

# **Can Automobile Dependence be Reduced in Markham Centre?**

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Report submitted in partial conformity of  
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Masters of Planning Degree

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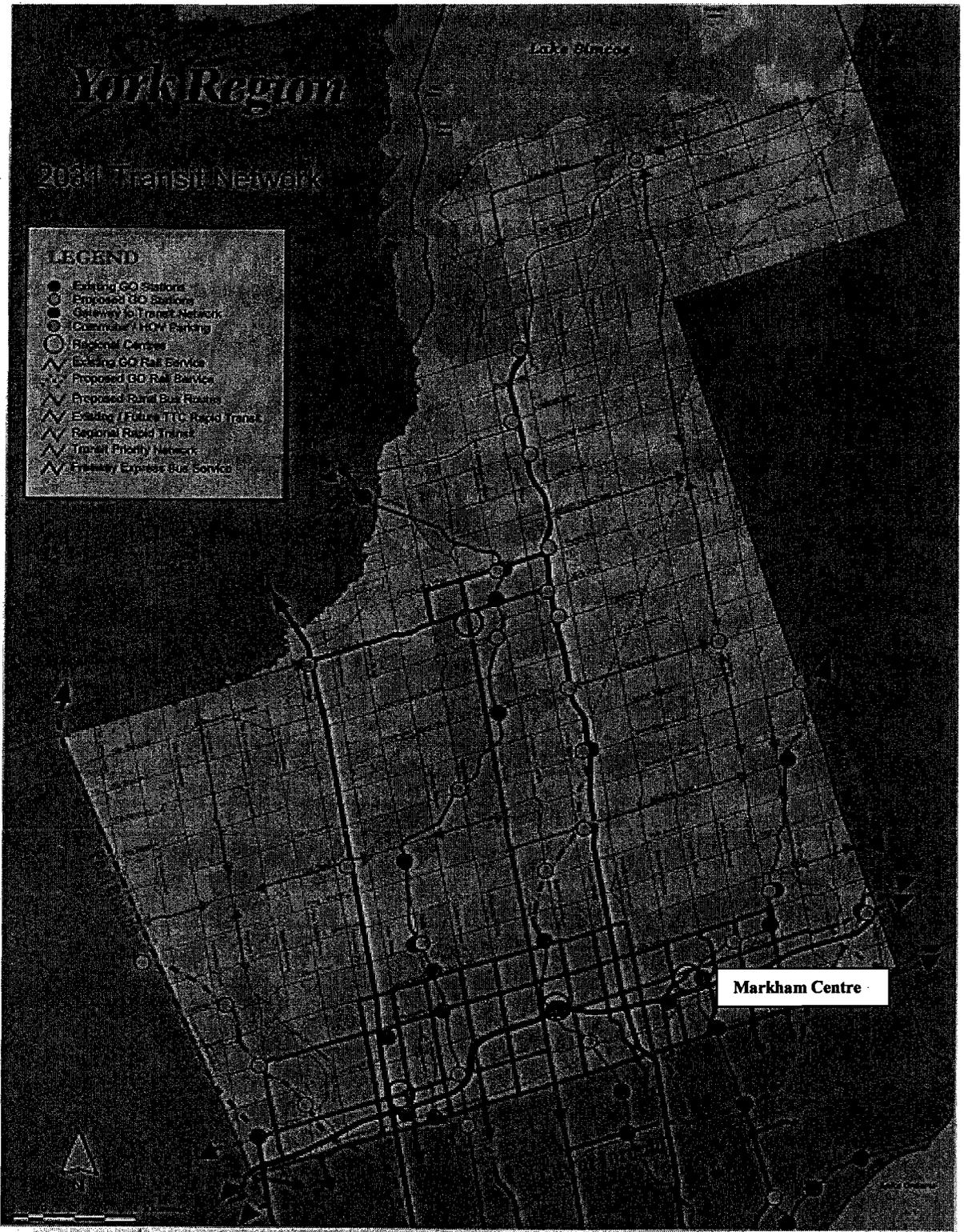
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## **Can Automobile Dependence be reduced in Markham Centre? Executive Summary**

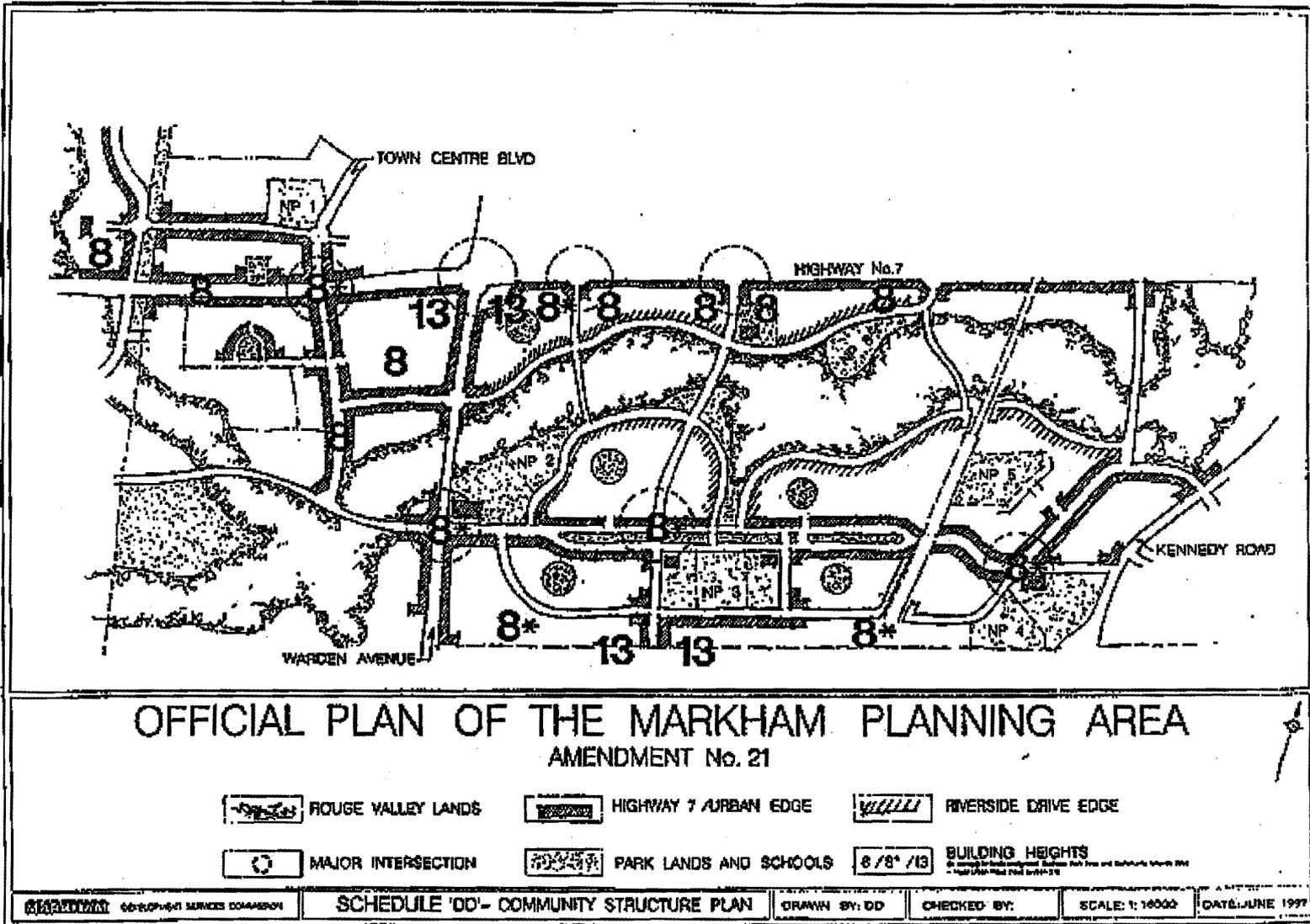
This report assesses the potential for reducing automobile dependence in Markham Centre. Two recent planning documents, the Markham Centre Secondary Plan (SP), and the York Region Transportation Master Plan (TMP), have been developed with the complementary goals of developing a vibrant mixed-use town centre in Markham (the Secondary Plan), and doubling the use of public transit in York Region (the TMP), which includes Markham. Markham Centre is planned to be a suburban activity node. As table E-1 shows, it will accommodate 25,000 residents and 17,000 jobs on a 990-acre site located between Highways 7 and 407 near Warden Avenue (Figure E-2).

Size	990 acres
Population	25,000
Residential Units	10,000 (mostly condos and townhouses)
Employment	17,000 jobs
Office Space	400,000 m <sup>2</sup>
Retail Space	55,000 m <sup>2</sup>
Schools	3 elementary, 1 secondary
Parkland	30.35 hectares
Open Space	77.75 hectares



**Figure E-1 York Region Planned Transit Network**

Figure E-2 Markham Centre Plan



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The TMP outlines plans for a rapid transit service that will connect Markham Centre to other urban centres in York Region and the Toronto subway system (see Figure E-1). Both planning documents represent a departure from traditional suburban development. Development in York Region, for the most part, is characterized by low population and employment densities, segregated land uses, and transportation the majority of residents and workers in York Region dependent on the automobile for any and all travel.

The potential of the two planning documents to reduce automobile dependence was assessed using criteria from two sources: "Sustainability and Cities: Overcoming Automobile Dependence", published in 1999, by Peter Newman and Jeffrey Kenworthy, and the "Transit-Supportive Land Use Guidelines", prepared in 1992 for the Ontario Ministries of Municipal Affairs and Housing (MMAH), and Transportation (MTO). The format used for this analysis combines the strengths of each list, and thus offers a thorough assessment of the policies, principles, and priorities outlined in the two planning documents with regard to reducing automobile dependence. For the purpose of the analysis, the criteria were divided into five categories: Land use planning; physical planning and urban design; policy; public education, information and marketing; and transportation planning. The criteria consisted of the following questions:

#### **Land Use Planning**

1. Create self-contained urban areas linked together by a transit system?
2. Do the plans encourage higher density development in the planned urban area?
3. Do the plans encourage a better mix of uses in urban areas?
4. Do the plans encourage these things to concentrate into "activity nodes"?
5. Will retail shopping centres and office uses be located within transit-oriented activity nodes or corridors?
6. Will facilities frequented by transit-dependents be located around transit stops?

#### **Physical Planning and Urban Design**

7. Do the plans aim to create a more transit-supportive development pattern?
8. Do the plans aim to develop compact, pedestrian-oriented activity nodes?

9. Will collector/arterial roads be designed to accommodate pedestrians?
10. Will collector/arterial roads be designed to accommodate transit vehicles?
11. Will bus stops and local roads be spaced 200-250m apart along transit routes?
12. Will land uses be oriented towards the street in activity nodes and corridors?
13. Will transit stop waiting areas be designed to meet needs of all transit users?
14. Will large shopping centres be designed to facilitate pedestrian access?
15. Is there a program to give transit a strong, coherent identity for stations and stops?
16. Will transit stations/stops places where people want to go or stay away from?
17. Has the option of negotiating with private firms for advertising rights in exchange for the provision of new transit stops been considered?

### **Policy**

18. Have transit agencies been actively involved in all stages of the planning process?
19. Is the policy framework in Official Plan and Secondary Plan transit-supportive?
20. Do zoning by-law regulations encourage more transit supportive development?
21. Is there a policy to promote and assist local businesses establish facilities for non-auto modes?
22. Is there a review of local company car policies in favour of promoting transit?
23. Has the option of joint development for increased private funding been explored?
24. Will incentives be provided to encourage developers to integrate with transit?
25. Is the provincial government reorienting priorities from freeways to transit?
26. Are population and employment targets set for key development sites?
27. Do government have transit responsibilities built into job descriptions?

### **Public Information, Marketing, and Education**

28. Is there a demonstration program to show benefits of transit?
29. Is there community education for communities about the potential of higher-density, compact development?
30. Are there public education exercises and awareness programs about car dependence, transit, urban sprawl, and urban lifestyles?
31. Are there efforts being made to educate the development community about the potential financial and urban design benefits of transit integration?

### **Transportation Planning**

32. Will High-Occupancy Vehicle Lanes be provided?
33. Will transit priority through traffic signal pre-emption systems be provided?
34. Will queue-jump lanes for transit vehicles be provided?
35. Will queue-jump lanes for transit vehicles be created?
36. Will the plans include reduced parking requirements for the plan area?
37. Will parking fees be raised and "free" parking be eliminated?
38. Will transfers between different transit modes and systems be facilitated?
39. Is it viable to introduce some "frequent flyer" services?
40. Has the possibility of "rhythmic timetables" been investigated?
41. Has the possibility of "night rider" services been investigated?

There is no implied order of importance for the criteria. Offering viable alternatives to automobile use requires good planning in all of the areas outlined above. This list of criteria are designed to be applied at the "node" or "regional centre" scale of development. For each criterion, the planning documents were assessed as having strong, medium, or weak potential to help reduce automobile dependence (see Table E-2).

In the area of land use, the Plans (primarily the SP) establish a framework for a pedestrian and transit-oriented activity node, with a good balance of households and jobs. With a net residential density of 66 units per hectare, and 150 residents and workers per hectare in mixed-use areas, sufficient population and job density targets are in place to support transit. In seeking to provide housing and employment in a mixed-use setting at key strategic locations that are accessible by transit, the Markham Centre Plan reflects the "Centres and Corridors" development strategy adopted by York Region. The Secondary Plan outlines maximum, rather than minimum densities for development in Markham Centre. This approach is somewhat puzzling, given that suburban municipalities typically suffer from a lack of density.

The policies in the SP that relate to urban design should provide for the development of a high quality streetscape. This includes discouraging parking between buildings and lot lines, and locating main pedestrian entrances to commercial and office buildings on the street. However, the SP provides little in the way of firm regulations for these matters. Many of the urban design elements of development are left to be addressed during site plan review.

In designing and engineering roads, there appears to be a trade-off between using standards that increase the speed of transit vehicles, and instituting measures (such as

reduced turning radii) that improve safety and access for pedestrians. Transit users are pedestrians at both ends of their trip, and thus a transit-supportive environment must first be a pedestrian-supportive one. Based on the information contained in the TMP, that trade-off seems to currently favour transit vehicles. This policy may also be in place to accommodate trucks and emergency vehicles.

The policy framework outlined in both the Markham Centre Secondary Plan and the Transportation Master Plan is designed to maximize the use of public transit. However, there are no plans to support the SP with an updated zoning bylaw that would entrench transit-supportive policies in the development process. While reorienting planning policies to favour transit seems to be a priority for staff and elected officials at both the Town of Markham and York Region, continued York Region capital funding for road expansion (at levels far beyond what is necessary to accommodate improved transit service) makes one wonder if this is simply rhetoric. Indeed, the Region's financial commitment to transit over the next 10 years is only 30 percent of the commitment to transit. Whatever the case, the efforts of both governments are hindered by provincial policies that severely limit the tools available to municipalities, such as providing financial incentives, to encourage developers to integrate with transit and provide transit-supportive amenities. Further, current provincial transportation and funding policies favour highways over rapid transit.

Public education has been an important part of implementing the SP policies. Local officials have organized community information and consultation sessions that have been well attended by local stakeholders. Developers have responded to community

**Table E-2: Summary of Results**

Criteria/Plan	SP	TMP	Both
<b>Land Use Planning</b>			
Self-contained urban areas linked together by a transit system	◆		
Higher density development in the planned urban area	≈		
Better mix of uses in urban areas	◆		
Concentrate into “activity nodes”			◆
Shopping centres, office uses located within nodes or corridors	◆		
Facilities frequented by transit-dependents located around transit stops		≈	
<b>Physical Planning/Urban Design</b>			
Create a more transit-supportive development pattern			≈
Develop compact, pedestrian-oriented activity nodes	◆		
Collector/arterial roads designed to accommodate pedestrians	≈		
Collector/arterial roads designed to accommodate transit vehicles		◆	
Bus stops and local roads spaced 200-250m apart.			≈
Land uses oriented towards the street in activity nodes and corridors	◆		
Pedestrian-supportive amenities along streets in nodes and corridors	◆		
Transit stop waiting areas designed to meet needs of all transit users			◆
Design shopping centres to facilitate pedestrian access	≈		
Give transit a strong, coherent identity for stations and stops			-
Make stations/stops a place where people feel comfortable			◆
Negotiate with private firms for advertising rights			-
<b>Policy</b>			
Transit agencies actively involved in all stages of planning process	◆		
Transit-supportive policy framework in OP and Secondary Plan	◆		
Zoning by-law encourage more transit supportive development	X		
Promote and assist local businesses establish facilities for non-auto modes?	≈		
Review local company car policies in favour of promoting transit	-		
Joint development for increased private funding			-
Provide incentives to encourage developers to integrate with transit	≈		
Provincial government reorienting priorities from freeways to transit		X (Province)	
Population and employment targets for key development sites	◆		
Transit responsibilities built into government job descriptions	◆		
<b>Public Education, Information, and Marketing</b>			
Demonstration program to show benefits of transit			X
Education about potential of higher-density, compact development	◆		
Public education/awareness programs about car dependence, urban sprawl	◆		
Educate the development community	-		
<b>Transportation Planning</b>			
Provide High-Occupancy Vehicle lanes		≈	
Transit priority through traffic signal pre-emption systems		◆	
Queue-jump lanes for transit vehicles		◆	
Create transit malls			X
Reduced parking requirements			X
Raised parking fees and “free” parking eliminated			X
Transfers between different transit modes and systems			≈
Introduce “frequent flyer” service		◆	
Rhythmic timetables		-	
All-night service		X	
<b>Legend: ◆ Strong, ≈ Medium, X Weak, - No Assessment</b>			

support by submitting proposals that conform to that principle, though they may be hindered in pursuing such projects by recalcitrant financial investors.

The TMP outlines a number of transit priority measures, including High-Occupancy Vehicle lanes, and signal pre-emption for transit vehicles. Transit service will be frequent. Service will be coordinated with GO Transit regional services to ensure fast connections and access to other parts of the GTA. While the transportation policies outlined in the TMP will provide strong incentives to use transit, the two planning documents lack complementary disincentives for automobile use, such as reduced parking requirements and plans for transit malls.

Generally, the Markham Centre Secondary Plan fares better against the criteria than the York Region Transportation Master Plan. The SP is an OMB-approved planning document, and thus it contains specific policies, benchmarks (such as densities), and guidelines for development applications. The TMP is very much a vision document. It outlines a strategy for transportation, and indicates the necessary steps, timetable, and costs to implement the vision. To have the same force and effect as the SP, those things have to be enshrined in Official Plans, budgets, and bylaws. These have already been done in some cases. Additionally, York Region needs to plan for a much larger area, that includes both suburban and rural populations. Thus, political expediency may have required York staff to shy away from potentially contentious language.

The policies outlined in both Markham Centre Secondary Plan and the Transportation Master Plan generally are well intentioned and contain many of the necessary elements to support a variety of viable transportation choices for workers and residents. However, these are for the most part only words on paper at the moment.

Ensuring that these policies are effective in reducing automobile dependence will require effective implementation. Planners and elected officials must be particularly vigilant during periods of economic decline, when they might be tempted to overlook some policies to appease developers and secure investment. Several development applications have been submitted, and the lack of OMB hearings challenging elements of the Secondary Plan, and cooperation from companies such as IBM, and developers such as the Remington Group indicate reason for cautious optimism in these early stages of the development process.

#### **Key Recommendations for Markham**

- Enact a zoning bylaw to complement and reinforce the Markham Centre Secondary Plan and ensure adherence to its policies.
- Expand public education programs to include financial institutions to dispel the perception that transit-oriented development is a risky investment.
- Explore the option of offering development incentives to developers in exchange for reduced parking requirements.
- Restrict the availability "free" parking in Markham Centre.
- Explore the possibility of creating a transit and pedestrian mall along the principal transit artery in Markham Centre.

#### **Key Recommendations for York Region**

- Re-examine capital funding for continued expansion of road infrastructure. Consider diverting those funds to more transit-supportive measures such as pedestrian-supportive amenities along major roads.
- Set design standards that prioritize the comfort and safety of pedestrians over ease of movement for vehicles, including transit vehicles (e.g. establish maximum, rather than minimum turning radii).

#### **Key Recommendations for Province of Ontario**

- Commit stable resources to improved rapid transit. This will not only reduce automobile dependence, but ease congestion on existing highways.
- Amend the Municipal Act to allow local municipalities to offer financial incentives to developers who choose to integrate with transit and provide transit-supportive amenities.