Markham Transportation Strategic Plan (MTSP)

Assessment of Growth Management Options

Presentation to Development Services Committee
April 20, 2010

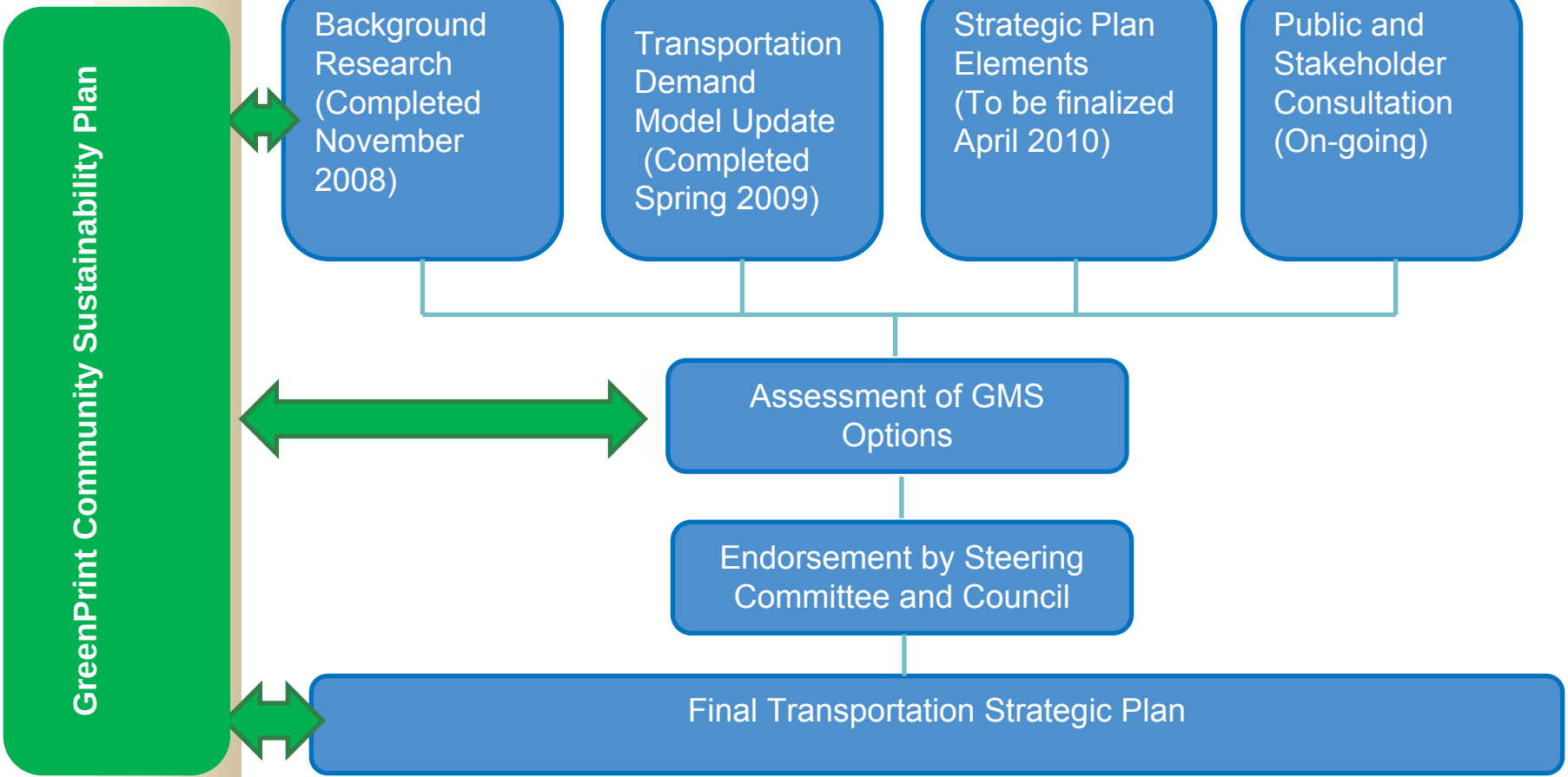
Presentation Overview

- **Purpose**
- **Overview of MTSP and Integration with GMS**
- **Key Transportation Trends and Outlooks**
- **Analysis of Growth Management Options**
- **Next Steps**

Purpose of Presentation

- **The purpose of this presentation is to review the feasibility and cost implication of two growth scenarios for 2031 (52-60% vs No Urban Boundary Expansion)**
- **Further detailed assessment of the Council's endorsed growth option to follow**

Overview of MTSP



Strategic Plan Elements

- **Transportation and Land Use Options Analysis**
- **Parking Strategy**
- **Transportation Demand Management (TDM) Strategy**
- **Active Transportation Plan (parallel project)**
- **Monitoring, Phasing and Performance Measurement**
- **Supporting elements:** Traffic operations, goods movement, collision prevention, access management, intelligent transportation systems (ITS), funding strategy

Transportation Vision

- **Based on feedback from the public, Council and coordinating with the GreenPrint, Markham's transportation strategy focuses on:**
  - — Making land uses more pedestrian, bike and transit friendly
  - — Promoting land use strategies that reduce trip lengths (mixed land uses, live-work, neighbourhood based planning for food, schools, etc)
  - — Maximizing opportunities for local transit
  - — Optimizing transportation infrastructure and managing travel demands
  - — Promoting livable communities through land use and transportation planning, including retrofits
  - — Reducing the global footprint of transportation activities

Historic Transportation Trends

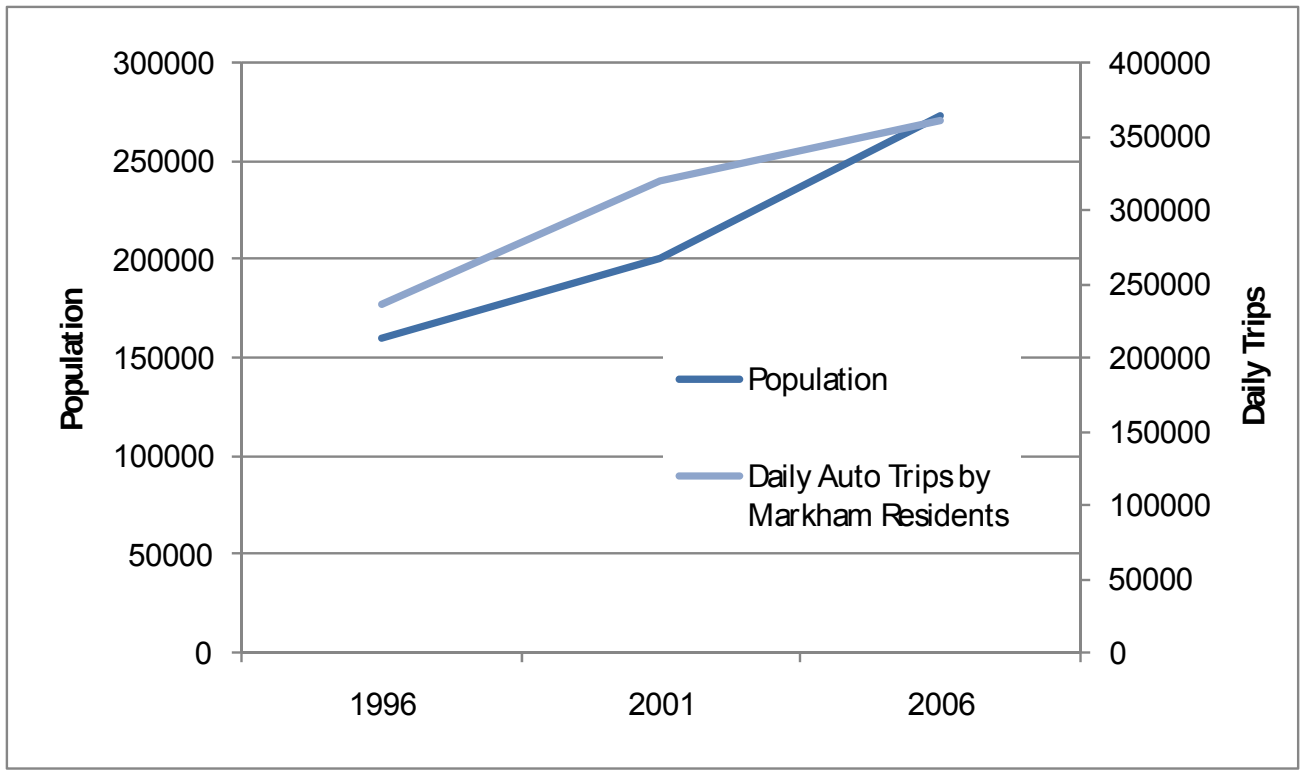
- **On a per capita basis, transportation trends in Markham are moving in the right direction**

Indicator	1996	2006
Share of trips by walking, cycling or transit	14%	16%
Percent of daily trips that start and end in Markham (Self-containment)	45%	50%
Vehicles per household	2.0	1.8
Daily Vehicle-km per household	63.4	61.1
Annual auto-related GHG emissions per household (tonnes)	5.5 t	4.9 t

Source: Transportation Tomorrow Survey

Historic Transportation Trends

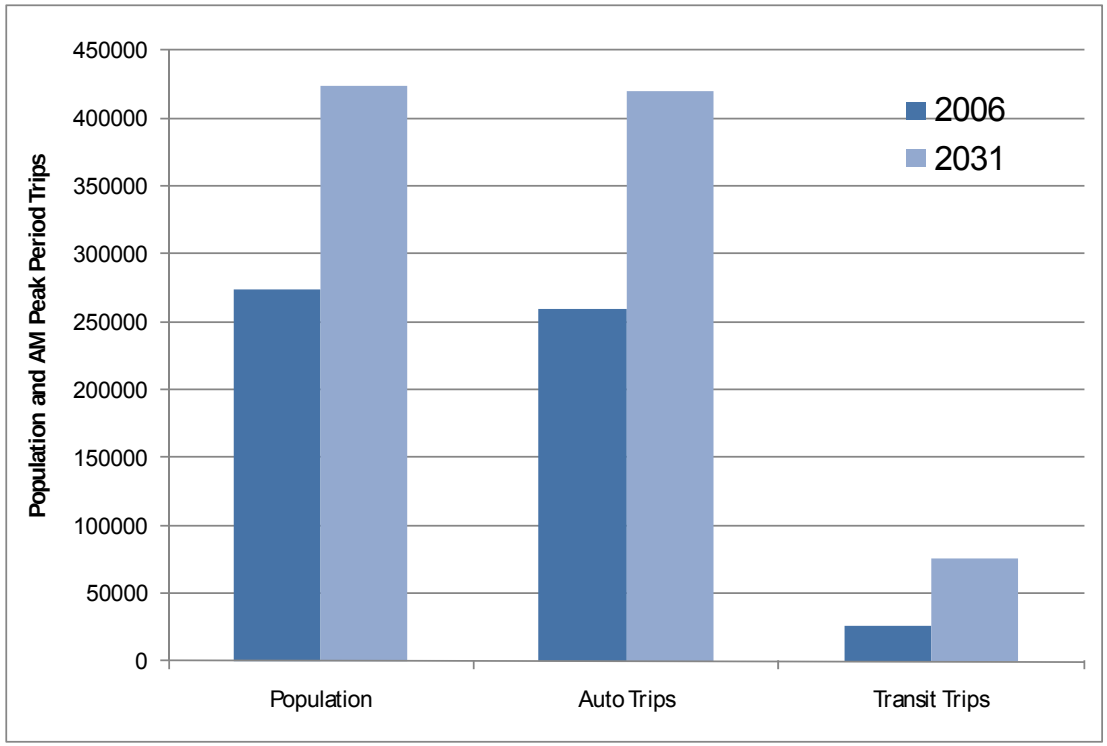
- **On an absolute basis, total automobile trips are growing in line with population**



Source: Transportation Tomorrow Survey

Projected Trends

Based on projected growth and anticipated infrastructure improvements, transit trips to/from Markham will nearly triple. However, based on current socio-economic factors, growth in auto trips will still outpace transit trips.



Analysis of Growth Options – Transportation Indicators

Indicator	Existing (2006)	52-60% (2031)	No Urban Boundary Expansion (2031)
Share of trips by transit (AM peak period trips from Markham)	11%	19%	21%
AM Peak Hours auto vehicle-kilometres of travel (1000's)	556	912	894
Average speed (km/hr)	47	45	45
AM Peak Period transit ridership – YRT, VIVA & GO (1000's)	53	154	158
Average Trip lengths	14.0	14.1	13.8

Key Findings

- **Both GMS options are similar in terms of overall transportation needs and opportunities -** Land use differences between options relate to the placement of approximately 9% of the population in 2031
- **Despite the major rapid transit and local transit improvements, there is still significant growth in vehicular traffic demand; many arterial road and collectors will experience congestion in peak hours**
- **Accommodating either scenario will require a change in travel choices and/or expectations, including increased active transportation**
- **Higher concentration of land uses will serve to reduce trip lengths and create more options for walking and cycling**
- **Increased concentration of growth in centres and corridors helps generate critical mass for transit, which also benefits existing residents**
- **Increased concentration of growth in centres and corridors will also increase auto trips in these areas**

Preliminary Infrastructure Capital Costs(1)

- **Transportation Costs include additional Roads, Structures, Ramps and Road Retrofits as well as pathways and trails**
- **Funded by Development Charges**
- **52-60% Option is approximately $106 million and the cost of No Urban Boundary Expansion Option is approximately $112 million**
- **No Urban Boundary Expansion Option may require/justify additional expenditures in intensification areas to mitigate congestion (e.g. pathways, trails, enhanced streetscaping, etc.)**
- **Operation and Maintenance costs included in Finance Department's Financial Evaluation**

(1) Local road construction costs are funded by developers and Regional and Provincial transportation costs (road & transit) not included in these estimates

Overall Strategy

- **Markham is expected to grow by approximately 150,000 people and 100,000 jobs by 2031 generating approximately 200,000 person trips to/from and within Markham**
- **Due to the limited opportunities for road expansion, additional trips will need to be accommodated on transit, non-auto modes, and active transportation, in conjunction with travel demand management (TDM)**
- **Strategies to reduce trip lengths, spread out peak travel and increase the use of non-auto modes would appear to have the greatest long term potential for Markham**

Next Steps

- **Update the study based on Council's endorsed Growth Management Option**
- **Present draft MTSP to DSC – June 2010**
- **Present Final report to Council – September 2010**
- **Incorporate recommendations in development of New Official Plan**