The University of Western Ontario

Performance and Activity Indicators

Annual Report to the Board of Governors

May 2006
President’s Message

Since 1995 I have presented the Board with an annual report describing Western’s progress towards our strategic goals and giving members of our community a sense of our relative standing within the Province and the country on a variety of statistical measures. This is the second annual report to give the presentation a more formal structure. These annual reports will reproduce the same array of core performance and activity indicators on a consistent basis, so that we will have a set of benchmarks which can be measured over time.

The report is an important element of the administration’s accountability to the Board. Increasingly the provincial government and the Provincial Auditor have been calling upon Ontario’s universities for greater levels of accountability and transparency. At Western we are already well-positioned to respond to these calls, in the sense that our academic plans, budget plans, financial statements, and Board and Senate proceedings are already publicly available.

In selecting a set of core indicators, we have attempted to produce a concise and focussed report. It is important to note that this is not intended as a promotional document. It contains not only indicators which suggest significant achievement by Western, but also ones that identify areas where improvement is necessary in order to achieve our strategic plans and aspirations.

Dr. Paul Davenport
President and Vice-Chancellor
May 29, 2006
The Primary Data Sources

The Council of Ontario Universities has for many years collected a wide variety of information from its member institutions: applications and marks data, space inventory, faculty and staff counts, and an annual financial report. By agreement, the member institutions do not publish comparisons which might damage the reputation of another member institution. Therefore, Western’s performance indicators compare us to the aggregate of the other seventeen member institutions.

In 1999 the executive heads of the G10, Canada’s ten most research-intensive universities (Laval, Montreal, McGill, Queen’s, Toronto, McMaster, Waterloo, Western, Alberta, and British Columbia) formed a data exchange consortium to facilitate comparative analysis and benchmarking. The G10 data exchange (G10DE) was modelled after a similar data exchange consortium of leading American research universities, and in a comparatively short period of time, the G10DE has produced a valuable set of comparative data. The scope of the G10DE continues to expand, and it holds promise for the development of additional benchmarking data in future. The G10 group has very recently expanded to include the University of Ottawa, the University of Calgary, and Dalhousie University: in future years those comparative indicators based upon G10 comparisons will be expanded to include the larger G13 group.

Western also participates in a number of American-based data exchange initiatives which can be used for comparison purposes:

- The Consortium for Student Retention Data Exchange
- The Association of Research Libraries
- The National Survey of Student Engagement, and
- The Graduate and Professional Student Survey

When considering comparisons to American universities, Western has chosen a peer group of five publicly-assisted research universities which most closely resemble Western in terms of program mix: Michigan State University, the University of Arizona, the Ohio State University, the University of Iowa, and the University of North Carolina at Chapel Hill.
The Format for the Indicators

The indicators in this report will be presented in one of three formats, and the selection of a particular format is in large measure a function of data availability. Over time, with increased data availability, the format of a particular indicator may be modified and enhanced. Data will be presented as one of:

1. Western compared to peer institutions over time,

2. Western compared to peer institutions at a point in time (the most recently available year), or

3. Western’s performance over a period of time with no peer comparator data.

Acknowledgements

The analyses in this report have been prepared by James MacLean and Anna Bitel of the Office of Institutional Planning and Budgeting. They have been assisted by staff in all of the central administrative offices in the data collection effort. Ruban Chelladurai and Martin England are responsible for the integrity of the analyses presented here, as well as for the organization of the report. We are grateful for their efforts.
Secondary School Grades of Incoming Students

Figures 1 and 2

Data Source: Ontario University Applications Centre (OUAC)

Calculation of Indicator: The analysis displays the final Ontario secondary school average grades for all first-time applicants who registered in the first year of study as full-time students at an Ontario university. The figure shows the average for first-year registrants at Western as compared to the aggregate of all Ontario universities.

Relation to Strategic Plan: Commitments 4.1 and 4.2 of Making Choices refer to improving student recruitment, including higher entering grades and improved recruitment outside Ontario.

Commentary: In the mid-1990s the average entering grade for Western students fell below the Ontario average. This trend has been reversed, and in spite of high levels of intake to accommodate the double cohort, the average entering grade of Western’s first-year students is now considerably higher than the provincial average. In 2004-05 there was a decline in the entering average for Western and for all Ontario universities, reflecting the passage of the sharp increase in applicants in 2003-04 occasioned by the double cohort.

The long-term trend is particularly pronounced at the highest end of the grade scale: Western’s share of all Ontario secondary school applicants with averages of 85 percent or better has increased by approximately 50 percent, from just under 6 percent of the provincial total in 1996-97 to 9 percent in 2004-05.
Figure 1

Average Entering Grades
of New Full-Time First-Year Ontario Secondary School Students

Source: Council of Ontario Universities and The University of Western Ontario

Figure 2

Western’s Share of All First Choice Ontario Secondary School Applicants with Entering Grades of 85%+

Source: Council of Ontario Universities and The University of Western Ontario
Out-of-Province and International Students

Figures 3 and 4

Data Source: Ontario University Applications Centre (OUAC)

Calculation of Indicator: The proportion of Western’s first time, first-year registrants in direct entry programs from out-of-Province and out-of-country are compared to the proportion of these first time registrants for the aggregate of all Ontario’s universities.

Relation to Strategic Plan: Commitment 4.5 of Making Choices involves an investment of resources in the recruitment of students from other provinces and countries.

Commentary: In cooperation with the Ministry of Training, Colleges, and Universities, all of Ontario’s universities, including Western, deliberately reduced the intake of out-of-Province and international students in 2002-03 and 2003-04 in order to create more first-year places for Ontario secondary school students who were graduating as part of the double cohort. This trend has been reversed in 2004-05, and Western’s proportion of out-of-province students is returning to its historical range of four to six percent of the first-year class.

Similarly, the proportion of first-year students from other countries is increasing, but remains slightly below the provincial average, and considerably below the recent historical peak of seven per cent of the incoming class.
Figure 3

Proportion of First-Year Students from Other Canadian Provinces

Western
Ontario

Source: Council of Ontario Universities and The University of Western Ontario

Figure 4

Proportion of First-Year Students from Other Countries

Western
Ontario

Source: Council of Ontario Universities and The University of Western Ontario
Undergraduate Retention and Graduation Rates

Figures 5 and 6

Data Source: Consortium for Student Retention Data Exchange (CSRDE)

Calculation of Indicator: Each year the participants in the CSRDE submit two sets of data: the number of students who have successfully proceeded from year 1 to year 2 of study in direct-entry undergraduate programs; and the number of students who have successfully graduated after five, six, and seven years of their registration since the time of their entrance to the program.

Relation to Strategic Plan: Commitment 4.3 of Making Choices refers to the role of our residences and the Centre for New Students in helping students succeed in their first year. The ability to graduate is a fundamental part of a successful student experience and central to our ability to recruit outstanding students.

Commentary: In the 2005 reporting cycle, there was limited participation in the CSRDE by Canadian institutions, with only Western, UBC, McMaster, and Toronto among the G10 universities as comparators. Western has taken a leadership role in encouraging participation in future years by all of the G10 universities and all of Ontario’s universities, and in 2006 there was full participation in this survey. Future presentations of these indicators will include more comparison points.

The data suggest that, as the quality of Western’s incoming class (as measured by entering averages) has steadily improved, so too have the retention and graduation rates of our students. Western compares favourably in year 1 retention rates with UBC and Toronto, and considerably exceeds the rates experienced by our American peer institutions. McMaster experiences a slightly higher graduation rate.

Western’s graduation rates exceed the American peers and compare favourably with Toronto, UBC, and McMaster.
Figure 5

Year 1 to Year 2 Retention Rates
1998-99 to 2003-04 Entering Cohorts

<table>
<thead>
<tr>
<th>Year</th>
<th>Toronto</th>
<th>Western</th>
<th>UBC</th>
<th>McMaster</th>
<th>U.S. Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-99</td>
<td>82%</td>
<td>86%</td>
<td>84%</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>1999-00</td>
<td>84%</td>
<td>88%</td>
<td>90%</td>
<td>94%</td>
<td>96%</td>
</tr>
<tr>
<td>2000-01</td>
<td>86%</td>
<td>92%</td>
<td>94%</td>
<td>96%</td>
<td>98%</td>
</tr>
<tr>
<td>2001-02</td>
<td>88%</td>
<td>94%</td>
<td>96%</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>2002-03</td>
<td>90%</td>
<td>96%</td>
<td>98%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2003-04</td>
<td>92%</td>
<td>98%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Consortium for Student Retention Data Exchange. U.S. Peers include the University of Arizona, University of Iowa, Michigan State University, University of North Carolina at Chapel Hill, and Ohio State University.

Figure 6

Undergraduate Student Graduation Rates
1995-96 to 1999-00 Entering Cohorts
Five Years After Entry

<table>
<thead>
<tr>
<th>Year</th>
<th>Toronto</th>
<th>Western</th>
<th>UBC</th>
<th>McMaster</th>
<th>U.S. Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>55%</td>
<td>60%</td>
<td>65%</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td>1996-97</td>
<td>60%</td>
<td>65%</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
<td>1997-98</td>
<td>65%</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
<td>85%</td>
</tr>
<tr>
<td>1998-99</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
<td>85%</td>
<td>90%</td>
</tr>
<tr>
<td>1999-00</td>
<td>75%</td>
<td>80%</td>
<td>85%</td>
<td>90%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Source: Consortium for Student Retention Data Exchange. U.S. Peers include the University of Arizona, University of Iowa, Michigan State University, University of North Carolina at Chapel Hill, and Ohio State University.
Proportion of First-Year Students in Residence

Figure 7

Data Source: The University of Western Ontario

Calculation of Indicator: The number of full-time, first-year students living in Western student residences expressed as a percentage of the full-time first-year student population.

Relation to Strategic Plan: The Plan notes that “One of the attractions of Western for undergraduate students is the residential nature of our campus ...” and in commitment 4.3 the role of student residences in first-year mentoring is underlined. The guarantee of a first-year residence space has been fundamental to achieving the recruitment objectives of the Plan.

Commentary: One of the hallmarks of the Western undergraduate experience is the commitment to an offer of a residence place for all first-year students. This has become increasingly important to prospective students and their parents because of the compressed Ontario secondary school curriculum and the resulting younger postsecondary incoming class.

Through the construction of new residences and effective use of existing residences, Western increased the proportion of first-year students in residence through the double cohort period. With the passage of the increased demands of the double cohort, the proportion of first-year students in residence has stabilized at approximately 75 percent.

This is an indicator which would benefit from comparative data from other institutions, but none is currently available.
Figure 7

Percent of Full-Time First-Year Students in Residence at Western

Source: The University of Western Ontario
Student Satisfaction: Evaluation of Instructor Effectiveness and Overall Satisfaction with Education Received

Figure 8 and 9

Data Source for Figure 8: Instructor/Course Evaluation Survey at Western

Calculation of Indicator: Each year all Western undergraduate students are invited to submit a course evaluation. Students grade their course experience on a variety of measures, on a scale of 1 (poor) to 7 (outstanding). The indicator summarizes five years of these student evaluations of their course instructor’s effectiveness.

Relation to Strategic Plan: Commitment 4.1 of Making Choices refers to the importance of maintaining high levels of quality in instruction.

Commentary: The survey results indicate a very high level of satisfaction on the part of students at both the direct-entry and second-entry level. The results also indicate modest but steady improvement over time in first-entry courses.

Data Source for Figure 9: Exit survey of all undergraduate students at time of graduation

Calculation of Indicator: Graduating students are invited to grade their undergraduate experience at Western on a variety of measures on a scale of 1 (not at all satisfied) to 5 (very satisfied). The indicator presents a six-year history of students’ satisfaction with the overall educational experience.

Relation to Strategic Plan: Commitment 5.1 of Making Choices calls for “the reform of undergraduate programs approved by Senate for implementation in 2004; encourage Faculties and professional Schools to work cooperatively with one another and with other parts of the university in the delivery of programs and in the reform process”.

Commentary: The results indicate that, at the time of graduation, about 95 percent of Western’s undergraduates were satisfied with the overall educational experience. This level of satisfaction has been consistent over the past six years, but there has been significant improvement in the proportion who were ‘very satisfied’ rather than ‘satisfied’.
Figure 8

Western’s Instructor and Course Evaluations
Ratings of Effectiveness of the Instructor

Grading Scale: 7-Outstanding; 6-Very Good; 5-Good; 4-Satisfactory; 3-Borderline; 2-Unsatisfactory; 1-Very Poor

Source: The University of Western Ontario

Figure 9

Overall Satisfaction with Education Received
Percentage of Responses Between 3 and 5 (on a 5 point scale)

Score = 3
Score = 4
Score = 5

scored on a 5-point scale where: 1 = not at all satisfied, 3 = somewhat satisfied, 5 = very satisfied

Source: The University of Western Ontario
Undergraduate Student Engagement

Figures 10 and 11

Data Source: National Survey of Student Engagement (NSSE)

Calculation of Indicator: In early 2004, eight of the G10 universities, including Western, elected to participate in the National Survey of Student Engagement (NSSE) administered through Indiana University. In addition, several Canadian universities outside the G10 participated in the survey, along with 450 universities in the United States. The NSSE survey, it must be emphasized, is not a student satisfaction survey, but rather an attempt to measure the extent to which students are involved in campus life and their academic program. NSSE groups the responses to the approximately 80 questions into five standard score benchmarks which can then be used to compare results among peer institutions. In 2006, all eighteen Ontario universities, and over thirty universities across Canada administered the NSSE survey. In the case of Ontario’s universities, this represented part of an accountability framework to be developed with the Provincial government. Next year’s report will include a greater number of comparator institutions.

Relation to Strategic Plan: Commitment 2.12 of Making Choices calls for the substantial improvement of student-faculty ratios, and commitment 4.4 calls for student involvement in the creation of a supportive campus environment.

Commentary: Figure 10, Student-Faculty Interaction, measures the extent to which students have been able to meet one-on-one with faculty members and the extent to which students have been graded on essays and class presentations as opposed to multiple-choice questions. This measure, it should be noted, is not a measure of the effectiveness of faculty members. It is, in most important respects, a result of student-faculty ratios. In this measure, Western performed near the average for the other Ontario and G10 participants, but significantly below the doctoral institutions in the United States.

Figure 11, Supportive Campus Environment, measures the extent to which students experience support from faculty, staff, and fellow students outside the classroom. In this indicator, Western ranks slightly above the Ontario and G10 average, and close to the average of U.S. doctoral institutions.
Figure 10

2004 NSSE Benchmarks
Student-Faculty Interaction

Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their instructors become role models, mentors, and guides for continuous life-long learning.

Source: The National Survey of Student Engagement

Figure 11

2004 NSSE Benchmarks
Supportive Campus Environment

Students perform better and are more satisfied at institutions that are committed to their success and cultivate positive working and social relations among different groups on campus.

Source: The National Survey of Student Engagement
Student Aid Funding at Western

Figure 12

Data Source: The University of Western Ontario

Calculation of Indicator: Total operating budget expenditures for student aid divided by total full-time equivalent (FTE) enrolment, 1996-97 through 2004-05. Expenditures from the central budget are presented separately from expenditures from Faculty budgets.

Relation to Strategic Plan: Commitments 7.1 of Making Choices affirms the importance of undergraduate student aid:

“In all our undergraduate programs, maintain the commitment of The University of Western Ontario that no qualified student will be unable to attend Western or will be required to withdraw from any academic program at Western for financial reasons”.

Commentary: Commencing in 1996-97 Ontario universities were compelled to reserve 30 percent of all revenues arising from tuition rate increases for needs-based student aid. This requirement has been removed in 2006-07, but this will not diminish the resources Western devotes to student aid. Historically, Western has exceeded this requirement, and has adopted as policy the intention that no qualified student shall be denied access to a program due to lack of financial resources. This policy further guarantees that no student shall have to withdraw from a program of study because of the lack of financial resources.

In satisfaction of this policy, Western’s per-student expenditure for student aid has more than doubled, from just under $800 per FTE student in 1996-97 to over $1,600 per FTE student in 2004-05. Efforts to further increase student aid continue through fundraising efforts under the Ontario Trust for Student Support.
Figure 12

Student Aid Funding from the Operating Budget per FTE Student at Western

<table>
<thead>
<tr>
<th>Year</th>
<th>Central Support</th>
<th>Faculty Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>$595</td>
<td>$480</td>
</tr>
<tr>
<td>1997-98</td>
<td>$314</td>
<td>$331</td>
</tr>
<tr>
<td>1998-99</td>
<td>$771</td>
<td>$595</td>
</tr>
<tr>
<td>1999-00</td>
<td>$851</td>
<td>$926</td>
</tr>
<tr>
<td>2000-01</td>
<td>$952</td>
<td>$1,085</td>
</tr>
<tr>
<td>2001-02</td>
<td>$1,010</td>
<td>$1,132</td>
</tr>
<tr>
<td>2002-03</td>
<td>$1,320</td>
<td>$1,205</td>
</tr>
<tr>
<td>2003-04</td>
<td>$1,705</td>
<td>$1,785</td>
</tr>
<tr>
<td>2004-05</td>
<td>$1,643</td>
<td>$1,342</td>
</tr>
</tbody>
</table>

Source: The University of Western Ontario
Student Debt

Figure 13

Data Source: Western’s exit survey of all undergraduate students at time of graduation

Calculation of Indicator: All undergraduate students, including students in second-entry undergraduate programs, are asked to report on the level of education-related debt they have accumulated at the time of graduation. Reported debt is presented for the 1998-99 and 2004-05 graduating classes.

Relation to Strategic Plan: Commitment 7.5 of Making Choices establishes priorities for student aid reform, including post-graduation debt relief:

“Continue to advocate increased, harmonized, fair and appropriate student loan programs at both the federal and provincial levels, including a debt reduction program available after graduation to those in greatest need”.

Commentary: The analysis indicates that the majority of Western’s undergraduates continue to graduate with debt less than $10,000, and the proportion who graduate with no reported debt has increased to over 40 percent of the total.
Figure 13
Education-Related Debt at Graduation
Western Graduates from Undergraduate Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>$0</th>
<th>$1 - $9,999</th>
<th>$10,000 - $19,999</th>
<th>$20,000 - $29,999</th>
<th>$30,000 - $39,999</th>
<th>$40,000 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-99</td>
<td>36.4%</td>
<td>15.5%</td>
<td>15.7%</td>
<td>10.3%</td>
<td>8.3%</td>
<td>10.9%</td>
</tr>
<tr>
<td>2004-05</td>
<td>42.7%</td>
<td>12.7%</td>
<td>13.1%</td>
<td>11.6%</td>
<td>9.3%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Source: The University of Western Ontario
Graduate Student Enrolment as a Proportion of Total Enrolment

Figure 14

Data Source: G10 Data Exchange

Calculation of Indicator: For each of the G10 universities, fall full-time headcount enrolments for Masters and Doctoral students are expressed as a percentage of total fall full-time headcount enrolment.

Relation to Strategic Plan: Commitment 6.1 calls on Western to undertake a substantial increase in graduate enrolment.

Commentary: Western has established the priority to double its doctoral enrolment over the ten-year period commencing in 2001. Western’s doctoral enrolment currently stands at 4.6 percent of total enrolment, whereas UBC, McGill, and Toronto are in the eight to nine percent range. This comparison puts the doubling objective into context: if Western attains this objective, we will enjoy an enrolment balance comparable to other leading research universities.

Ontario’s universities are at present engaged in a process of securing operating and capital funds for graduate expansion. The Provincial Budget has allocated substantial funds for this purpose.
Figure 14

Full-Time Masters and Doctoral Students
as a Proportion of Total Full-Time Student Enrolment
2004-05

Source: G10 Data Exchange
Doctoral Students: Completion Rates and Time-to-Completion

Figures 15 and 16

Data Source: G10 Data Exchange

Calculation of Indicator: In order to accurately measure the completion rates and time-to-completion for students in doctoral programs, the G10 data exchange developed a detailed methodology which tracks each entering student on a term-by-term basis for nine years after first registration. This gives a precise reading on the percentage of each entering cohort who graduate, as well as the length of time involved to complete the program. The exchange has already gathered information on the 1992 through 1995 entering cohorts.

Relation to Strategic Plan: Commitment 6.4 refers specifically to monitoring time-to-completion in our programs.

Commentary: About two-thirds of Western’s doctoral students successfully complete the PhD, taking an average of just under five years to do so. Both indicators for Western are slightly better than the G10 average. As Western proceeds with expansion of doctoral enrolment, it will be important to monitor these two indicators.

A cautionary note about these two indicators: both the completion rate and the time-to-completion will vary significantly by disciplinary group, with lower completion rates and longer completion times, for example, in the humanities disciplines across all universities.
Figure 15

Doctoral Degree Completion Rates
1992-1995 Entering Cohorts – All Disciplines
at Nine Years After Entry

G10 Avg = 62%

Source: G10 Data Exchange; UBC data exclude the 1993 cohort

Figure 16

Average Number of Years to Doctoral Degree Completion
1992-1995 Entering Cohorts – All Disciplines

G10 Avg = 5.2

Source: G10 Data Exchange; UBC data exclude the 1993 cohort
Graduate Student Satisfaction

Figure 17

**Data Source:** Graduate and Professional Student Survey

**Calculation of Indicator:** In February 2005 Western, along with six other members of the G10, administered the Graduate and Professional Student Survey to all graduate students, excluding those enrolled in the MBA program. This survey, designed and administered by the Massachusetts Institute of Technology, assesses student satisfaction in all areas of the graduate student experience.

**Relation to Strategic Plan:** Section VI of the plan states that “To meet our targets for [graduate] growth, we will need to ensure that our programs are of high quality and have positive outcomes for students . . . . ”.

**Commentary:** The survey results indicate a very high level of satisfaction on the part of graduate students with most aspects of the Western experience. At the same time, they have expressed a need for improvement in the quality and availability of graduate-level course offerings.
Figure 17

2004-05 Graduate Student Survey – PhD Students

Western

Source: Graduate and Professional Student Survey
Average Financial Support per Doctoral Student

Figures 18 and 19

Data Source: G10 Data Exchange

Calculation of Indicator: Each of the G10 institutions (except for Alberta) has submitted a record-level file of all student support provided to its masters and doctoral students for the 2004-05 academic year. The data exchange has noted certain problems of data comparability in the basic medical sciences, and have thus excluded them from the analysis for 2004-05, pending resolution of the problems.

Relation to Strategic Plan: Commitment 7.2 of Making Choices refers to the maintenance of competitive financial support for graduate students.

Commentary: In order to realize its plans to significantly increase doctoral enrolment, Western must offer a competitive package of financial support to prospective students. The data indicate that Western’s support, both from internal and external sources, is highly-competitive among the leading research universities.

The data for McMaster University, while correct in total, are not comparable to other G10 universities in terms of the internal/external split of funding. Certain external funds are categorized in McMaster’s information systems as being internal.
Figure 18
Average Financial Support per Doctoral Recipient in All Programs (Excluding Basic Medical Science Programs) 2004-05

Figure 19
Average Financial Support per Masters Recipient in All Programs (Excluding Basic Medical Science Programs) 2004-05

Source: G10 Data Exchange; Alberta did not participate
Graduate Student Support from Federal Granting Councils

Figures 20 through 22

Data Source: Awards data from the three federal granting councils for the years 2002-03 through 2004-05, and graduate enrolment data from the G10 data exchange for the academic year 2004-05.

Calculation of Indicator: The average number of fellowships from the three federal granting councils are expressed as a percentage of the total graduate student population (masters and doctoral) at each of the G10 institutions. The graduate enrolments for each institution have been subdivided into the three granting council categories for the analysis: engineering and physical sciences (NSERC); humanities and social sciences (SSHRC); and health sciences (CIHR).

Relation to Strategic Plan: Making Choices refers to Western as a research-intensive university with a strong record of scholarship apparent in peer-reviewed publications, external awards to faculty members and students, substantial successes in recent external funding competitions, and engagement in international conferences.

Commentary: The data suggest that Western compares very favourably with the other G10 institutions in competition for graduate student awards from NSERC and SSHRC, but not quite as well in the CIHR disciplines.

This is an important indicator to monitor as Western realizes its aspirations for growth in doctoral stream programs.
**Figure 20**

Graduate Student Fellowships
Natural Sciences and Engineering Research Council of Canada
3-Year Average Awards as a % of Full-Time Eligible Graduate Students

Source: Awards data from The Natural Sciences and Engineering Research Council of Canada; Enrolments from G10DE - enrolments not available for Montreal, Laval; awards are from 2002-03 to 2004-05, enrolments are from 2004-05

**Figure 21**

Graduate Student Fellowships
Social Sciences and Humanities Research Council of Canada
3-Year Average Awards as a % of Full-Time Eligible Graduate Students

Source: Awards data from The Social Sciences and Humanities Research Council of Canada; Enrolments from G10DE - not available for Montreal, Laval; awards are from 2002-03 to 2004-05, enrolments are from 2004-05 and exclude Business and Education
Figure 22
Graduate Student Fellowships
Canadian Institutes of Health Research
3-Year Average Awards as a % of Full-Time Eligible Graduate Students

Source: Awards data from The Canadian Institutes of Health Research; Enrolments from G10DE - enrolments not available for Montreal, Laval; awards are from 2002-03 to 2004-05; enrolments are from 2004-05 and exclude Therapy programs.
Gender Balance of New Tenure-Track Faculty Appointments

Figure 23

Data Source: G10 Data Exchange

Calculation of Indicator: All new tenure-track faculty appointments for 2004-05 are shown by gender and by institution. Comparable data are not available for Laval.

Relation to Strategic Plan: Commitment 2.4 of Making Choices:

“Continue our efforts to hire and retain more female faculty and to promote more female faculty members to positions of Department, School, Faculty, and University leadership”.

Commentary: For the 2004-05 academic year, the G10 institutions (excluding Laval) appointed 837 new tenure-track faculty, of whom 34 percent were women. For Western, approximately 45 percent of all new hires were women, the highest percentage among the G10 universities.
Figure 23

New Tenured and Probationary Appointments by Gender
2004-05

Males
Females

Source: G10 Data Exchange; excludes Laval
Student-Faculty and Student-Staff Ratios

Figures 24 and 25

**Data Source:** G10 Data Exchange and Western’s Student and Human Resources databases

**Calculation of Indicator:** Two indicators are presented: the full-time student to full-time faculty ratio for the G10 universities for 2004-05; and a summary of the full-time student to full-time faculty and full-time student to full-time staff ratios at Western from 1999-2000 through 2004-05.

**Relation to Strategic Plan:** Commitments 2.12 and 3.9 of *Making Choices* call for a significant increase in faculty and staff complement.

**Commentary:** The comparative analysis indicates that Western experiences a slightly lower student-faculty ratio than the G10 average.

The six-year trend for Western indicates recent improvement in both the student-faculty and student-staff ratio. With the stabilization of first-year intake following the double cohort, and improved Provincial funding, this trend should continue.
Figure 24

Full-Time Student to Full-Time Faculty Ratio
2004-05

G10 Avg = 22.2

Source: G10 Data Exchange; excludes UBC

Figure 25

Full-Time Student to Full-Time Faculty and Staff Ratios at Western

Source: The University of Western Ontario
Research Funding: SSHRC Awards per Eligible Faculty Member

Figure 26

Data Source: Social Sciences and Humanities Research Council (SSHRC) for grants and G10 data exchange for faculty counts.

Calculation of Indicator: The total value of peer-adjudicated research grants awarded by the SSHRC in 2004-05 divided by the number of tenure-track faculty members at each institution in SSHRC disciplines.

Relation to Strategic Plan: Making Choices refers to Western as a research-intensive university with a strong record of scholarship apparent in peer-reviewed publications, external awards to faculty members and students, substantial successes in recent external funding competitions, and engagement in international conferences.

Commentary: On a per-faculty-member basis, Western’s success in competition for SSHRC grants is in the mid-range of the G10 universities, clustered with Laval, Queen’s and McMaster, but significantly lower than McGill, Toronto, and UBC.
Figure 26

SSHRC Awards
Funding per SSHRC-Eligible Tenure-Track Faculty Member
2004-05

<table>
<thead>
<tr>
<th>University</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterloo</td>
<td>$6,701</td>
</tr>
<tr>
<td>Queen's</td>
<td>$7,553</td>
</tr>
<tr>
<td>Laval</td>
<td>$7,963</td>
</tr>
<tr>
<td>Western</td>
<td>$8,004</td>
</tr>
<tr>
<td>McMaster</td>
<td>$8,005</td>
</tr>
<tr>
<td>Alberta</td>
<td>$10,235</td>
</tr>
<tr>
<td>Montreal</td>
<td>$10,496</td>
</tr>
<tr>
<td>Toronto</td>
<td>$12,605</td>
</tr>
<tr>
<td>McGill</td>
<td>$12,580</td>
</tr>
<tr>
<td>UBC</td>
<td>$13,644</td>
</tr>
</tbody>
</table>

Source: Social Sciences and Humanities Research Council of Canada; excludes funding for CRCs, NCEs, Communications and Training. Faculty data from Statistics Canada and include only those eligible for SSHRC funding.
Research Funding: NSERC Awards per Eligible Faculty Member

Figure 27

Data Source: Natural Science and Engineering Research Council (NSERC) for grants and G10 data exchange for faculty counts.

Calculation of Indicator: The total value of peer-adjudicated research grants awarded by the NSERC in 2004-05 divided by the number of tenure-track faculty members at each institution in NSERC disciplines.

Relation to Strategic Plan: *Making Choices* refers to Western as a research-intensive university with a strong record of scholarship apparent in peer-reviewed publications, external awards to faculty members and students, substantial successes in recent external funding competitions, and engagement in international conferences.

Commentary: On a per-faculty-member basis, Western’s success in competition for NSERC grants is at the low end of the range of the G10 universities, suggesting potential for improvement.
Figure 27

NSERC Awards
Funding per NSERC-Eligible Tenure-Track Faculty Member
2004-05

Source: Natural Sciences and Engineering Research Council of Canada; excludes funding for CRCs, NCEs, and Training. Faculty data from Statistics Canada and include only those eligible for NSERC funding.
Research Funding: CIHR Awards by Institution

Figure 28

**Data Source:** Canadian Institutes for Health Research (CIHR)

**Calculation of Indicator:** The total value of peer-adjudicated research grants awarded by the CIHR in 2004-05, by institution.

**Relation to Strategic Plan:** *Making Choices* refers to Western as a research-intensive university with a strong record of scholarship apparent in peer-reviewed publications, external awards to faculty members and students, substantial successes in recent external funding competitions, and engagement in international conferences.

**Commentary:** This particular indicator, unlike the comparable indicators for SSHRC and NSERC, presents the dollar value of CIHR awards by institution in order to give an overall sense of scale of the health research enterprise at each of the G10 institutions. It is not possible to compute the grants on a per-faculty-member basis due to different practices from one institution to the next in counting clinical faculty members.
Figure 28

CIHR Awards
Total Faculty Funding ($M)
2004-05

Source: The Canadian Institutes of Health Research.
Bibliometric Measures: Publications per Faculty Member

Figure 29

Data Source: Observatoire des Sciences et Technologie (OST)

Calculation of Indicator: Western is a subscriber to the OST, a research affiliate of the Universite de Quebec a Montreal, whose mandate is to analyse data concerning the performance of Canada’s institutions in various research measures. The OST collects data on the publications of Canadian faculty members in refereed journals via the International Science Indicators (ISI). The number of publications by faculty members at the G10 institutions in NSERC disciplines are expressed on a per-faculty-member basis.

Relation to Strategic Plan: Making Choices refers to Western as a research-intensive university with a strong record of scholarship apparent in peer-reviewed publications, external awards to faculty members and students, substantial successes in recent external funding competitions, and engagement in international conferences.

Commentary: Western’s faculty members in the NSERC disciplines publish in refereed journals at slightly above the average of the G10 group, about the same as the University of Alberta and UBC. Bibliometric output is commonly used as a proxy for research productivity.

Comparable analyses for the SSHRC and CIHR disciplines are not presented here. While the analysis is reliable for the NSERC disciplines, in the case of SSHRC the ISI does not capture the full spectrum of published faculty output. With respect to CIHR disciplines, the G10 has been unsuccessful in attempts to accurately and consistently report the clinical research population to which the clinical discipline publications could be normalized.
Figure 29

Natural Sciences and Engineering Publications per NSERC-Eligible Faculty by University 2000 to 2004

G10 Avg = 11.9

Source: Publications from OST are totals for the period 2000 to 2004 excluding those categorized as Clinical Medicine; NSERC-eligible faculty from G10
Data Exchange is from 2004-05
Contract Research Revenue

Figure 30

Data Source: The University of Western Ontario

Calculation of Indicator: This indicator is a six-year summary of Western’s revenue from research contracts, excluding government research contracts. Research contracts administered through the hospitals and affiliated research institutes are included, but displayed separately.

Commentary: The volume of contract research is a limited measure of the university’s research collaboration with industry. Over the past six years, the volume of contract research at Western has been relatively stable in the range of $17 to $20 million per year.
Figure 30

Western’s Non-Government Contract Research Revenue ($M)

Source: The University of Western Ontario
Total Endowment Value

Figure 31

Data Source: The University of Western Ontario

Calculation of Indicator: This indicator is a six-year summary of the value of Western’s endowment at the end of the fiscal year.

Relation to Strategic Plan: Commitment 14.4 of Making Choices establishes an objective “…to raise endowed funds, in partnership with Foundation Western, to provide for long-term financial security and independence and to secure funds for those disciplines and units that may not be able to attract targeted government funding”.

Commentary: Western’s endowment fund has been relatively stable until 2003-04, when the first large gifts were received in response to the Ontario Student Opportunity Trust Fund (now the Ontario Trust for Student Support), a provincial government matching program to encourage endowed gifts for student aid. Western’s early success in attracting gifts and future pledges under this program will lead to an enhanced endowment fund in the coming years.
Figure 31

Western’s Total Endowment Value ($M)

Source: The University of Western Ontario Audited Financial Statements as of April 30th.
Total Gifts to Western

Figure 32

Data Source: The University of Western Ontario

Calculation of Indicator: This indicator is a six-year history of gifts to Western, segregated between endowed and expendable purposes.

Relation to Strategic Plan: Commitment 9.7 of Making Choices establishes objectives for fundraising:

“Carry out successfully Campaign Western, by reaching the target of $270 million before April 30, 2004, and maintaining the flow of new gifts and pledges at a level above $40 million per year for the five years after the conclusion of the Campaign”.

Commentary: The target for Campaign Western has been met and exceeded, and the annual target of $40 million seems to be a realistic goal for the foreseeable future. The large increase in 2003-04 was the direct result of a single large gift to the Schulich School of Medicine and Dentistry.
Figure 32

Total Gifts to Western ($M)

Source: The University of Western Ontario
Comparative Endowment Levels

Figures 33 and 34

Data Source: Canadian Association of University Business Officers (CAUBO)

Calculation of Indicator: Data on the total market value of endowments as at December 31, 2004 for the G10 universities are displayed both in terms of the absolute value, and as a value per FTE student.

Relation to Strategic Plan: Commitment 14.4 of Making Choices establishes an objective “to raise endowed funds, in partnership with Foundation Western, to provide for long-term financial security and independence and to secure funds for those disciplines and units that may not be able to attract targeted government funding”.

Commentary: The analysis indicates that Western’s endowment fund, as compared to other G10 institutions, is quite modest both in absolute terms and on a per-FTE-student basis.
Figure 33

Total Market Value of Endowments ($M) 2004

- Waterloo: 97.2
- Montreal: 105.3
- Laval: 112.2
- Western: 339.9
- McMaster: 505.4
- Queen's: 576.5
- Alberta: 713.9
- UBC: 765.1
- McGill: 1,512.8
- Toronto: 1,512.8

Source: CAUBO University Investment Survey (December 31, 2004)

Figure 34

Endowment Assets per FTE Student 2004

- Montreal: 3,462
- Laval: 4,844
- Waterloo: 4,717
- Western: 7,987
- McMaster: 15,826
- Alberta: 18,838
- UBC: 30,177
- Toronto: 27,139
- Queen's: 28,566
- McGill: 29,815

Source: CAUBO University Investment Survey (December 31, 2004)
Physical Infrastructure: Actual vs. Required Space

Figure 35

Data Source: Council of Ontario Universities (COU)

Calculation of Indicator: On a triennial cycle, each Ontario university reports to COU, quantifying space inventory in a number of categories such as research space, classrooms, faculty offices, student services. The COU then calculates the amount of space required by each university through the use of space standards formulae. The analysis then computes each university’s actual space inventory as a percentage of the space requirement generated by the formula.

Relation to Strategic Plan: Commitment 9.4 of Making Choices refers to strategies for more appropriate, innovative and intensive use of existing space.

Commentary: The analysis suggests that Western has fallen considerably below the provincial space standard, and significantly below Ontario’s other universities. This is due to two factors. Since 1995-96, Western’s enrolment growth has outpaced that at the other universities. Also, Western, in proportional terms, took on less debt than other institutions to construct facilities that might be more appropriately funded through provincial capital grants.
Figure 35

Ratio of Actual Space to Provincial Space Formula

[Graph showing the ratio of actual space to provincial space for Western University and all Ontario universities from 1977-78 to 2004-05.]

Source: Council of Ontario Universities
Maintenance, Modernization, and Infrastructure Expenditure

Figure 36

Data Source: The University of Western Ontario

Calculation of Indicator: Annual expenditures for facilities maintenance, modernization, and infrastructure are expressed as a percentage of the estimated building replacement value, excluding the value of student residences.

Relation to Strategic Plan: Commitment 9.5 of Making Choices establishes a target for the appropriate level of annual expenditure:

“Continue to increase the transfer from the operating budget to the capital budget for deferred maintenance by $750,000 a year, until the annual transfer reaches $7.5 million”.

Commentary: The absolute target of $7.5 million has been met and exceeded. Annual expenditures are now at just over two percent of the replacement value of campus buildings, which compares favourably to industrial standards.
Figure 36

Western’s Maintenance, Modernization, and Infrastructure Expenditures as a Percentage of Building Replacement Value

- 1.3% for 2000-01
- 1.2% for 2001-02
- 2.3% for 2002-03
- 2.0% for 2003-04
- 2.2% for 2004-05

Source: The University of Western Ontario; Replacement Value includes Non-Residential Buildings, Utilities and Infrastructure