## Office of Institutional Planning and Analysis

Top -5 Accomplishments - April 2020, Year-End Evaluation

## 1. Research, Analysis and Academic Program Support (Reporting Improvements & Support)

## **Faculty of Environmental & Urban Change**

- Obtained a) student/parent-based information for naming their faculty and b) physical geography stream
- Expanded on the Faculty's initial request (i.e., faculty/program naming) by including non-requested survey sections to inform program copy content; delivered at the same cost of their initial project request

#### **New Market Research**

- Consultations have been effective; projects have gone forward with minimized meeting time to reduce burden on stakeholders, and needs/expectations were clearly embedded in project proposals
- Presented the results of the ONCAT Math Competencies project at both CIRPA and the COU-MCU-HEQCO day showcasing the work that was done

## **Economic and Social Impact Report**

Coordinated and provided data for ESIR as well as supported/administrated two surveys on a short timeline

#### **Research Support**

- Set up a BI platform using MS Power BI and developed/completed the 360-degree view Dashboard Research Funding Applications - cost savings \$300K+
- Restored the database for the web-based research funding management system, Sophia cost savings \$500K+

## Early Alert (SEM)

- Provide evidence of the utility of early alert intervention pilot program for ECON 1530
- The first pilot project was done Fall Sept 2018, the re-designed intervention was done in Fall 2019, and was scheduled to be expanded to the current term (Winter 2020)

## **Academic Program Report**

Annual report updates and customization

#### Cyclical Program Review

- 2019 -20 data kits development and data consultation
- Language program custom analysis and Power BI Application

## 2. Data Modernization - (Development, Support & Implementation)

#### Data Modernization - with Institutional BI Adoption and Usage

- NSSE dashboard was officially launched and adopted, and the community was trained on how to use the dashboards and interpret the results
- CGPSS dashboard prototype created, the launch is expected in Summer 2020
- Developed an interactive BI report that could be delivered to faculties each week to show trends this infrastructure will be in place for the next time NSSE runs, and the reports can be easily transitioned to Power BI

#### **Enterprise BI Tool Selection**

Supported the process of selecting an institutional BI tool/software (although -and until- the RFP was cancelled, we still
consulted with various University stakeholders, met with UIT/EDW, went to Power BI demos, provided data from the
Internal Repository Survey to inform decision-making, strategized about the RFP process and who to include in the
process, etc.)

#### **Service Transformation**

Shared staff resources to support Benchmarking and Service Transformation project

## 3. Reputation and Impact Rankings - (Ranking Improvements)

## **THE Impact Ranking 2020**

- OIPA played a key role in coordinating all the data for this ranking and has submitted on behalf of the University
- In the 2019-2020 fiscal year York University has earned recognition from Times Higher Education (THE) on its impact ranking, York University ranked 33<sup>rd</sup> in the world!
- The overall ranking includes 766 universities from 85 nations/regions. THE's Impact Rankings assess the social and economic impact of universities using metrics based on the United Nations' Sustainable Development Goals

## TheBestSchools.org

• York University ranking as 100 in the top 100 Universities in the world "This ranking of the world's best universities focuses on academic prestige and intellectual horsepower! At these universities, you will be with the brightest faculty and students in the world develop your knowledge and skills to join the world's elite academics, scientists, and thinkers"

#### NSSE

 NSSE 2020 Administration (even though it has been derailed somewhat by COVID-19) Mobilized the faculties to support the survey and provide them with ongoing data to support their efforts

#### 4. SMA3 2020-2025 - (Coordinated Submission)

#### **Strategic Positioning & Scenario Modelling**

- Supported the SMA3 committee working groups, combined all input and expertise from the SMEs and consolidated the
  information for the Provost; Supported community information sessions through various methods of data collection,
  verification and analysis
- Developed the corridor modelling, including enrolment projections through to 2020-2025; Positioning for metric
  weighting, provided recommendations and led bilateral discussions; Lead the scenario modelling and
  recommendations for York's economic impact indicator
- Coordinated the draft narrative and the SMA3 submission with Provost and President's Office, completed data workbook and facilitated the submission of SMA3 Instrument and Data Workbook to MCU on February 18, 2020
- Responded to Ministry feedback on March 10<sup>th</sup> and again on March 16<sup>th</sup> and resubmitted changes to the final draft of the Narrative and Data Workbook
- Ministry deferral on finalizing SMA3 due to COVID-19 crisis
- Internal SMA3 Dashboard (draft) currently in development

## 5. Enrolment Modeling & Reporting - (Improved Processes)

## **Graduate & Undergraduate**

- Construction of the new graduate enrolment model that improved over the previous graduate model by incorporating
  detailed student level analytics. It is an easy to maintain model with lower turn-around time and less risk of error when
  adding new data. Using historical data to track the movement of students, it allows us to forecast Heads, FFTEs and
  WGUs at the program cluster level
- UG enrolment projection in Heads, FFTEs and WGUs for Contract 2019/20
- Enrolment and resource planning for Markham Campus

#### Reporting

- Ensure the accuracy of enrolment data
- Support government and sector reporting requirements related to Enrolment

## **SHARP Support**

Tuition revenue projection for Budget Envelope 2019/20, including Early Indicator; transitioned from BIU to WGU allocations/attributions

#### **Process Optimization**

Migration of OIPA enrolment files and processes to a virtualized Linux server

## 6. Labour Relations Support

- Development and consultation of scenarios for YUFA Equal Pay
- Osgoode Anomaly model development, retro-exercise 2016/17, 2017/18, and 2018/19

## 7. Integrated Resource Plans (IRP)

- Continued to support PVP IR Plan development, realigned 2018-2020 PVP IR Plan to retreat themes including Top 10 critical priorities and overarching outcomes
- In response to the COVID-19 situation, implemented changes to the annual IR Plan evaluation process, both at an organizational and Divisional/Faculty/unit level
- Provided alternate reporting options and support to the planning community (e.g. Top 5 Accomplishments vs annual evaluation)
- Continued IR Planning support provided options for alternate evaluation formats (Excel, Word, Email) for Divisions/Faculties and units as well as ongoing IRP technical training for InfoPath
- Working towards meeting the board reporting timeline for the President keeping to the reporting cycle

#### 8. COVID19 Planning and Response Support

- Developed enrolment and revenue (tuition and grant) impact scenarios at University and Faculty levels, developed and presented to Board and Senior Executive and COVID planning groups
- Administered York new and continuing Summer survey and reporting; Coordinated prospective international student survey with Academica, and developed report for PVP/Deans and COVID planning groups; Coordinating HESA/Strategic Counsel survey of current and prospective students
- Leading costing of LR proposals
- Supported draft institutional budget framework for COVID scenario responses with Finance and Provost Office.

## **Academic Quality**

## 1. Innovative, Quality Programs for Academic Excellence

## Provide support for development of UAP 2020-2025

## Strategy/Action Measure/Milestone

Coordinate environmental scan information for Provost/APPRC/Faculties to inform UAP development

Provide data on progress towards previous plans (e.g. White Paper, UAP) Produce reports as needed throughout process

Align IR framework & Planning Cycle to align new UAP timeframe

Information is developed and presented Performance report (Measuring Success)provides progress towards plans

On Track

Continue to systematize program data and make efficiencies on how CPR data is pulled and presented to the community

Undergraduate and Graduate Program Reports for data kits are generated and delivered to the program chair and directors for inclusion in the CPR process; (Data and key metrics are compiled and published for admission, enrolment, retention and graduation at program level in a consistent and efficient layout)

Improvements are made to the end-to-end workflow of Academic Program Report generation

Annually, OIPA's data hub provides Academic Program Reports for each undergraduate and graduate program, certificate and diploma

Improvements are made to the data quality, and student and enrolment databases are maintained with integrity Faculties/units have program information to inform decision-making and resource allocations

On Track

Support ARMS course planning, teaching resource allocation, and budget planning for Faculties and continue to improve the system's performance and functionality

Osgoode's academic resourcing fully integrated into ARMS All Faculties on ARMS

The process for assigning, using, and eventually converting temporary employee pay no's is streamlined Quicker access by contract faculty to teaching resources like Moodle

Instituted a KANBAN agile project management tool to increase development flow items through the queue to promote collaboration and prioritization of work Improved ARMS for tracking graduate student support and associated academic resourcing

On Track

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- 1. Develop sustainable enrolment model scenarios.
- 2. Model Tuition and grant revenue associated with enrolment scenarios.
- 3. Develop comparative staff, student and faculty ratios for consideration

Enrolment scenarios developed and presented to Provost and Dean, and Deans Forum  $\,$ 

Tuition and grant revenue assumptions developed for all scenarios

Ratio information informs decision making. Program development is informed by sustainable enrolment and resource scenarios



On Track

## **Academic Quality**

## 2. Advancing Exploration, Innovation and Achievement in Scholarship, Research and related Creative

## Support grant applications, bibliometric rankings and research reporting capacity

## Strategy/Action Measure/Milestone

Build the capacity to report on research and funding data with much better integrated research reporting

Improved quality and accuracy of Sophia database data Dashboards provide insight, understanding and analysis of Sophia data

Integrated E-CV and databases improves bibliometric analysis

Enhanced systems and infrastructure improves analytics, measure reporting, comparisons and rankings



On Track

## **Student Success**

## 3. Enhanced Quality in Teaching and Student Learning

## Support Faculties with program evaluation to enhance academic experience and student success

## Strategy/Action Measure/Milestone

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Develop insight on the educational pathways of students and the efficacy of specific programs to improve student performance and retention.

Partnered with the Toronto District School Board to track students from K-12 to York University and successfully matched a large portion of students (providing information about pathways from TDSB into York; and demographic information about students) ONCAT Funded: Tracked the pathways of business students that transfer between York and Seneca to better understand the transfer student profile and factors influencing successful transfer Gathered an understanding of the mathematical competencies of students who transfer from a college to those who enter directly from high school and provided data analysis for the research project ONCAT Funded: Student experience in transfer project with Seneca in development



On Track

Support Student Services to enhance student support services to help the unit evaluate Support the stakeholders involved in planning and the impact of initiatives using student perspectives.

managing student services (e.g. survey design, conducting analysis)



On Track

Support Faculties and academic departments using customized research projects to inform their program development and monitoring.

Consulted with academic stakeholders to identify research questions and potential research approaches Leverage and collaborate with external market research resources

Stakeholders are provided with analysis and summary to inform next steps in program development and monitorina



On Track

Operationalize market research options at the University (e.g. identify data resources and tools)

Toolkit developed to summarize market research options Developed expertise in new research methods Market research resource library available for reference



On Track

## **Student Success**

## 4. A Student-Centred Approach

## Conduct predictive analytics to provide intelligence to support program and resource decisions to improve student retention/persistence and success

## Strategy/Action

#### Measure/Milestone

Leveraging student behavior in York's Learning Management System (Moodle), student Developed analytic datasets which merge student demographic data in SIS, and Student Self-Assessment data to identify crucial relationships, opportunities and risks for students.

demographics, student self-assessments, and Moodle student activity data

Leverage analytic datasets to identify factors which predict student retention

Student retention factors identified

Leverage student retention data to improve retention System capacities enhanced with integration of predictive data elements (eq. York specific Moodle metrics, student self-assessments) into the Civitas Advising tool for accurate 'early alerts' for at-risk students Continually increasing the University's accuracy of identifying student success and risk trends and patterns; pilots are being conducted and pilot recommendations

are being used to inform decisions to improve student

Enhanced data analytics with machine learning for improved evidence-based decision making with collaborators (OIPA and within the University)

Develop a survey ETL process and automated statistical analysis for survey data and develop accessible dashboards.

Creation of Dashboards (e.g. CGPSS)

Dashboards are presented to internal stakeholders and brown-bag sessions are conducted

Dashboards go live on Yulink

Data informs local and central strategies (e.g. Textual

Analysis - NSSE 2019)

retention and success

Dashboards provide improved awareness, access and insight into survey data for the institutional and Faculties Completed proof of concept project for an Enterprise BI

Ongoing maintenance of published dashboards



Progressing



On Track

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On Track

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Administer a variety of surveys with a high enough response rate for data analysis

CGPSS, STUDENTMOVETO)
Administered incentives for increased response rates
Survey design and administration advice provided across
campus

Campus-wide campaigns are underway (e.g. NSSE,

Survey response rates have improved

Develop a proposal for institutional survey coordination with community partners

Drafted 'university survey' governance and coordination proposal. (metric: proposal released for consideration) Awareness of issues being addressed and support for final governance and coordination plan Established survey committee
Survey governance coordination, and policy and



Support Economic & Social Impact Report Development

Provided background data to consultants Administered surveys to students Reviewed report findings

procedures implemented



On Track

Manage, analyze and report on the Student-Self Assessment data in collaboration with interested units across the University to meet the needs of those units

Project plans developed with various Faculties and VP Academic about specific projects
Multi-year data repository of student self-assessment data compiled and made accessible (as appropriate)
Overseeing the integration of student self-assessment data into the Civitas system to facilitate identification of at-risk students based on non-cognitive measures



Progressing

Understand how rankings are scored and identify where York could affect ranking improvements:

MacLean's QS THE NSSE

**CGPSS** 

York Library and VPRI continue to cleanup Yok related data in citation indices

Faculty members include ORCID in CVs so that research publications and impact are captured

York has completed negotiations with THE and QS; York has a growing desire to purchase datasets in BI format



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# Enabling the Plan 7. Enabling the Plan

## Support labour relations and Collective Bargaining processes

Strategy/Action Measure/Mile	Measure/Milestone		
Develop interactive academic staff data repository	Create historically accurate reports for all academic employee groups Dashboard results provide access to historical data OIPA is working with Labour Relations and HRIM	•	On Track
Continuously improve CUPE 3903 hiring process	Systematized posting and hiring dates Monitored hiring process across all units, identify issues that cause delays Provided progress reports and highlighted areas for improvement	•	Progressing
Enhance data gathering, analytics and systems development to facilitate the needs for FT & PT Academic Collective Bargaining (YUFA, OHFA and CUPE)	A parameter-based interface is developed to gather pension and benefit credit service data for annual processing Data needs for bargaining units are supported through reusable, and repeatable automated programs (systems) Continuous improvement of source data quality and accuracy is ongoing Data provided in timely manner to support negotiations effectively	•	On Track

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On Track

Develop effective processes to support government and sector reporting requirements related to CSRDE, CUDO, SMA and Enrolment.

Cohort-specific retention and graduation rates calculated and submitted to the Consortium for Student Retention Data Exchange (CSRDE)

Data is now available at the Faculty level for York CUDO:

Developed and verified Common University Data (CUDO) Data has been published to York's CUDO website SMA:

Dashboards dynamically track institutional and Faculty results against targets + enrolment contracts Dashboards are used at the Institutional and Facultylevel to track progress of SMA goals and objectives Dashboards provide Institutional and Faculty-level metrics and targets and inform IR Plan strategies and measures

Annual report-back to the Ministry is completed Enrolment:

Data validations are completed

Diagnostics developed to ensure accurate data

ERE data for MTCU completed

On Track

Develop datasets to support reporting systems for units across the university to enable decision-making and resource allocations

Diagnostics on data completed Student Information Data, Financial and HR data available is made available (e.g. PES, SIS, STAC, INFOMART, HR)

Faculties and OIPA have access to reportable data

Create an Internal Repository of Dashboards for our internal stakeholders that will allow. The University acquires an institutional BI platform OR. decision on a work-around plan to publish the internal repository

> Pilots are completed (e.g. Enrolment, Admission) in the new dashboard format

Internal use dashboards are published and the community has the ability to perform analyses and create custom reports

On Track

Provide ongoing maintenance & updates to Quick-Facts dashboards

more access to readily-available, insightful data

Quick-Facts dashboards have little to no data anomalies Quick-Facts dashboards are updated and updates are communicated to users

No major issues with the Quick-Facts updating process (back-end)

Quick-Facts continues to track ~10-15k clicks/year



On Track

7 June 2020

1238

Further develop existing enrolment models to support data-driven enrolment planning and provide better access to the modelling data

Strategic advice on SMA3 corridor planning provided Integrated SMA3 corridor with Faculty contracts Integrated enrolment forecasts used in contract, budget, recruitment to support more accurate projections of revenue and sub-Faculty intake targets Created new graduate student enrolment projection model that better captures movement of students through their graduate programs and allows more accurate tuition and grant revenue projections Refined undergraduate enrolment model and intake targets so that projections are made at sub-Faculty levels (e.g. program clusters) that make sense from both recruitment and revenue projection perspectives Created a database of previous and current projections, targets and actuals together with a front-end, dashboardstyle interface to promote easier access to strategic enrolment planning data Integrated the undergraduate and graduate models into

On Track

Use the undergraduate and graduate enrolment projection model to report and predict enrolment contract targets annually

Provided weekly enrolment data to VPA&P, Faculties and Finance (e.g. FFTEs, Headcounts) Multi-year enrolment plans discussed with Faculties FFTE projections completed for the next three years based on Faculty intake plans Enrolment target contracts distributed to the Faculties

the interface so that what-if scenarios may be run by end



On Track

Develop a new medium and long-range Faculty complement model to support datadriven academic resource planning

Full-Time Faculty Plan

users

OIPA has identified opportunities to make better use of the FTF data and will eventually provide data to various stakeholders (e.g. will feed into the Faculty Complement model)

Faculty Complement Model

Coordinate and collect Faculty complement data to support Provost faculty complement planning. Developed a medium- and long-range faculty complement model in consultation with Provost and informed by Faculty Complement discussion paper, consultation process and strategic planning Streamlined and enhanced the collection, integration and presentation of faculty complement data for planning purposes



Progressing

1238

Collaboratively improve the existing anomaly and pay equity exercises for full-time faculty

Annual anomaly regression analysis conducted, and anomaly reports generated for all Faculties Analyses results interpreted and communicated to Faculty Relations



On Track

Anomaly exercise procedure documented, and validation lists and report distributed

A fair and equitable compensation system is in place that supports the success of the organization New YUFA pay equity anomalies model created in collaboration with YUFA executive and Academic Relations.



On Track

Provide advice on metric target, bands of tolerance and weighting strategies and enrolment corridor strategy

Develop corridor scenarios to maximize enrolment income and manage risk for 2020/21 to 2024/25 time period.

SMA3 sub-group consultations: gathering insights on approaches and metric data trends
Develop scenarios with historical data and project future performance and risk

SMA lead for York. Member of SMA3 negotiation panel with MTCU

Coordinate SMA3 metric narrative and strategy with President's Office

On Track

Support the alignment of planning across the University with the long term strategic direction set out in the White Paper, UAP, SMA and PVP IR Plan

An integrated planning communication strategy is ongoing Ongoing communication with the university community on IRP priorities, activities, and accomplishments IRP 2019-2020 template is aligned to York's Pillars, Mission, Vision, UAP Priorities and PVP IR Plan WP, UAP, SMA and PVP IR Plan strategies and metrics are embedded IR Plans and outcomes are clearly articulated

Learning, development and IRP support provided to the planner community  $% \left( \mathbf{p}\right) =\mathbf{p}\left( \mathbf{p}\right)$ 

The University's budget and planning processes are closely coordinated with and explicitly linked to its academic and strategic plans and priorities
Assessment and metrics are used to evaluate progress to towards academic and strategic priorities (mid-term & final)

IRP Dashboards track Divisional & unit IR Plan information and allow the ability to create quick summaries; dashboards significantly cut-down on the time it takes to create IRP reports and analyses OIPA has partnered with HR to bring together planning (IRP) and employee performance processes (PDP) in a more integrated way for 2019 forward IRP 2020-2025 will be aligned to new UAP priorities and will include SMA3 metrics

On Track

Progressing

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Develop enrolment planning reporting and analytics to help inform decision making and space planning for the new Markham campus

Markham proposal
Undergraduate and Graduate Enrolment projections
developed in consultation with Faculties
Draft Enrolment Complement Plan completed
Markham Enrolment model integrated with institutional,
SEM and SMA plans
Engagement with Faculties on programs and curriculum

planning at new campus in conjunction with AVP Academic

Revenue projection model scenarios created to support

Update & redesign the "Measuring Success – Progress Towards Plan" (Institutional Metrics Report)

Functional leads across the University have identified key metrics to include in the institutional metrics report A new dashboard has been developed that incorporates new measures and targets set out in the UAP 2020-2025 The institutional metrics report incorporates key metrics to track the University's success against the new UAP 2020-2025

The report is used by Divisions/Faculties and units to evaluate progress against strategic and academic strategies

On Track

Streamline the KRI reporting exercise to the Board by developing a data repository process; and providing accurate and consistent metric information

Developed and informed best way to track/record KRIs Bi-Annual data reports are provided to Internal Audit York's key risk values are presented to BOG The University is able to mitigate risk and initiate strategies to improve its KRI status

Streamline OIPA's employee onboarding processes

Onboarding and orientation checklist has been documented; includes pre-arrival and arrival procedures for new employees, including systems access and technical setup
Standard Operating Procedures (SOP) indicate process



On Track

Maintain and update critical pages on the OIPA website; keep the content up to date and relevant

Website's web analytics is examined to determine performance and usability
Content is organized to best practices
Majority of data is accessible to the YORK community through OIPA website
Data Hub is up-to-date and is used as the University's central data repository

roles and responsibilities



On Track

June 2020

On Track

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Select new project portfolio system to ensure that critical deadlines and information needs of the community are met

Quarterly reports are generated AVP and Provost are informed of workload and resource capacity

Improved reporting is achieved by leveraging the project portfolio functionality that align resources/projects to the UAP priorities

New project reporting process and tracking methodology improves decision making and provides efficiencies for the unit

Improve the quality, access and understanding of benchmarking data

Reports inform Senior-Level decision-making Cost/wFTEs/Service Effectiveness results and reports are presented to various divisions and units Benchmarking data reviewed to ensure data integrity Units/Depts start using this data in decision-making OIPA on Benchmarking Steering Committee



Develop the systems, data, and reporting capabilities for the Institution and Faculties that support SHARP, and improve access and insight into SHARP data

SHARP Data

Tuition and Grant projection models are improved and tested

Cost allocation data available for SHARP based on approved driver methodologies, data is used to develop SHARP budget envelopes

Inter-Faculty data supports the allocation of resources between Faculties for teaching services provided to students

Teaching space data has been moved to the Cloud and a new process to acquire teaching space data from the cloud environment has been developed

Provide in-year tuition and grant projections for Faculties Budget envelopes distributed to the faculties for budget guidance using the current tuition framework

SHARP Dashboards

SHARP Dashboard prototypes are created SHARP Dashboards track revenues and costs (breakdowns) across years at the Faculty and Institutional level

SHARP Dashboard numbers are verified against budget envelopes

SHARP Dashboard is live on Yulink

Decreased number of manual processes and length of time it takes for Faculties to do an analysis of their

SHARP data SHARP Website

SHARP's public-facing website is live

On Track

June 2020 11



On Track

On Track

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Support Review of SHARP OIPA member on SHARP steering committee Engage in consultations with external reviewers Gather feedback from budget consultations Support implementation of SHARP review

recommendations

Develop plan to adjust revenue drivers coming from

review

Provide information, analysis and advice to Provost, President and other PVP members

and administrative priorities; Align Roadmap portfolio tracking with Institutional

Reports for Board Finance and Audit, Academic Resources, Senate, APPRC, EPG completed as requested by the Provost, VPFA and President

Data is provided for President's Annual Report Data is presented into useful information that provides context, supports planning practices and decision-making

for leadership

Professional training, development and recognition of staff

Employees feel appreciated for their contributions. Improved relationships between coworkers Employees strive to meet and/or exceed performance expectations

Employees show a heighten level of commitment and interest to the institution

Employees benefit by developing new skills and the university benefits from the additional expertise acquired

Employee contributions are recognized Reward and recognition occurs as close to the activity as

possible to reinforce positive action and behavior Employees understand how their work aligns to University priorities

Employees provide input/develop strategies for OIPA's IR Plan

On Track

Acknowledge employee contributions and their role in moving forward York's academic

On Track

priorities.