Case-in-Point 2014

Informing Station Area Plans in Winnipeg: Illumination from Minneapolis and St. Paul Experience

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Abstract:

The City of Winnipeg is planning for the second phase of Southwest Rapid Transit Corridor (SWRTC), seeking to provide a rapid and credible transit service between the downtown and southwest part of the city. The city is also proposing development of some areas designated by the City's OurWinnipeg Direction Strategy Complete Communities as Major Redevelopment Sites, such as Sugar Beet Site, which is located immediately to the west of the proposed SWRTC and a future rapid transit station. However, these plans are being planned in isolation rather than from a station area perspective. Station Area Plan is an efficient tool and catalyst utilized by government to support Transit Oriented Development. This Case-in-Point project aims to study the experience of Minneapolis and St. Paul to inform Station Area Plans in Winnipeg.

Introduction

Currently, the City of Winnipeg is conducting the planning for the second stage of Southwest Rapid Transit Corridor (SWRTC), extending the corridor from the south end of the Fort Rouge Yards (Jubilee Ave.) to the University of Manitoba (CW, 2011a). Including the first phase of this corridor, of which the operation has commenced since 2012, a complete Southwest Rapid Transit Corridor will integrate with existing transit networks, providing prompt dependable transit service between the downtown and the southwest part of the city. Meanwhile, the city is also proposing the development of some areas designated by the City's OurWinnipeg Direction Strategy Complete Communities as Major Redevelopment Sites (CW, 2011d). One of the plans named Sugar Beet Major Redevelopment Site is situated immediately to the west of SWRTC and a future rapid transit station. The planning of the Sugar Beet site does not take the lands to the east of the station into account. These lands will be developed in accordance with the City of Winnipeg's Transit Oriented Development Handbook and Complete Communities. However, they are being planned in isolation rather than from station area perspective. There is a gap in Winnipeg policy hierarchy to support the implementation of Transit Oriented Development.

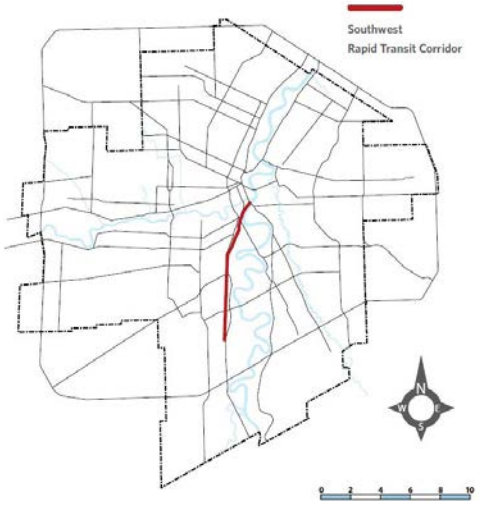

Figure 1. Southwest Rapid Transit Corridor

The Station Area Plans (SAP's) have been recognized as an effective tool to support Transit Oriented Development, as they are more specific and focused than citywide development plans. The City of St. Paul has adopted seven Station Area Plans along the Metro Green Line between downtown Minneapolis and downtown St. Paul (CSP, 2008c). This project intends to study the experience of Minneapolis and St. Paul to inform Station Area Plans in Winnipeg.

Background

Before undertaking study of Minneapolis and St. Paul's experience, this section aims to indentify principles and significance of Transit Oriented Development and Station Area Plans to build up the foundation for further inquiry.

Transit Oriented Development

Transit Oriented Development (TOD) can be defined as a neighborhood/community centered on a transit station, which features a high-density, mixed-use, and walkable community. It supports compact growth within an average 2000-foot walking distance of a major transit station, promoting increased ridership by providing accessible transit service (Calthorpe, 1993).

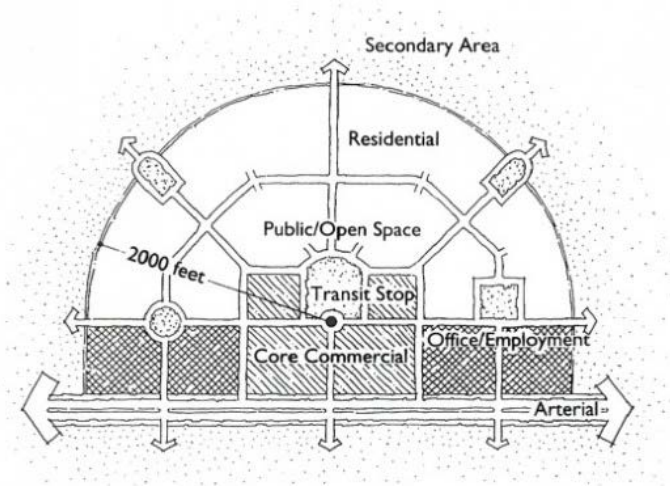

Figure 2. Transit Oriented Development concept diagram

In General, the principles of Transit-Oriented Development have been summarized by Calthorpe (1993) as follows:

- Organize growth on a regional level to be compact and transit-supportive.
- Place commercial, housing, jobs, parks, and civic uses within walking distance of transit stops
- Highest intensity of uses should be with a five-minute walk of adjacent residential districts.
- Provide a mix of housing types, densities and mix of incomes.
- Preserve sensitive habitat, riparian zones, and high quality open space.
- Make public spaces the focus building orientation and neighbourhood activity.
- Encourage infill and redevelopment along transit corridors within existing neighbourhoods.

As a "Smart Growth" strategy, TOD finesses the integration of land use and transportation, enabling both land and infrastructure to be used efficiently. Experience from many American cities, such as Portland, has proved that implementing TOD can have significant benefits to individuals, communities and regions. People living and working in the TOD neighborhoods tend to walk more, ride transit more, and own fewer vehicles than the rest of the larger community, which contributes to a healthier and cleaner environment. From region perspective, implementing TOD helps preserve farmland and green space as people occupy less land by living, working and playing in dense community.

As shown in the table, TOD zones can be categorized into certain types, including Urban Centre, Urban Neighbourhood, Town Centre, Neighbourhood Medium Density, Neighbourhood Low Density, and High Frequency Transit Corridor (CW, 2011b). Applying TOD concept should take existing context into account, which means actual planning and design for a major station area might be influenced by topography, local climate, current transit network, as well as other physical conditions (Calthorpe, 1993).

Station Area Plans

Station Area Plans (SAP's) is an efficient tool and catalyst utilized by government to support Transit Oriented Development. It is supposed to identify local market situation, potential development, and community vision, seeking to establish detailed planning and design guidelines for land use, density, open space, parking management, etc, around individual transit stations (CSP, 2008a). Created in early planning stage, SAP's aim to bridge the gap between comprehensive plans and implementation and set a clear vision with guidelines, roles and responsibilities for future implementation.

TOD Zones:						
TOD TYPE	Urban Centre	Urban Neighbourhood	Town Centre	Neighbourhood Medium Density	Neighbourhood Low Density	High Frequency Transit Corridor
Land Use Mix	Office Centre Urban Entertainment Multiple Family Retail	Residential Retail Class B Commercial	Office Centre Urban Entertainment Multiple Family Retail	Residential Neighourhood Retail Local Office	Residential Neighourhood Retail	Office Centre Urban Entertainment Multiple Family Retail
Net Housing Density	124-371 units per hectare	99-247 units per hectare	86-247 units per hectare	49-124 units per hectare	25-49 units per hectare	62-148 units per hectare
Regional Connectivity	High, Hub of regional system	Medium access to downtown, Sub regional hub	High access to downtown, Sub regional hub	Medium access to suburban centre, Access to downtown	Low	High access to downtown, Sub regional hub
Frequencies	5-15 minutes	5-15minutes	5-15 minutes	15-30 minutes	20-30 minutes	5-15 minutes

Table 1. TOD Typology

Fact of the Case

Overview of Metro Green Line

The Central Corridor Light Rail Transit Project, which connects downtown Minneapolis and downtown St. Paul, will commence the service in June, 2014 as expected (CM, 2014). This Metro Green line has 9.8 miles of new track and 18 new stations, plus more than a mile of existing track and five existing stations shared with the Metro Blue Line in downtown Minneapolis. It will take about 40 minutes to travel between Nicollet Mall Station in Minneapolis and Central Station in St. Paul. This Green Line project is intended to serve ridership of more than 40,000 weekday boardings in 2030 (CM, 2014).

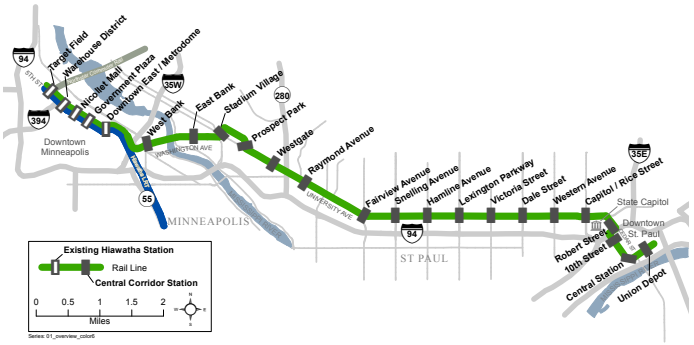

Figure 3. Metro Green Line - Central Corridor LRT Project

This Green Line project will contribute a series of benefits to the public in the future. It will act as a catalyst to stimulate the development of economy along the Green Line by creating economic opportunities and facilitating investment on communities. It is anticipated to increase employment by more than 90,000 jobs by 2030. With the features of efficiency and convenience, this Green Line is supposed to be attractive to a significant amount of ridership and reduce automobile commuters, thus mitigating ecological footprint from environment perspective (CM, 2014).

Overview of Station Area Plans

The City's Comprehensive Plan includes a chapter of Central Corridor Development Strategy, which was adopted by the St. Paul City Council in 2007. In 2008, the St. Paul City Council adopted Station Area Plans around seven proposed University Avenue LRT stations, including Rice, Dale, Lexington, Sneilling, Fariview, Raymond, and Westgate. As addenda to the Central Corridor Development Strategy, these SAP's respectively address the areas about 1/4 mile around each proposed stations. Each plan involves aspects of building scale; public realm and open space; public art; and bicycle, pedestrian, transit, and automobile movement (CSP, 2008a).

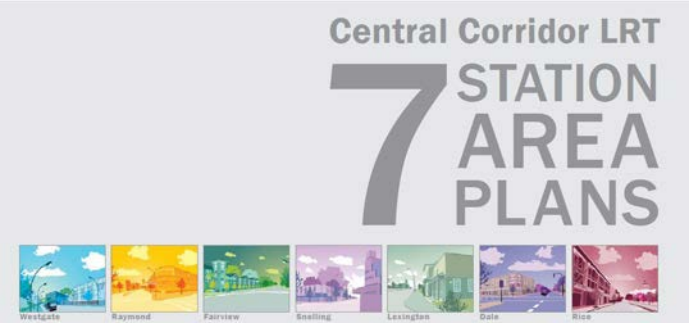

Figure 4. Central Corridor LRT 7 Station Area Plans

Review of Winnipeg Relevant Plans

As the highest level development plan, Our Winnipeg is supported by four direction strategies, including Complete Communities; Sustainable Transportation; Sustainable Water and Waste, and A Sustainable Winnipeg (CW, 2011c).

Figure 5. Our Winnipeg Direction Strategies

Complete Communities has been developed to be comprehensive in scope and detail, connecting with others of Our Winnipeg's supporting documents to establish a set of resources and directions completely (CW, 2011d). Applying an urban structure that OurWinnipeg is based on, Complete Communities develops a framework for the city's physical growth and development for decades to come. Described in Complete Communities, an urban structure is a spatial articulation of city development goals to lead the future growth and redevelopment, by indicating and defining its envisioned physical components (CW, 2011d).

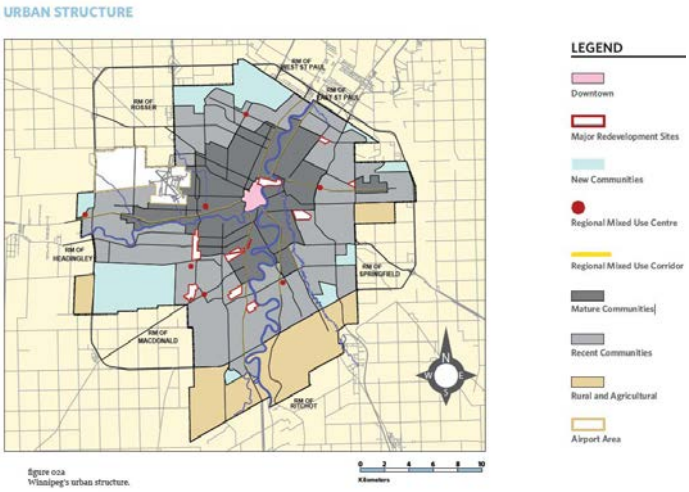

Figure 6. Winnipeg Urban Structure

Since property may be situated within more than one area, so that an urban structure hierarchy is needed to decide which policy the property should comply with in priority, in case the policies conflict with each other, otherwise, both policies shall apply. Four levels of urban structure have been defined as follows to help decision making: (CW, 2011d)

A. Airport Area, Aboriginal Economic Development Zones, Rural and Agricultural Areas

B. Transformative Areas

1. Major Redevelopment Sites
2. Downtown
3. New Communities
4. Centres and Corridors

C. Parks, Places and Open Spaces, Employment Areas

D. Areas of Stability

Lessons Learned

Lesson One. Where did St. Paul's Station Area Plans fit in?

The City of St. Paul's seven Station Area Plans were adopted as addenda to Central Corridor Development strategies, which is a chapter included in the City's Comprehensive Plan (CSP, 2008a). Thus, the seven Station Area Plans play a key role as a Secondary Plan in facilitating the implementation of Central Corridor Development Strategies. It can be seen from Fig.7 in the following, the City of St. Paul's Station Area Plans commence in early stage rather than in the end of phased construction, which bridges the gap between Central Corridor Development strategies and Preliminary Engineering. The Station Area Plans finesse the integration of land use and transportation plan at specific areas, rather than address them respectively.

The City of Winnipeg is planning for the second phase of Southwest Rapid Transit Corridor. It is a good opportunity to learn from Minneapolis and St. Paul's experience and create specific Station Area Plans around each proposed transit station. For instance, since the planning of the Sugar Beet site does not consider the developed lands to the east of the station, it can be applicable to apply Station Area Plan as a tool to stimulate their combination at early stage before phased construction.

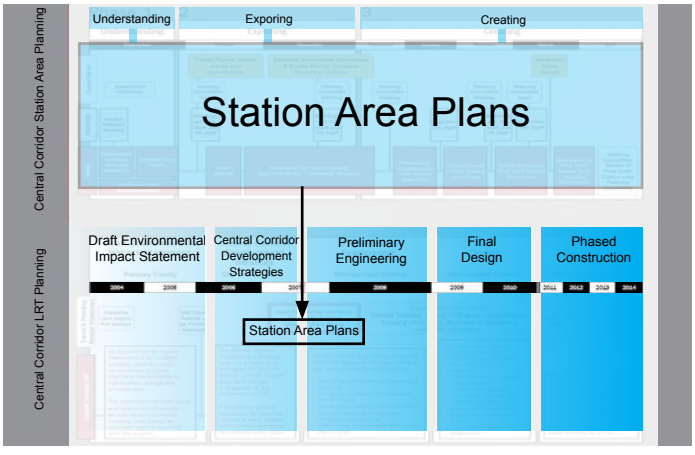

Figure 7. The City of St. Paul's Station Area Plans

Lesson Two. What issues have St. Paul's SAP's addressed?

Each of the City of St. Paul's Station Area Plans has addressed four main issues, including built form, land use, public realm, and movement. Seven Station Area Plans were organized by a common structure, which consists of six chapters as follows (CSP, 2008c):

1. The Station Today
2. The Future of the Station Area
3. Public Realm - Creating Places
4. Future Character Areas - Policy Directions
5. Movement - Balancing Mobility
6. Moving Forward

These plans not only identified existing conditions of station areas of the time, but also formulated envisioned goals for future development. It is important for the City of Winnipeg to respect existing features of each station area and avoid "NIMBY" attitude, since most of the lands along the proposed Southwest Rapid Transit Corridor have been developed. Infill development strategies are supposed to be applied and adjusted in accordance with basic context of adjacent neighbourhood to make sure new development or expansion of existing buildings are able to fit with its surroundings. Learning from chapter 5 (Movement - Balancing Mobility), the City of Winnipeg is highly recommended to seriously take movement issue into account, because the current urban setting is not pedestrian-friendly and cyclist-friendly, and in conjuction with proposed transit stations, as observed and analyzed. The increased ridership of public transit is inevitably linked with a balanced movement network and high quality of public realm and infrastructure. people tend to walk more and ride public transit more in the future, if pedestrian-oriented and cyclist-oriented movement network are well-established.

Lesson Three. How did St. Paul conduct planning process to develop SAP's?

Before developing draft plans, public roundtable events were held to identify challenges and opportunities, followed by seven day-long workshops for each station area. Comments generated from both roundtables and workshops provided valuable and constructive input for enactment of draft plans. Public review and public hearing were also conducted to collect feedbacks and recommendations from citizens and refine draft plans. Seven plans were accomplished based on integration of applicable input collected from key stakehoulders, developers, planners and designers, government officials, as well as community members (CSP, 2008b).

Public involvement is vital during planning process for the City of Winnipeg to gain recognition and support from the public, and develop Station Area Plans. As mentioned, most of the lands along the proposed Southwest Rapid Transit Corridor have been developed so that "NIMBY" attitude has a high chance to be confronted in the future. As showed in Fig.8, physical model can be a desirable tool to be used by both planners and the public during planning process, since planners are supposed to plan with the public rather than plan for them. This method might help the citizens enhance a sense of participation, thus minimizing "NIMBY" attitude.

Figure 8. Community Consultation for Station Area Plans

Future Recommendations

To ensure successful and comprehensive planning for TOD in Winnipeg, SAP's should be entrenched in City Policy. They should be adopted as secondary plans, consistent with Complete Communities and guided by the TOD handbook. Complete Communities would require a plan amendment to include policies outlining the intent, objectives, identifying locations and general criteria for station area planning.

Because the proposed Southwest Rapid Transit Corridor follows a rail line, comprehensive TOD on both sides of the rail line will require people to cross the rail line. Sometimes there are existing legal crossings at roads but if there is not a legal crossing then a negotiation with CN rail will be required for an at grade crossing or an over/under pass would have to be built. An over/under pass is more highly recommended to ensure safety of transit riders.

The City of Winnipeg should consider methods of implementing incentives and policy tools to motivate and encourage economic investments on community development adjacent to transit stations. Certain development tools, such as Tax Increment Financing can be applicable and effective to subsidize enhancement of public facilities.

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References

City of Winnipeg (CW). (2011a). Winnipeg Transportation Master Plan. Retrieved from http://transportation.speakupwinnipeg.com/

City of Winnipeg (CW). (2011b). Winnipeg Transit Oriented Development Handbook. Retrieved from http://www.winnipeg.ca/ppd/TOD/Handbook.stm.

City of Winnipeg (CW). (2011c). Our Winnipeg. It's Our City, It's Our Plan, It's Our time. Retrieved from http://speakupwinnipeg.com/ourwinnipeg/

City of Winnipeg (CW). (2011d). Complete Communities. An Our Winnipeg Direction Strategy. Retrieved from http://speakupwinnipeg.com/ourwinnipeg/

City of Saint Paul (CSP).(2008a). Central Corridor Development Strategy: Plans for Seven University Avenue Station Areas. Retrieved from www.stpaul.gov/DocumentView.asp?DID=7504

City of Saint Paul (CSP). (2008b). Saint Paul Central Corridor Station Area Planning Fall 2007-Spring 2008. Retrieved from http://www.stpaul.gov/index.aspx?NID=156

City Of Saint Paul(CSP). (2008c). Central Corridor LRT 7 Station Area Plans. Retrieved from http://www.stpaul.gov/index.aspx?NID=159

City of Minneapolis (CM). (2014). METRO Green Line
Fact Sheet. Retrieved from http://www.metrotransit.org/metro-green-line.

Calthorpe, P. (1993). The Next American Metropolis. Ecology, Community, and the American Dream. New York: Princeton Architectural Press.

U.S. (2005). Department of Transportation Federal Transit Administration. TOD lessons Learned. Retrieved from www.fta.dot.gov/documents/TOD_Lessons_Learned_12_21.pdf.