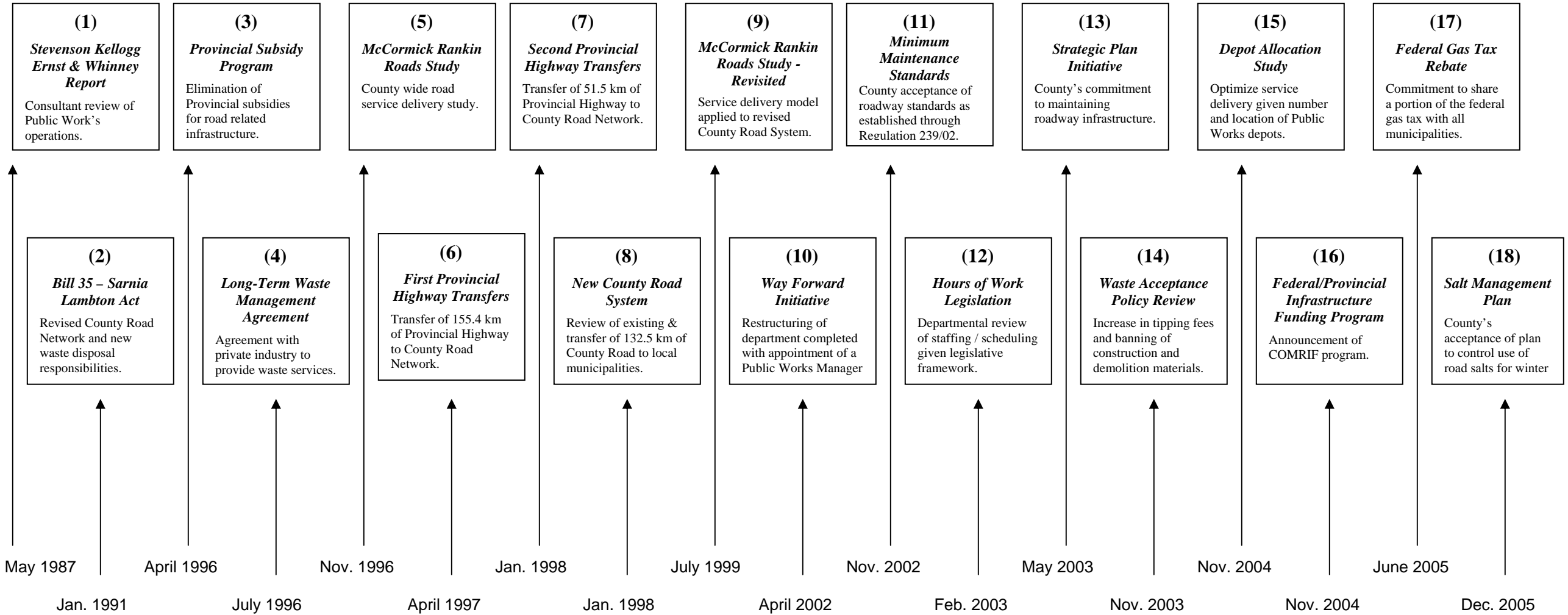


**INFRASTRUCTURE & DEVELOPMENT SERVICES DIVISION
PUBLIC WORKS DEPARTMENT**

HISTORICAL IMPACTS/REPORTS TIMELINE



INFRASTRUCTURE & DEVELOPMENT SERVICES DIVISION PUBLIC WORKS DEPARTMENT

HISTORICAL IMPACTS/REPORTS BACKGROUND

Stevenson Kellogg Ernst & Whinney – Departmental Review (1)

- In May 1987, the County of Lambton solicited proposals from interested parties to complete a departmental review of the Roads Department. The assignment was awarded to Stevenson Kellogg Ernst & Whinney Management Consultants.
- County Road network was then comprised of 515 km of collector roadways with 98 large span structures, with a staff of **42 fulltime employees** performing administrative duties out of Wyoming and operations from a main depot located in Petrolia and a district depot outside of Forest. Fulltime staffing was supplemented with seasonal workers during the construction season.
- The purpose of the study was to review the structure of the Roads Department including its methods of operation, and to make specific and detailed recommendations in regards to improving the services delivered by the department.
- The reports findings were as follows:
 - Engineer had too broad a span of control and all departmental decisions are focused at this level;
 - additional supervisory development was required;
 - maintenance system to facilitate planning and organizing activities were inadequate;
 - planning and scheduling of crews was inadequate;
 - work force productivity was below desired level;
 - vehicle programs were inadequate;
 - contracts were granted in isolation from any County procedures.
- The following recommendations were made to improve department operations:
 - formalize the communications channels to the foreman level and below;
 - restructure department to include an Operations Manager/Road Superintendant;
 - provide additional supervisory development training;
 - introduce a maintenance management accounting control system;
 - improve planning and scheduling;
 - incorporate regular productivity audits.
- Report recommendations were implemented as presented.
- Changes resulted in a staff compliment of **43 fulltime employees** through the hiring of the Operations Manager.

Bill 35 - Sarnia Lambton Act (2)

- With the royal assent of Bill C-35 (Sarnia-Lambton Act) in July of 1989, the newly amalgamated City of Sarnia, including the former Town of Clearwater, joined the County of Lambton.
- Part VIII of the act clarifies the responsibilities pertaining to Waste Disposal within the County structure including the following:
 - Commencing January 1, 1991 the County became responsible to provide appropriate facilities for the receiving, dumping, and disposal of waste.
 - The County shall designate to each municipality one or more facilities for waste disposal purposes.
 - As such, the County obtained ownership of all active waste disposal facilities owned by the member municipalities, namely the Brooke, Dawn, Grand Bend, Moore, Sarnia and Sombra Landfills.
- Part IX of the act dealt with the provisions of the County Road System including the following:
 - Provided for the dissolution of the Sarnia Suburban Roads Committee.
 - That all roads under the jurisdiction and control of the County as of January 1, 1991 shall continue to form part of the County Road System together with those roads under the jurisdiction and control of the Sarnia Suburban Roads Committee, and the roads within the amalgamated City of Sarnia as prescribed by the Minister.
 - This resulted in the following additions to the County Road System:
 - Army Camp Road from Ipperwash Park to Thomson Line – 7.4 km;
 - Thomson Line from Highway 21 to Highway 7/79 – 12.3 km;
 - Christina Street from Michigan Avenue to Murphy Road – 2.3 km;

- London Road from Exmouth Street to Front Street – 5.25 km;
- Wellington Road from Highway 40 to Front Street – 5.1 km;
- Michigan Avenue from Murphy Road to Front Street – 3.4 km;
- Confederation Street from Front Street to Indian Road – 2.7km;
- Holt Line from Highway 40 to St. Clair Parkway – 6.4 km;
- Indian Road from Highway 40 to Lakeshore Road – 8.2 km;
- Christina Street/Front Street/Johnson Street from Confederation Street to Michigan Avenue – 8.3 km.
- The County also took the opportunity to review the revised County Road System and transferred the following sections of roads to the local municipalities:
 - Port Franks Road from Highway 21 to Riverside Drive – 2.3 km;
 - Ravenswood/Ipperwash Road from Northville Rd. to West Parkway Dr. – 10.9 km;
 - Blackwell Road from Michigan Avenue to Lakeshore Road – 5.8 km;
 - Michigan Avenue from Christina Street to Livingston Street – 1.9 km.
- Transfers resulted in a net increase to the County Road System of 41.75 km and a total road network of 559 km.
- It also included the provision that all bridges that on December 31, 1990 that are under the exclusive or joint control of the County are transferred and vested to the local municipality that has the jurisdiction over the highway where the bridge lies, excepting bridges on County roads, bridges on boundary lines between local municipalities, and those bridges situated on a County boundary line.

Provincial Subsidy Program (3)

- In April 1996, the Province of Ontario discontinued the practice of providing shared funding to municipalities for operating and capital expenditures pertaining to roadway infrastructure.
- In prior years, the provincial funding formula had been revised to include only certain core activities (i.e. paving, shouldering, etc.) and the funding for the softer activities (i.e. grass cutting, tree trimming, etc.) had been removed. This mandate was the last step the Province made in eliminating consistent funding to municipalities for road related infrastructure.
- This loss in funding had a dramatic impact to the Roads Department significantly reducing the financial resources available for road purposes. Given this loss of provincial funding, the County's options were to increase taxes to offset the loss of provincial funding or reduce spending within the Public Works function. This situation was compounded further given other competing demands within the County given the evolving nature on the organization.
- FTE: 37 (includes 3.5 FTE Waste Management)

Long Term Waste Management Agreement (4)

- In July of 1996, the County entered into a twenty-five year (25) agreement with Philip Environmental and K & E Solid Waste Management to provide Waste Disposal and other related services to the County and its member municipalities. The agreement took effect on November 1, 1995.
- The waste disposal provisions included the disposal of municipally collected wastes at the Petrolia Landfill Site at a base disposal fee with an annual escalation clause.
- The other services included the daily operation of the Sarnia Landfill Site and other County owned facilities, proforma contracts for the collection of organics, waste and recyclables, and annual royalty payments.
- The site operations provisions expired with the closure of the Sarnia Landfill Site in October, 1999.
- In accordance with the terms of the agreement, the proforma contracts lapsed as none of the local municipalities chose to contract for these services within the prescribed timeframes.
- The assets of Philip Environmental and K & E were subsequently purchased by Canadian Waste Services and morphed into Waste Management of Canada Inc.
- The long term waste agreement expires on October 31st, 2021.

McCormick Rankin Roads Study (5)

- In November 1996, the County retained McCormick Rankin & Associates Ltd. to undertake a Road Management System Options Study that would encompass all municipalities within the County structure.
- The study was to examine alternative service delivery models and establish the magnitude of savings for the various options considered.
- The following six (6) road management system options were considered:
 - Existing Road Management System (status quo) would see a continuation of the existing County Road and Local Municipal Road operations;
 - Local Road Management System (20 local municipalities) would see the local municipalities assume those County Roads within their boundaries;
 - Single Tier Road Management System would see the County assume all municipal roads within the County;

- Local Road Maintenance Systems and County Capital on County Roads (20 local municipalities) would result in the local municipalities assuming the maintenance on all roads within their municipalities with the County responsible for construction activities on County roads.
- Hybrid System – 9 Local Road Maintenance Systems and County Capital on County Roads would result in the 20 local municipal road systems being restructured into 9 local road authorities for maintenance on all roads under their jurisdiction with the County responsible for construction (capital) activities on County Roads.
- One Tier Management System with Privatized Maintenance would see all roads within the County assumed by the County with the County performing all construction (capital) activities and all maintenance activities contracted to the private sector.
- A Single Tier Road Management System at the County level was identified as being the most cost effective of the various options. Report not implemented, see item 9 below.

First Provincial Highway Transfer (6)

- On April 1st, 1997, the Province of Ontario, through the provisions of the Public Transportation and Highway Improvement Act, transferred 155.4 km of Provincial Highway to the County of Lambton with funding of \$4,324,150.
- Transfer included the following sections of Provincial highway including all related appurtenances (i.e. bridges, culverts, guiderail, signs, entrances, etc.):
 - King’s Highway 7/22 (renamed County Road 22 – London Line/Egremont Road) from 300 m west of Highway 40 to Middlesex County boundary – 43.0 km;
 - King’s Highway 7/79 (renamed County Road 79 – Cairo Road/Nauvoo Road/Arkona Road) from Kent County boundary to Highway 7 south of Thedford – 59.4 km;
 - King’s Highway 80 (renamed County Road 80 – Courtright Line) from St. Clair Parkway to Middlesex County boundary – 52.4 km;
 - King’s Highway 40 (renamed County Road 34 – Churchill Line) from Tashmoo Avenue to Highway 40 – 0.6 km.
- Transfer resulted in a total road network comprised of 712.7 km of arterial and collector roadways.
- Transfer also included 44 large bridges and culverts with a span greater than 3 metres associated with these sections of arterial roadways.

- The County absorbed these roadways and related appurtenances into the County network with little or no changes to the available manpower and equipment. Changes in our winter maintenance practices included a move to all inclusive trucks that could plow and sand/salt as well as the implementation of pre-wetting salt and spreader controls improved efficiencies.
- The Public Works Department implemented the practice of entering into winter control agreements with the County of Middlesex and several local municipalities where efficiencies dictated.
- The Province indicated that additional transfers would follow (see note 7 below).

Second Provincial Highway Transfer (7)

- On January 1st, 1998, the Province of Ontario, through the provisions of the Public Transportation and Highway Improvement Act, transferred an additional 51.5 km of Provincial Highway to the County of Lambton with funding of \$3,483,200.
- Transfer included the following sections of Provincial highway including all related appurtenances (i.e. bridges, culverts, guiderail, signs, entrances, etc.):
 - King’s Highway 7 (renamed County Road 6 – Thomson Line) in its entirety from Highway 7/79 to Middlesex County boundary – 1.9 km;
 - King’s Highway 79 (renamed County Road 79 – Arkona Road) from Thomson Line to south limits of Thedford – 1.2 km;
 - King’s Highway 79 (renamed County Road 79 – Northville Road) from north limits of Thedford to Highway 21 – 6.8 km;
 - King’s Highway 21 (renamed County Road 21 – Oil Heritage Road) from Kent County boundary to south limits of Wyoming – 38.5;
 - King’s Highway 21 (renamed County Road 21 – Oil Heritage Road) from north limits of Wyoming to Highway 402 – 3.1 km.
- County assumed the former connecting link through the Village of Wyoming – 2.8 km.
- Transfer resulted in a total road network comprised of 767 km. of arterial/collector roadways.
- Transfer also included 17 large bridges and culverts with a span greater than 3 metres associated with these sections of arterial roadways.
- The County absorbed these roadways into the County network with little or no changes to the available manpower and equipment.

- This round of downloads completed the transfer of the Province’s secondary arterial road network to the County. The Province’s remaining roadway assets within the County of Lambton was limited to restricted access highways namely King’s Highways 402, 40, and 21 north.
- Given the new makeup of the County Road System with a larger proportion of arterial roadways, the Public Works Department commenced a comprehensive review of what should comprise the County Road Network (see note 8 below).

New County Road System (8)

- Given the new composition of the County Road System the Public Works Department through the direction of County Council commenced a study to determine which roadways within the County serve a County-wide and/or regional function versus a localized need. It was important to determine the proper composition of the County and Local Road Networks prior to selecting the proper service delivery model (i.e. who does what) as brought forward as part of the McCormick Rankin Roads Study (see note 5 above).
- The Road Designation Study was completed utilizing criteria as previously established by the Ministry of Transportation and additional criteria as formulated by the Public Works Committee. The purpose of the study being to designate the most appropriate level of responsibility for each roadway within the County.
- Current County Roads that provided a local function would be transferred to the local municipality and roads serving a regional (arterial) function would be assumed at the County level.
- Involvement from all local municipalities was encouraged throughout the process.
- Evaluation criteria included the following:
 - connectivity to urban centres and rural settlements;
 - connectivity to commercial and industrial sectors, Provincial or County roadways;
 - composition of traffic mix, specifically heavy commercial vehicles;
 - accessibility across and or parallel to barriers (freeways, watercourses, etc.);
 - linkages to recreational areas (beaches, parks, etc.);
 - coverage and linkages to other County and/or provincial roadways;
 - extensions of arterial roadways;
 - posted speeds as a measure of the roads ability to move traffic;
 - existing road surface (asphalt, granular, etc.);
 - traffic volume;

- available road right of way width.
- In January 1998, based on the above evaluation, 132.5 km of former County Roads were transferred to local municipalities with compensation of \$5,108,000. [They are as follows:](#)
 - County Road 1 (Lambton Line) from Highway 40 to County Road 21 and County Road 21 to Cairo Road – 39.9 km;
 - County Road 2 (Bentpath Line) from County Road 79 to Middlesex County – 5.1 km;
 - County Road 3 (Army Camp Road) from Ipperwash Park to County Road 6 – 7.4 km;
 - County Road 4 (Petrolia Line) from County Road 79 to Middlesex County – 7.2 km;
 - County Road 13 (Gore Road) from Conservation Road to Middlesex County – 0.6 km;
 - County Road 17 (Wellington Street) from Front Street to Highway 40 – 5.1 km;
 - County Road 23 (River Street) from County Road 79 to County Road 80 – 2.3 km;
 - County Road 24 (Oil Springs Rd) from County Road 21 to limits of Oil Springs – 2.4 km;
 - County Road 25 (Confederation Line) from Highway 40 to County Road 26 – 9.3 km;
 - County Road 26 (Mandaumin Road) from County Road 7 to Old Lakeshore – 0.5 km;
 - County Road 32 (Oakdale Road) from Kent County to County Road 2 – 9.4 km;
 - County Road 33 (St. Clair Parkway/Vidal/Front Street) – from Kent County boundary to County Road 16 – 43.3 km.
- These changes resulted in the County’s current composition of arterial roadways as they exist today – 646.2 km.

McCormick Rankin Roads Study - Revisited (9)

- With the revised County Road System and associated transfers completed, McCormick Rankin re-evaluated the alternative service delivery models available to the County and local municipalities to manage the maintenance and construction

activities of roadway infrastructure throughout the County as outlined above (see note 5).

- The finalized report was presented to County Council and all of the local councils.
- In July 1999, based on the feedback from local municipalities and the discussions with County Council, the report was filed and no further action taken. The end result being the status quo whereby the County undertakes all of the maintenance and construction activities on roads forming the County Road network and the local municipalities perform the same on their roadways.

Way Forward Initiative (10)

- The Way Forward Report was released in the Spring of 2001.
- The Infrastructure & Development Services Division was created to oversee the activities of the Facilities Management, Building Services, Planning and Development, and Public Works Departments. The General Manager's position was created as the most senior manager for this division and replaces two former Director's positions. The position was filled in July, 2001.
- The Public Works Departmental hierarchy and reporting structure was reviewed and in April of 2002, the restructuring within the Public Works Department was completed with the hiring of the departmental manager.

Minimum Maintenance Standards (11)

- In November of 2002, the County adopted the Minimum Maintenance Standards as established by Regulation 239/02 made under the new Municipal Act, 2001.
- The regulation was intended to provide municipalities with a defense against negligence claims involving a road or bridge by setting out the minimum standards of repair for municipal roadway operations.
- The standards included appropriate responses and timeframes for routine patrolling, snow accumulation, icy roadways, potholes, shoulder drop-offs, debris, luminaires, signage, traffic control devices, and bridge decks based on the roadway classification.
- The Public Works Department revised several of its operational procedures to comply with the legislation. The changes were implemented utilizing existing resources (manpower and equipment).

Hours of Work Legislation (12)

- In February 2003, the County received clarification from the Ministry of Transportation and the Ministry of Labour on the municipality's interpretation of the various Hours of Work legislation, namely the Highway Traffic Act through Regulation 4/93 and the Employment Standards Act through Regulation 285/01.
- Previously, municipalities considered their winter operations as emergency conditions and assumed those activities were exempt from all hours of work legislation.
- The clarification indicated that any storm event or series of events on consecutive days is not considered an emergency unless an emergency is declared by the head of council.
- The Public Works Department monitored its conformance with the above noted legislation during the 2003/2004 winter season and discovered several gaps in the department's scheduling and available manpower where the County was in non-conformance.
- The department reviewed its available resources and implemented the following changes for the 2004-2005 winter season:
 - Record keeping to track and distinguish between driving time requiring CVOR registration and other non-CVOR activities including breaks;
 - Twelve (12) hour staggered shifts Monday to Friday, 3:30 a.m. – 12:00 p.m. and 3:30 a.m. to 12:00 a.m. throughout the winter season thereby minimizing overtime to 3½ hours through the week.
 - Hired standby/call-in operators during the winter season to fill in gaps in staffing, specifically weekends, to comply with the legislation.
- Above noted changes continue to be utilized by the Public Works Department for winter operations.

Strategic Plan Initiative (13)

- On February 5, 2003, County Council approved the new 3 year Strategic Plan for the organization.
- The Plan included a commitment from the County to provide the necessary funding to improve the condition of the County's road network, and in the longer term, sustainable funding to maintain its infrastructure.

- This commitment from Council resulted in an increase in capital spending on projects involving roadway and bridge and culvert improvements.
- This level of funding has been maintained to the present and more recently been supplemented with funding programs through the Federal and Provincial Governments (see note 16 and 17 below).

Landfill Waste Acceptance Policy (14)

- In November of 2003, the County approved several revisions to the Department's Waste Acceptance policies for the County owned waste disposal facilities.
- The changes included the banning of all commercial quantities of construction and demolition material from the Moore Landfill.
- It also saw an increase in tipping fees at the County's remaining active sites from \$35/metric tonne to \$45/metric tonne to reflect market conditions.

Depot Allocation Study (15)

- In November 2004, the Depot Allocation Study was presented and approved by Council.
- Given the provincial downloading of highways and the revised County Road System, as well as the recent acquisition of the former MTO maintenance depots in Alvinston, Oil City, and Warwick Village, the Department performed a service review of the optimal location(s) from which the departmental operations should be delivered.
- The study looked at the five (5) depot properties owned by the County and analyzed for operational costs, capital improvements, and potential operational savings for a number of alternatives.
- The report concluded that the department's operations could best be delivered from two (2) locations namely the Oil City and Forest Yards with the fleet servicing to continue out of the Petrolia Depot. The Warwick depot would serve as a winter salt storage base and the Alvinston Depot would be transferred to the Township of Brooke- Alvinston.
- The department continues to implement the recommendations from the report.

Federal and Provincial Infrastructure Program (16)

- In November of 2004, the Federal and Provincial Governments announced the Canada-Ontario Municipal Rural Infrastructure Funding (COMRIF) program. The program involved

a five year, \$900 million shared funding model to improve the quality of infrastructure in small and rural municipalities.

- The COMRIF program is a project-based initiative which was rolled out in three intakes with priorities pertaining to infrastructure improvement projects in the areas of water, wastewater, bridges and roads, and waste management.
- The Public Works Department submitted two bridge improvement projects as the County's highest priority project for Intake 1. The County's submission was subsequently approved and resulted in shared funding from the Federal and Provincial Governments in the amount of \$970,000.
- The County's Intake 2 submission involved the rehabilitation of 21.7 km of arterial roadway (County Road 22 – London Line) at an estimated cost of \$5,600,000. The County is awaiting a decision in regards to this application for funding.
- There have been no announcements that the program will be extended beyond the third intake.

Federal Gas Tax Rebate (17)

- In June 2005, the Federal Government announced that a portion of the Federal Gas Tax (5 cents per litre) would be redirected to municipalities. The funding is geared towards environmentally sustainable infrastructure projects in the following categories: water, wastewater, solid waste management, capacity building and transit, and roads and bridges.
- The funding model to be used involves increased funding over a five year period (2005-2009) and sustainable funding at the fifth year level thereafter.
- The municipal revenue sharing is to be on a per capita basis. Revenue sharing for a two tier municipal government structure will be 50:50 as suggested by the Association of Ontario Municipalities (AMO).
- The program results in the following funding to the County over the next 5 years:
 - 2005 - \$1,205,068,
 - 2006 - \$1,205,168,
 - 2007 - \$1,606,711,
 - 2008 - \$2,008,254, and
 - 2009 - \$4,016,509.
- Results in a five year commitment in the amount of \$10,476,979, with anticipated annual funding in the amount of \$4,016,509 thereafter.

Salt Management Plan (18)

- In December 2005, Council County accepted the County's Salt Management Plan which was drafted in accordance with the provisions of Environment Canada's Code of Practice for the Environmental Management of Road Salts.
- The plan sets out the policy and procedural framework that will ensure the County of Lambton continuously improves on the effective delivery of winter maintenance services by providing safe winter road conditions while minimizing the negative impacts salts and chlorides can have on the environment.
- The plan outlines the County's current practices pertaining to winter control activities and looks at best management practices, technological innovations, monitoring, etc. as a means to continuously improving its delivery of winter maintenance activities.
- FTE: 37 (includes 3.5 Waste Management)

Benchmarking/Performance Measurement Factors

❖ Municipal Performance Measurement Program (MPMP):

- Roadways:
 - Operating costs for paved (hard top) roads per kilometre
 - Operating costs for unpaved (loose top) roads per kilometre
 - Operating costs for winter maintenance of roadways per lane kilometre maintained in winter
 - Percentage of paved lane kilometres where the condition is rated as good to very good
 - Percentage of winter events where the response met or exceeded locally determined – municipal service levels for road maintenance
- Solid Waste:
 - Operating costs for garbage disposal per tonne or per household
 - Total number of solid waste management facilities owned by the municipality with a Ministry of Environment Certificate of Approval
 - Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a municipally owned solid waste management facility, by facility

❖ Ontario Good Roads Association (OGRA) Annual Survey:

- Roads
 - Average annual dollars raised per household from property taxes for road operating and capital
 - % of total roads budget from local property tax
 - Average expenditure dollars per household for road operating and capital
 - % of total roads budget allocated to operating and maintenance
 - % of capital roads budget spent on road rehabilitation/reconstruction
 - % of total roads budget spent on outsourced services
 - % of roads which are paved
 - % of roads which are high class bituminous
 - % of roads reported which are in an urban roadside environment
 - % of roads rated in good to very good condition
 - % of roads in NOW time of improvement
 - % of bridges with a deficiency
 - % of operating budget spent on winter services