

3

ROADS CAPITAL CONSTRUCTION PROGRAM UPDATE

The Transportation Services Committee recommends the adoption of the recommendation contained in the following report dated October 23, 2009, from the Commissioner of Transportation Services.

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report provides an update on the status of the 2009 Roads Capital Construction Program.

3. BACKGROUND

The 2009 Roads Capital Budget of \$197.5M consists of \$110.9M new 2009 budget plus \$86.6M carried forward from unspent 2008 budget. Approximately \$176.2M was allocated to road related construction projects such as road widenings, road resurfacings and bridge rehabilitation, \$22.2M of this budgeted work is largely delivered by outside agencies with the Region as a cost-sharing partner.

The overall 2009 – 10 Year Roads Capital Program (2009 to 2018) is \$1.516B. The 2009 Roads Capital Budget of \$197.5 represents approximately 13% of the expenditures in the 2009 – 10 Year Roads Capital Program.

Projects are only tendered when the risk of cost escalation during construction is minimized

The approach used for delivery of Roads capital projects is to minimize risk and project costs by carefully planning many details in advance. Projects are often tendered throughout the course of the year because of the number of variables to be coordinated, such as property acquisition and approvals required from external agencies. Tender calls are scheduled based on the earliest anticipated date for the completion of the design and contract documents but the tenders are not released until all required permits and properties are acquired, utilities are relocated, and funding (in the case of cost-sharing/recovery from others, front-end financing) is in place. Also, all road and bridge projects are coordinated with any water or wastewater capital infrastructure projects,

York Region Transit/VIVA and local municipal initiatives to minimize community disruption and maximize construction efficiencies.

This report describes the status of projects currently underway and the plans for the remaining portion of 2009 and first quarter of 2010.

4. ANALYSIS AND OPTIONS

The 2009 Roads Capital Budget is presented in Table 1.

Table 1
2009 Approved Capital Budget

Purpose	Amount
Expansion/Growth related road construction (managed by Regional staff)	\$131.8M
Rehabilitation/Asset Management related road construction	\$22.2M
Sub-total	\$154.0M *
Expansion/Growth related road-related construction (delivered by others)	\$22.2M
Road operations capital (ITS, new patrol yard purchase, program support, allocations, etc.)	\$21.3M
Total	\$197.5M

Note: * Subject of this report.

The construction of many road projects resulting in additional road capacity was substantially completed in 2009

The following expansion/growth road projects have been substantially completed in 2009:

- Widening of Major Mackenzie Drive from Woodbine Avenue to Kennedy Road, Town of Markham.
- Widening of Teston Road from Weston Road to Jane Street, City of Vaughan.
- New interchange at Highway 400 and Teston Road, City of Vaughan.
- Reconstruction of Ravenshoe Road from Prout Road to Weir's Sideroad, Town of Georgina.
- Construction of a new signalized intersection at Warden Avenue at Mount Albert Road, Town of East Gwillimbury.
- Reconstruction of Mount Albert Road from east of Colonel Wayling Blvd. to Woodbine Avenue to accommodate the Highway 404 extension, Town of East Gwillimbury.
- Highway 7 bridge rehabilitation west of Bullock Drive, Town of Markham.

- Widening of Dufferin Street from Steeles Avenue to Glen Shields Avenue for the addition of Transit/HOV and bike lanes, City of Vaughan.
- Kennedy Road at Elgin Mills Road intersection improvements, Town of Markham.
- 9th Line at Millard Street intersection improvements, Town of Whitchurch-Stouffville.
- Signalization of Davis Drive West at Keele Street, Township of King.

The above projects have not only resulted in the addition of 16 lane kilometres to the Region's road network but also enhanced intersection safety, facilitated expansion of Highway 404 and enhanced the value of the Region's bridge assets.

The construction of many roads projects was ongoing in 2009 and will be completed in 2010

The following expansion/growth road projects were under construction in 2009 and will be carried over and completed in spring/summer 2010:

- Bathurst Street from Mulock Drive to Davis Drive West, Town of Newmarket and Township of King.
- Ninth Line from Highway 407 to Rose Way, Town of Markham.
- Stouffville Road from McCowan Road to Highway 48, Town of Whitchurch-Stouffville.
- Woodbine Avenue By-pass (Victoria Square) from north of Major Mackenzie Drive to south of 19th Avenue, Town of Markham.
- Highway 50 at Highway 7 intersection improvements, City of Vaughan.
- Dufferin Street from Glen Shields to Langstaff Road, City of Vaughan.

Upcoming 2009 and early 2010 Construction Tenders

The tendering of capital infrastructure road projects is contingent on a number of factors all being in place. These factors include but are not limited to property acquisition, permit approvals and timing of water, wastewater or other municipal infrastructure. The following projects are planned to be tendered in 2009 or in the first quarter of 2010. The proposed timing of the tenders is noted Table 2.

Table 2
Upcoming Construction Tenders

Project	Key Issues	Status
Widening and reconstruction of Woodbine Avenue from Ravenshoe Road to Morton Avenue, Town of Georgina.	• Coordination with Water and Wastewater infrastructure • Incorporation of Town of Georgina infrastructure	• Tender Q4 2009 • Anticipated completion fall 2011
Intersection improvements and signalization of Keele Street at 15 th Sideroad	• Coordination with monestary property	• Tender Q1 2010 • Anticipated completion fall 2010
Widening and reconstruction of Stouffville Road from Highway 404 to Warden Avenue and Stouffville Road from Warden Avenue to McCowan Road.	• Permits – new requirements from MNR to address Redside Dace now being an Endangered Species	• Tender Q1 2010 • Anticipated completion fall 2011
Widening and reconstruction of Langstaff Road from Highway 50 to Highway 27.	• Coordination with MTO/Highway 427 Extension IEA	• Tender Q1 2010 • Anticipated completion summer 2011
Widening and reconstruction of York/Durham Line from Steeles Avenue to Highway 401	• Combined with South East Collector contract	• Tender Q1 2010 • Anticipated completion fall 2011

More than ten rehabilitation/asset management projects have already been completed in 2009

In addition to the above growth/expansion roads projects, many rehabilitation/asset management capital projects have been tendered and were being constructed in 2009 or will be tendered in 2009 and constructed in 2010. The rehabilitation/asset management program includes works such as resurfacing and pavement rehabilitation contracts, minor intersection improvements such as installation or modification of traffic signals and/or illumination and bridge/structure repairs.

Some of the key resurfacing and road rehabilitation projects substantially completed in 2009 include:

- Leslie Street – Green Lane to Mount Albert Road.
- Mount Albert Road – Leslie Street to Colonel Wayling Blvd.
- Highway 7 – Jane Street to Keele Street.
- Highway 7 – Main Street Markham to Donald Cousens Parkway.
- Pine Valley Drive – Steeles Avenue to Langstaff Road.
- Dalton Road – Baseline Road to Metro Road.
- Kennedy Road – Mount Albert Road to Pollock Road.
- Weston Road – Steeles Avenue to Highway 407.
- Highway 7 – Centre Street to Bathurst Street.
- Highway 7 at Bathurst Street and Bayview Avenue.

York Region staff are also delivering additional projects funded by the \$26.5M Federal Infrastructure Stimulus Fund contribution

The 2009 Federal budget established a new \$4-billion Infrastructure Stimulus Fund (ISF) that provides funding towards the rehabilitation or construction of provincial, territorial, municipal and community infrastructure projects. York Region's Transportation Services Roads Branch applied for stimulus funding for several Roads capital projects.

Ten projects were approved for ISF contributions

In July 2009, York Region received confirmation from the Federal government that ten of its Roads project applications for ISF funding were approved. These projects are as follows:

- Dufferin Street Rehabilitation from Glen Shields Avenue to Langstaff Road, City of Vaughan.
- Bathurst Street Rehabilitation from Steeles Avenue to Centre Street, City of Vaughan.
- Weston Road Rehabilitation from Langstaff Road to Rutherford Road, City of Vaughan.
- Keele Street Rehabilitation from Rutherford Road to Major Mackenzie Drive, City of Vaughan.
- Old Homestead Road Rehabilitation from Warden Avenue to Station Road, Town of Georgina.
- Davis Drive Rehabilitation from Patterson Street to Woodbine Avenue, Towns of Newmarket and Whitchurch-Stouffville.
- Warden Avenue Rehabilitation from Steeles Avenue to MacPherson Street, Town of Markham.
- Highway 27 Rehabilitation from Nashville Road to Davis Drive West, City of Vaughan and Township of King.
- Bathurst Street Rehabilitation from Major Mackenzie Drive to King Road, City of Vaughan, Town of Richmond Hill and Township of King.

- Gamble Road Widening from Bathurst Street to Yonge Street, Town of Richmond Hill.

Many of these projects are either completed or underway and scheduled for completion in spring 2010. The Gamble Road and Highway 27 projects will be tendered in the first quarter of 2010 and construction will be substantially completed by the end of 2010.

In addition to the above rehabilitation and ISF funded projects, design and construction is also underway on more than five minor intersection improvement projects which will be constructed in 2009/2010

In addition, design and construction work is underway for many intersection improvement projects, some of which are:

- Bathurst Street at Queensville Sideroad.
- 16th Avenue at Red Maple Road.
- Bloomington Road at Red Cardinal Trail/Soleil Boulevard.
- Woodbine Avenue at Cardico Drive.
- Yonge Street at Regatta Avenue.

Regional staff continue to improve delivery of our services to the Regional businesses and ratepayers by reviewing current practices

As the needs of our communities, road users and transportation customers evolve and change so to does the need for our road construction practices and procedures to change. During 2009, with the significant volume of work underway as part of our base program and augmented by the construction of many ISF projects, many lessons were learned that will be incorporated into our planning and construction in future years.

Simultaneous construction on parallel corridors will be more carefully reviewed during the planning of construction schedules for future projects

While it has been our practice not to have parallel arterial corridors under construction concurrently, during 2009, the ISF program resulted in our deviating from this practice.

Dufferin Street from Steeles Avenue to Glen Shields Avenue was under construction for widening when we initiated construction on the Bathurst Street rehabilitation from Steeles Avenue to Centre Street. It was initially thought this timing for both projects would have a marginal impact on traffic; however, this impact would be offset by benefits of further stimulating the economy through aggressively implementing the ISF projects. During construction of the Bathurst Street project, it became known that the community impacts and the incremental delay caused by having multiple parallel corridors under construction at the same time were of significant concern to the surrounding community.

Prior to the start of construction on future pavement rehabilitation projects, we will better inform the surrounding communities of the reasons for and the results expected after our work has been completed

During 2009, we received significant question and feedback on the rehabilitation treatments selected for many of our corridors. This was most notably in the areas where we applied “Double Chip Seal” and “Micro Surfacing” treatments. While these techniques have been in practice in York Region for several years, the change from the original surface to the new surface raised many questions from our residents and local municipalities.

As part of the design and engineering work to develop our minor capital construction contracts staff engaged the services of industry experts and geotechnical consultants to evaluate the existing condition of our roadways and recommend the preferred rehabilitation treatment. The type of treatment is based on many factors such as existing condition/cracking/distress, subgrade soil types, thickness of asphalt and granular material, traffic volumes, roadside environment (rural or urban), etc. These elements all factor into the selection of a preferred treatment type with the underlying objective to maximize the service life and minimize life cycle cost.

In recognition that the evolution of pavement rehabilitation program has progressed significantly over the past three years it is staff’s intention to convene a workshop with staff from the local municipalities. The intent of this workshop will be to present the minor capital program objectives, explain the types of treatments being used by York Region and ask how the local municipalities can be better engaged as key stakeholders. Depending on the results of this workshop, we will consider next steps including, but not limited to, presentations to local municipal councils, annual meetings with local municipal staff and reinstating public meetings in advance of our rehabilitation projects.

PLANNING AND DESIGN STUDIES ARE ALSO UNDERWAY FOR A NUMBER OF FUTURE PROJECTS

Environmental Assessments and preliminary engineering activities are continuing on a number of key corridors in preparation for future work as approved in the 2009 10-Year Roads Capital Program. These include:

- Western Vaughan Arterial Road Improvements Individual Environmental Assessment.
- Keele Street from Steeles Avenue to Rutherford Road.
- Leslie Street from Wellington Street to Mulock Drive.
- Bathurst Street from Green Lane to Yonge Street.
- Vaughan Corporate Centre Ramp Connections to Highway 400.
- 2nd Concession from Green Lane to Queensville Sideroad.

- Doane Road from Yonge Street to Woodbine Avenue.

Since June 2009, we have completed the EA for Bathurst Street from Highway 7 to Teston Road/Elgin Mills Road and it has achieved *Environmental Assessment Act* clearance to proceed to the implementation phase.

In addition, environmental assessments to be initiated before the end of 2009 include those for future programmed work in the following corridors:

- Rutherford Road from Jane Street to Yonge Street.
- Intersection improvements at King/Vaughan Line and Jane Street, Keele Street and Dufferin Street.

Work is also continuing on the Sustainable Travel Choices (STC) study in the Town of Markham.

5. FINANCIAL IMPLICATIONS

There are no financial implications resulting from the recommendations contained in this report.

Based on the results to the end of the third quarter, we are forecasting the total year-end expenditures to be approximately \$111.2M of the \$154.0M budget. This represents an expenditure of approximately 72% of the budget. The key projects with significant under expenditure are York/Durham Line from Steeles to Highway 7, 19th Avenue from Yonge Street to Bayview Avenue, Langstaff Road from Highway 50 to Highway 27, Stouffville Road from Highway 404 to McCowan Road and 9th Line at Major Mackenzie Drive intersection improvement.

6. LOCAL MUNICIPAL IMPACT

Regional staff continue to work closely with staff from the local municipalities to ensure local concerns are addressed through the preparation for York Region's projects. Furthermore, requirements for additional municipal infrastructure are routinely incorporated into Regional construction contracts where practical. The successful timely delivery of key infrastructure is critical to meet the needs of current residents and businesses as well as approved future growth in York Region.

7. CONCLUSION

York Region continues to invest significant resources in very large infrastructure programs. In 2009, construction has progressed on eleven high profile capital road projects. Before the end of 2009 or the first quarter of 2010 construction of an additional four growth/expansion capital road projects will be started or tendered.

For more information on this report, please contact Paul Jankowski, General Manager, Roads at extension 5901 in the Transportation Services Department.

The Senior Management Group has reviewed this report.