

# MARKHAM TOWN WIDE PATHWAYS AND TRAILS MASTER PLAN

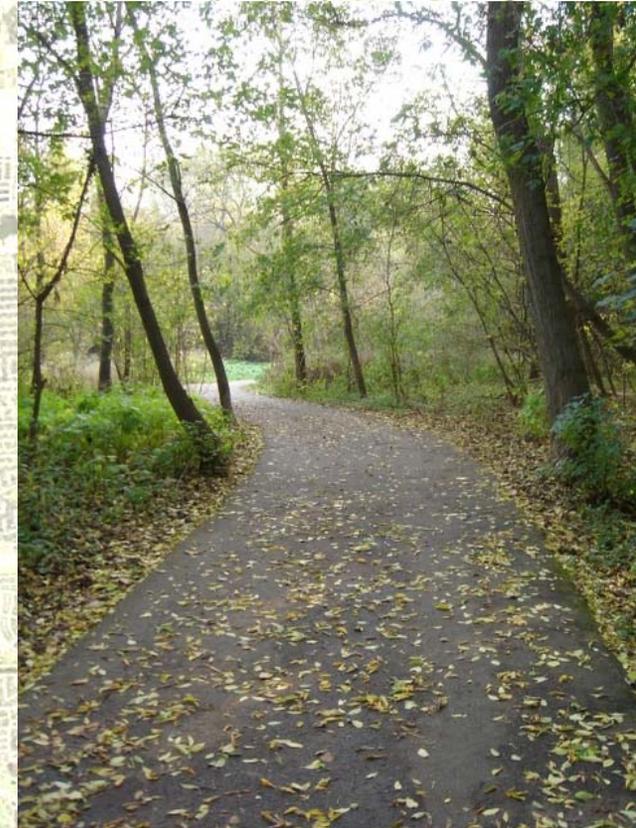


**Development Services Committee**

**April 24, 2007**

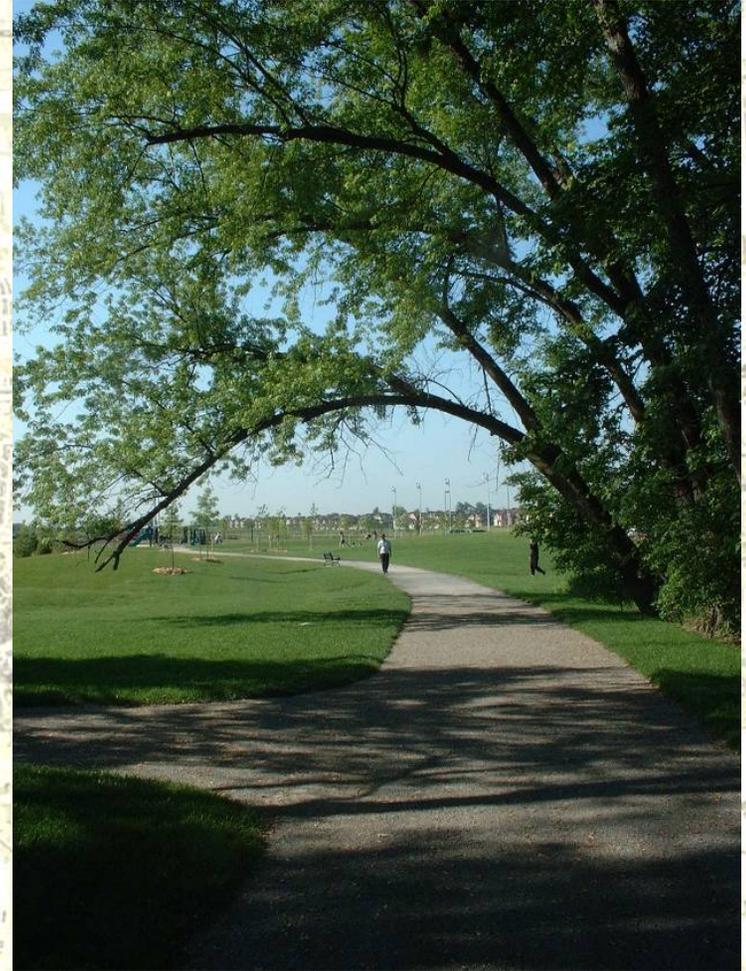
# Project Update

- **Presentation to DSC - September 2006**
- **Public open house - October 2006**
- **Refinements to Network and Priority Maps**
  - Detailed estimate of costs
  - Implementation and Funding Strategy
- **Review with Town Staff (TAC) Feb, 2007**
- **Presented to CPAC April 12, 2007**



# Presentation Outline

- **Vision and Goals**
- **Key Public Input**
- **Benefits of Pathways / Trails**
- **Final Master Plan Network and Priorities**
- **Cost Estimates**
- **Implementation Strategy**
- **Next Steps**
- **Recommendations**



The **VISION** is:

**An interconnected system of pathways and trails, which;**

- **Accommodates a wide variety of users**
- **Achieves Town priority as identified in the Parks, Recreation, Culture and Library Master Plan 2005-2021**
- **Provides a diversity of experiences**
- **Provides improved connections to existing and planned sidewalks**
- **Is more accessible and connects neighbourhoods to key destinations in the Town.**



## The Study **GOALS:**

- 1. Develop a long-term pathways and trails plan for the Town**
- 2. Provide guidance for the future delivery of pathways and trails**
- 3. Identify pathway and trail users, specific user needs and requirements through public consultation**
- 4. Develop an implementation strategy that describes routes, method of delivery, construction, costs, and priority connections to link existing systems**
- 5. Create a data management tool that can be updated and adapted as the trail system evolves over time.**



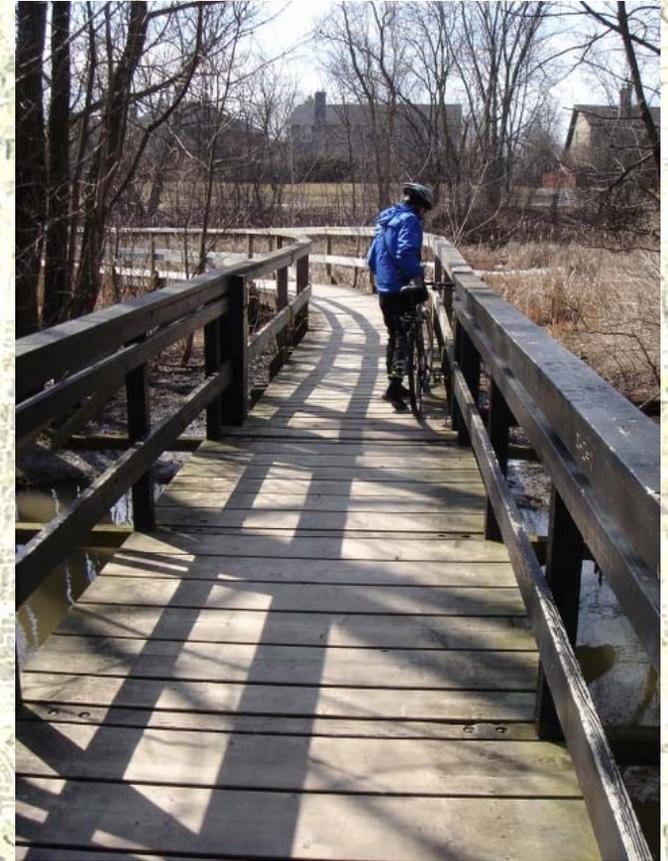
# Key Public Input

1. **Strength of existing facilities (e.g. Toogood Pond, Milne Park)**
2. **Lack of connectivity**
3. **Implementation is too slow**
4. **Desire to be able to walk / cycle to destinations avoiding busy roads**
5. **Pathways and Trails as Active Transportation – Environmental, Health, Transportation, Recreational, Economical Benefits**
6. **Pathways and Trails are not just for leisure enjoyment, they can provide viable alternative transportation mode**



# Pathways and Trails have many positive impacts on the Community:

1. Transportation Benefits
2. Recreational Benefits
3. Health and Fitness Benefits
4. Environmental Benefits
5. Economic Benefits

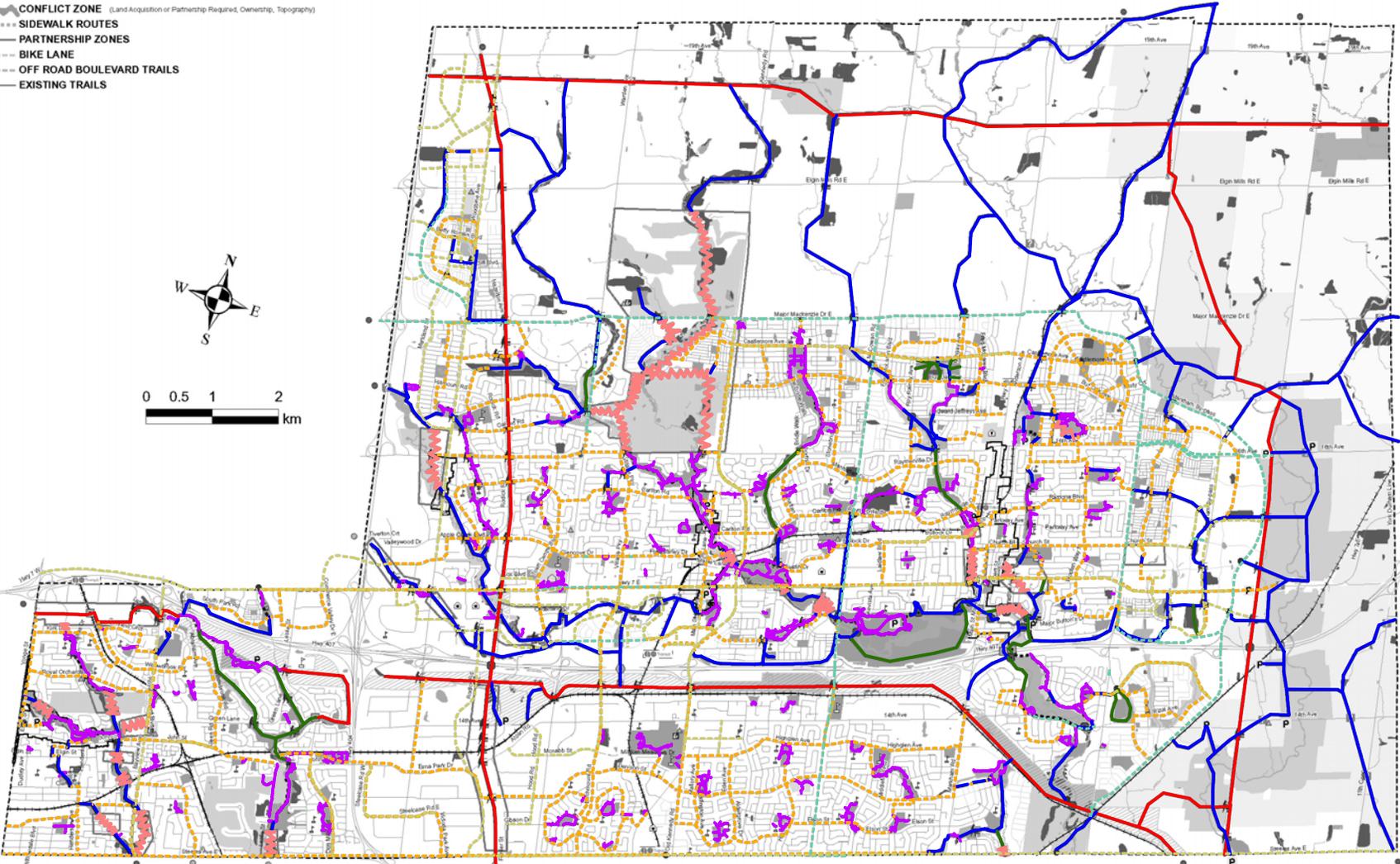


**BENEFITS OF PATHWAYS AND TRAILS**

**Legend**

- Railway
- Roads
- Proposed Future
- Park
- Open Space
- Woodlot
- Storm Water
- School
- Buffer
- Town Facilities
- Golf Course
- Golf Course
- Heritage District
- Federal Airport
- Federal Open
- Provincial Open
- Hydro Corridor
- On Road/Off Road
- Gateway to Other Facilities
- Potential Connections
- Trails & Pathways
- GO Station

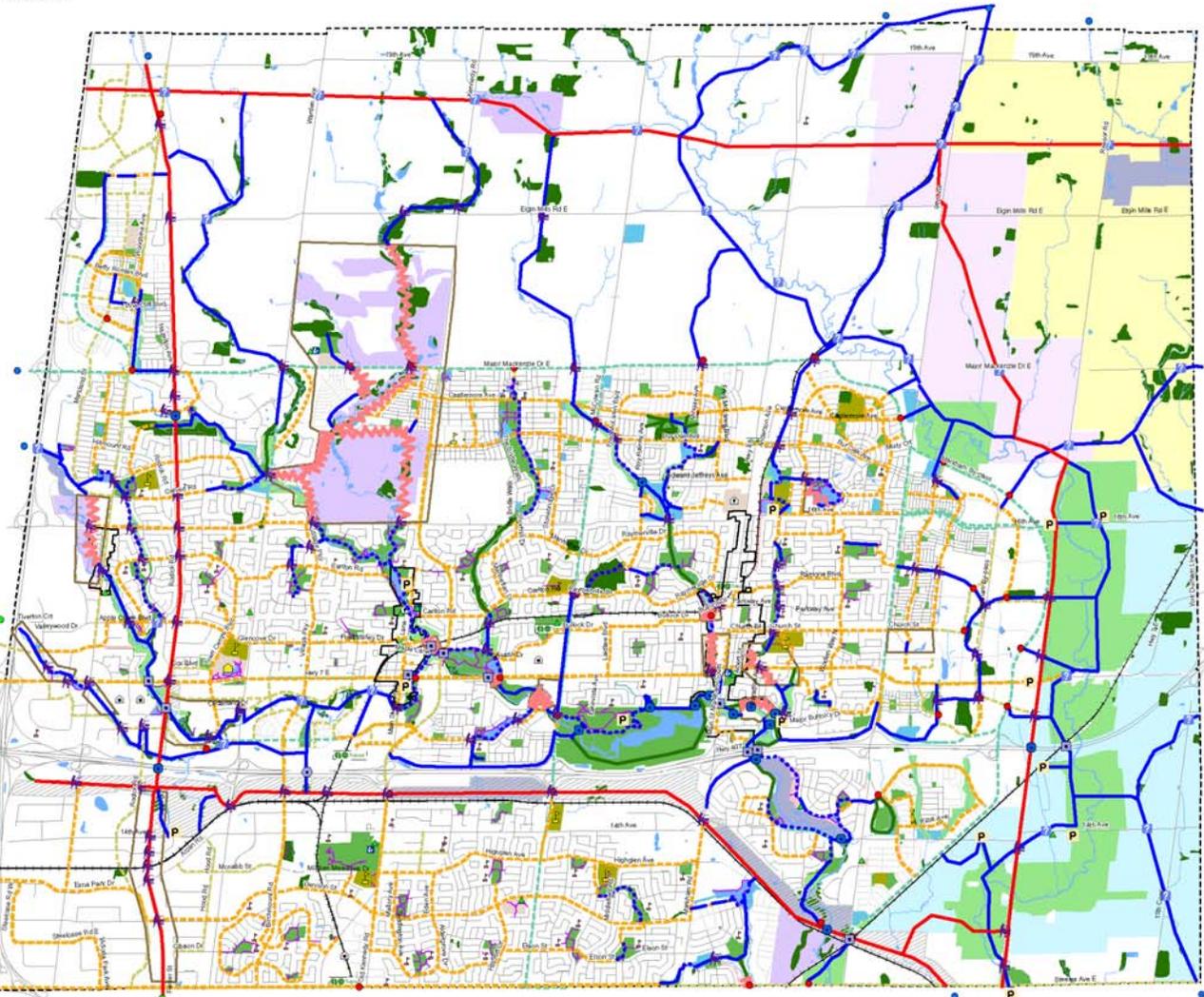
- Field Work Legend: (Draft Facility Types)**
- TYPE 1 - PRIMARY MULTI-USE TOWN WIDE PATHWAY
  - TYPE 1 - ON EXISTING TRAILS
  - TYPE 2 - SECONDARY TOWN WIDE PATHWAY
  - TYPE 2 - ON EXISTING
  - TYPE 4 - TRAILS
  - PROPOSED TRAIL HEAD
  - AT GRADE CROSSING
  - TRAIL UNDER EXISTING BRIDGE
  - PROPOSED UNDERPASS
  - PROPOSED BRIDGE CROSSING
  - CROSSING TO BE DETERMINED BASED ON FUTURE ROAD PLANS / UNKNOWN
  - CONFLICT ZONE (Land Acquisition or Partnership Required, Ownership, Topography)
  - SIDEWALK ROUTES
  - PARTNERSHIP ZONES
  - BIKE LANE
  - OFF ROAD BOULEVARD TRAILS
  - EXISTING TRAILS



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# Unit Costs for Selected Features

- **Asphalt Pathway** = **\$192,000 /km**
- **Limestone Pathway** = **\$132,000 /km**
- **Signalized Pedestrian** = **\$75,000 each**
- **Mid-Block Road Crossing**
- **Steel Truss Pedestrian** = **\$2,800 /m**
- **Bridge**

Notes: Pathway costs include rough grading in valley conditions

# Order of Magnitude Costs

- **Existing Trails = 32kms**
- **Short Term (0-5 YRS) = 25kms, \$10.4 Million**
- **Med Term (5-10 YRS) = 65kms, \$19.4 Million**
- **Long Term (10-20 YRS) = 42kms, \$22.3 Million**
- **Ultimate (20-50 YRS) = 33kms, \$11.4 Million**
- **Total Network over 50 Years = 175kms, \$63.5 Million**

<b>Assumptions</b>	<b>Excluded</b>
higher costs for valley construction	facilities by developers
2007 Prices – inflation will apply	Rouge Park facilities
based on conceptual information	property acquisition
all Type 2 trails implemented as asphalt	major utility relocation
includes 10% Design and Engineering	improvements to existing trails
includes 10% Town Project Management costs	regular trail signage and furnishings
includes 25% estimating contingency	excludes streetscape improvements to sidewalk routes
	major grading or site works

# Operations / Maintenance Costs

- **Operational / Maintenance cost difficult to estimate due to varying levels of maintenance**
- **Research indicates a range in maintenance from \$2,200 per km annually, to as high as \$14,000 for a highly maintained pathway (i.e. lighting, snow plowing, paving surface upgrade, etc.)**
- **Ultimate Master Plan = 175 kms**
- **Operations budget from \$385,000 to \$2.5 million annually once full system is implemented**
- **Operations and maintenance may be reduced by volunteer efforts**
- **Life cycle for trails and pathways is 15-20 years. Need to allocate Reserve Funds for life cycle rehabilitation.**

# Seven Major Funding Types:

1. Fees, Levies
2. Public Grants
3. Private Grants
4. Entrepreneurial
5. Assessments
6. Donations
7. User Pays

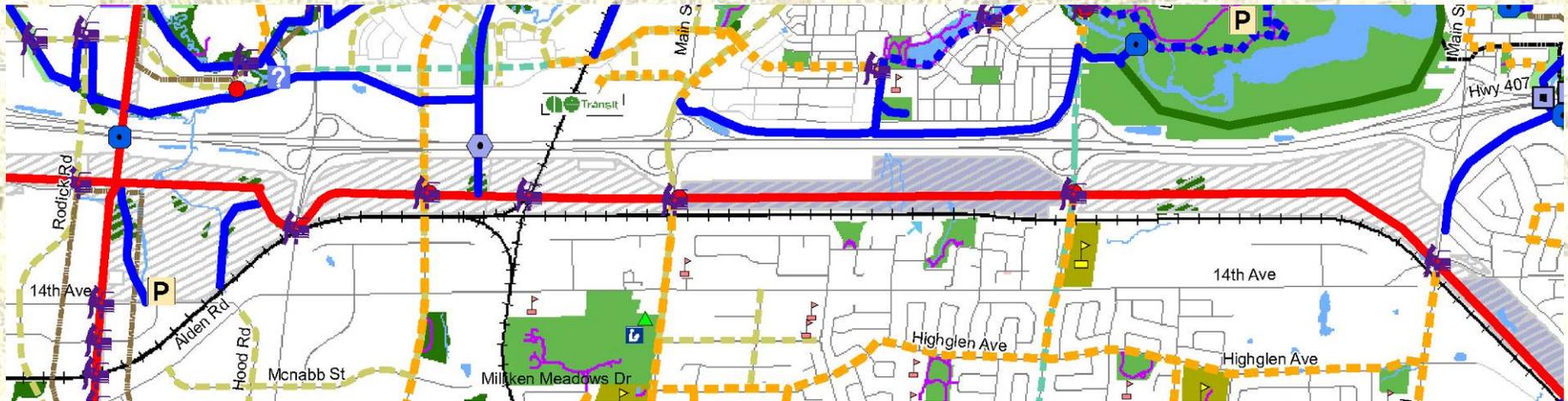


# Potential CPAC Initiatives:

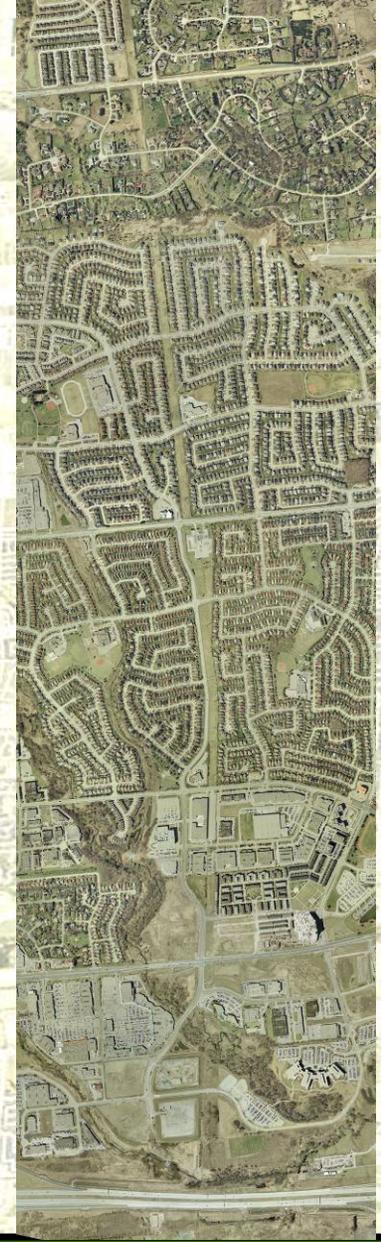
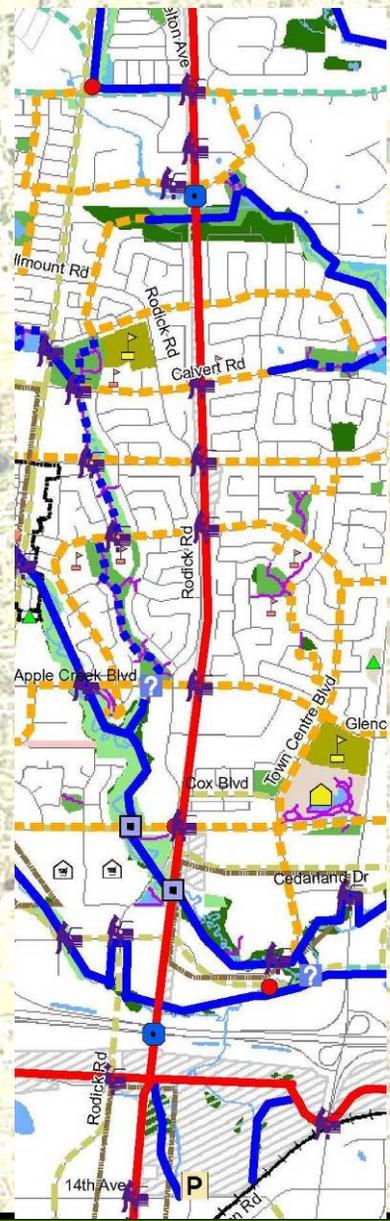
- the catalyst to organize fundraising events
- could organize and enlist volunteers
- hold events and festivals which are to celebrate and increase interest in the Pathway and Trail Network
- implement a program to pursue bequests, donations, and in-kind donations
- implement and support programs such as “Adopt-a-trail”, or “Buy-a-Foot” programs, some of which may already be in place
- pursue funding opportunities for pathway and trail projects
- **Continue to Support and Promote Pathways and Trails as viable modes of ACTIVE TRANSPORTATION!**



## Hydro Corridor Pathways (East West) – Estimated Cost: \$2.0 million

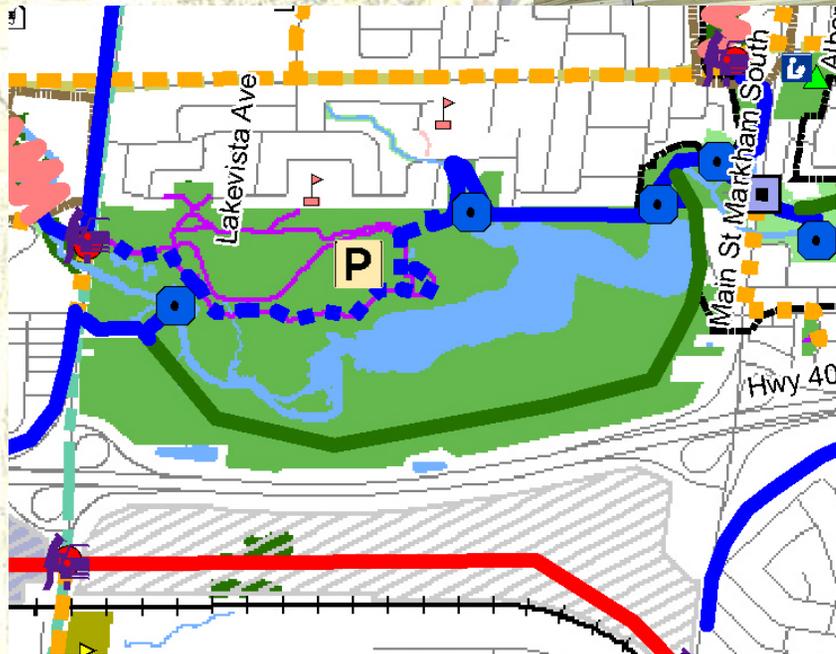


**Hydro Corridor  
Pathways  
(North South)  
Estimated  
Cost:  
\$1.2 million**



**PRIORITY PROJECTS**





**Connection from Milne Park to Main St. Markham, Estimated Cost: \$900,000**



**PRIORITY PROJECTS**



- Why not other high priority projects?



- Other High Priority Routes – Property Barriers
- Negotiations should begin immediately, while other projects with less barriers are undergoing detailed design and construction

# Implementation Action Steps: (to be refined)

- **Phased, multi-year, inter-departmental approach**
- **Staff Resources: Design, Construction, Operations, and Maintenance**
- **Gas Tax Funding and Town capital / DC funding per year**
- **Requires ongoing funding commitment (Capital & Operating)**
- **Priority projects: Hydro Corridor Pathways, and Milne Park to Main St. Markham**
- **Define approach to acquisition and easement negotiation**
- **Promotion and Marketing: Awareness**
- **Active Transportation**
- **Encourage and Support CPAC**

# The Next Steps:

- **Final Public Open House in May to review Master Plan**
- **Final Revisions Based on Council and Public Feedback**
- **Coordination with the Other Ongoing Studies including the Bicycle Study and Regional Study**
- **Final Report Fall 2007 for Council Approval**
- **Consideration in capital budget process in 2008**



THANK YOU



QUESTIONS?