Analyzing Private Investment in the Chicago Transit Authority: The Potential for Joint Development

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1. Introduction

> "Transportation is the lifeblood of an urbanized society, and the health and welfare of an urbanized society depend on providing efficient, economical, and convenient transportation in and between urban areas."
>
> 49 U.S.C. 5301.

Title 49, Chapter 53 of the U.S. Code addresses the need to foster the development and revitalization of public transportation systems. With more than two thirds of the American population living in urbanized areas, there is an increasing need for comprehensive, efficient and high quality public transit to ensure the vitality of cities. Yet, the insufficient capacity of the government to meet the increasing demand for public transportation requires a critical look at alternative tools that support mass transit. One strategy is joint development. Joint development is a public-private partnership at, adjacent, or near a transit facility in which the private partner(s) help offset the costs of improving a transit facility with the recognition that improved facilities can enhance the surrounding area. This strategy has proven successful in cities like Washington DC, but has not been adequately pursued in Chicago due to challenges unique to CTA.

I argue that fostering joint development is a worthwhile goal in Chicago as it will support public transportation and provide considerable benefits to the transit agency, the private partner(s), and the general public. In this paper, I will first review the challenges facing mass transit today and the strategies that can address these challenges. Then, from an extensive literature review and interviews with transit officials, I will then identify the benefits and challenges to joint development to illustrate the opportunities and obstacles of implementing these type of projects within the CTA. The centerpiece of my research is a case study on a recent joint development project in Chicago: the CTA and Apple partnership for the refurbishment of the North and Clybourn Red Line station. Finally, I will analyze the potential of pursuing joint development in Chicago and recommend ways to encourage its use. While I find that joint development cannot solve all the challenges of mass transit, it is certainly a worthwhile means to support the lifeblood of America's urbanized societies.

2. Challenges facing Mass Transit

Mass transit faces three main challenges: social and cultural preference of automobiles, aging infrastructure, and lack of funding.

2.1 Social and Cultural Implications

The history of mass transit in the twentieth century describes the shift from public transit to private automobiles, and suburbanization of the nation. Public transport is often regarded as an inferior good, meaning a good that individuals use less as their incomes rise. The Organisation for Economic Co-operation and Development (OECD) asserts that a fundamental challenge is to "reinvent public transport to encourage the return of the more affluent class."[1]

[1] Organisation for Economic Co-operation and Development, *Regulation of Urban Transit Systems.*

Public transport is not well-adapted to the increasingly complex living and work patterns of individuals. The OECD notes, "people are in favour of developing public transport, but in fact most of them use their cars. Public transport is a valuable as an option: people are keen on keeping this option open, even if their actual behavior proves the contrary."[2]

2.2 Condition of America's Aging Transit Systems

The Federal Transit Administration (FTA)'s April 2009 *Rail Modernization Study* assesses the level of capital investment required to attain and maintain a state of good repair (SGR) for the nation's seven largest rail transit operators. SGR is defined using FTA's Transit Economic Requirements Model (TERM) and is based on the asset's type, age, rehabilitation history, and other factors. The study finds that "more than one third of the agencies' assets are either in marginal or poor condition, indicating these assets are near or have already exceeded their expected useful life."[3]

2.3 Funding Matters

Mass transit is currently funded through a combination of federal dollars, state and local taxes, and the fare box. Funding can be divided into two main categories of expenses: operating and capital costs. CTA fare box revenue covers roughly 45 percent of operating costs and the rest is covered primarily by the Regional Transportation Authority.[4] Reduced fare subsidies, advertising and concessions, and contributions from local governments are other small sources of revenue for operations. CTA's capital costs are funded primarily through the Federal Transit Administration (FTA), the Illinois Department of Transportation (IDOT), the Regional Transportation Authority (RTA), and CTA bonds.[5] However, in poor economic times with poor tax receipts, funding from the government is simply insufficient.

Funding is arguably the biggest challenge facing mass transit systems. In March of 2009, the *New York Times* reported drastic fare hikes and service cuts to cover the Metropolitan Transportation Authority's $1.2 billion budget deficit.[6] In October of 2009, the *Washington Post* reported similar cuts.[7] In the same month, the *Chicago Tribune* announced the CTA's budget proposal to cut services and raise fares to cover a projected $300 million budget deficit.[8] In August 2009, Transportation for America reported, "Nearly 90 percent of transit systems have had to raise fares or cut service in the past year and among the 25 largest transit operators, 10 agencies are raising fares more than 13 percent."[9]

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[2] Ibid.
[3] Federal Transit Administration, *Rail Modernization Study*.
[4] Chicago Transit Authority, *Financial Statements and Supplementary Information*.
[5] Ibid.
[6] Neuman, "M.T.A. Votes to Raise Fares and Cut Service."
[7] Hohmann, "Metro Bracing to Make Further Cuts."
[8] Hilkevitch, "CTA plan: $3 for train, 25-cent bus fare hike, job losses."
[9] Transportation for America, *Stranded at the Station*.

3. Meeting the Challenges of Mass Transit

Public-private partnerships, transit-oriented development, value capture and joint development are four strategies that can address the challenges facing mass transit. A brief overview of these concepts provides the necessary context for this policy paper.

3.1 Public-Private Partnerships

The U.S. Department of Transportation defines public-private partnerships (P3s or PPPs) as "contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery of financing of projects."[10] The National Council on Public Private Partnerships expands on this definition, noting that through this agreement, the skills and assets of each sector are shared in delivering a service or facility. In addition to the sharing of resources, each sector shares in the risks and rewards.[11]

3.2 Transit-Oriented Development

Transit-oriented development (TOD) has attracted considerable interest as a way to leverage economic development, respond to shifting market demands and lifestyle preferences, and promote smart growth in the center of the city. The California Department of Transportation defines TOD as "moderate to higher density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use."[12]

3.3 Value Capture

Value capture is a transit finance tool that captures the value created from a transportation investment. Specifically, beneficiaries of transit such as landowners and developers contribute to the expected benefits that result from the transportation improvement before the investment. The Center for Transportation Studies (CTS) at the University of Minnesota describe eight mechanisms to capture the created value from transportation investments and improvements: land value taxes, tax increment financing, special assessments, transportation utility fees, development impact fees, negotiated exactions, air rights, and joint development.[13]

3.4 Joint Development

The International Economic Development Council defines joint development as a "public-private partnership designed to decrease the costs of operating or constructing public transportation systems, stations or improvements through creative public-private financing arrangements."[14] Cervero, Landis and Hall's definition of joint development includes the

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[10] Federal Highway Administration, "P3 Defined."
[11] National Council on Public Private Partnerships.
[12] Transit Cooperative Research Program, *Transit-Oriented Development and Joint Development*, 6.
[13] Center for Transportation Studies at University of Minnesota, *Value Capture for Transportation Finance*.
[14] Zhirong et al., "Joint Development as a Value Capture Strategy in Transportation Finance."

"recognition [from both parties] of the enhanced real estate development potential or market potential created by the sitting of a public transit facility."[15]

Joint development is considered a value capture strategy because the benefits created by the final transportation improvements are "partially captured" to support the development in the first place. Joint development typically comes in four forms[16]: 1) the leasing of land parcels, development rights or unimproved space (land, air, or subsurface) from the transit agency to private developers or commercial tenants; 2) incentive-based agreements in the form of density bonuses, additional floors, or additional floor-area ratio (FAR) to developers in exchange for a transit improvement; 3) connection fee programs, where a private tenant pays for the right to connect to a transit project, paid through a one-time fee or annual connection charge; 4) mutual sharing of construction costs between the public and private entities.

4. Methodology

I argue that joint development is a worthwhile goal in Chicago that supports public transportation and provides considerable benefits to the transit agency, private partner and general public. To determine the potential benefits and limitations of joint development, I conducted a literature review and interviewed transit officials from the Washington Metropolitan Area Transit Authority (WMATA), Metropolitan Transportation Authority (MTA) and the Southeastern Pennsylvania Transportation Authority (SEPTA). The literature review and interviews reveal lessons learned from past projects, and illustrate procedural barriers and incentives to joint development.

The centerpiece of my research is a case study on the 2010 CTA and Apple joint development project, the first PPP deal of its kind in Chicago. Apple invested $3.897 million in improvements to the North and Clybourn Red Line station. I interviewed relevant parties involved in or knowledgeable about the deal: the CTA, an Apple expert, the general public, and area businesses (See Appendix for all methodology instruments).

5. Benefits and Success of Joint Development

The literature review and interviews with transit officials reveal four major benefits to joint development: enhanced property values, increased revenues, increased transit ridership, and improved urban form.

5.1 Enhanced Property Values

There is a strong connection between transit accessibility and land value. In an empirical study of residential land values in southwest Chicago before and after the construction of CTA's Orange Line, McDonald and Osuji found that properties within one-half mile of planned station sites rose in value by 17 percent.[17] Gruen Gruen & Associates studied ninety-six Chicago area CTA and Metra stations and concluded that apartments located closer to transit stations have higher rents and higher occupancy rates than comparable apartments located further away.[18]

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[15] Cervero et al., *Transit Joint Development in the United States*, 4.
[16] Zhirong et al., "Joint Development as a Value Capture Strategy in Transportation Finance," II-158.
[17] McDonald and Osuji, "The effect of anticipatd transportation improvement on residential land values."
[18] Gruen Gruen & Associates, *The effect of CTA and Metro stations on residential property values*.

In Cervero's study of commercial properties around five joint development projects in Washington D.C. and Atlanta, office rents at or near stations were 15 percent higher than rates for comparable properties elsewhere (roughly three dollars more per gross square foot).[19] A 1993 study of office development around twenty-five BART stations in the San Francisco area found increased land values within 1,000 feet of a station.[20] Another San Francisco study found that the land price within ¼ mile of a station was $74 per square foot and decreased to $30 per square foot as one got farther away from the station.[21] Commercial buildings at or near transit stations, particularly stations in which there has been joint development, outperformed the broader real estate market during the 1980s. Transit system ridership was positively correlated with office rent premiums, low vacancy rates, and high absorption rates.[22]

5.2 Increased Revenue to the Public Sector

Joint development can generate revenue directly through land leases or development rights and indirectly by attracting new riders and raising more tax revenue from surrounding businesses. The few empirical studies show that the amount of revenue generated is small. While joint development may not play a significant role in transit financing, with less investment from federal and state agencies, every investment in transit counts. As Paley stresses, "Every station is significant. Whenever you're investing in any station, it's never a small amount of money – it's always significant."[23]

In Cervero, Landis and Hall's comprehensive study of 117 joint development projects, the projects have yet to generate a great deal of income for local transit operations. With the exception of New York City's system, "capital contributions from joint development have generally amounted to less than 1 percent of yearly capital expenditures. Furthermore, annual payments generally account for an even smaller share of annual operating costs."[24] The study also found that transit officials did not see revenue as the primary benefit of joint development; only seven of the 117 respondents believed joint development could have a substantial revenue yield.[25] My interviews reflected this sentiment. "[Joint development] is never going to be a big part of the funding equation … It really is not so much a funding opportunity as it is an opportunity to use real estate and transit facilities to effectively and creatively maximize the full public benefit."[26]

Joint development is still a relatively new practice, with few project examples to fully measure its financial implications. Washington Metropolitan Area Transit Authority (WMATA) is recognized as the leader in joint development; between 1970 and 2002, WMATA entered into thirty-eight joint development projects that generated approximately $6 million dollars in annual revenues.[27] As of 2006, the WMATA reported fifty-eight joint development projects

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[19] Cervero, "Rail Transit and Joint Development."
[20] Cambridge Systematics, *Economic Impact Analysis of Transit Investments.*
[21] Doherty, "Funding public transport development."
[22] Cervero et al., *Transit Joint Development in the United States*, 147.
[23] Interview with Robert Paley, director of transit-oriented development, MTA, March 15, 2010.
[24] Cervero et al., *Transit Joint Development in the United States*, 162-163.
[25] Ibid., 95-96.
[26] Interview with Robert Paley, director of transit-oriented development, MTA, March 15, 2010.
[27] Cervero et al. *Report 102: Transit-Oriented Development*, 9.

and average annual revenues of $15 million.[28] Other cities have seen more modest financial benefits from joint development. As of 2004, Los Angeles Metropolitan Transportation Authority received nearly $3.5 million annually in air-rights lease revenues.[29] San Francisco's BART receives $75,000 annually in ground-lease revenue at the Castro Valley Station.[30]

5.3 Increased Transit Ridership

Transit officials intuitively support joint development because it draws individuals to station areas, thereby increasing system patronage.[31] A key concern is whether joint development generates new transit trips or simply redistributes transit trips from one area to another.[32]

Leck found that the built environment, population density, and employment density exert a strong influence on travel behavior, even when controlling for sociodemographic variables such as income and age. He found that residents who live in more diverse urban environments are more likely to commute by transit.[33] Lund, Cervero and Wilson determined that residents living near transit stations are about five times more likely to commute by transit than the average resident that works in the same city.[34] To the extent that joint development does stimulate high-density development, individuals have a greater likelihood of choosing transit over other alternatives and increase overall system patronage.

In a 1983 study of nine joint development projects, Keefer estimated that every one thousand square feet of new commercial development at or near a transit station generated an additional six trips per day and between 37 to 82 percent of these were new trips. Keefer postulated that nine joint development projects increased annual fare box revenues by $11.4 million.[35]

5.4 Improved Urban Form

Rapid suburbanization and urban sprawl inefficiently consume land, causing farmland, natural areas, and other open spaces to disappear quickly and produce fiscal and quality of life problems. Sprawling growth costs more than $21,00 per residential and nonresidential development.[36] In response to the costs of urban sprawl, new planning theories have been championed. New Urbanism promotes pedestrian-friendly and diverse neighborhoods with accessible public spaces and community institutions.[37] Smart Growth promotes compact, pedestrian-friendly neighborhoods, community and stakeholder collaboration, place-making, mixed-land uses, open space, and transit-oriented development.[38]

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[28] Bottigheimer, "Redefining What We Expect From Joint Development."
[29] Cervero et al. *Report 102: Transit-Oriented Development*, 20.
[30] Ibid.
[31] Interviews with Bill Trumbull, general manager of real estate and asset management, the CTA, February 16, 2010, Robert Paley, director of transit-oriented development, the MTA, and Joseph Chan, director of real-estate development, the Metropolitan Transportation Authority, March 15, 2010.
[32] Cervero et al., *Transit Joint Development,* 163.
[33] Leck, "The Impact of Urban Form on Travel Behavior: A Meta-Analysis."
[34] Lund, et al. *Travel Characteristics of Transit-Oriented Development in California.*
[35] Keefer, *An Interm Review of Nine UMTA-Assisted Joint Development Projects.*
[36] Burchell et al., *Sprawl Costs*, 50-63
[37] Congress for the New Urbanism, "Charter of the New Urbanism."
[38] Smart Growth Network, "About Smart Growth."

To the extent that joint development promotes transit use and catalyzes development in the area, JD has the potential to: reduce automobile dependency, increase pedestrian and bicycle-originated transit trips, foster safe station areas, enhance surrounding area connections to stations including bus access, provide mixed-use development, and enjoy active public spaces near stations.[39] Joint development supports urban planning principles that seek to resolve the costs of urban sprawl.

6. Barriers and Challenges to Joint Development

Despites its benefits, "joint development has not yet been adopted *as a major element or centerpiece of transit agency policy.* If anything, joint development has occurred in different ways and for different reasons, often through the leadership of individuals whoa re not employees or officials of a transit agency."[40] The literature review and interviews with transit officials reveal barriers during the planning stages, challenges during implementation, and obstacles to joint development unique to Chicago.

6.1 Barriers to Joint Development in the U.S.

The goals and actions that characterize public and private agencies create certain challenges to the planning and implementation of joint development projects.

First, the mission and spirit that characterize public and private agencies are at odds. Most transit agencies focus on operations – the delivery of quality, affordable rail and bus services that link people, jobs, and communities. Real estate business is typically limited to leasing concessionary spaces within transit stations.[41] Joint development is not within the purview of transit agencies. Additionally, the bureaucratic rules and regulations that characterize public agencies conflict with the entrepreneurial, risk-taking and creativity of private partners in joint development.

Second, existing transit systems were considered in "cold" real estate markets where relatively little development was occurring. Until the late 1970s, the majority of new development occurred in suburban areas. With a limited supply of land in "hot" real estate areas, transit agencies did not realize they had valuable real estate.[42] The absence of valuable land, the key ingredient in development, prevents the pursuit of joint development.

Finally, prohibitive legislation and complicated property rights prevent agencies from pursuing joint development. Flemming notes that SEPTA's legislation prohibits developing property for money; in other words, private parties must drive joint development.[43] Paley notes that the MTA is composed of many operating agencies, each of which is a successor to a railroad, transit operator, or other body that held its properties in a variety of ways. Many of these properties are reversions, where properties are given to railroads with certain development conditions; if the property is not developed for transit, the land reverts back to the original property owner.

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[39] Washington Metropolitan Area Transit Authority, "Joint Development & Real Estate."
[40] Cervero et al., *Transit Joint Development*, 55.
[41] Ibid.
[42] Ibid.
[43] Interview with Alex Flemming, senior long-range planner, SEPTA, March 8, 2010.

Paley asks, "If you sell your property as a transit agency because you're going to do joint development, does that kick in the reverter?"[44]

6.2 Challenges During Implementation of Joint Development

A private partner's interest in joint development may be short-lived when working with a public agency's bureaucracy. Joint development projects take time, and there must be sustained interest and someone championing the project.[45] Unforeseen technical problems such as building over tracks, on top of subways, or in other very constrained environments, may complicate plans, increase costs, and exceed project timelines.[46]

Settling the private-sector dollar contribution can be an obstacle. Cervero, Landis and Hall found that approximately half of all transit agencies surveyed had some difficulty negotiating the amount and type of private contribution.[47] The lack of formal guidelines and policies among transit agencies waste time and make it difficult to decipher the goals and responsibilities of each party in the project. Paley notes that real-estate development is complicated by a broad range of constituencies with different interests and needs, localities, transportation needs, and broader regional needs.[48]

Most importantly, no joint development can overcome weak market conditions.[49] All transit officials interviewed commented that development must be market driven. Chan notes that Long Island's Ronkonkoma station successfully established station retail; however, because the market turned, the project has yet to create the expected real estate development.[50]

6.3 Obstacles to Joint Development Unique to Chicago

First, much of Chicago's transit system is elevated, with stations that exit to the street level and few that are connected to adjacent buildings. Development at the elevated level can be more complicated from an engineering standpoint compared to developing on or adjacent to the subway station.

Second, large stretches of CTA's rail lines run parallel to, or are within the rights-of-way of either commercial rail lines or interstate divided highways.[51] While running transit along the median of an interstate may save the transit agency from paying for a new right-of-way, it decreases transit accessibility for riders and eliminates opportunities to promote higher densities and economic growth around the stations.[52]

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[44] Interview with Robert Paley, director of transit-oriented development, the Metropolitan Transit Authority, March 15, 2010.
[45] Ibid.
[46] Ibid.
[47] Cervero et al., *Transit Joint Development*, 95.
[48] Interview with Robert Paley, director of transit-oriented development, the Metropolitan Transit Authority, March 15, 2010.
[49] Cervero et al., *Transit Joint Development*, 177.
[50] Interview with Joseph Chan, director of real-estate development, Metropolitan Transit Authority, March 15, 2010.
[51] Chicago Transit Authority et al., *Transit Friendly Development Guide: Station Area Typology.*
[52] Dunphy et al. *Ten Principles for Successful Development Around Transit*.

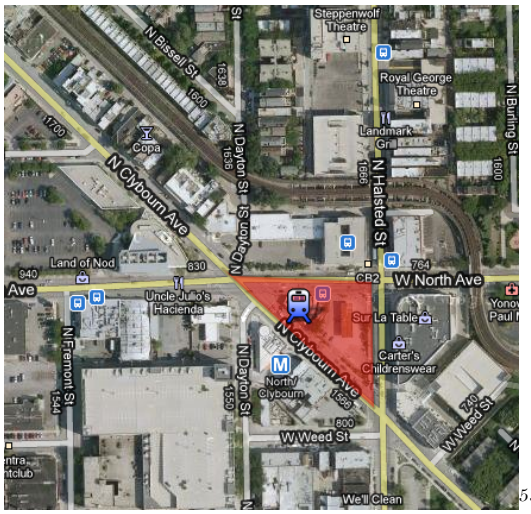
Third, a large number of transit stations are owned by the city of Chicago while the CTA operates and maintains the system.[53] If the CTA were to initiate joint development, the CTA would have to coordinate with the private partner, the city and other relevant bodies.

Fourth, the CTA has a short list of unused properties, much of them acquired through federal dollars that restrict uses to specific transit services.[54] For example, the CTA cannot develop an electrical substation nor can it develop under a right of way below the tracks.

7. Case Study: CTA and Apple Public-Private Partnership

The CTA and Apple partnership for the refurbishment of the North and Clybourn Red Line station is the first major joint development project for the Chicago Transit Authority. This case study examines the deal from the perspectives of the public, Apple, the CTA, and area businesses.

71. Overview of the Partnership



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In 2007, *Crain's Chicago Business* announced Apple's interest in opening a second retail store in Chicago, speculating over two locations: a 6,000 square foot space in Block 37 or an 18,4000 square foot parcel occupied by a BP station in the Clybourn corridor.[56] Apple ultimately chose to close a deal with M Development LLC for the triangular parcel bounded by North and Clybourn Avenues and Halsted Street. In April 2009, Apple had signed a long-term lease at the North Avenue location to pay an annual rent of approximately $700,000.[57]

Soon after, on August 12, 2009, Apple entered into a three-way contract with the Chicago Transit Authority and the City of Chicago. In the agreement, passed as Ordinance No. 009-92, Apple paid up to $1.789 million for the exterior work and up to $2.108 million for the station

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[53] Interview with Bill Trumbull, general manager of real estate and asset management, the Chicago Transit Authority, April 22, 2010.
[54] Ibid.
[55] Maps from *Crain's Chicago Business* and Google Maps.
[56] Corfman, "Apple eyes Clybourn corridor."
[57] Corfman, "Apple picks North & Clybourn."

interior and platform level. In return, the city of Chicago leased the bus turnaround to Apple for ten years at no charge and the CTA granted Apple "right of first refusal for naming/sponsorship rights at the station in the event that the Authority chooses to offer such rights for sale" and "Right of first refusal to place advertising at the station through the Authority's advertising corridor, if any."[58] Construction for Apple's second retail store began in summer 2009 and construction on the CTA station began in fall 2009.

7.2 The Public Perspective: Survey of Transit Riders

Changes to the transit system affect the public directly, and it is important to keep the public in mind when pursing joint development deals. I surveyed thirty transit riders on the platform level of the North and Clybourn Station in the winter of 2010 to gain public perspective on private investment in mass transit (See Appendix). The surveys gathered riders' opinions about the quality of the CTA station, the quality of the surrounding neighborhoods, those who should be responsible for investing in transit, and the Apple-CTA public private partnership.

As detailed in Tables 1 & 2, riders found the quality of the CTA station to be generally poor while the surrounding area to be generally good or attractive. This disparity between station and location suggests the need for improvements on the dilapidated station to match the quality of its surroundings.

Table I: Transit Riders Rate the Quality of the North and Clybourn Station

	1 Very Poor n / %	2 Poor n / %	3 OK n / %	4 Good n / %	5 Excellent n / %
Station Interior	3 / 10	11 / 37	14 / 47	2 / 7	0 / -
Station Exterior	4 / 14	10 / 34	13 / 45	1 / 3	1 /3
General Cleanliness	3 / 10	14 / 47	11 / 37	2 / 7	0 / -
Safety	1 /3	5 / 17	13 / 45	8 / 28	2 / 7

Table 2: Transit Riders Rate the Quality of the North and Clybourn Area

	1 Very Poor n / %	2 Poor n / %	3 OK n / %	4 Good n / %	5 Excellent n / %
Quality of commercial activity	0 / -	0 / -	7 / 25	9 / 32	12 / 43
Quality of housing	0 / -	2 / 7	13 / 48	9 / 33	3 / 11
Visual quality of neighborhood	1 /3	2 / 7	7 / 24	12 / 41	7 / 24
Traffic congestion	7 / 25	5 / 18	10 / 36	3 / 11	3 / 11
Safety	1 /3	1 /3	10 / 34	13 / 45	4 / 14

[58] *Ordinance 009 – 92.*

Riders were also polled on who they thought should be responsible for investing in mass transit. The majority believed that local and state government, transit riders, and taxpayers should be most responsible. Only seven individuals believed landholders, developers, and businesses around transit stations should be responsible.

Table 3: Rider Opinion on Who Should Be Responsible for Investing in Mass Transit

Funding Sources	Number of Votes
Transit riders	20
Local and state government	23
Federal government	13
Landholders and developers near transit stations	7
Businesses around transit stations (private and public companies)	7
The general public and taxpayers	17

The last set of survey questions gathered the public's perspective about Apple's investment in the station. Twenty-five of the thirty surveyed reacted positively. They raised concerns over CTA's financial state; one individual said, "Considering the CTA had to make service cuts, they don't have enough money and can't do it themselves." The riders also cited the potential to attract more visitors to the area, and the potential increase in foot traffic that will yield more business to the surrounding stores. Five riders reacted indifferently or negatively to the deal, expressing general distrust in government deals. Three individuals mentioned the parking meter fiasco, with one individual exclaiming, "It's important for someone to look out for the public interest!" Others expressed concern over corporate sponsorship, naming rights, and advertising, with one individual describing corporate sponsorship as "simply annoying."

As with all surveys, there is some level of respondent bias; additionally, my sample size of thirty was modest. Regardless, these public opinion surveys do provide valuable insight and raises a salient point that must be addressed when pursuing future joint development deals: It is important keep the public informed to gain support and prevent distrust in both the public and private parties involved.

7.3 The Private Perspective: Apple's Investment in Transit

Apple's investment stirs up questions about the role of private investment in public transit. By studying Apple's motive and gains, I hope to illustrate the opportunities and challenges of incorporating private investment in transit. While Apple does not participate in any research studies, a close look at Apple's press releases and interview with Gary Allen, Apple expert and webmaster of ifoAppleStore.com, provides valuable insight.

Since Apple opened its first store in 2001, the number of visitors and revenue earnings has steadily increased. Between 2004 and 2007, the number of store visitors increased from 25.2 million to 102.4 million; in the same period, store revenues increased from $1.185 billion to

$4.11 billion.[59] Apple now has over 225 stores, including eleven "high-profile stores" that receive $27 million a year in brand marketing and promotion investments.[60]

The Lincoln Park location was likely chosen for a myriad of reasons. First, the Clybourn Corridor is a rising shopping district that includes high-end stores like Crate and Barrel. In 2009, consumers spent $192.486 million on entertainment within a mile radius of the area and the median household income in that same area was $80,110.[61] Second, the triangle parcel gave Apple's architects the complete freedom to design a signature store. The proximity of the CTA next to the station was another draw. Finally, the store would be able to serve as a "brand lighthouse" – in other words, a giant Apple billboard.[62]

Studying the deal from Apple's perspective reveals major points about the opportunities and obstacles for planning and implementing joint development projects. For one, the private partner must have a strong stake in the transit facility with much to gain from the investment or significant loss for maintaining the status quo. Allen speculates, "Their architect is top-notch and probably took one look at the deteriorated red brick building, the alley, and then thought – why am I working so hard?" [63] With the deal, Apple gains considerable control of the whole triangle and the retail experience. Secondary benefits include increased foot traffic, good publicity, and advertising or naming rights.

Most importantly, for joint development deals to be successful, the private partner must have the financial capacity and will to commit to the project. Apple, with $40 billion in cash, has enough financial capital to commit to the project and approached the CTA and the city, which indicates their willingness to commit.[64]

7.4 The Transit Agency Perspective

Bill Trumbull, general manager of real estate and asset management at the Chicago Transit Authority, states the deal was "relatively clean in terms of the process." Trumbull lists three key gains from the partnership. The greatest benefit is the renovation of a station that was in pretty bad shape: "We're excited to have the sign improvement and improvements on the inside." Second, the CTA will gain a "new station, new look, new retail, and a great new neighbor across the street." Third, the CTA can gain additional revenue from a new concession space and potential increases in fares after the upgrades.

In studying joint development from the transit agency perspective, three major points can be made about the opportunities and obstacles for planning and implementing joint development projects. First, transit agencies operate with specific goals and priorities. For the CTA, they hold the public interest and their priority is to focus on operations and frequency of quality service. Seeking alternative funding opportunities is secondary and partnering with private companies may be outside their scope. As Trumbull emphasized, "I think there's an untapped

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[59] Gary Allen, "The Stores."
[60] Ibid.
[61] CoStar Property Demographics, *801 W North Ave – Apple Store - Demographics*
[62] Interview with Gary Allen, March 26, 2010.
[63] Ibid.
[64] Interview with Bill Trumbull, general manager of real estate and asset management, Chicago Transit Authority, February 16, 2010; personal correspondence with Ellen McCormack, attorney, city of Chicago, March 24, 2010.

source of money but we at the CTA have to be very careful. We are holding the public trust, because the transit system is a public asset. So while we can look at opportunities to bring in private money, we certainly can't jeopardize the operations, frequency or location based on where there is money available from a private investor."[65]

Second, joint development in principle is very creative and requires an entrepreneurial attitude. In this case, Apple approached the CTA and the city. The CTA successfully seized this opportunity; however, it is worth noting that the CTA did not initiate the process and does not have any formal joint development guidelines or policies.

Third, most transit agencies have limited capacities and resources. The CTA must manage budget cuts, staff reductions and an expansive old system. With limited resources, the CTA will prioritize operations and the delivery of quality service rather than pursue alternative financing opportunities.

7.5 Perspective of Other Key Stakeholders

Apple's $3.9 million dollar investment sparks interesting questions about the role of private investment. Specifically, what is the role and responsibility of other key stakeholders near transit, such as businesses, landholders and developers, in support of mass transit? Businesses within a block of the triangle, a real estate brokerage firm, and the Lincoln Park Chamber of Commerce were contacted to reveal the opportunities and obstacles of incorporating key stakeholders in transit investment.

An employee from one high-end store noted, "When we first opened here, I think we tried to give money to improve the CTA station. We're pretty close and it is run down. This was about ten years ago… I think the city returned the money and took out a fee." The employee further expressed dismay about how the city drags its feet: "They weren't organized enough. I want to say that they sat on this money and didn't know what to do with it for… three years?"[66] Regardless, the employee was glad that something was done about the station and the deal will make the area more attractive. The owner of a nearby boutique store also acknowledged the positives, but expressed concern over the ability of all businesses to contribute to transit. "More businesses should step up to the plate, and big businesses can really help beautify the land." However, for some businesses that are very small and specialized, it is much more difficult to have the financial capital to contribute to transit.

A real estate agent from @Properties, Chicago's leading real estate brokerage, responded positively to the deal. "Apple was truly innovative… Apple selected the right demographic, because many transit riders use iPods." The agent expressed dismay that her brokerage did not think of the idea in the first place. Residents and businesses have begun calling the station the "i-Stop"; the agents' coworkers joked that they should invested in transit and created "the @Stop." Regarding surrounding real estate values, the agent noted, "it's unclear as to how property values will change specifically because Apple is here, or because there are transit improvements. This is a minor factor. The larger factor is how good the economy is." The Lincoln Park Chamber of Commerce expressed a similar view: "I don't know [if the

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[65] Ibid.
[66] Employee of high end retail store, who wished to keep both name and store anonymous.

improvements to the CTA or Apple's presence] will do enough to property values to make a noticeable difference."

The Lincoln Park Chamber of Commerce acknowledges the North and Clybourn stop as the "southern gateway" to Lincoln Park; an improved station would welcome visitors to the community. The Chamber of Commerce agrees that if businesses have the means, they should invest in transit; however, most do not, but there are still ways to support public transit. Businesses can enroll in the Transit Benefit Fare Program to help their employees save commuting costs.

8. The Potential for Joint Development in Chicago

While Chicago's aging transit system faces unique challenges in leveraging private investment, these challenges can be overcome. The CTA and Apple public-private partnership at the North and Clybourn station demonstrates the potential of planning and implementing joint development projects in Chicago. Understanding the definition and necessary conditions, along with ways to meet the challenges unique to Chicago, will inform my policy recommendations.

8.1 Defining a Successful Joint Development Project

To date, no study has defined what constitutes a successful joint development project. Being able to determine success of a project will validate why joint development should or should not be pursued.

I define a "successful" joint development project as a completed public-private partnership at, adjacent, or near a transit facility that, in the long-run, maximizes development opportunities and provides considerable benefits to the partners and general public. The benefits will vary according to each project, but include some combination of encouraging transit usage, enhancing property values around the transit improvement, sparking new development or redevelopment, increasing revenues, creating jobs, and supporting urban planning principles that improve urban form. A successful project overcomes all obstacles to be completed according to schedule and costs. As MTA's Robert Paley remarked: "A successful project is one that gets built – that's success."[67]

8.2 The Necessary Conditions for Success

First, the private partner must have considerable interest in investing in transit, the financial capacity to interest, and the will to commit to the project. The case study demonstrated that Apple's investment in transit was aligned with their primary goal of providing a superior experience; a deteriorating station next door to Apple's new retail store would have detracted from that experience. Additionally, the case study illustrated how investing in transit can be infectious, as seen with @Properties' enthusiasm.

[67] Interview with Robert Paley, director of transit-oriented development, the Metropolitan Transportation Authority, March 15, 2010.

Second, public officials must take an entrepreneurial attitude and approach. The bureaucracy of transit agencies is often at odds with the profit-seeking, entrepreneurial attitude of private entities.

Third, coordination among all parties is key. For certain deals, it is necessary to have a broad range of people with experience in development, real estate, transportation, zoning, engineering, law, planning, design, and construction. It also helps to have a professional staff who already know each other and have a good working relationship.

Fourth, the real estate market must be robust and healthy: "No matter how high the quality of an individual joint development project, no project can overcome weak local market conditions."[68]

Finally, it is important to recognize the full range of benefits that can come from joint development. Agencies that look at joint development purely from a financial perspective have not been able to successfully promote its use.[69] Instead, it is helpful to think about joint development as a multi-faceted tool that supports mass transit.

8.3 Meeting the Challenges of Transit: Joint Development on the CTA

The increasing demand for public transportation and the insufficient capacity of the public sector to meet these demands requires a critical look of alternative tools that support public transit. Joint development can help reverse urban sprawl and improve urban form. To the extent that joint development promotes transit use and catalyzes development in the area, joint development has the potential to reduce automobile dependency, increase pedestrian and bicycle originated transit trips, foster safe station areas, enhance surrounding area connections to transit stations including bus access, and create mixed-use development. These benefits make transit a more attractive than the automobile and addresses the social and cultural barriers to the use of transit. Joint development contributes to the modernization of poor transit infrastructure by improving transit facilities.

Joint development does not play a significant factor in funding mass transit and cannot be used to fix the financial struggles facing transit agencies. However, it is important not to underestimate the financial benefits resulting from these projects. As of 2006, the WMATA reported average annual revenues of $15 million. With federal and state dollars strapped for cash, every investment in transit matters.

9. Policy Recommendations

I propose the following five policy recommendations to make joint development a more attractive and viable option in the future:

- **Adopt formal, yet flexible, joint development guidelines or policies**

[68] Cervero et al., *Transit Joint Development in the United States*, 177.
[69] Ibid.

The Chicago Transit Authority currently lacks joint development policies or guidelines. Guidelines can aid the agency during the development process by defining the roles and responsibilities of each party involved, and allow for flexibility to accommodate the distinct conditions of each project. Paley notes that joint development is inherently challenging and complicated because you're dealing with a broad range of constituents with different interests and needs.[70] WMATA's joint development policies and guidelines can serve as a starting point to writing Chicago's policies. Last updated in February 2008, WMATA's document outlines the program's goals and purpose, scope, major roles and responsibilities of participants, detailed procedures, the competitive selection proposal ("RFP") process, the competitive selection qualification ("RFQ") process, and advocacy efforts.[71]

- **Support private sector participation through workshops**

  Workshops educate parties about the benefits of joint development, encourage public-private partnerships, and launch necessary relationships. The WMATA workshop on September 22, 2009 introduced participants to project initiation, design review and approvals, real-estate permits, construction monitoring, and project close-out under the joint development and adjacent construction program.[72]

- **Explore opportunities within the zoning ordinance to encourage more investment in transit**

  Chicago's zoning ordinance should be examined for opportunities and amended to support joint development projects. New York City's zoning law supports developer investment in transit through FAR bonuses and the dedication of Special Transit Districts.[73] Paley notes that zoning for high-density areas and mixed use is desirable for joint development projects; additionally, the usual parking regulations needed to be adjusted to reflect the presence of public transit.[74] Under Sec. 17-14-1020 of Chicago's Zoning Ordinance, "Transit Station Improvements," floor area bonuses may be granted for improvements to transit.[75] Special Transit Districts like New York City's and the right adjustments to parking regulations should also be explored in Chicago.

- **Encourage the new transportation authorization bill to incorporate policies encouraging joint development, value capture, public-private partnerships in transit, and transit-oriented development**

  SAFETEA-LU, the funding and authorization bill that governs federal transportation spending expired as of September 30, 2009 and has since been extended. As a new

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[70] Interview with Robert Paley, director of transit-oriented development, the Metropolitan Transportation Authority, March 15, 2010.
[71] Washington Metropolitan Area Transit Authority. "WMATA Joint Development Policies and Guidelines."
[72] Washington Metropolitan Area Transit Authority's Office of Joint Development & Adjacent Construction. "Workshop on Joint Development & Adjacent Construction Projects."
[73] Cervero, *Transit Joint Development*, 69.
[74] Interview with Robert Paley, director of transit-oriented development, the Metropolitan Transportation Authority, March 15, 2010.
[75] City of Chicago Department of Zoning and Land Use Planning. *Chicago Zoning Ordinance and Land Use Ordinance.*

transportation law is being shaped, policymakers and leaders should be cognizant to incorporate policies that encourage private sector participation in public transit.

- **Foster communication about joint development deals through open public forums**

  Open forums allow for open communication and increased trust among the transit agency, private sector and affected community. For the CTA-Apple partnership, transit riders were suspicious about public-private deals given Chicago's poor track record with privatizing public assets. Open public forums, combined with educational workshops, could foster more investment and interest in future projects.

10. Conclusion

With more than two thirds of the American population living in urbanized areas, there is an increasing need for comprehensive, efficient and high-quality public transit that ensures the vitality of cities. Yet, social and cultural implications including America's love affair with the automobile, the poor condition of aging infrastructure, and constant financial struggles present serious challenges to the delivery of quality transit.

Joint development is an innovative public-private partnership strategy that can help resolve some of the challenges facing mass transit. Despite the benefits and demonstrated success of joint development, the strategy has not been adequately pursued in Chicago. I argue that fostering joint development is a worthwhile goal in Chicago, as it will provide considerable benefits to the transit agency, private partner and general public. I found that joint development has the potential to encourage transit usage, enhance propert values around the transit improvement, spark new development or redevelopment, increase revenues and support urban planning principles that improve urban form. The success of the CTA and Apple project at the North and Clybourn Red Line station demonstrates the potential of planning and implementing joint development projects in Chicago. It is my hope that this public-private partnership will not be the rare exception of private investment in transit, but instead, will serve as a catalyst for similar projects in the city's future.

To conclude, mass transit is plagued with problems that no single solution can remedy. While I find that joint development cannot solve all the challenges of mass transit, it is certainly a worthwhile means to support the lifeblood of America's urbanized societies. Only through the pursuit of multiple strategies that support mass transit, like joint development, can the nation's valuable transportation network thrive for ages to come.

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Appendix: Methodology Instruments

General Public Survey

1. Why did you take public transportation to the North/Clybourn stop today?
- ☐ I work in the area
- ☐ I live in the area
- ☐ For shopping & other leisure activities
- ☐ Other

2. How often do you take the CTA to the North/Clybourn stop?
- ☐ 4-7 days a week
- ☐ 0-3 days a week

3. Please rate the quality of the North/Clybourn station in terms of:

	1 (Very poor)	2 (Poor)	3 (OK)	4 (Good)	5 (Excellent)
Station interior					
Station exterior					
General Cleanliness					
Safety					

4. Based on your personal experience, please rate the quality of the surrounding neighborhood (1 mile or 8 block radius) in terms of:

	1 (Very poor)	2 (Poor)	3 (OK)	4 (Good)	5 (Excellent)
Quality of commercial activity					
Quality of housing					
Visual quality of neighborhood					
Traffic movement					
Safety					

5. Who do you think funds the CTA's operations and maintenance?

6. Who should be responsible for funding and improving our mass transit system?
- _____ Transit riders
- _____ Local and state government
- _____ Federal government
- _____ Landholders and developers near transit stations
- _____ Businesses around transit stations (private & public companies)
- _____ The general public & taxpayers
- _____ Other

7. Apple is constructing a new retail store in the area and agreed to pay up to $3.9 million dollars to refurbish the station. *(For more details, show Ordinance No. 009-92)*

7a) Do you think this is a good idea? Why?

7b) Do you think this is a bad idea? What are your concerns, and why?

8. Comments or questions about the survey you took today?

Interview Guide for Transit Officials

1. How is [the transit agency] funded?
2. What is your general perception about joint development? Why is it good? Why is it bad?
3. To date, how many transit-joint development projects have been completed or are underway?
4. What types of joint development projects have been undertaken? Please give specific examples.
5. In general, who initiates the joint development project?
6. Why does [your transit agency] engage in joint development projects? What are the greatest benefits?
7. How would you define a "successful" joint development project? What are the conditions necessary for success?
8. How much private money has been invested in renovating transit facilities?
9. What are the greatest challenges to implementing joint development program?
10. Does [your transit agency] have established joint development guidelines or policies? Do you promote joint development? If so, how?
11. What do you perceive to the future of joint development in NYC? Value capture? Transit-oriented development? Public-private partnerships?

Interview Guide for Apple Expert

1. Please describe to the best of your knowledge, the process that Apple goes through to determine the location of a retail store. What are some of the requriements or circumstances in order for there to be an Apple store in place?
2. Has Apple invested in or "fixed up" the neighborhood around its retail store before? How, where, and in what ways?
3. Has Apple invested in public transit before the CTA-Apple partnership for the refurbishment of the North/Clybourn Red Line Station? If so, where and how?
4. What is the relationship between Apple's retail stores and transportation (both public transit and automobile travel)/
5. What is the relationship between Apple and the community?
    a. What is the role of philanthropy in the company?
    b. Why do you think Apple chose to invest in the CTA? Is this in line with their usual actions?
6. What do you think Apple expects to gain from the partnership?
7. Do you think this investment is sound? Why or why not?
8. Why do you think Apple chose to pull out of Block 37 for the site of its second Chicago retail store?
    a. Why do you think it chose to establish the second Chicago retail store in the North and Clybourn area instead?

9. There is a lot of redevelopment going on in the North and Clybourn area. Why do you think Apple chose to pick the land specifically within the triangle instead of choosing another location nearby, where they could potentially have more land, less rents, etc.?
10. Do you foresee Apple engaging in this type of deal in the future? Do you think Apple will continue to invest in public transit? Why or why not?

Questions for Other Key Stakeholders

1. Do you know about the recent partnership between Apple and the CTA to refurbish the north and Clybourn stop? Do you think it's a good or bad idea? Why? What are your concerns, if any?
2. Do you think this investment will affect you? How? What are the benefits and disadvantages of this investment from your perspective?
3. How do you interact with the community?
4. Would should be responsible for funding and supporting our mass transit system?
5. Would you consider investing in mass transit (especially if there is a particular upgrade or improvement to services)? Why or why not?