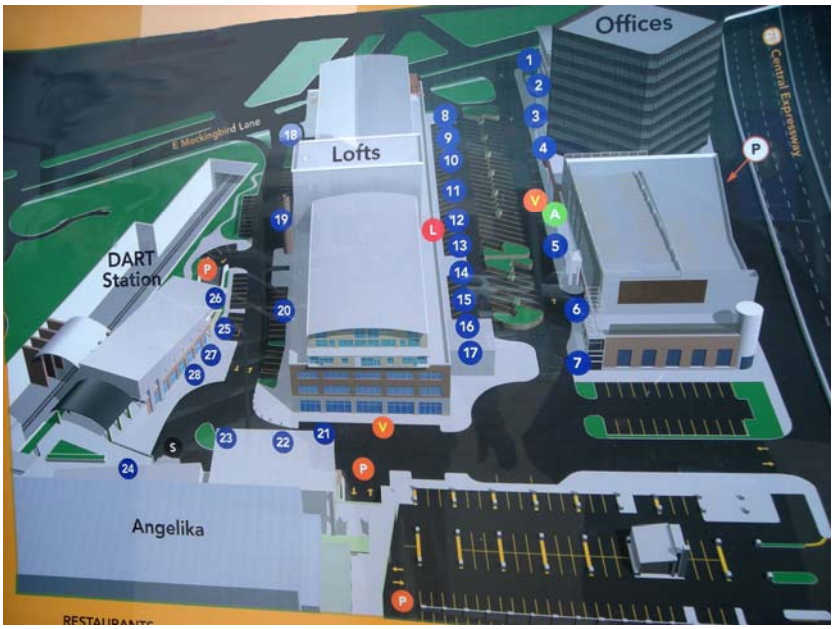
With vigorous growth to be allocated within the Dallas area, participating municipalities increasingly want their own transit stations. DART facilitates development at transit stations by prodding city planners in Dallas and other cities to incorporate TOD thinking into their land use and economic development planning.

Fast metro-area growth overwhelms highway capacity so traffic congestion continues to worsen. Cities in the Dallas area increasingly recognize advantages of rail access, place making and walkable communities. By the end of the 1990s, residential and office properties as well as land price premiums near DART stations were appreciating much faster than those farther away.

Mockingbird DART Station and TOD

The canopy over the train platform provides an entry gateway from the street to the Mockingbird mixed-use TOD.

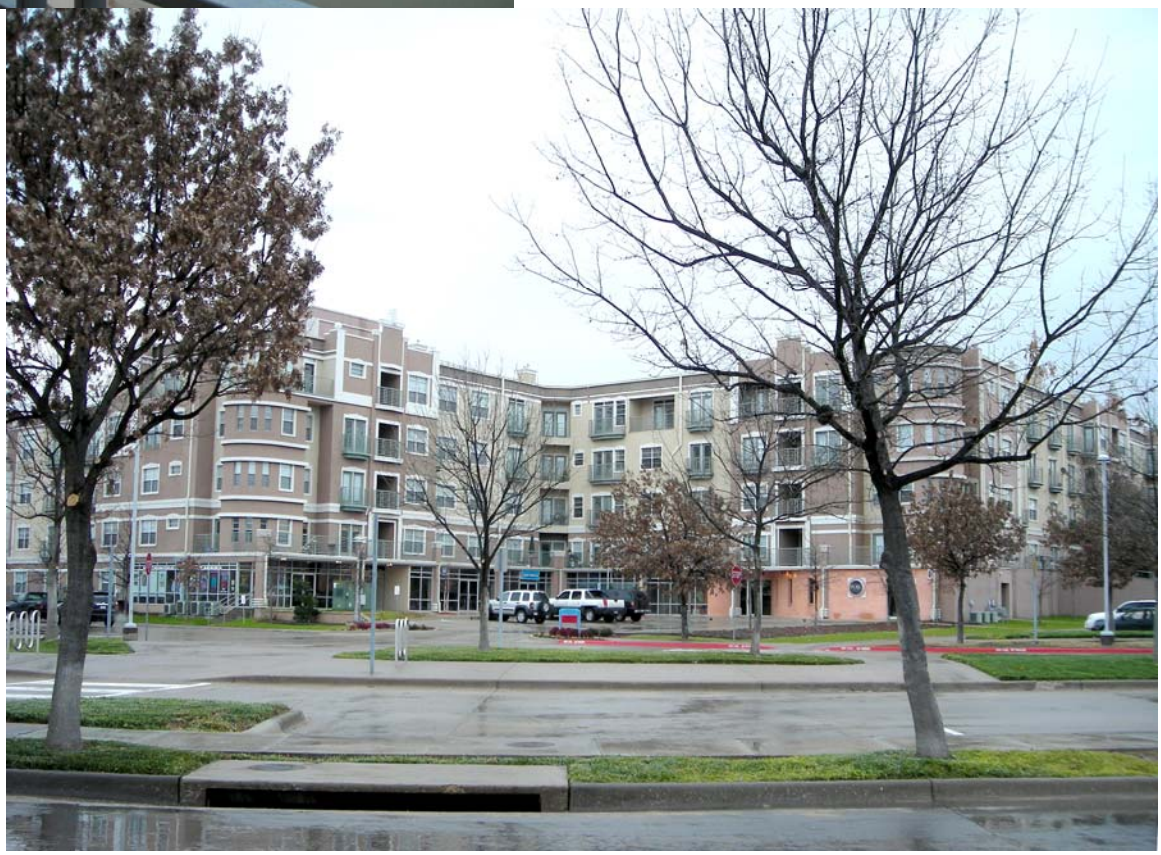
A bus interchange adjacent to the station at street level provides for transfer between train and bus. The design of the development has retained the character of the reclaimed industrial landscape on which it is built.



The development adjacent to the DART station includes ramp and surface auto parking, housing, office, retail and entertainment space, centered on a multi-level central courtyard that keeps pedestrians away from street traffic.

The former industrial area around the Mockingbird TOD also has experienced new investment.

A new housing complex for students of Southern Methodist University, directly across the street from Mockingbird Station, has helped to provide both customers for Mockingbird businesses and increased ridership from the DART station.



Arlington County, VA

Arlington is a first-ring Washington suburb of 200,000, located west across the Potomac River from Washington, D.C. (**Figure 13**). Arlington grew steadily in the 1920s and 1930s, but was aging 50 years later.

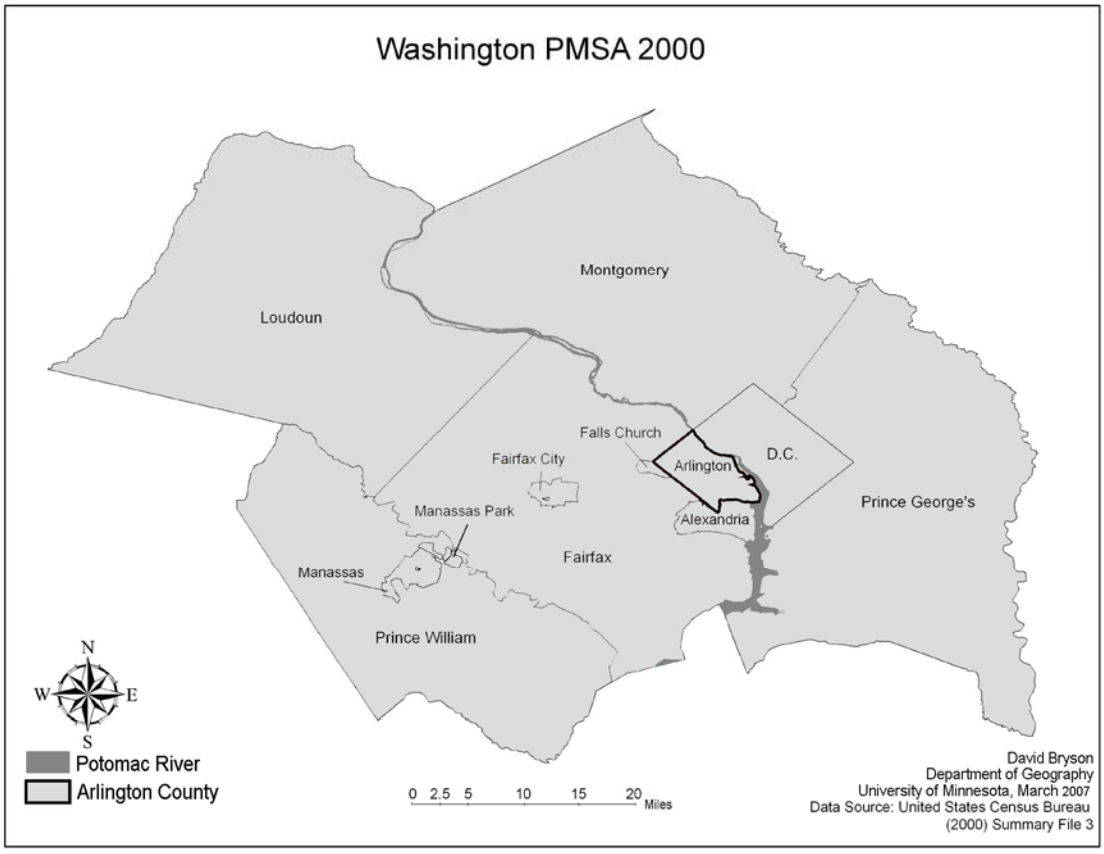


Figure 13. Arlington County, VA, Area.

Beginning in the 1970s, Arlington planners focused redevelopment efforts on TODs at five Orange Line stations of the Washington Metropolitan Area Transit Authority (METRO), in the city and county of Arlington, VA. Long-range planning efforts since the 1970s in Arlington have been focused on rejuvenating an aging housing stock and upgrading office-commercial land use while maintaining stable neighborhoods with a balance of household incomes and variety in housing styles and prices. A great deal of planning, economic development, and real estate development has been focused on the five Washington Metro stations located along the Orange Line rail corridor, extending through the county from the Rosslyn station on the east to the Ballston station on the west.

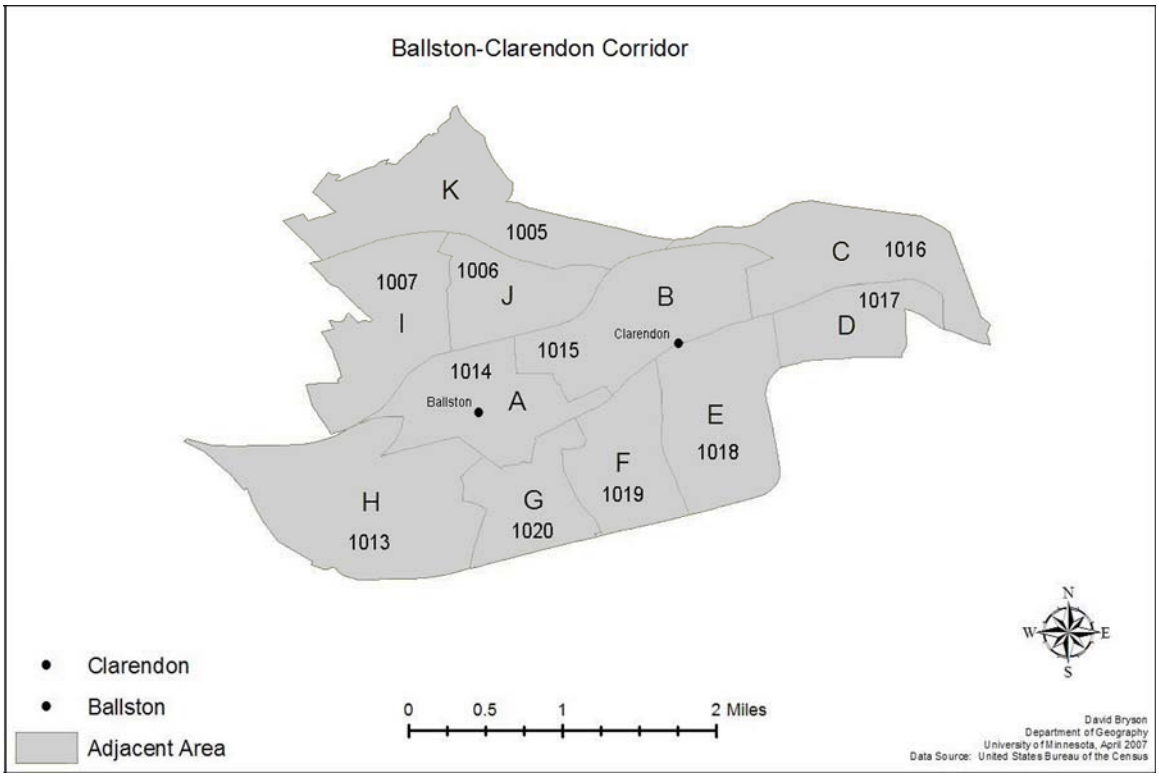


Figure 14. Rosslyn-Ballston Corridor, VA TOD Corridor and Adjacent Census Tracts. Tract numbers correspond to Table 14.

Growth of the Washington, D.C. area was steady in the 1990s, at 16.3 percent (**Table 14**). While the population of the Washington metro area expanded by more than 16 percent in the 1990s, the population of already built-up Arlington County expanded by 11 percent as density of development around the METRO stations increased. Steady growth of the Washington, D.C. area has added demand pressure on both land and existing housing. The combination of effective planning, community support for development and redevelopment programs that protect single-unit detached housing areas has added to the attractiveness of Arlington for residential and commercial activity. As a result, the relative position or relative attractiveness of most of the census tracts adjacent to the rail transit corridor showed improvement compared with metro averages during the 1990s.

Changes in relative attractiveness are revealed by ratios of median family incomes to the metro median, ratios that were above average in most tracts adjacent to the rail transit corridor in 1990, and increased in all but two tracts during the 1990s. With the exception of only one tract, the same was true of median housing values. The tract medians exceeded the metro median in 1990 in all tracts, and the ratio then rose in all but one tract in the 1990s. The contract rent ratio dropped in two tracts in the 1990s, but in some tracts the ratio rose sharply, due in part to new construction near the METRO stations.

Table 14.—Family Incomes and Housing Values Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Rosslyn-Ballston Corridor, Arlington County, VA

Adjacent Census Tracts		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
K	1005.00	80,703	132,027	293,100	345,800	814	1,267	3,785	3,788
J	1006.00	67,553	90,283	226,300	265,600	741	921	2,674	2,953
I	1007.00	54,879	89,667	246,300	277,400	613	777	4,959	5,310
H	1013.00	63,027	96,975	220,200	241,600	855	1,059	5,699	5,820
A	1014.00	56,033	93,136	211,600	234,200	866	1,219	4,464	8,436
B	1015.00	55,034	86,269	283,400	351,600	671	824	5,807	6,013
C	1016.00	51,587	100,000	194,900	496,900	717	958	4,818	5,501
D	1017.00	44,698	51,675	214,500	193,400	615	785	8,545	9,853
E	1018.00	41,148	81,081	215,400	267,900	693	1,005	6,929	9,013
F	1019.00	73,781	108,835	264,900	323,200	683	754	2,374	2,429
G	1020.00	31,969	40,888	209,300	242,300	608	722	7,426	8,723
City of Arlington, VA		55,346	78,877	231,000	262,400	678	871	170,936	189,453
County of Arlington, VA		55,346	78,877	231,000	262,400	678	871	170,936	189,453
Washington-Arlington-Alexandria DC-MD-VA MSA (g)		54,094	72,247	166,100	178,900	623	755	122,914	796,183

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
K	1005.00	1.49	1.83	1.76	1.93	1.31	1.68	1.00
J	1006.00	1.25	1.25	1.36	1.48	1.19	1.22	1.10
I	1007.00	1.01	1.24	1.48	1.55	.98	1.03	1.07
H	1013.00	1.17	1.34	1.33	1.35	1.37	1.40	1.02
A	1014.00	1.04	1.29	1.27	1.31	1.39	1.61	1.89
B	1015.00	1.02	1.19	1.71	1.97	1.08	1.09	1.04
C	1016.00	.95	1.38	1.17	2.78	1.15	1.27	1.14
D	1017.00	.83	.72	1.29	1.08	.99	1.04	1.15
E	1018.00	.76	1.12	1.30	1.50	1.11	1.33	1.30
F	1019.00	1.36	1.51	1.59	1.81	1.10	1.00	1.02
G	1020.00	.59	.57	1.26	1.35	.98	.96	1.17
City		1.02	1.09	1.39	1.47	1.09	1.15	1.11
County		1.02	1.09	1.39	1.47	1.09	1.15	1.11
MSA (g)		1.00	1.00	1.00	1.00	1.00	1.00	1.16

Data Source: U.S. Bureau of the Census. MSA as defined by OMB, 6 June 2003. Calculations by the authors.

The flourishing transit-oriented development at and near the Arlington METRO stations is partially due to the overall growth of the greater Washington, D.C., area, but part of it is also due to the county's location within one of the traditionally most-favored residential sectors of the entire metro area.

Planning focused on capturing and directing metro growth into a transit corridor, using joint development as a strategy. Arlington County has one unified government with no municipalities. All county board members are elected at large, minimizing parochial concerns that might trump long-term county-wide goals. Today the area boasts some of the highest ridership in the METRO system, and very low car traffic.

Redevelopment planning began in the 1970s, as local population dropped and the tax base languished. Arlington left its former Euclidian zoning code in place while creating a new "policy overlay" that offered developers a choice: (1) follow the old zoning "by right"; or (2) negotiate with Arlington County for more density in exchange for doing what the county wants.

The original plan for METRO's Orange Line was modified to support TOD at five stations in Arlington. By focusing redevelopment efforts on TODs at METRO stations, part of the Washington area's growth can be attracted to Arlington and accommodated without disrupting established residential areas or adding to traffic on county arterials, levels of which remain modest. Thus far, this has been a 50-year planning and development effort, and is ongoing.

The Changing Community

Aging 1920s-era strip development along Wilson Boulevard near the Clarendon METRO station in Arlington, VA, is slowly being superseded by new and high-density residential and commercial land uses.

(above) New high-density residential developments behind Wilson Boulevard near the Clarendon METRO station in Arlington overshadows a vacant commercial property scheduled for redevelopment. (below) Attractive, well-maintained 1920s-era neighborhood near Irving and 9th, south of Wilson Boulevard in Arlington, protected from redevelopment pressures.

(above) A 1920s-era neighborhood near the Clarendon METRO station in Arlington, protected from pressure for high-density development close to the METRO (background).
(below) Recent high-density commercial-residential mixed use development surrounding the Ballston METRO station in Arlington.

Ballston Mall near the METRO station (above), with continuous intense development along the METRO corridor in Arlington (below).

The old and the new in Arlington. Massive new mixed-use development replaces earlier strip development along Wilson Boulevard, an important highway thoroughfare (US50) that connected early suburban development in Arlington with the District of Columbia.

Arlington Heights, IL

Arlington Heights, IL, is a commuter-rail suburb, about 25 miles northwest of Chicago's CBD (**Figure 15**). It is an old village being engulfed by sprawling suburban growth. It developed early as a 16-square-mile commuter-rail suburb on the edge of Cook County, but only in recent decades was it engulfed by typical post-WWII-style suburban development. Today, it is essentially fully built-up.

Beginning in the early 1980s, Arlington Heights undertook a major revival and renewal of its downtown, next to the railroad station. This TOD is a revamp of a commuter-rail village stop. High-density mixed-use surrounds the station, including high-rise housing. The historic image of the village is capitalized in the new station building. The line has experienced a continual increase in ridership during this period, as population has grown.

Village population is between 75,000 and 80,000, and is capturing a small share of the Chicago area growth as well as some activity relocating from other older parts of the metro; 1,600 to 2,000 residents now live in the redeveloped downtown area.

The village began a new round of planning in the 1970s, and established a Tax Increment Finance (TIF) district in the 1980s. Downtown redevelopment started in 1983, and continues to today. As in some of the other cases, successful plans often unfold over decades. Only 17 percent of downtown residents use the train to commute, but the station relocation and rebuilding and the downtown redevelopment plan formed part of a successful unified plan.

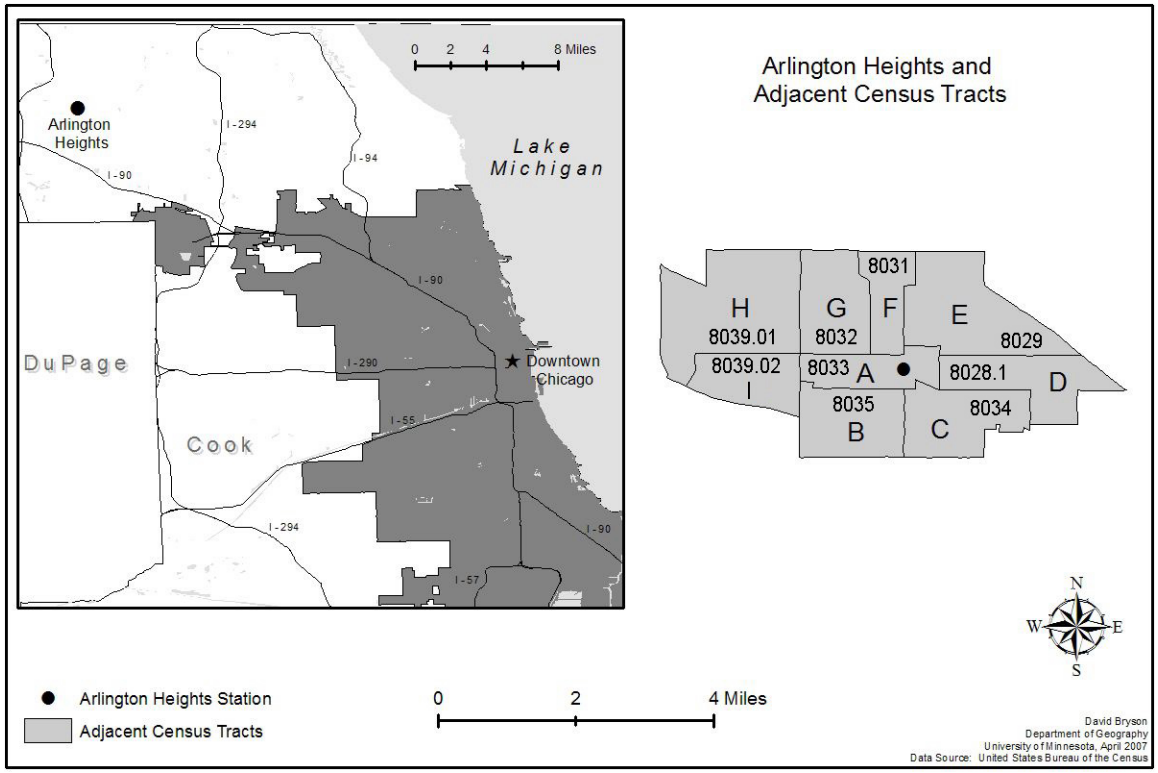


Figure 15. Arlington Heights, IL, Project Area and Adjacent Tracts. Tract letters correspond to Table 15.

Metropolitan Chicago has seen only modest population and economic growth since 1990 (**Table 2**). Average family incomes and housing values stood well above county and metro averages in 1989/1990

and in 1999/2000, as would be expected in a typical middle-class or upper-middle-class Midwestern suburban area.

With the exception of a single census tract, populations of tracts adjacent to the commuter rail station were stable in the 1990s (**Table 15**). The area covered by the eight tracts had a total population increase of .01 percent during the decade. Part of the village housing stock dates from the 1920s and earlier, but recent new construction of apartments and condos in and near downtown and within walking distance from the station helps to maintain the relative desirability of the housing stock (as measured by average prices), compared with the average within the Metropolitan Statistical Area (MSA). Housing value ratios were high in 1990, and generally remained high by the time of Census 2000. The same was true of the family income and rent ratios; they remained generally stable. In other words, the Village of Arlington Heights is holding its own compared with competition from new developments in downtown Chicago and in other communities around the metro area.

It seems clear that serious long-range planning and real estate development near the rail station in and around downtown Arlington Heights has helped the village sustain its relative attractiveness, and will position it competitively as metropolitan growth and expansion continue into the coming years.

Table 15.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Commuter Rail Station, Arlington Heights, IL*

		Median Family Income		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population		Owner-Occupied Housing	
Adjacent Census Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000	1990	2000
D	8028.01	58,069	81,479	155,500	223,800	538	695	4,886	4,890	87	89
E	8029.00	63,691	91,287	163,900	241,300	671	1,013	6,291	6,169	94	95
F	8031.00	58,788	81,502	142,600	217,600	680	897	3,584	3,441	88	94
G	8032.00	55,693	80,474	133,800	187,800	498	674	4,947	5,640	85	88
A	8033.00	51,749	75,083	146,800	226,200	617	908	5,141	5,212	46	48
C	8034.00	62,819	95,343	168,900	245,600	607	795	6,172	6,183	87	87
B	8035.00	66,923	89,736	165,600	242,100	1,001	1,725	6,256	5,899	84	83
H	8039.01	48,382	72,262	129,100	185,700	541	738	3,150	3,449	83	88
I	8039.02	49,607	68,005	111,900	155,900	720	930	3,907	3,726	93	95
Chicago-City		30,707	42,724	78,700	132,400	377	543	2,783,726	2,895,964	41	44
Cook County		39,296	53,784	102,100	157,700	411	582	5,105,067	5,376,741	55	58
Chicago-Naperville-Joliet IL MSA (g)		42,153	60,367	103,100	159,000	417	589	8,065,633	9,157,540	62	65

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
D	8028.01	1.38	1.35	1.51	1.41	1.29	1.18	1.00
E	8029.00	1.51	1.51	1.59	1.52	1.61	1.72	.98
F	8031.00	1.39	1.35	1.38	1.37	1.63	1.52	.96
G	8032.00	1.32	1.33	1.30	1.18	1.19	1.14	1.14
A	8033.00	1.23	1.24	1.42	1.42	1.48	1.54	1.01
C	8034.00	1.49	1.58	1.64	1.54	1.16	1.35	1.00
B	8035.00	1.59	1.49	1.61	1.52	2.40	2.93	.94
H	8039.01	1.15	1.20	1.25	1.17	1.30	1.25	1.09
I	8039.02	1.18	1.13	1.09	.98	1.73	1.58	.95
Chicago- City		.73	.71	.76	.83	.90	.92	1.04
Cook County		.93	.89	.99	.99	.99	.99	1.05
Chicago-Naperville-Joliet IL MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.14

Data Source: U.S. Bureau of the Census. MSA as defined by OMB, 6 June 2003. * A fourth-ring suburb northwest of the City of Chicago. Calculations by the authors.

Prerequisites for success in Arlington Heights included a vision for redevelopment, a plan, TIF funding, and cooperation with developers. The village relocated its train station to broaden its impact and support downtown redevelopment. The municipality also relaxed some density rules to get developer cooperation. Other commuter suburbs along the line are doing the same.

The 1920s retail landscape of the Arlington Heights Village commuter rail suburb slowly is giving way to higher-density, mixed-use TOD, bringing new residents to downtown.

The new pedestrian-friendly retail landscape abuts the park-and-ride lot of the commuter rail station.

The commuter rail line runs through the heart of downtown, providing easy access for residents of the new high-density housing within the Central Business District.

Downtown housing expansion continues, within a few blocks of the commuter rail station. This massive condominium development is served by retail shops on its street level, as well as adjacent auto-oriented strip shopping center,

Southwest Transit Station, Eden Prairie, MN

The development is within the fast-growing suburb of Eden Prairie, on the flourishing southwest edge of the most prosperous residential-commercial sector of the steadily growing Minneapolis-St. Paul metro area (**Figure 16**). This was the fastest-growing large metro area in the Midwest in the 1990s. Forecasts predict the region to add a million more residents in the next 30 years or so (**Table 16**).

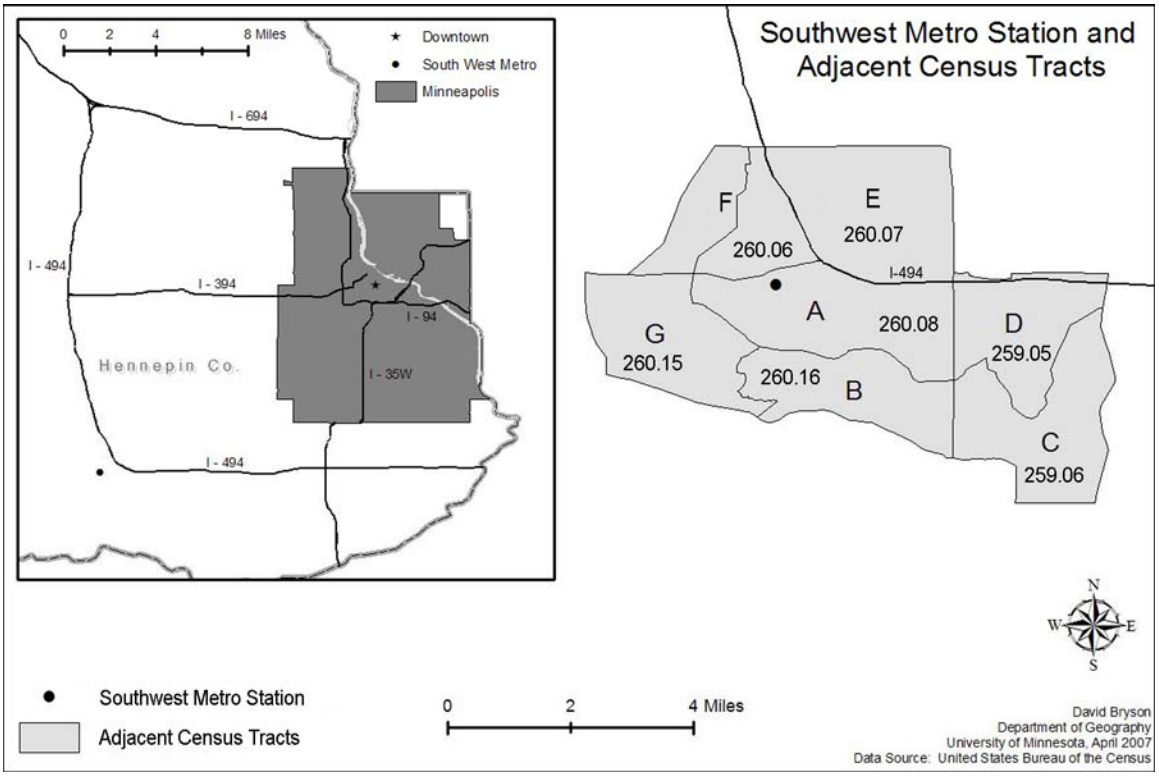


Figure 16. Southwest Transit Station and Adjacent Tracts. Tract letters correspond to Table 16.

The Southwest Transit Station (STS) is an integrated pedestrian and bus-rapid-transit (BRT)-oriented development, with express bus service to the Minneapolis downtown, the University of Minnesota, and other central-city destinations. A park-and-ride and ticket station was needed for express bus riders. Chain-retail development was built along with those facilities, plus some parking capacity for non-commuters. A hotel is part of the development, so the area is not only a boarding point, but a destination in itself as well.

Table 16.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Southwest Metro Bus Transfer Station, Eden Prairie, MN

		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
Adjacent Tracts		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
D	259.05	74,744	107,599	167,100	229,500	886	1,363	4,098	4,019
C	259.06 ('00) 259.04 ('90)	55,675	81,273	116,000	178,700	655	874	10,624	6,389
F	260.06	53,859	72,750	106,100	168,600	689	875	2,746	3,008
E	260.07	61,648	87,834	175,400	261,100	623	859	3,304	4,411
A	260.08	41,795	65,898	118,100	157,400	609	857	5,268	6,939
G	260.15 ('00) 260.11 ('90)	61,648	101,849	114,400	202,800	585	822	5,025	5,591
B	260.16 ('00) 260.09 ('90)	67,884	90,225	134,100	174,900	631	831	4,860	6,584
Minneapolis City		32,998	48,602	71,700	113,500	390	536	368,383	382,452
Hennepin County		44,189	65,985	91,000	143,400	452	615	1,032,431	1,116,200
Minneapolis-St. Paul-Bloomington, MN-WI MSA (g)		43,252	65,450	88,700	141,200	444	599	2,464,124	2,968,806

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
D	**259.05**	1.73	1.64	1.88	1.63	2.00	2.28	.98
C	**259.06 (00') 259.04 (90')**	1.29	1.24	1.31	1.27	1.48	1.46	.60
F	**260.06**	1.25	1.11	1.20	1.19	1.55	1.46	1.10
E	**260.07**	1.43	1.34	1.98	1.85	1.40	1.43	1.33
A	**260.08**	.97	1.01	1.33	1.11	1.37	1.43	1.32
G	**260.15 (00') 260.11 (90')**	1.43	1.56	1.29	1.44	1.32	1.37	1.11
B	**260.16 (00') 260.09 (90')**	1.57	1.38	1.51	1.24	1.42	1.39	1.35
Minneapolis City		.76	.74	.81	.80	.88	.89	1.04
Hennepin County		1.02	1.01	1.03	1.02	1.02	1.03	1.08
Minneapolis-St. Paul-Bloomington, MN-WI MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.20

Data Source: U.S. Bureau of the Census; MSA as defined by OMB, 6 June 2003. Calculations by the authors.

Homer Hoyt and others showed more than a half-century ago that more than 100 industrial cities in the U.S. feature at least one upper-middle-class/elite residential sector that extends outward from the downtown, and captures a disproportionate share of the area's most prosperous households. In the Minneapolis area, such a sector extends southwest of downtown, through the city's Lake District, through the early streetcar suburb of Edina to Eden Prairie, the location of the Southwest Bus Transfer Station. The physical and economic amenities within this sector attract capital investment and upper-priced housing, which in turn attract jobs and households that reinforce each other in a process of cumulative and circular causation.

As growth in the southwest sector continues and intensifies, traffic on highways serving the sector has become increasingly congested, stimulating demand for park-and-ride options for commuters from the southwest heading to downtown 17 miles away, and the University of Minnesota, about a mile east of downtown. The prosperous setting of the bus transfer station stands in stark contrast to the East St. Louis plight. Eden Prairie's population rose from 39,311 in 1990 to 54,901 in 2000 (an increase of 40 percent), and added an additional 10 percent over the next five years.

The income, housing-value, and rent ratios in census tracts at and near the station were high in 1990 compared with the metro averages, and generally stayed high during the 1990s although there is evidence of ratios drifting slightly downward. Fast population growth means additions to the housing stock. To the extent that housing units added to the inventory are, on average, lower in price or rent levels than existing units, the ratios may drop a bit even though growth rates remain brisk. How much of the growth of Eden Prairie, or the addition of convenient park-and-ride bus transit at the Southwest station feed off one another cannot easily be discerned, but bus transit service from the station provides a convenient and cost-effective option for park-and-ride commuters as well as for residents living within walking distance of the station.

The state's economy remains competitive and very strong. Minnesota was 19th in population size in 1970, and is 20th today; in other words, losing relative ranking, but growing steadily. It was 10th in per capita personal income in 2000, and 9th in 2005. The Twin Cities area remains one of the most prosperous metro areas in the U.S.

The Eden Prairie community is growing steadily, so the availability of the transit station and development adjacent to it will provide positive reinforcement in both directions–the station supporting nearby commercial and residential activity, and the land development supporting transit use by local residents and park-and-ride patrons.

Lessons learned from planning and development of the Southwest Transit Station (STS) include: [16]

- *The importance of a shared vision with the host city is vital to success and working with developers.*

- *The site and tenant mix at STS was driven by parking that was available on nights and weekends.* SouthWest Metro Transit (SWT), the bus-rapid-transit agency for Chaska, Chanhassen, and Eden Prairie, would learn later that the site was too focused on the lunch crowd, which causes a shortage of daytime parking on the site. Don't rely on one retail segment. Establish a team of real estate professionals to assist.

- *The transit customer isn't the only retail customer.* Transit customers can add to the success of businesses, but they cannot be the only type of customer.

- *Plan for the future.* Originally only four levels of parking were planned; but, at the last minute, a fifth was added, which is full on many days but wasn't projected to be so until 2030. The site is capable of serving future Bus Rapid Transit or Light Rail Transit.

- *TOD can work for bus.* TOD can work well in a suburban environment.

- *Create a "sense of place."* Creating a sense of place with good design and layout assisted efforts to overcome public misconceptions about bus service. At the STS all private development is market rate and no TIF funds were used. Open space and public plazas are key assets.

- *It is important to accommodate existing service during the build-out of the site.* The schedule eventually did attract some prime tenants. The site schedule consisted of first building the transit station, followed by the parking ramp, then retail and housing.

The Southwest Transit project is still unfolding, and growth in the area remains vigorous. A dedicated high-frequency transit corridor has been proposed that would connect downtown and the southwest suburbs, including the STS, and is currently under study by the Metropolitan Council. Meanwhile, the Minnesota Department of Transportation (MnDOT) has undertaken $238 million worth of highway and local road improvements in Eden Prairie and surrounding suburbs, to decrease congestion, improve traffic safety and road capacity, and create a stronger highway link between the Twin Cities and western Minnesota and South Dakota.

Covered walkways allow sheltered pedestrian transfer between bus rapid transit and auto parking facilities.

Downtown Station and Eastside Village, Plano, TX

Plano lies about 30 miles (40 minutes) north of downtown Dallas, a first-ring suburb centrally located in the city's most prosperous northern sector. Plano is part of the Dallas Metroplex, the 36th fastest growing U.S. metro area in the 1990s (29.3 percent); and ranked second in population added 2000-2005: (+658,000). Plano captures part of the area's continuing growth (**Figure 17, Table 17**).

The city, covering 72 square miles with 250,000 residents, grew 12.7 percent between 2000 and 2005. The downtown Plano DART station and surrounding development were upgraded to create a "home" destination—meant for Dallas commuters (**Figure 18**).

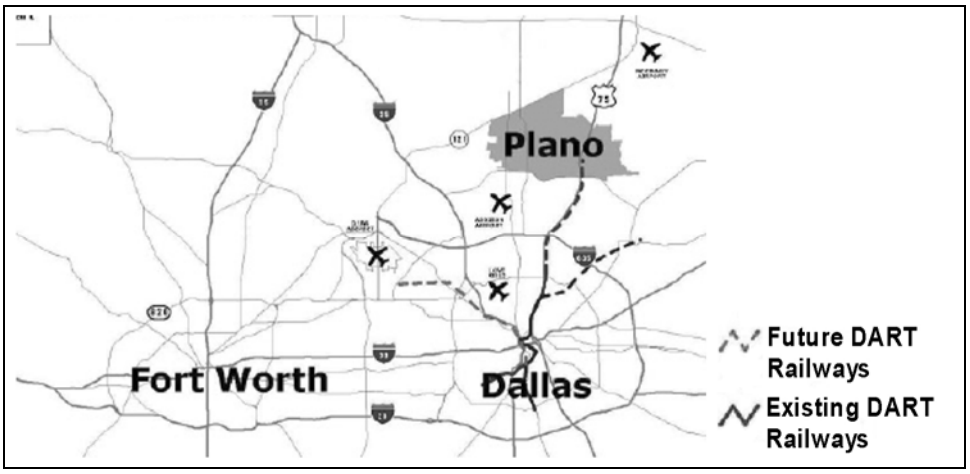


Figure 17. Dallas-Fort Worth Metroplex Area, and the City of Plano.
Source: City of Plano. Comprehensive Plan. Department of Economic Development. April 2001.

During the 1980s boom, sprawling office and shopping center development in Plano drew activity away from the downtown. In response, the city embraced New Urbanism and TOD in an effort to transform its CBD into a compact, mixed-use center.

Downtown Plano was upgraded and housing added. Moderate-price housing is steps from the transit line. The development around the DART station is now both a destination in itself and a mode transfer point.

The vision behind the Plano development is to improve quality of life, provide a model of sustainable development for maturing suburban cities, and create a unique identity for itself. The downtown redevelopment plan was reinforced when DART decided to build a full-service, "destination" platform in downtown Plano without any park-and-ride facilities.

Table 17.—Family Incomes and Housing Values Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the Downtown DART Station and Eastside Village, Plano, TX

Adjacent Census Tracts		Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
		1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
A	316.01	58,951	NA	135,800	NA	559	NA	7,934	NA
B	316.11	NA	69,719	NA	108,200	NA	972	NA	3,696
C	316.22	NA	80,319	NA	146,800	NA	741	NA	5,841
D	316.23	NA	69,712	NA	151,900	NA	701	NA	3,187
E	318.02	NA	67,151	NA	128,700	NA	867	NA	5,851
F	318.03	68,593	NA	117,600	NA	1,001	NA	4,897	NA
G	319.00	23,784	32,083	50,600	64,300	458	601	3,011	4,099
H	320.03	NA	43,098	NA	80,400	NA	607	NA	5,234
I	320.04	40,735	NA	70,500	NA	626	NA	6,204	NA
J	320.05	49,826	NA	87,300	NA	567	NA	3,105	NA
K	320.07	36,715	52,043	63,100	85,300	627	744	5,013	7,721
City of Plano		58,653	87,767	115,400	161,300	548	737	203,592	361,199
City of Dallas		31,925	40,921	78,800	89,800	375	551	1,006,877	1,188,580
County-Dallas		36,982	49,062	79,200	92,700	389	570	1,852,810	2,218,899
Dallas-Ft.Worth TX MSA (g)		38,829	55,016	78,700	100,000	383	564	3,885,415	5,221,801

Adjacent Census Tracts		Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
A	316.01	1.52	NA	1.73	NA	1.46	NA	NA
B	316.11	NA	1.27	NA	1.08	NA	1.72	NA
C	316.22	NA	1.46	NA	1.14	NA	1.31	NA
D	316.23	NA	1.27	NA	1.52	NA	1.24	NA
E	318.02	NA	1.22	NA	1.29	NA	1.54	NA
F	318.03	1.77	NA	1.49	NA	2.61	NA	NA
G	319.00	.61	.58	.64	.64	1.20	1.07	1.36
H	320.03	NA	.78	NA	.80	NA	1.08	NA
I	320.04	1.05	NA	.90	NA	1.63	NA	NA
J	320.05	1.28	NA	1.11	NA	1.48	NA	NA
K	320.07	.95	.95	.80	.85	1.64	1.32	1.54
City of Plano		1.51	1.60	1.47	1.61	1.43	1.31	1.77
City of Dallas		.82	.74	1.00	.90	.98	.98	1.18
County-Dallas		.95	.89	1.01	.93	1.02	1.01	1.20
Dallas-Ft.Worth TX MSA		1.00	1.00	1.00	1.00	1.00	1.00	1.34

Data Source: U.S. Bureau of the Census. MSA as defined by OMB, 6 June 2003. Calculations by the authors.

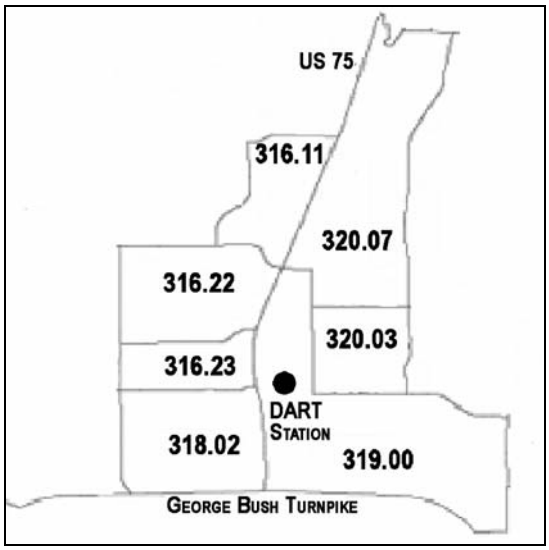


Figure 18. Plano DART Station and Adjacent Census Tracts.

DART and the city worked together to strategically locate the platform to bring the entire downtown business/government district to within a quarter-mile of the platform, and to facilitate the city's first major redevelopment project, Eastside Village, which added housing and commercial activity in a transit village adjacent to the DART station (**Figure 19**).

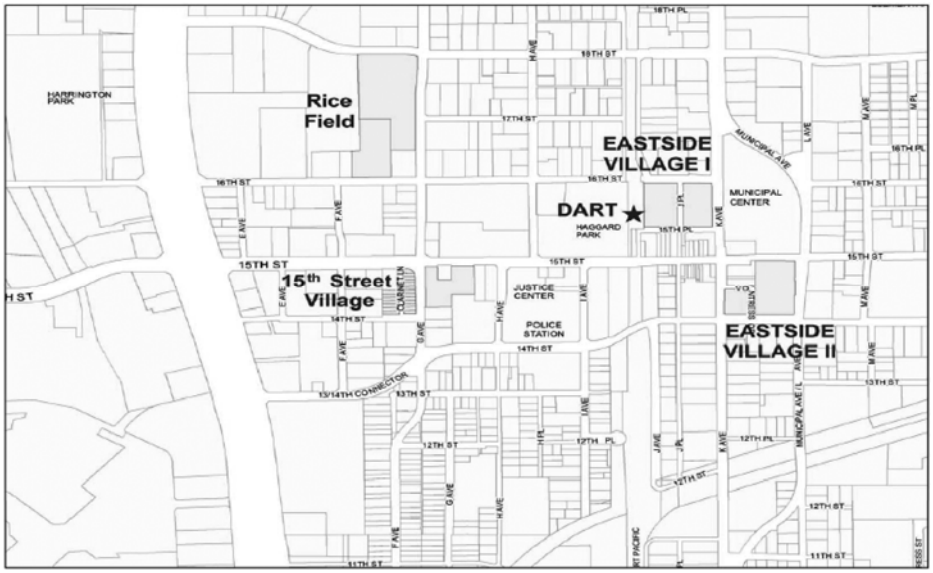
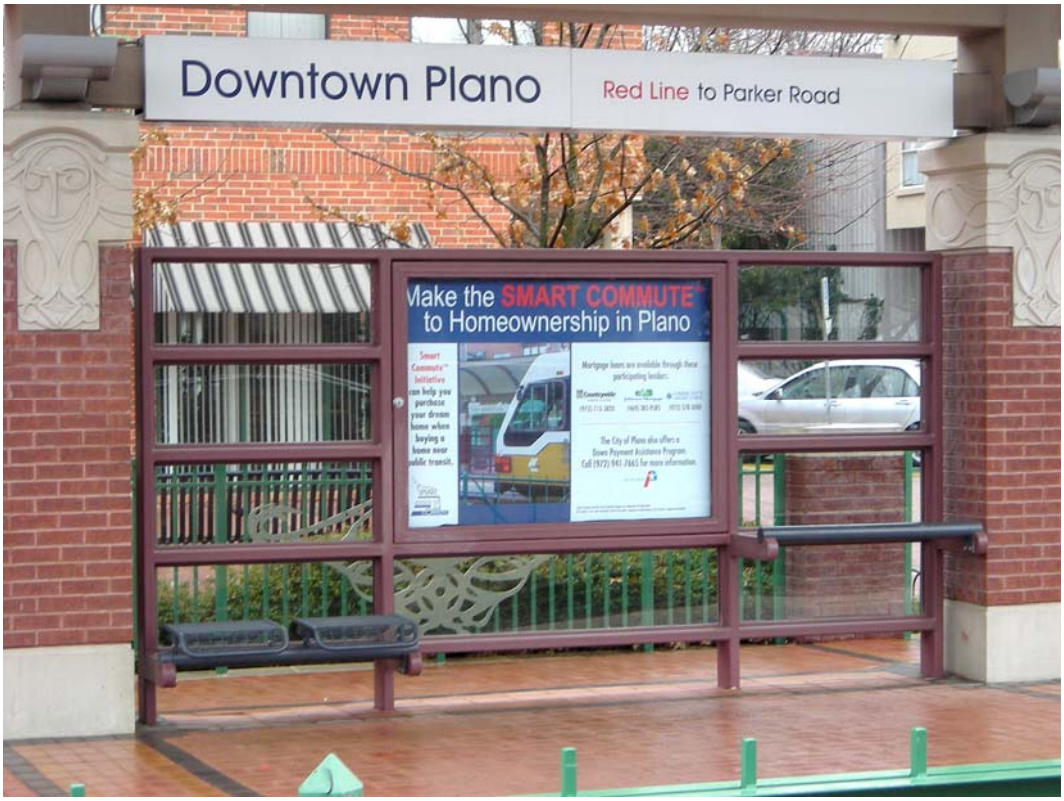


Figure 19. DART Station and Transit-Oriented Development in Plano.
Source: City of Plano, Comprehensive Plan.

Success of the first phase of the development stimulated plans for additional phases, which will support the downtown redevelopment and transit usage for Plano as both an origin and a destination.



DART advertising encourages commuting by rail into Dallas.

Station advertising promotes EastSide Village, the residential TOD next to the Downtown Plano Dart Station. The ad captures the sense of new urban development in the imagery of the Old West railroads running through the Texas desert.

Main street through old downtown Plano, once a small country town beyond the Dallas suburbs and now engulfed by the metro rapid growth.

Rapid population growth in Plano means new higher-density residential developments not far from the Downtown Plano DART station.

DART's Downtown Plano Station on the Red Line, with new housing adjacent to the station.

New housing and ground-floor commercial activity adjacent to DART's Downtown Plano Station on the Red Line.

New, medium-density housing adjacent to the Downtown Plano DART station.

Contemplative transit patron awaits the next DART Red Line train heading into central Dallas from Downtown Plano.

(above) A park-and-ride facility and city park behind the Downtown Plano DART station.
(below) A park-and-ride facility behind the Downtown Plano DART station, with a sculpture that evokes old Plano's mining history.

A downtown main street with earlier commercial buildings (foreground) next to new higher-density housing (background).

New, medium-density housing in downtown Plano near the Downtown Plano DART station.

Intermodal Facilities

Intermodal Hub, Salt Lake City, UT

The Salt Lake City metro area is sandwiched between the Wasatch Mountains on the east and Great Salt Lake on the west. It lies at the center of a string of cities running from Logan and Ogden to the north to Provo to the south. Early transcontinental railroads ran mainly north-south through Salt Lake City, with passenger stations located west of downtown.

The site for the Intermodal Hub is an abandoned rail yard that needed brownfield cleanup. Following the reclamation of the warehouse/heavy rail district on the edge of downtown, the goal is to fill in the area with mixed uses between the former railroad stations and the new Intermodal Hub (**Figure 20**). The Hub will include a new Amtrak station, Greyhound bus service, bike parking, auto parking, and a light rail stop. By 2009, pedestrians, bikes, cars, city buses, light rail, and commuter rail service will converge at the Hub.

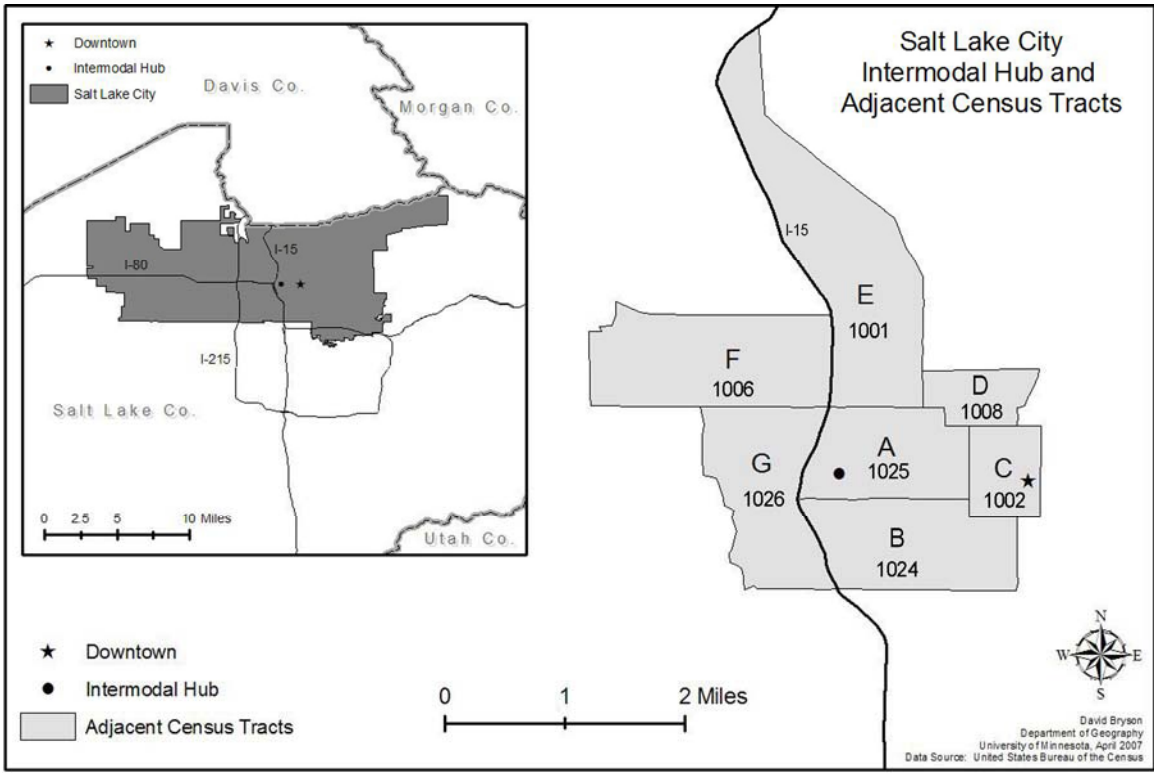


Figure 20. Salt Lake City Intermodal Hub and Adjacent Census Tracts. Tract letters correspond to Table 18.

The metro area of one million is one of the fastest-growing in the U.S., up 26 percent in the 1990s, and adding 66,000 more between 2000 and 2005 (**Table 18**). Thus, there is steady growth to allocate and to direct with effective land use and transportation planning.

Table 18.—Family Incomes, Housing Values, and Contract Rents Compared with Metro Averages, 1989/1990 and 1999/2000, in Tracts Adjacent to the downtown Intermodal Transit Hub, Salt Lake City, UT

	Median Family Income ($)		Median Value of Owner-Occupied Housing ($)		Median Contract Rent ($)		Population	
Adjacent Census Tracts	1989 (a)	1999 (b)	1990 (c)	2000 (d)	1990 (e)	2000 (f)	1990	2000
1001	14,219	27,500	39,100	104,400	218	457	1,449	1,587
1006	23,346	34,387	46,100	98,300	267	527	5,007	6,573
1008	29,727	41,786	91,700	167,600	309	457	2,197	2,204
1022	51,316	23,750	0*	97,200	359	522	577	693
1024	15,556	26,250	40,900	85,800	207	611	527	596
1025	12,404	40,446	36,900	325,000	185	485	937	1,663
1026	17,568	32,594	37,000	96,600	255	483	3,224	4,343
Salt Lake City	29,697	45,140	67,200	152,400	282	516	159,936	181,456
Salt Lake County	34,699	54,470	71,000	153,500	316	578	725,956	898,387
Salt Lake City-Ogden UT, MSA (g)	35,239	54,470	71,000	148,300	313	564	1,072,227	1,333,914

Adjacent Census Tracts	Income Ratio, 1989 a ÷ g	Income Ratio, 1999 b ÷ g	Housing Value Ratio, 1990 c ÷ g	Housing Value Ratio, 2000 d ÷ g	Contract Rent Ratio, 1990 e ÷ g	Contract Rent Ratio, 2000 f ÷ g	2000 Pop ÷ 1990 Pop
1001	.40	.50	.55	.70	.70	.81	1.10
1006	.66	.63	.65	.66	.85	.93	1.31
1008	.84	.77	1.29	1.13	.99	.81	1.00
1022	1.46	.44	NA	.66	1.15	.93	1.20
1024	.44	.48	.58	.58	.66	1.08	1.13
1025	.35	.74	.52	2.19	.59	.86	1.77
1026	.50	.60	.52	.65	.81	.86	1.35
Salt Lake City	.84	.83	.95	1.03	.90	.91	1.13
Salt Lake County	.98	1.00	1.00	1.04	1.01	1.02	1.24
Salt Lake City-Ogden, UT MSA	1.00	1.00	1.00	1.00	1.00	1.00	1.24

Data Source: U.S. Bureau of the Census. MSA as defined by OMB, 6 June 2003. *Number of owner-occupied housing units too few to provide meaningful median value; calculations by the authors. NA = not available.

Cities north and south of Salt Lake City are growing; commuter rail service is planned to link the cities in the corridor. The Intermodal Hub will bring together commuter rail service, local and long-distance bus, and local light rail service.

The original railroad stations serving downtown–the Union Pacific and the Rio Grande–were four blocks west of downtown. The Hub is four blocks farther west, with old and underused warehouses and industrial land between the old rail stations and the current edge of downtown. The plan is to use the Hub and the traffic it generates as a stimulus to land redevelopment linked with the Hub and downtown activity.

Continued metro area growth, a sustained vision for redevelopment, continued financing of redevelopment, and cooperation among cities in the corridor brought together organizations representing large and small businesses, the city planning department, the city's and economic development office, the redevelopment agency of the Mormon Church (Property Reserve, Inc.), and the city's redevelopment agency.

Design has been completed and the bus terminal is in use. Next will be the Amtrak terminal, followed by extension of the light-rail line from downtown, which will then proceed to the international airport.

The north-south rail lines were rerouted west to the Hub, releasing land for mixed-use housing, commercial and office development in and around the old rail stations. This type of medium-density, mixed-use development is expected to fill in the area west to the Hub in the years ahead relying on the Hub and providing patronage to it.

Railroads and Interstate 15, which runs north-south parallel with the railroads, raise a barrier to lower-income neighborhoods west of the Hub. Residents complain of railroad noise now that train traffic has been rerouted west to the Hub and closer to them while restricting their east-west movement to the center of the city.

(top) Salt Lake City Intermodal Hub at the western edge of downtown connects regional traffic on highways and rail with local movement by transit, cars and pedestrians, and eventually will be linked by transit to the international airport. It supplies Salt Lake City with expanded reach to Ogden and Provo and beyond, while stimulating redevelopment of old industrial and railroad land. (bottom) The completed northern end of the Hub contains the bus terminal at ground level, with offices above.

(above) Looking south toward the Hub entrance. The northern half of the Hub building houses the Greyhound Bus terminal and offices.
(below) Between the Hub and the downtown center, the old Rio Grande railroad station now houses a historical museum.

Obsolete industrial land uses between the Intermodal Hub and the downtown center are being replaced since north-south rail lines were relocated farther west to link with the Hub, allowing new uses and modern facilities to replace them.

Vacant industrial land adjacent to the Hub, awaiting redevelopment.

CenterPoint Intermodal Center, Joliet, IL

The CenterPoint Intermodal Center (CIC) is a regional facility for container freight trans-loading and warehousing, located along a corridor of heavy freight transfer between Chicago and the Mississippi River. It is the largest freight logistics center in North America, sited within the rapidly growing Chicago market area. The CIC is part of a regional economic development strategy, facilitated by cooperation among state and local government, Burlington Northern Santa Fe (BNSF) Railway, and 13 local communities along U.S. Route 34 Logistics Corridor, stretching from Greater Chicago to within 30 miles of the Mississippi River.

This is an example of an effort both to revitalize aging and isolated communities, and to facilitate the growing traffic in intermodal freight in the area. Intermodal freight is the fastest growing sector in the railroad industry. Growth in the rail-truck modality is driven by growth in trade and by cost efficiencies. Growth in container freight traffic is being driven by expansion in overseas trade, especially in the Pacific Rim. The CIC provides an inland location, access to ports on both coasts, excellent rail and highway links, and air cargo access via Chicago (**Figure 21**).

The facility sits on 770 acres, on land reclaimed from the U.S. Army Joliet Arsenal and from railroad property (**Figure 22**).

This regional facility has been developed to facilitate the timely and orderly transfer, storage, distribution and movement of container freight. The facility has reclaimed a large brownfield site, and provides jobs and jobs training in operations management and engineering. This facility required a large parcel of land, with good connectivity to rail and highway. The design had to include space and connections for multiple rail trans-loading facilities.

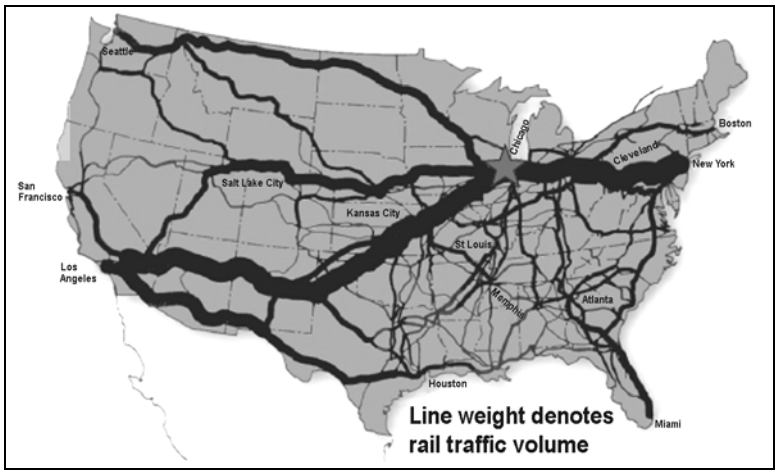


Figure 21. U.S. Rail Traffic Volume, 2004.
Source: U.S. Department of Transportation.

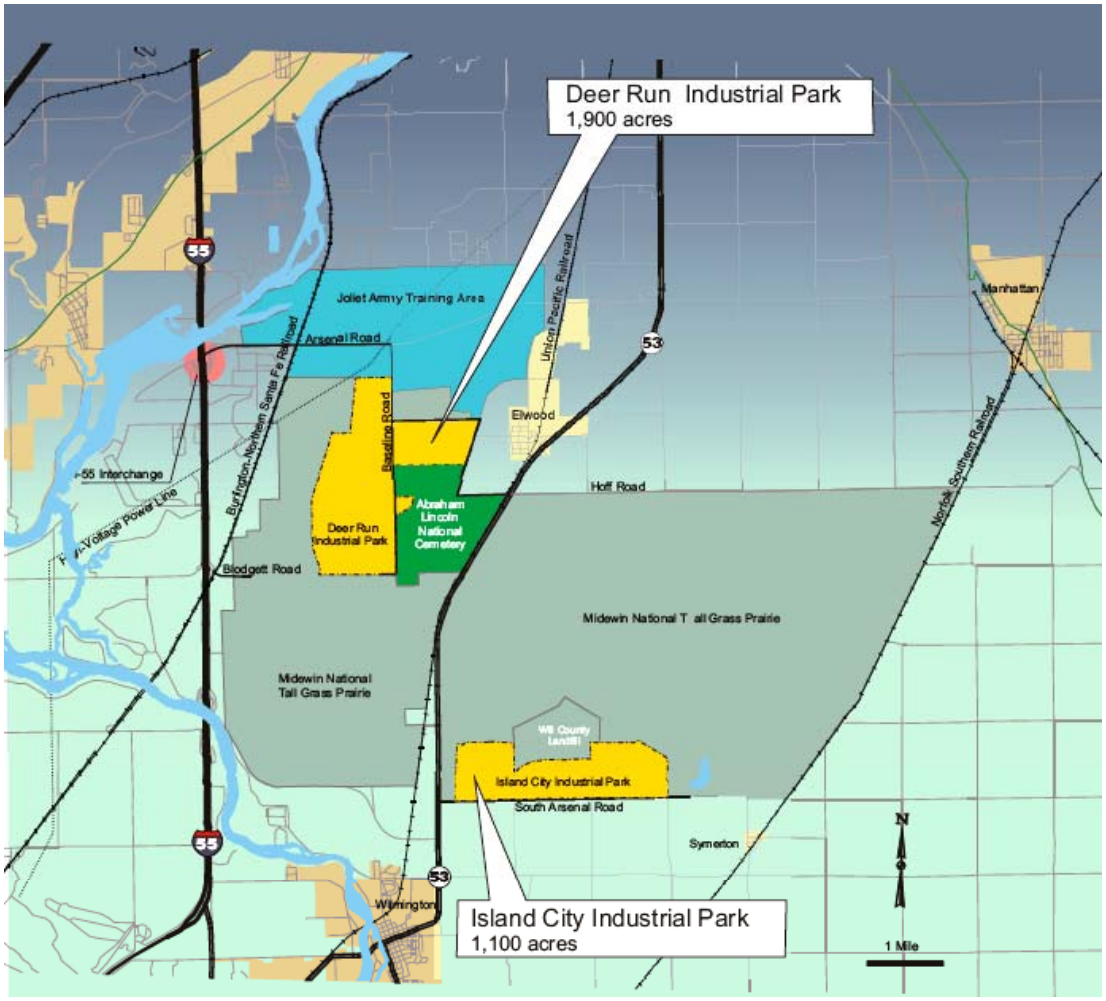
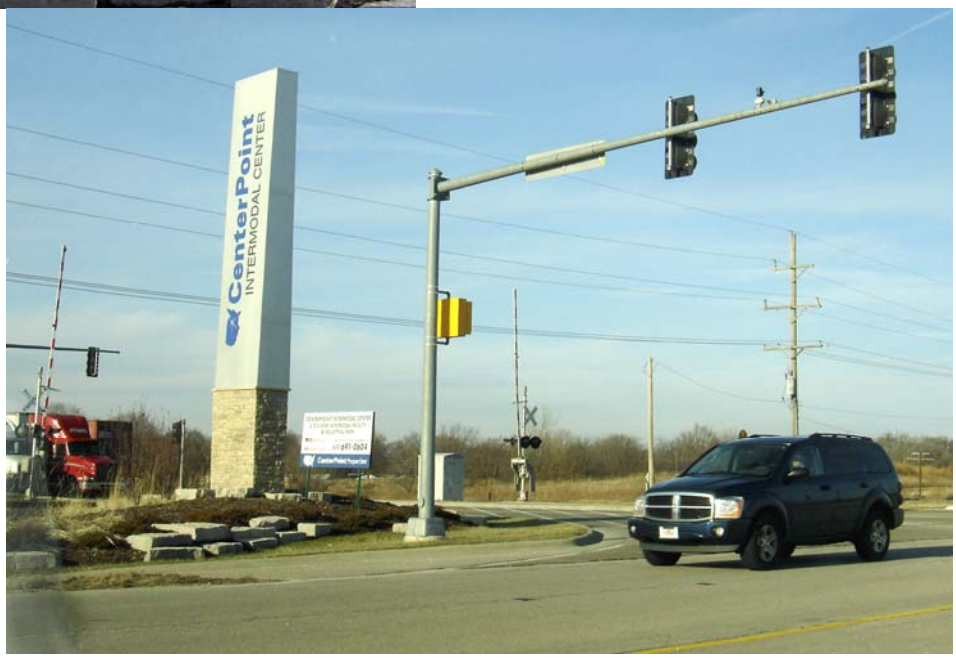


Figure 22. Joliet Arsenal Redevelopment Site and Surrounds.
Source: Strategic Plan for development of the Joliet Arsenal Development Authority property. Executive Summary. Joliet, IL: Joliet Arsenal Development Authority.

The warehousing, distribution and transfer space and access to transportation links is organized to attract the growing number of the largest global users of distribution space, such as Wal-Mart and Potlatch, and a number of foreign distributors, for whom access to West Coast ports is critical. Road and highway plans include increased connectivity for the facility, through additional transportation links with the region and the nation.

The International Union of Operating Engineers training facility provides jobs training and a continuing supply of workers for the sophisticated logistics utilized within the intermodal center. This population growth and facility development have helped to relieve unemployment in Will County (**Figure 23**). The nearby townships are expected to increase by over 400 percent by 2030, while job growth is predicted at over 500 percent.

CenterPoint Intermodal Center near Joliet, IL, brings together rail and highway freight movement, with nearby links with waterborne freight movement.



The 2,200-acre intermodal facility and industrial park provides modern and efficient movement of containers from rail to warehouse, and from warehouse to trucks for final distribution. State-of-the-art logistical software systems keep track of every shipment in this complex system.

Freight travels in containers, from around the world to U.S. ports, by rail through the intermodal hub, onto trucks, and across the nation.

Wal-Mart's massive distribution center. Using state-of-the-art logistical software, freight is distributed from containers to warehouses to trucks, for delivery to Wal-Mart's retail sites.

Chapter 4:

Summary and Conclusions

Our study identified and described a set of conceptual frameworks and quantitative methods for assessing selected economic development impacts of well-designed transportation projects. In our review of the literature together with on-site inspections of a series of case studies across the United States, we distilled a series of lessons learned, best practices, and metrics for assessing outcomes.

The choice of a project *site* matters, whether it is a greenfield location or a redevelopment. It also makes a difference whether the project is located in a fast-growing metro area, a stable one, or one that is losing population and other resources. Moreover, prevailing land prices and the regulatory environment set limits on what can be done successfully.

It's important to distinguish *economic development* from *real estate development*. Economic development brings resources into fuller production of valued goods and services in ways such that overall benefits exceed overall project costs over time. Economic development is often accompanied by real estate development and, in some cases, real estate development provides a catalyst for economic development.

Projects can be implemented in different parts of a metro area, from the downtown to the outer suburbs, and the distance of the project from the core can affect conditions for a project's success. In addition, a project can be implemented in different sectors of a city or metro area (e.g., elite, upper-middle class, middle class, working class, poor), with the choice of sector influencing the project's prospects for success.

The appropriate geographical framework for assessing the economic impact of a project normally extends well beyond the immediate site of the project. A community transportation project is implemented within a specific geographic setting (e.g., a building, a block, a corridor, a neighborhood), but each setting, in

turn, exists within a series of ever-wider spatial frameworks (e.g., city, county, metro area, state) with which it is linked in various functional ways.

A well-designed project can improve a community's balance sheet by enhancing assets and diminishing liabilities, and increasing the flow of net benefits to the community over time. But it is important when evaluating changes occurring in a project area to distinguish *absolute change* from *change relative to metropolitan-wide measures*. For example, household incomes in 1990 and 2000 in and near the project area should be compared with metro averages to determine whether the area is holding its own, rising in rank, or slipping. The same kinds of comparisons are needed for land process, housing values, rent levels, retail sales, jobs, commercial-industrial investment, and so on.

For projects to succeed, there needs to be a sustained vision that defines realistic goals, and instills them in the outlooks of individuals and communities associated with the project. In addition, there needs to be consistent community or organizational leadership to sustain efforts over the years. Successful project outcomes require sustained activity over decades.

Finally, a solid and consistent financial foundation is vital to ensure a successful project. Available "up front" investment funds, followed by a consistent stream of continuing investment and maintenance money year after year, will be needed for a project to succeed.

Endnotes

[1] Robert Dunphy, Deborah Myerson, and Michael Pawlukiewicz. 2003. *Ten Principles for Successful Development Around Transit*. Washington, DC: ULI—the Urban Land Institute.

[2] Forkenbrock, David J. and Glen E. Weisbrod. 2001. *Guidebook for Assessing the Social and Economic Effects of Transportation Projects*. Report No. 456, National Cooperative Highway Research Program (NCHRP). Washington, DC: Transportation Research Board, National Research Council.

[3] *ibid*., pp. 21-25.

[4] *ibid*., pp. 25-26.

[5] *ibid*., p. 26.

[6] *ibid*.

[7] *ibid*.

[8] Based on John S. Adams and Barbara J. VanDrasek. *Urbanization of Minnesota's Countryside, 2000-2025: Evolving Geographies and Transportation Impacts*. Report no. Mn/DOT 2006-23. Minneapolis, MN: Center for Transportation Studies, University of Minnesota. June 2006. http://www.cts.umn.edu/Research/ProjectDetail.html?id=2004038

[9] The Unity Council. Fruitvale Neighborhood Characteristics. 2007. http://www.unitycouncil.org/community1.htm

[10] DataQuick report, *San Francisco Chronicle*, Sunday March 2, 2003.

[11] LANI Web site. 2007. http://www.lani.org/program_overview.htm

[12] Mahyar Arefi. 2003. "Revisiting the Los Angeles Neighborhood Initiative (LANI): Lessons for Planners," *Journal of Planning Education and Research* 22, p. 384.

[13] Transportation Research Board. 1997. "Los Angeles Neighborhood Initiative: Rebuilding Disinvested Neighborhood "Main Streets" from the Bus Stop Up." Case Study 5-2 in *The Role of Transit in Creating Livable Metropolitan Communities*. Transportation Cooperative Research Program (TCRP). Washington, DC: Transportation Research Board, pp. 42-45.

[14] Arefi *op. cit.*, p. 385.

[15] *ibid*.

[16] Metropolitan Council of the Twin Cities