REGION OF OTTAWA-CARLETON | REPORT
RÉGION D'OTTAWA-CARLETON | RAPPORT

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DATE 16 August 2000

TO/DEST. Co-ordinator
Planning and Environment Committee

FROM/EXP. Commissioner
Planning and Development Approvals Department

SUBJECT/OBJET **GROWTH IN OTTAWA-CARLETON, 1996-1999 AND INFRASTRUCTURE PLANS**

DEPARTMENTAL RECOMMENDATION

That Planning and Environment Committee recommend that Council approve the updated Table 6 on Infrastructure Priorities attached as Annex A and forward it to the Transition Board as a framework for future capital budgets.

PURPOSE

The purpose of this report is to provide an update to the 23 May 1999 report entitled "Official Plan Development Projections and Infrastructure Plans" and recommend additional priorities for capital spending. The report outlines the residential and employment growth that has occurred over the last three years, discusses where this growth is occurring, and compares what is actually happening to what the Official Plan (OP) projected. It identifies sub-areas of the Region which are surpassing expected growth rates, and examines any short-term infrastructure implications of the observed growth patterns.

BACKGROUND

The Regional Official Plan (ROP), as adopted by Council, contains a phasing policy which identifies the amount, location and timing of development throughout the life of the Plan. The phasing of development in the ROP provides an opportunity to ensure the provision of an adequate supply of serviced urban land without unduly triggering the need for additional costly infrastructure in a number of areas across the Region. The development strategy as set out in the Official Plan identifies two phases of development; Phase 1 refers to the first 10 years of the Plan and Phase 2 refers to the period from 2006 to the end of the planning period (2021). The Phase 1 residential development capacities presented in Table 5 of the ROP were identified based upon an assessment of the most cost-effective

means of staging the infrastructure requirements to meet the regional development strategy for each of the urban areas. The provision of additional required infrastructure to achieve the development capacities for Phase 1 are also identified in the Official Plan.

Although no employment projections or capacities are identified by sub-area in the ROP, the potential infrastructure implications of recent employment growth are examined to determine if additional infrastructure should be added to Table 6 of the Regional Official Plan, which identifies Key Infrastructure Projects for Phase 1 Developments. During the preparation of the Official Plan and Master Plans future infrastructure requirements were identified with an assumed number of jobs allocated to the sub-areas of the Region, and any recent trends which affect this assumed allocation may impact the need for, the timing of and the provision of Regional infrastructure.

DISCUSSION

Region-Wide Dwelling Unit Growth

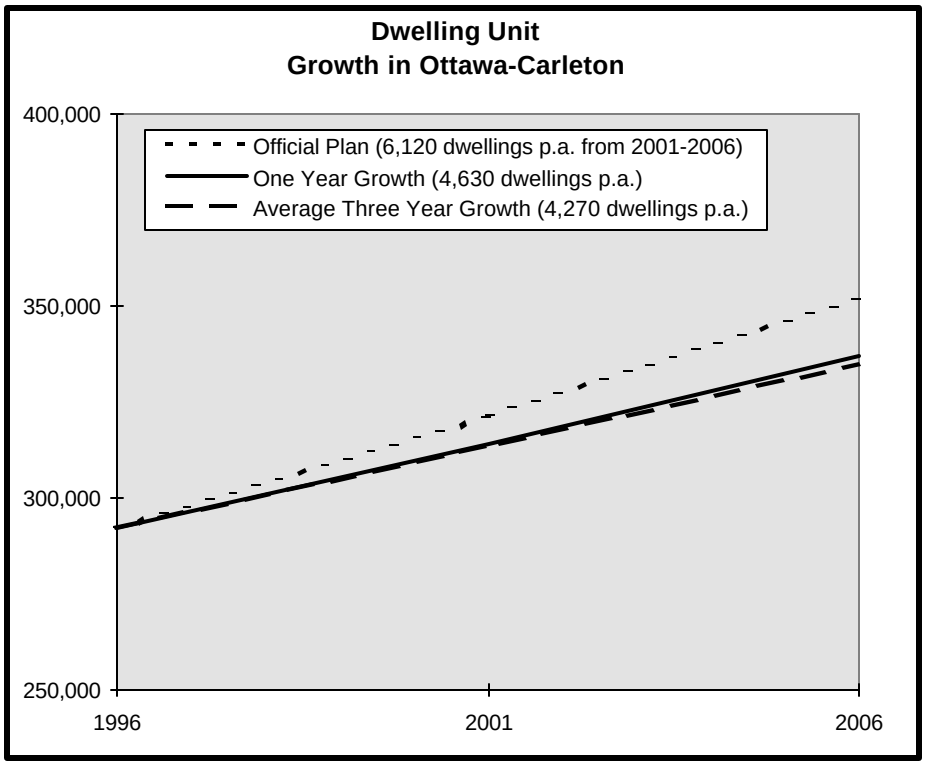
Based on building permit data, and assessment information, the number of dwelling units for the end of 1999 is estimated at approximately 304,800 in Ottawa-Carleton. This is an increase of approximately 12,800 units since 1996, an average annual increase of some 4,265 units. As shown in Table 1, 1999 had the highest growth over the three year period at 4631 units. In fact, the number of new units in 1999 was the highest since 1994.

Table 1 Ottawa-Carleton Dwelling Unit Growth, 1996-1999

		Dwelling Units (estimated)
Total Units		
	1996	291,990
	1997	296,223
	1998	300,173
	1999	304,803
New Units		
	1997	4,233
	1998	3,950
	1999	4,631
	1996-1999	12,814

This trend is expected to continue for at least the next two years. CMHC is expecting housing starts to increase for 2000 and 2001 in Ottawa-Carleton, to 5,050 and 5,120 respectively (based on forecasts for the Ottawa CMA). These numbers underestimate actual expected growth in that they do not include conversions which have accounted for about 10% of the growth in dwelling units over the last two years in the Region. Including conversions, about 5,550 new units in 2000 and 5,625 in 2001 may

be built. This would result in a total of about 315,900 dwelling units by the end of 2001. The 2001 OP projection, adjusted for year-end, is 321,500 units. Therefore, even with the assumed increase in the rate of growth over the next two years, the total number of units in Ottawa-Carleton will be less than the OP projection.



Looking a little further into the future, to the end of Phase 1 of the OP, the projection for 2006 (year-end) is 352,100 units. This assumes an increase of 6,120 units per annum from 2001 to 2006. The elevated rates experienced in 1999 and those expected for 2000 and 2001 must continue until 2006 to meet OP projections. It would seem premature to suggest that growth, in terms of dwelling units, in the Region is occurring at rates unexpected in the OP. While the Region is experiencing a cycle of high employment growth and housing starts are higher than in the mid 90s, annual growth of some 6,000 residential units has been forecast and is included in the infrastructure requirements for Phase 1 of the OP.

Region-Wide Employment Growth

According to the Statistics Canada Labour Force Survey, approximately 47,000 jobs were created in Ottawa-Hull from 1996-1999. Table 2 provides annual totals of the number of jobs and the per annum growth. As Table 2 indicates, job creation of 27,000 in 1999 accounted for nearly 60% of the new jobs over the three year period. From 1996-1999 total employment in Ottawa-Hull grew by approximately 10%.

Because of the difficulty in determining the current number of jobs in Ottawa-Carleton, an assumption was made that 82% of the Ottawa-Hull job growth occurred in Ottawa-Carleton since 1996. This approach suggests that the Region has added about 40,000 new jobs over the last three years. Over the same period of time the number of high technology jobs has increased by approximately 45%, from 41,000 to about 60,000. In fact, the high tech sector has accounted for 40% of all new jobs from 1996-1999. This does not include any "spin-off" jobs that might have resulted from the high tech growth.

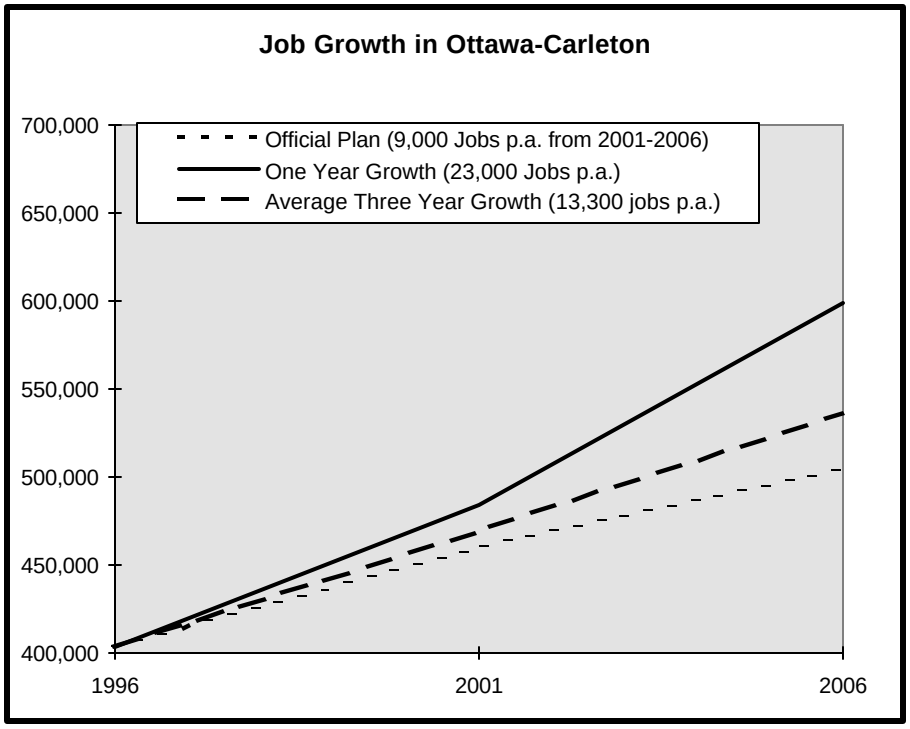
Table 2 Estimated Employment Growth, 1996-1999

		Ottawa-Hull CMA	Ottawa-Carleton	
		Total Jobs	Total Jobs	High Tech Jobs
Total Jobs				
	1996	497000		41000
	1997	504000		46750
	1998	517000		51000
	1999	544000		60000
Job Growth				
	1997	7000		5750
	1998	13000		4250
	1999	27000		9000
	1996-1999	47000	38450	19000

Note: Ottawa-Carleton is assumed to account for 82% of CMA job growth.

The OP projected employment for 2001, adjusted to year-end, was based on an expected increase of 61,500 jobs. These figures indicate that by the end of 1999 the Region had added almost 65% of the jobs that were projected in the OP to the end of 2001. Because these figures represent a point in time 60% of the way to the end of 2001, job growth is slightly higher than had been projected. Growth over the next two years, at the average rate of the last three years, would see another 26,500 jobs added by the end of 2001, about 5,000 above the projection. Growth at the 1999 rate would produce another 46,000 jobs by the end of 2001, about 24,000 above the projection.

If one assumes constant job growth over the ten years between 2001 and 2011, the OP projects 45,000 new jobs between 2001 and 2006. Using the three year average, continued growth at present rates would see 66,500 jobs added. Although this is significantly higher than the 2006 OP projection, caution should be used here. The Region is currently experiencing a period of very high growth, one which saw Ottawa-Hull lead the country in rate of job growth in 1999. This is unlikely to continue for the remainder of the planning period. History suggests that economic growth is cyclical, with periods of high rates of growth inevitably followed by slower growth. It should be noted that the Executive Summary of *The Ottawa Economic Generators Initiative,* recently released by The Ottawa Partnership (TOP) does not actually contain any projections of employment or population for Ottawa-Carleton.



Growth Trends by Area

The Official Plan identifies (in Table 5 of the OP) dwelling unit capacities for sub-areas of the Region to the end of Phase 1 of the Plan. This is essentially the number of dwelling units that are being planned for, based on the infrastructure in place by 2006, as outlined in Table 6 of the Plan. Thus, an examination of the geographic distribution of growth is necessary in order to identify infrastructure implications of the observed growth to the end of 1999.

Table 3 presents the total number of dwelling units by sub-area for 1999, the growth from 1996-1999 and the OP targets for the end of Phase 1. The percentage of projected growth to 2006 that has occurred by the end of 1999 is also presented. Since we are 3 years into a 10 year projection, any figure above 30% in this last column represents an area that, at current rates of growth, will surpass the anticipated 2006 growth.

Table 3 Comparison of Actual Dwelling Unit Growth and OP Capacity Growth, 1996-2006

	1996 Assessment	1999 Year-End	Growth 1996-1999	OP Targets 2006	Growth 1996-2006 (Planned Capacity)	% of Projected 2006 Growth by End of 1999
Inside Greenbelt	**214,260**	**218,864**	**4,604**	**240,000**	**25,740**	**18%**
Nepean SUC	9,289	10,945	1,656	17,500	8,211	20%
Gloucester SUC	0	546	546	3,500	3,500	16%
Leitrim	0	0	0	1,500	1,500	0%
Total SUC	**9,289**	**11,491**	**2,202**	**22,500**	**13,211**	**17%**
Kanata Urban Centre	15,028	17,159	2,131	22,500	7,472	29%
Stittsville	3,773	4,482	709	8,000	4,227	17%
Total WUC	**18,801**	**21,641**	**2,840**	**30,500**	**11,699**	**24%**
Cumberland EUC	11,719	12,860	1,141			
Gloucester EUC	13,183	14,054	871			
Total EUC	**24,902**	**26,914**	**2,012**	**29,000**	**4,098**	**49%**
Rural	**24,738**	**25,894**	**1,156**	**30,500**	**5,762**	**20%**
RMOC	**291,990**	**304,804**	**12,814**	**352,500**	**60,510**	**21%**

Note: To be on "target", growth from year-end 1996 to year-end 1999 should be 30% (3 of 10) of the growth to 2006.

Currently, the East Urban Centre (EUC or Orleans) is the only sub-area of Ottawa-Carleton growing at a pace that will surpass the anticipated growth by 2006. The Kanata Urban Centre is essentially on target to reach the 2006 development level as set out in the OP. All other areas are currently below the rates of expected growth. That is, the number of dwelling units in 1999 is less than what would have been expected based on the 2006 servicing capacities.

Table 4 projects current 1, 3 and 5 year growth rates, by sub-area, to 2006 to examine the capacity implications of a continuation of the rates of observed growth. Once again, the EUC surpasses the 2006 capacity under each of the projections. The Kanata Urban Centre also surpasses its capacity assuming the 1999 rate of growth continues; it will also be close to capacity if the 3 year average growth rate continues.

Table 4 Projection of 2006 Dwelling Units by Official Plan Area

	1999	2006	**2006 Total Number of Units**			**Comparison with OP Capacity at 2006**		
	Total Dwelling Units	Capacity	Assuming 1 Year Growth Rate	Assuming 3 Year Growth Rate	Assuming 5 Year Growth Rate	Assuming 1 Year Growth Rate	Assuming 3 Year Growth Rate	Assuming 5 Year Growth Rate
Inside Greenbelt	**218,864**	**240,000**	**228,594**	**229,607**	**228,096**	**11,406**	**10,393**	**11,904**
Nepean SUC	10,945	17,500	15,950	14,809	14,445	1,550	2,691	3,055
Gloucester SUC	546	3,500	2,296	1,820	1,820	1,204	1,680	1,680
Leitrim	0	1,500				1,500	1,500	1,500
Total SUC	**11,491**	**22,500**	**18,246**	**16,629**	**16,265**	**4,254**	**5,871**	**6,235**
Kanata Urban Centre	17,159	22,500	22,962	22,131	21,471	-462	369	1,029
Stittsville	4,482	8,000	5,959	6,136	6,002	2,041	1,864	1,998
Total WUC	**21,641**	**30,500**	**28,921**	**28,268**	**27,473**	**1,579**	**2,232**	**3,027**
Cumberland EUC	12,860		16,185	15,522	15,155			
Gloucester EUC	14,054		16,119	16,086	15,763			
Total EUC	**26,914**	**29,000**	**32,304**	**31,609**	**30,918**	**-3,304**	**-2,609**	**-1,918**
Rural	**25,894**	**30,500**	**29,163**	**28,591**	**28,247**	**1,337**	**1,909**	**2,253**
RMOC	**304,804**	**352,500**	**337,228**	**334,703**	**326,225**	**15,272**	**17,797**	**26,275**

Sub-Regional Employment Growth

The servicing capacities in the ROP are based on dwelling unit thresholds and do not explicitly define the corresponding employment levels in the various sub-areas of the Region. However, the number of jobs in a given area impacts the demand for infrastructure and any major deviations from projected employment totals will affect infrastructure requirements. For this reason, along with recent experiences in the high-tech sector, an examination of job growth in the Kanata Urban Centre and the Nepean South Urban Centre, the areas outside the Greenbelt experiencing the most rapid increase in employment, is included in this discussion. Recent work by the Corporate Research Group for the Corel Area study has confirmed that, at least for the near term, high tech firms are likely to continue to favour locations west of the Rideau River.

Table 5 offers an estimate of the total employment in urban Kanata and the Nepean South Urban Centre for 1999. Sub-area employment estimates are rather difficult in that the only source providing detailed geographic employment distribution data is the Region's employment survey, an exercise that is carried out every five years. Estimates were prepared based on the best available data and some judgement as to growth that has occurred. Table 5 also includes the total number of jobs projected for these two sub-areas for 2006 and the growth in employment between 1996 and 1999. To be on pace to achieve the 2006 employment projections each of these areas should have experienced about 35% of the projected 1996-2006 growth by the end of 1999. As can be seen in Table 5, both urban Kanata and the Nepean SUC are substantially ahead of this pace. That is, Kanata has already experienced about 55% of the growth to 2006; Nepean SUC has already seen 76% of the projected employment increase occur.

Table 5 Comparison of Actual and Projected Employment Growth for Kanata and Nepean South Urban Centre, 1996-2006

	1996 Employment	1999 Employment	Growth 1996-1999	Projected Employment 2006	Projected Growth 1996-2006	% of Projected 2006 Growth by End of 1999
Nepean SUC	2,291	6,100	3,809	7,300	5,009	76%
Kanata Urban Ctr.	19,549	24,400	4,851	28,300	8,751	55%

Notes:
1) 1996 Employment from 1996 Region of Ottawa-Carleton Employment Survey
2) 1999 Employment based on December 1999 OED Advanced Technology Survey and an estimate on non-high tech growth.
3) 2006 Employment projections based on Official Plan projections and are consistent with the Regional Development Charge Study (1998) projections.
4) To be on "target", growth from 1996 to 1999 should be 35% (3.5 years of 10) of the growth to 2006.

Table 6 projects the current one and three year average job growth in Kanata and South Nepean to 2006 in order to determine the employment levels should present rates continue. As can be seen in Table 6, both areas surpass the projected employment levels using either the one or three year rates. The last year saw unprecedented growth in the high-tech sector in Ottawa-Carleton and this resulted in the high growth in the number of jobs in Kanata and South Nepean. Whether this one year rate can continue until 2006 is not clear, but even using the lower three year average both areas exceed their 2006 projections by more than 6,500 jobs. Under each projection scenario, employment growth in these two areas is surpassing expected growth, and the impact of these observed trends on the infrastructure array provided for in the ROP needs to be reviewed.

Table 6 Projections of 2006 Employment for Kanata and Nepean South Urban Community

	1999 Total Employment	Projected 2006 Employment	Observed 1999 Growth	1996-99 Annual Average	2006 Estimated Employment Assuming 1 Year Growth Rate	Assuming 3 Year Growth Rate	Comparison with Projections Assuming 1 Year Growth Rate	Assuming 3 Year Growth Rate
Nepean SUC	6,100	7,300	2,170	1,270	19,771	14,353	-12,471	-7,053
Kanata Urban Ctr.	24,400	28.300	2,765	1,617	41,820	34,911	-13,520	-6,611

Notes:
1) 1999 growth based on assumptions that 57% of three year growth occurred in 1999.

REGIONAL INFRASTRUCTURE IMPLICATIONS

West (Kanata and Stittsville)

Employment growth for the West Urban Centre (WUC) will surpass the expected 2006 growth scenario. In addition to high tech growth primarily in the Kanata North Business Park, urban Kanata has seen substantial development in its Town Centre, including retail, hotel, cinema and residential development. While current residential growth does not surpass expectations, if it continued until 2006 at the 1999 rate, it would surpass the Phase 1 projection.

This development will place additional demand upon the existing and planned infrastructure. All areas of the Kanata UC and Stittsville are serviced with water and wastewater but the projects discussed below are needed to increase the capacity of these services. At present there is capacity for an additional 2200 dwelling units[1]. Completion of the recommended projects will add capacity for approximately 13400 more dwelling units in Kanata and Stittsville.

In the 2000 Budget, projects such as upgrades to the Hazeldean wastewater pumping station and construction of the Kanata North elevated water tank have been accelerated to provide additional capacity. A study is currently under way for the Tri-Township Collector rehabilitation and upgrade and for the March Area Pumping Station and Gravity Sewer. The contract for rehabilitation of the Tri-Township Collector may be let in 2000, but construction would commence in 2001. An upgrade of the March Pumping Station and Gravity Sewer is planned between 2005 and 2009 per the 2000 Capital Budget. However, this project should be moved forward to allow for earlier, full development of the Kanata North Business Park and the Kanata North residential areas. The 2001 budget should provide for design of this facility with construction to follow in 2002. Also the timing of the Kanata North elevated tank and connecting pipe should be moved forward from 2004 to 2002. This would ensure completion of these projects by the end of 2003. In summary, the timing of some facilities should be advanced from current budget proposals, but no new water and wastewater infrastructure needs to be added to Table 6.

Table 6 includes the widening of Hazeldean (from Terry Fox to Regional Road 5) and Phase 1B of the West Transitway, which are still needed by 2006. The need to widen Carling Avenue could be postponed beyond 2006.

In view of the growth trends now being experienced in Kanata, coupled with the desire to better cater to the needs of the rapidly growing high tech sector, the following additional pieces of major transportation infrastructure, not previously identified in Table 6 of the ROP, are proposed to be added to the budget needs of the New City of Ottawa over the next five years.

- Extension of Terry Fox Drive north to March Road and south to Eagleson Road (two-lane). The northern extension serves Kanata North Business Park and the southern extension serves Kanata South Business Park.

[1] Estimate based on mid-1999 Vacant Residential Land Supply minus building permits from July 99 through June 2000. Kanata North Expansion is not included because ROPA is under appeal.

- Castlefrank overpass & interchange, to provide enhanced transportation services for pedestrian/cyclists and transit within Kanata and particularly the Town Centre.
- Transitway Station/Park & Ride Lot within Kanata Centre.

(It is assumed that MTO will address interchange problems at March/Terry Fox and widen Highway 417.)

In order to be in a position to respond rapidly to the high tech growth pressures in Kanata, it is recommended that design proceed in 2000 for the following projects:

- Castlefrank Interchange
- Kanata Centrum Transitway Station and Park & Ride
- Terry Fox Drive extensions

Having designs ready could save a construction season when funding is identified for construction of these facilities. This is dealt with in a separate report to Corporate Services and Economic Development Committee.

South Urban Centre -Nepean

At present, the pace of residential growth in the Nepean SUC does not exceed anticipated rates. However, primarily due to the explosive growth of JDS Uniphase in the South Merivale Business Park, the Nepean SUC has already seen 76% of the projected employment increase to 2006 occur. In addition there are proposals for retail development in the Town Centre.

Water and wastewater services are available for full development of the South Merivale Business Park, but most of the land has been assembled by JDS Uniphase, so this serviced land supply is not available to other high tech employers.

The South Nepean/416 Business Park is a major business park designated in both the Regional and Nepean official plans. However it is neither subdivided nor serviced. Currently, no Regional trunk wastewater or water service is provided for the area.

The West Rideau Collector was identified as a key Phase 1 infrastructure project for the Nepean SUC. Presently, the first phase of the West Rideau Collector has been constructed. An interim solution was constructed by Monarch Developments ahead of completion of the second phase which has an anticipated planning horizon of 2005 - 2006. The construction of the Jock River Collector has been assumed by the City of Nepean and is included in their development charges bylaw. Completion of the collector was anticipated between 2012 and 2016 (depending on rate of development). The City of Nepean has started a Class EA study regarding interim wastewater servicing, utilizing local infrastructure. Nepean estimates that up to 70% of the total Business Park area can be serviced using interim sanitary servicing. It is recommended that the timing of the West Rideau Collector Phase 2 and the Jock River Collector be accelerated to meet the needs of the business park and growth in the Nepean SUC. The 2001 budget for the new City should provide funds for design of the West Rideau

Collector Phase 2. Funding to move from design into construction should be provided for these projects, so that they can be built as development requires.

Due to the location of the South Nepean/416 Business Park, completion of services for the park will mean completion of services for all development in the Nepean SUC, residential and non-residential. Capacity for an additional 18,500 units will be added to the current capacity for approximately 4600[2] units.

Phase 1 projects identified in Table 6 to service the Nepean SUC also included the Barrhaven (Highway 416) elevated tank and a transmission main between Greenbank Road and the new tank. The Barrhaven (Highway 416) elevated tank and the section of pipe on the Fallowfield Road is scheduled for completion in 2002. Funding for a feasibility study for the transmission main between Greenbank Road and the new tank was included in the 2000 Capital Budget. Timing for the construction of the project will be reviewed after completion of the study and identification of a preferred solution and will be co-ordinated with construction of the elevated tank and the installation of interim wastewater servicing.

The Southwest Transitway (bus priority lanes on Woodroffe), which is identified in Table 6 as a Phase 1 requirement, is still needed by 2006. Completion of the Fallowfield Park & Ride lot and its subsequent expansion are also still needed by 2006. To reflect the recent growth trends and meet the needs of the high tech sector, the following additional infrastructure is recommended for addition to Table 6 and inclusion in the budget of the new City over the next five years:

- Jock River Collector (to be financed by development charges in Nepean Development Charges by-law)
- Four-laning Fallowfield Road from Highway 416 to Merivale Road. This will serve both industrial areas.
- Four-laning Merivale Road – Slack to RR73. This is required by current development in the South Merivale Business Park. (An EA of this road will start in late 2000.)
- Four-laning Woodroffe Avenue – Longfields Drive to Strandherd Drive. This requirement has been identified in an EA currently underway.
- Four-laning Greenbank Road – Strandherd Drive to Malvern. This requirement is related to anticipated development in the Town Centre.

In order to be in a position to respond rapidly to the high tech growth pressures in the Nepean SUC, it is recommended that design proceed in 2000 for the following projects:

- Fallowfield Road (Strandherd Drive to Merivale Road
- Woodroffe Avenue Bus/HOV lanes

Having designs ready could save a construction season when funding is identified for construction of these facilities. This is dealt with in a separate report to Corporate Services and Economic Development Committee.

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[2] Estimate based on mid-1999 Vacant Residential Land Supply minus building permits from July 99 through June 2000.

South Urban Centre - Gloucester and Leitrim

Presently overall residential development in the Gloucester South Urban Centre is below the ROP projected growth for the 2006 planning horizon. There has been no significant non-residential development. No key water and wastewater infrastructure projects for this development area were identified in Table 6 of the ROP. The two-phased extension of the River Ridge Gravity Sewer was moved ahead from the 2006 - 2009 planning horizon through a servicing agreement and is being constructed as development of the area proceeds. The sewer has capacity for approximately 3900[3] additional units at present and extensions will service land with development potential of approximately 6500 more units, as well as the Business Park. Extensions of the River Ridge Trunk Sewer were never included in Table 6, although provision has been made in the Capital Budget per the servicing agreement. For consistency, River Ridge Trunk sewer extensions should be added to Table 6.

To provide wastewater service for the Leitrim development area, the Leitrim gravity sewer extension and construction of pumping station and forcemain were planned for completion in 2002. Due to an early servicing agreement, an interim solution consisting of a pumping station and forcemain is proposed for completion in 2001. Although Table 6 anticipated that Leitrim would be serviced by an expansion of the South Gloucester water pumping station, the need for this project was eliminated by bringing forward the South Gloucester Transmission Main project to be completed in 2002 along with an upgrade to the South Ottawa pumping station.

Although they are in Table 6, it is no longer considered necessary to twin the Airport Parkway south of Hunt Club or to extend Bowesville Road to Lester Road or to build the Leitrim Park & Ride by 2006, in view of the slower growth in the SUC (Gloucester)/Leitrim and the changed traffic pattern on the Airport Parkway,. The twinning of the Airport Parkway north of Hunt Club and the widening of River Road from Limebank to Hunt Club are still considered necessary by 2006 to service suburban growth. The EA for River Road is underway, but implementation is not scheduled until 2005-2009. Timing for both these projects should be advanced, so that they are completed by 2006.

In summary no additions to Table 6 Priority Infrastructure projects are recommended for the Gloucester SUC other than the substitution which was approved in the Leitrim Early Servicing Agreement and adding the River Ridge Trunk to reflect that servicing agreement.. The following infrastructure should be added to Table 6:

- South Gloucester transmission main (replaces South Gloucester pumping station expansion)
- River Ridge Trunk Sewer extensions

[3] Estimate based on mid-1999 Vacant Residential Land Supply minus building permits from July 99 through June 2000.

East Urban Centre (Orleans)

Orleans continues to expand rapidly. Population-serving employment in stores and schools, etc. is also growing, but not at a pace to exceed employment projections. Currently, the East Urban Centre (EUC) is the only sub-area of the Region which is growing at a pace which will surpass the ROP projected dwelling unit increase by 2006. However, if all identified key water and wastewater infrastructure projects in Table 6 are implemented as per the 2000 Budget, no additional works will be required to accommodate this rate of growth. In fact land already serviced can accommodate approximately 5500[4] additional units. The projects anticipated by the 2000 Capital Budget will add capacity for approximately 12,000 more units and complete the servicing of Orleans except for extensions of pipes as development occurs. The Ottawa River Subtrunk will provide wastewater services to the Ottawa River Business Park. Design of both the Ottawa River subtrunk/Trim Road trunk and the Forest Valley trunk will begin in 2000. Capital budget submissions propose that funds be authorized to commence construction in 2001. Similarly authority will be proposed in the 2001 budget to extend the EUC feedermains as required. Staff will also pursue any outstanding property acquisitions needed.

Table 6 also identifies a widening of Innes Road from Orleans Boulevard to Tenth Line. To complete this link a widening is also required from Blair to Highway 417. The Environmental Assessment for both these portions of Innes is currently underway. These improvements are needed by 2006 at current growth rates, but implementation has been delayed until 2005-2009 in the 2000 Capital Budget and Forecast. In addition the Orleans Park & Ride lot is currently at capacity. In order to address the faster residential growth and support achievement of the desired transit share of travel, additional Park & Ride capacity should be provided by either expanding the existing lot or developing a second lot at some other location.

In summary the recommended additions to Table 6 Priority Infrastructure projects for Orleans are:

- Innes Road widening from 417 to Blair
- Orleans Park & Ride lot expansion.

Inside Greenbelt

Presently residential development inside the Greenbelt (IGB) is below the ROP projected growth for the 2006 planning horizon. However, employment growth has been strong. Indications from OED high tech surveys are that approximately two-thirds of new high tech jobs are occurring inside the Greenbelt. Construction of most water and wastewater IGB key infrastructure projects identified in Table 6 is scheduled for completion by 2006. The Crystal Beach Diversion and the CSO Tunnel projects are now scheduled to be completed in 2002 and 2004 respectively. In addition, the Woodroffe Diversion is underway but behind schedule due to construction difficulties.

[4] Estimate based on mid-1999 Vacant Residential Land Supply minus building permits from July 99 through June 2000.

The Booth Street Station/Transitway Relocation is also in Table 6. This is a key piece of infrastructure which if delayed will delay the development of at least portions of LeBreton Flats. This fails to implement Council's policies about removing barriers to the development of additional housing inside the Greenbelt and encouraging housing in and around the Central Area. It also delays the opportunity to accommodate office development in portions of the Flats. The 2000 Capital Budget does not include sufficient funding to complete this facility by 2009. This should remain a Table 6 Priority Project and be completed by 2006.

The OMB decision on the appeal of the 1997 Regional Official Plan by Angie Todesco and the Rideau BIA requires the Region to add reconstruction of King Edward Avenue to Table 6. Its priority, unlike other projects in Table 6, may only be changed by amendment to the Plan. The EA is underway and money to complete the project is currently in 2001 of the budget.

Rural Area

Like all areas other than Orleans, residential growth in the rural area is slightly lower than assumed in the Official Plan. Available data does not provide an indication of the rate of rural employment growth. Since approximately 60% of rural residents work in the urban area, the infrastructure proposals to service employment growth in business parks in Kanata and the Nepean SUC will also be of benefit to rural residents.

Authority is proposed in the 2001 Budget to do a pumping station upgrade in Richmond. The upgrade addresses existing problems and provides for growth.

CONSULTATION

The updated Table 6, attached as Annex A, will provide a framework for the public discussion of priorities as part of the budget process for the new City.

FINANCIAL IMPLICATIONS

The recommendations of this report will increase the capital budget requirements of the new City substantially. The total capital budget for the projects recommended in this report (whether in Table 6 now or new to Table 6) is approximately $390 million. Of this total

- $215 million is for projects which were in the 2000 capital budget (although some total project estimates have increased or decreased)
- $175 million is for projects which were not in the capital budget or were transportation projects dependent upon 100% revenue

None of the projects recommended for deletion from Table 6 (estimated total cost approximately $32 million) were included in the 2000 capital budget. The 2001 budget submissions reflect the recommendations of this report.

It should be noted that this report has only discussed capital budget requirements in the context of Table 6 priorities and current ROP policies. There are many infrastructure requirements outside the scope of Table 6 (e.g., rehabilitation and reconstruction budgets for existing infrastructure, large diameter watermain extensions internal to urban areas). In the new City, the growth supported by the piped and transportation infrastructure recommended in this report will require additional public facilities, including storm water management facilities, community centres and parks. The Regional Official Plan amendment for the Corel Centre area to be brought forward in September will identify additional infrastructure requirements for land to be added to the Urban area.

In general, the sewer and water infrastructure expenditures can be financed through a combination of development charges and water and wastewater reserve funds. The financing of transportation infrastructure is much more challenging. Work done for the City of Toronto has concluded that senior governments must contribute to the funding of urban infrastructure if our cities are to remain competitive. Senior government financing could be direct or could be provided by giving municipalities access to new revenue sources, e.g. a share of the gasoline tax.

The search for infrastructure funding is ongoing. The report, *How Should the User Pay? Opportunities for Financing the Region of Ottawa-Carleton Transportation System*, published in December 1998, provided a comprehensive review of user pay options. More recently KPMG was hired by the Region to investigate the potential for public/public or public/private partnerships in financing infrastructure, especially transportation infrastructure. The report concludes that:

- There is no simple solution or "magic bullet" to the problem of financing transportation infrastructure within the tools available to municipalities today other than increasing taxes or development charges or assuming debt.
- "One shot" funds for selected projects may become available in the future through the sale of surplus municipal assets due to amalgamation, or through Treasury Board's Infrastructure Canada program or from the Ontario Superbuild Corporation, but program details are not known at this time.
- Public-private partnerships in the form of design-build procurement may create and capture some cost efficiencies, if smaller projects are bundled into one project of at least $20 million but do not raise capital dollars from the private sector
- Public-private partnerships with private sector capital financing require projects which generate a revenue stream which can be assigned to the private sector partner
- Municipalities should continue to lobby senior governments for access to user pay funding, such as a share of gasoline tax or license plate fees, which could provide a long term sustainable revenue source.

Resolving the transportation infrastructure funding shortfall will need to be a top priority for the Council of the new City of Ottawa.

CONCLUSION

Although the Region is going through a cycle of high employment growth at present, all indications are that residential growth is approximately on par with OP projections. Orleans is the only location where

residential development is currently exceeding projections. This higher rate of growth can be accommodated without additional infrastructure beyond that already installed or in the capital budget, with the exception of the expansion to the Orleans park & ride lot.

Region-wide estimated employment in 2000 is approximately in line with ROP projections. However continued growth at rates like those of the past three years would result in employment exceeding OP projections. In particular, employment growth outside the Greenbelt, primarily in Kanata and Nepean, is occurring at a faster rate than had been projected in the ROP. This report provides advice on the additional infrastructure which may be required if the high growth cycle continues until 2006. A summary of this infrastructure discussion is presented in Annex B which reports on the status of Table 6 infrastructure and on additional infrastructure now recommended for completion by 2006.

In general the planning and installation of sewer and water infrastructure has kept pace with development. Some advances in timing for infrastructure already in the capital budget are recommended to ensure that the supply of serviced business park land in the Kanata UC and the Nepean SUC remains ahead of demand. The only major additional piece of piped infrastructure recommended which is not in either Table 6 or the capital budget is the Jock River collector. While design for the collector should be done now, the timing of construction will depend on the capacity of the interim servicing solution for the 416/Strandherd business park and the pace of development in the park.

The construction of transportation facilities has not been keeping pace. Many of the Table 6 Priority Infrastructure projects have been deferred into the 2005-2009 period of the capital budget, due to lack of funding. This report identifies eight additional transportation projects which should be added to Table 6, most of them related to the rapid increase in employment in the Kanata UC and Nepean SUC. Designs should be completed for these facilities and funding approved so that they can be constructed by 2006 if high employment growth rates continue and they are needed.

In the short term accelerated employment growth can be absorbed at least in part by increases in labour force participation rates and shifts from part time to full time employment. The implications of accelerated employment growth for the long term projections of population, dwelling units and jobs will be addressed in the preparation of new long term projections over the next few months. It is anticipated that the revised projections will form the basis for preparation of a new Official Plan for the new City, commencing early in 2001.

Approved by
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Annex A

Updated Table 6 (from 1997 Regional Official Plan)
Key Infrastructure Projects for Phase 1 Developments

Area	Wastewater	Water	Transportation
Inside Greenbelt	• 2 Diversions • CSO Tunnel and Regulators • Cave Creek Collector replacement	• Watermain (Hurdman to Billings) • Expand Hurdman Bridge Pumping Station	• West Transitway Phase 1 • Airport Parkway Walkley ramp • Southwest Transitway extension (bus priority) • Airport Parkway twinning (north of Hunt Club) • LeBreton Transitway station • King Edward Avenue Improvements
Orleans Urban Centre	• Gloucester/Cumberland Rehabilitation • Cumberland gravity sewer extensions • Ottawa River subtrunk • Forest Valley (pumping station, forcemain and gravity sewer)		• Innes Road widening (Orleans to Tenth Line) • Innes Road widening (417 to Blair) • Expansion of Orleans Park & Ride lot
Kanata Urban Centre and Stittsville	• Tri-Township Collector Rehabilitation • March Area pumping station and gravity sewer	• New elevated tank • Watermain - Barrhaven to Kanata	• Hazeldean Road widening • Terry Fox Drive extensions • Castlefrank Overpass and interchange • Transitway station/Park & Ride lot in Town Centre
Nepean South Urban Centre	• West Rideau Collector • Jock River Collector	• New elevated tank • Watermain - Greenbank Road to new tank • Watermain - Barrhaven to Kanata	• Southwest Transitway extension (bus priority) • Expansion of Fallowfield Park & Ride lot • Fallowfield Road widening (416 to Merivale) • Merivale Road widening (Slack to RR 73) • Woodroffe Avenue widening (Longfields Drive to Strandherd) • Greenbank Road widening (Strandherd to Malvern)

Gloucester South Urban Centre	• River Ridge Trunk Sewer Extensions		• River Road widening (Limebank to Hunt Club) • Airport Parkway twinning (north of Hunt Club)
Leitrim	• Pumping station and forcemain • So. Gloucester forcemain		
All Urban Areas			• Transit priority measures • Walking & cycling facility improvements included where appropriate in the above projects • Walking & cycling facility improvements independent of the above projects

Notes: All urban areas have large diameter internal watermain requirements not shown on this table. Phasing is approximate and actual timing depends on monitoring development over the time frame to 2006.
Works from Table 6 as included in the 1997 Regional Official Plan which have been completed or which are under construction as of July 2000 are not included.

Annex B

Completed Table 6 Projects

Mackenzie King Bridge Transitway Station
Hawthorne Road (Hunt Club to Russell)
Airport Parkway Hunt Club Ramps
Bronson Avenue widening (Dunbar bridge to Canal)
Conroy Road widening (Hunt Club to Walkley)
Highway 17 shoulder bus lane (eastbound)
March Road widening (Solandt to Klondike Road)

Table 6 Projects Under Construction

West Transitway Extension - Phase 1A
Woodroffe/Baseline Sewer Diversion
Hazeldean pumping station
Alvin Heights Collector Sewer
Orleans-Cumberland Collector Sewer
Pilot rail rapid transit
Pooley's Bridge Rehabilitation
Gloucester-Cumberland Sewer Rehabilitation
Fallowfield Park & Ride

Table 6 Projects in EA or Design Stage

Crystal Beach/Graham Creek Sewer Diversion
Mooneys Bay/Borden Side Road Diversion
CSO Tunnel and Regulators
Hurdman Bridge Pumping Station Expansion
Ottawa River Subtrunk/Trim Road sewer
Tri-Township Collector rehabilitation
March Road Pumping Station/Gravity Sewer
Forest Valley-pumping station, forcemain, gravity sewers
Cumberland Gravity Sewer Extensions
Watermain (Hurdman to Billings)
Innes Road (Orleans Blvd. to Tenth Line Road)
New North Kanata Elevated Tank
Hazeldean Road
Barrhaven Elevated Tank
River Road widening

Proposed Deletions from Table 6

Airport Parkway twinning south of Hunt Club
Carling Avenue widening (related to Highway 417 project)
Bowesville Rd. extension (Leitrim to Lester)
South Gloucester Pumping Station expansion
Leitrim Park & Ride Lot

Proposed Additions to Table 6

Innes Road widening (Highway 417 to Blair)
Orleans Park & Ride expansion
Terry Fox Drive Extension (Campeau Drive to Goulbourn Forced Road)
Terry Fox Drive Extension (Michael Cowpland to Hope Side Road)
Castlefrank Overpass and Interchange
Kanata Town Centre Transitway Station and Park & Ride lot
South Gloucester Transmission Main
River Ridge Trunk Sewer extensions
Jock River Collector
Fallowfield Road widening (416 to Merivale)
Merivale Road widening (Slack to RR 73)
Woodroffe Avenue widening (Longfields Drive to Strandherd Drive)
Greenbank Road widening (Strandherd to Malvern)
King Edward Avenue Improvements