

CASE IN POINT 2009

Potter Greens Study Area

Transit-oriented development in Edmonton

CONTRIBUTORS

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ABSTRACT

The City of Edmonton has made significant efforts to integrate land use planning with investments in public transit, in order to manage population growth, transportation demand, and enhance the liveability of existing and future neighbourhoods.

The Potter Greens Special Study Area is part of broader initiatives in Edmonton to create transit-oriented development around future light rail transit (LRT) stations. The Potter Greens Special Study Area is an in-progress TOD station area plan that incorporates a 14-hectare mixed use residential and commercial site, a future LRT station and a current park-and-ride bus facility.

Within the Potter Greens project there is the opportunity to explore best practices in TOD planning, including supportive zoning, urban design guidelines, and participatory planning. Development within the Potter Greens project represents the many challenges and trade-offs often required within TOD projects, in order to arrive at common values amongst the many actors and community stakeholders involved.

“Transit-oriented development may be utilized to create a safe, vibrant, and attractive mixed used environment adjacent a transit terminal and a natural area in west Edmonton.”

City of Edmonton

“Integrating transit and land use policies provides direction for developing and redeveloping property around rapid transit stations, so that it is convenient for many people to use transit.”

Edmonton Integrated Transit and Land Use Policy Framework

BACKGROUND: TRANSIT-ORIENTED DEVELOPMENT IN EDMONTON

Integrating transit and land policies to organize urban growth is central to transit-oriented development and New Urbanism. Within these movements, an assumption is that transit investments, particularly rapid transit, have the potential to stimulate development due to elevated land values around transit stations. Conversely, higher-density, pedestrian-friendly, mixed-use development has the potential to create ridership to support transit.

American architect and planner Peter Calthorpe, who is credited with introducing TOD into the broader discourse on ‘smart growth’ in the 1990s, defines the concept as:

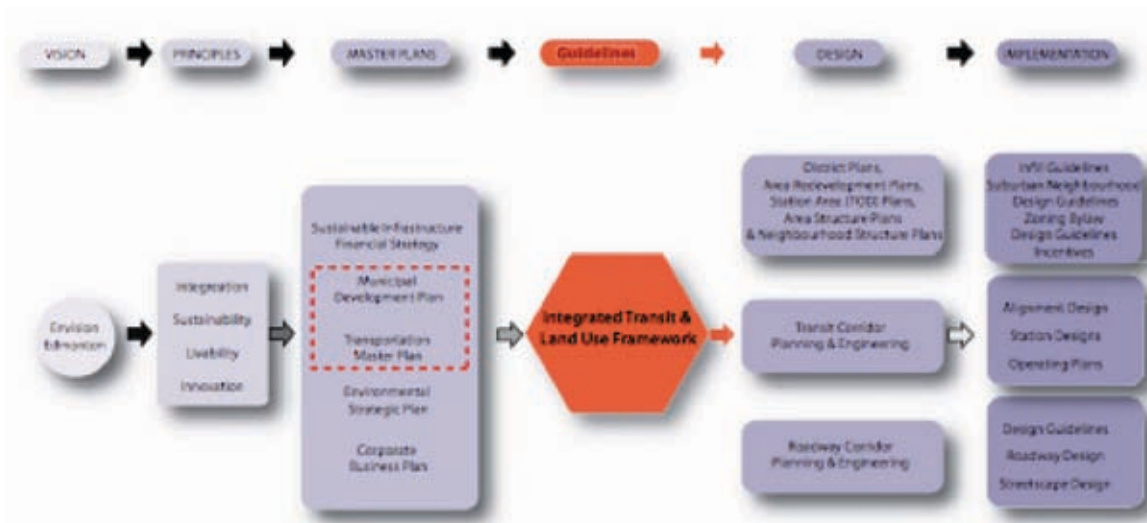
“A Transit Oriented Development is a mixed-use community within an average 2,000-foot walking distance of a transit stop and core commercial area. TODs mix residential, retail office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car” (Calthorpe 1993, 56).

While exemplary examples of TOD exist in South

America, Western Europe, and the United States, the development concept is only beginning to coalesce in Canadian cities. TOD is not a new concept; it has roots in the streetcar suburbs that sprang up at the turn of the century in North America. However, implementing TODs remains prohibitively complex under the conventional scope and practice of urban planning in North America.

Implementing transit-oriented development requires a ‘toolbox’ of approaches, including:

- Land use regulations that accommodate higher densities and mixed uses, such as form-based zoning;
- Innovative financing arrangements
- Stringent urban design guidelines and review processes
- Institutions to facilitate collaboration between various actors and stakeholders, such as private developers, land use planners and transportation engineers; and
- Integration of land use and transportation planning at various policy levels.



The Integrated Transit and Land Use Framework within the City of Edmonton’s structure

An initiative that makes significant movement towards integrating land use and planning activities within the City of Edmonton is the *Edmonton Integrated Transit and Land Use Policy Framework*, currently in its final draft stages. *The Framework* is meant to provide a guideline, fitting within existing policy directions under Plan Edmonton and the City's Transportation Master Plan, for the design and implementation of TOD station area plans and transit-corridor planning.

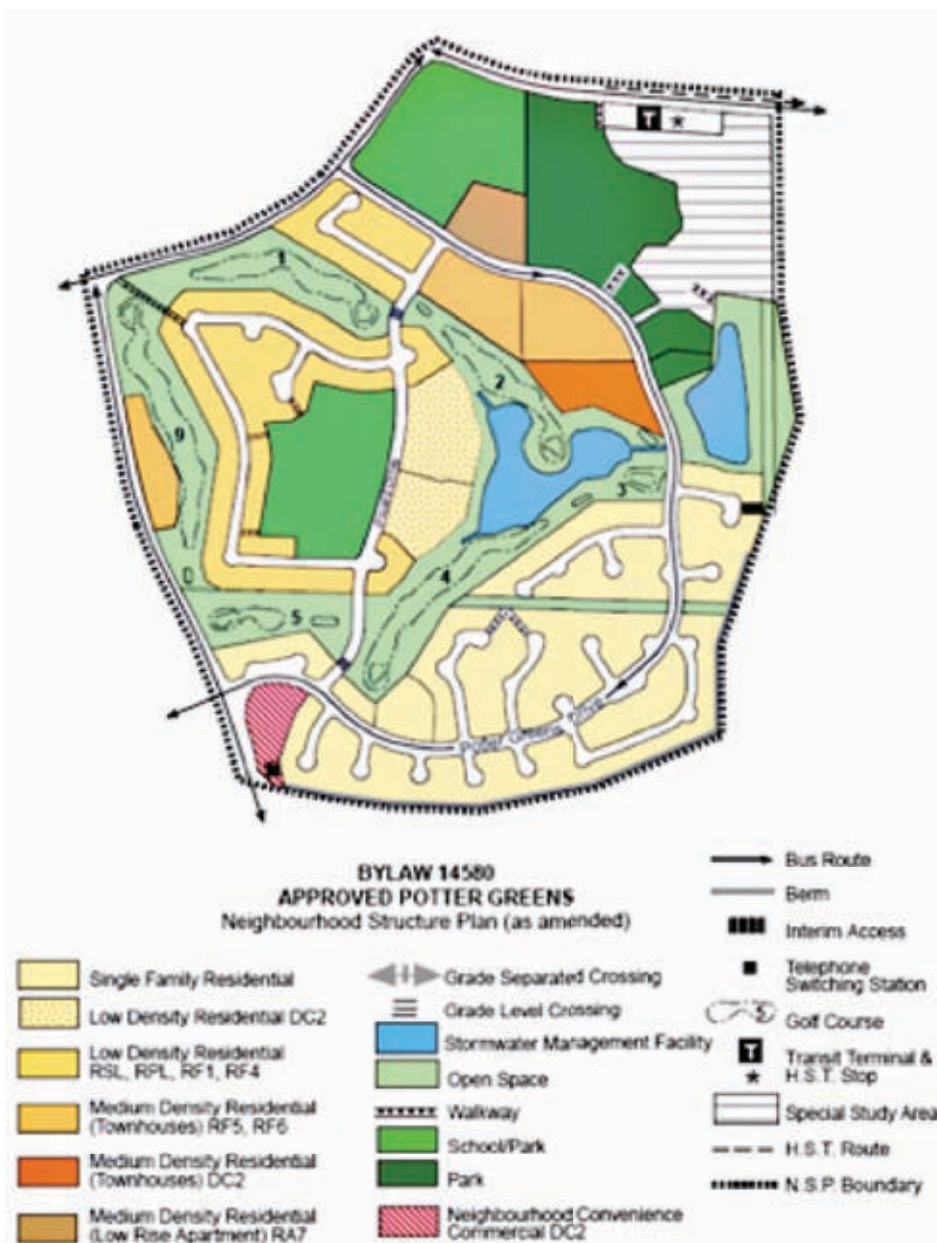
FACTS OF THE CASE: THE POTTER GREENS NEIGHBOURHOOD STRUCTURE PLAN

The Potter Greens is a 15-hectare planned development located in west Edmonton. The land was acquired by the City of Edmonton to accommodate a transit station for a future LRT corridor expansion and

is the current site of a park-and-ride facility. The Potter Greens Neighbourhood Structure Plan (NSP), which was approved as a City by-law in 2007, identifies a natural area, a transit centre, and a Special Study Area.

The Potter Greens Special Study Area encompasses approximately 6.4 hectares of land located south of Webber Greens Drive (87 Ave) and west of Anthony Henday Drive. In June 2007, City Council designated the Special Study Area for further research and analysis.

The Potter Greens Special Study is a plan to “explore how park-and-ride and transit-oriented development may be utilized to create a safe, vibrant, and attractive mixed used environment adjacent a transit terminal



and a natural area in west Edmonton” (City of Edmonton 2008). Depending on the proposed phasing of development, it could also include rezoning and subdivision applications.

Within the Potter Greens, there was the possibility for progressive development that hadn’t done before in Edmonton’s Greenfield development context. Hydrological and geotechnical conditions at the site are complex. Soil conditions on the City-owned land are poor and the natural area is a peat bog. When amendments to the Potter Greens NSP began in 2006, construction estimates for surface parking versus structured parking were actually very close, as 3 meters of peat had to be stripped from the ground either way.

This lent support within the City of Edmonton’s Transportation Department to mixed-use, higher density development in the Special Study Area, as using a portion of the land for multi-unit housing and/or commercial uses would generate the assessment base to offset the costs of the parking infrastructure.



Proposed land uses within the Potter Greens NSP

The Potter Greens NSP amendment process incorporated significant public consultation on the form of any development concept for the Special Study Area, both in terms of visioning and detailed design, and it also indicated that the design process would make recommendations to Council on the form of parking that was most appropriate for the site, structured or surface, while also reflecting the costs of the preferred option.

Planners within the City of Edmonton Planning and Development Department have advocated for an urban, mixed-use approach to developing the area around the transit centre. They are encouraging private property owners adjacent to the site to think in similar terms, indicating the obvious advantages of the location for urban development. For the project there also seemed to be serious buy-in for TOD principles amongst the City’s transportation engineers.

Advantages of adopting a TOD approach in the Potter Greens include:

- It is a major transit centre for a future westbound LRT route for all developing west Edmonton neighbourhoods; existing approved neighbourhoods outside of the ring road will have a population of approximately 75,000 people at full build-out, with the expectation of additional neighbourhoods to come;
- The area around transit centre offers large plots of undeveloped (greenfield) land buffered from existing low-density development by a sizeable natural area, thus minimizing transition and privacy concerns over high-density development and negative effects of increased activity and traffic;
- Conversely, the relative isolation of the transit centre location suggests that not developing more intensely could result in future safety concerns at the transit centre; and
- Location provides excellent access to the ring road freeway, in addition to good transit service, would support commercial activities there.

Project Complications

In 2007, an engineering solution was found for the soil problem, a design for a parking lot substructure that would essentially float on top of the wet, peaty soil. The design approach was much less expensive than either the earlier surface parking approach or structured parking. Removing 3 meters of peat from the ground was no longer necessary. This engineering

solution discarded the structured parking idea from the perspective of the transportation engineers working on the design of the transit centre and park and ride.

As plans for LRT extension to west Edmonton became more concrete, the idea of what amount of parking was needed at the Potter Greens site became larger and larger. From a maximum of 800 stalls identified in the Potter Greens NSP, the Transportation Department's estimate of need ranged upwards towards 2000 stalls.

In 2008, the community consultation processes began. More detailed analysis of the geotechnical conditions on the site suggested that high-rise and medium-rise apartment development was not financially feasible. This suited the interests of the community, who were generally uncomfortable with the idea of anything taller than the 4-storey condominiums that already exist in the area. Despite an aging community and a lack of diverse housing options, few residents seemed willing to accept anything beyond this 4-storey threshold. Some community members expressed an interest in reversing the earlier plan amendment decisions, reversing the protection of the natural area to single-family residential development.

The community consultation process resulted in a plan for the Special Study Area that was reflective of wide range of interests but sacrificed adherence to some core TOD principles. The community got a development plan that respected the scale of the existing neighbourhood, that kept transit-related traffic off their streets, and the proposed the development of some attractive new public spaces. The Planning and Development Department achieved some density adjacent to transit, while not as dense as hoped and not mixed-use in character, is compatible with the existing fabric. The Transportation Department maintained approximately half of the parking capacity that was identified in the Potter Greens NSP. However, a structured parking form would have allowed for the full 800 stalls stipulated in the Potter Greens NSP.

LESSONS LEARNED

Through the process of planning the Potter Greens Special Study Area, some important 'lessons learned' are generated, pertaining to implementation of TOD station area plans.

Get the parking right

The parking issue within the Potter Greens Special

Study Area is an example of differing goals and pressures on local government departments. The City of Edmonton's Transportation Department, while initially agreeing to structured parking in the Potter Greens, had negative experiences with structured parkades at two stations on the south Edmonton LRT line. Parkades at Southgate and Century Park stations were planned but subsequently abandoned by Council when costs became too high.

Another complication is that the Transportation Department had received Federal funding for the construction of Potter Greens transit centre, and the funding required a park-and-ride. Although the form of the park-and-ride was not specified in the agreement, all construction needed to be completed by 2010. As structured parking projects are more risky in terms of costs and potential construction delays, the structured parking seemed to be a pie-in-the-sky concept for risk-averse engineers responsible for designing the Potter Greens parking.

Engineers within the Transportation Department approached the Potter Greens parking issue with very different assumptions. Where the City's land use planners assumed that large parking lots inhibit the develop of urban community character and TOD principles, transportation engineers think of parking as necessary to support transit in a city that is heavily dependent on the automobile. For practical reasons, these engineers seem to assume that the least expensive form of parking is best, regardless of land use implications, whereas a planner will most likely assume that the form of parking that best serves good land use planning is the most desirable, regardless of cost implications. These engineers seem to feel that TOD is fine, so long as its implementation does not infringe upon transportation needs, which include parking. This indicates a lack of commitment to TOD as a concept, or perhaps a lack of understanding of its core principles.

TOD requires development of collaborative processes to facilitate inter- and intra-departmental communication within local government structures

Planners within the Planning and Development Department assumed that once a transit centre and TOD area were established in the Potter Greens NSP amendment, there would be acceptance of the concept amongst other City representatives, particularly within the Transportation department. Planners on the Potter

Greens project also assumed that the people who make the transportation planning decisions are the same people who implement them. It was assumed that transportation planners have an understanding of the role and process of neighbourhood plans in relation to their own work (i.e. that certain commitments, once approved in a plan, cannot be changed without further discussion, regardless of financial expediency). These commonly held assumptions were challenged through the planning processes of the Potter Greens.

The City of Edmonton, like many Canadian cities, operates a large bureaucracy with numerous departments, each with their own areas of responsibility and expertise. Roles and communication between these departments can be fragmented, as expert realms tend to function independently of one another. At times, communication between land use and transportation departments is quite clear, particularly where tasks are formalized and accountable by individuals within the respective departments. However when processes of communication are not established or responsibilities for tasks is not definite, it is not clear who, if anyone, should be contacted if there is a problem that involves collaboration between multiple departments to address. Overall, better inter- and intra-departmental communication is needed in order to implement TOD projects within local government. Buy-in is needed from all relevant departments and community stakeholders into the principles in the Edmonton Integrated Transit and Land Use Policy Framework Transit. When confronted with the trade-offs such as the cost of structured parking versus the land use implications of surface parking, an overarching vision is needed to give best practices some backbone, because good land use planning principles are not shared assumptions across all professions.

CONCLUSION

The Potter Greens case study offered insight into some the common planning issues that arise when implementing TOD station area plans. Through collaboration with community stakeholders and government representatives from multiple departments within the City of Edmonton, trade-offs concerning parking structures and urban form were made, resulting in concession of some core TOD principles within the project, but also greater community buy-in. The Potter Greens Special Study provided the opportunity to explore the process of collaboration

between land use planners and transit engineers, particularly where planning objectives align and conflict. More broadly, the Potter Greens project represents larger efforts within the City of Edmonton to integrate transit investments with land use planning, urban form and community character. The Potter Greens project is representative of current TOD practice coalescing in Canadian cities.

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