

## CATEGORY 7: MEASURING EFFECTIVENESS

### INTRODUCTION

LLCC's processes for Measuring Effectiveness are systematic and aligned yet not thoroughly integrated. Data collection and analysis are integrated processes that support institutional planning. LLCC's mission, values, and goals inform the strategic and operational plans (7P4) as well as the College's selection and use of data (7P2, 7P3). Each of the College's six strategic goals has associated targets and measures that gauge progress towards achieving each. Progress is monitored at the President's Cabinet level through the College's Strategic Planning and Performance Indicators Dashboard and Scorecards.

Data management and distribution (7P1) at the College was significantly improved through implementation of a data warehouse and reporting system. When the data warehouse reports are coupled with aggregate data reports and trends available on the Institutional Research (IR) website, departments and teams now have instant access to data needed to inform both everyday operations and planning efforts.

Benchmarking the College's performance within the state is commonplace, a process facilitated through standardized reporting required by the Illinois Community College Board. Expanding the College's ability to benchmark (7P5) its performance nationally is an area of improvement made possible through relatively recent membership in the National Community College Benchmarking Project (NCCBP). As the College examines and selects standardized instruments to improve evaluation of its processes, Institutional Research will be able to expand LLCC's national comparisons in future systems portfolios.

Processes related to the timeliness, accuracy, reliability, and security of the College's information systems (7P7) are "aligned to integrated."

Comparisons that lead to a better understanding of how LLCC's processes for Measuring Effectiveness compare with that of other institutions are not available currently through the NCCBP. The College would appreciate feedback on best practices evaluating Measuring Effectiveness processes.

*Reader's Note for Process Questions:* The College's responses to the Criteria for Accreditation are denoted by a notation that references a specific core component subcategory. For example, [crit.1A3] alerts the reader that the preceding text is included in the Systems Portfolio in response to Criteria One, Core Component 1A, Subcategory 3.

**CATEGORY 7: MEASURING EFFECTIVENESS**

*Measuring Effectiveness examines how the organization collects, analyzes, distributes, and uses data, information, and knowledge to manage itself and to drive performance improvement.*

**PROCESSES**

**7P1. How do you select, manage, and distribute data and performance information to support your instructional and non-instructional programs and services?**

Data and performance information which support instructional/non-instructional programs and services are managed primarily through Datatel Colleague, the College’s administrative student database. Datatel Colleague records range from the entry-level test scores of students to the degrees conferred. Data and performance information from Datatel Colleague are provided to the appropriate LLCC personnel through dynamic standardized reports. LLCC’s Institutional Research (IR) and Information and Telecommunications Systems (ITS) offices began implementing Zogotech, a data warehouse and reporting system, in fall 2011.

**Figure 7.1 – Enterprise Reports Accessible through the Data Warehouse and Reporting System**

Zogotech Reports
Course Outcomes
10 <sup>th</sup> Day – End of Term Enrollment and Success Course Completion and Success Chart Course Completion and Success Trends Course Completion/Success/Withdrawal/Contact Hrs Grade Distributions
Enrollment
Attendance and Retention Status Census Enrollment Comparison Course Section Enrollment by Date Daily Enrollment Change Faculty Course Section Enrollment Students by Gender, Age, and Race/Ethnicity
Student Outcomes
Cumulative GPA by Class Location Cumulative GPA by Student Location/Zip Cumulative GPA by Subject/Course End of Term Retention Status Bar Chart Graduate Totals by Degree, Major, and Term Graduation and Retention Graph
Utilization
Utilization Rate Trend Utilization Rates by Discipline

Zogotech acts as an interface to Datatel Colleague, enhancing staff access to data while maintaining data integrity. Staff were trained in using the warehouse template reports in summer 2012. These warehouse reports (see Figure 7.1) provide instant access to class retention, course performance, graduation, and student progression data as well as other enrollment management information.

IR and ITS create supplementary Datatel Colleague reports at the request of faculty and staff. For example, a series of database reports was designed to support Education Service Areas (ESAs) operations, enrollment management, and student tracking (see Figure 7.2). Additional reports and further analyses are provided by IR on an ad hoc basis.

**Figure 7.2 – Customized Reports for ESA Analyses**

Reports in Datatel Colleague
<ul style="list-style-type: none"> <li>• Current Dual Credit by Region</li> <li>• Unduplicated Students by Date</li> <li>• First Time Total for Region</li> <li>• Student Demographic Reports</li> <li>• Non-Dual Credit Demographic Reports</li> <li>• Dual Credit Demographic Reports</li> <li>• Sections and Credit by Student</li> <li>• Student Name and ID Report</li> <li>• Data Entry Student Checklist</li> <li>• Students by FT and PT Status</li> <li>• Data Download for Region</li> <li>• Course Grades and Counts by Region</li> <li>• Regional Center FA Year Counts</li> </ul>

In addition to the Colleague database, IR accesses IPEDS data files; IR enrollment, completions, and faculty/staff databases (designed for state-mandated data files); economic modeling software; and census data to enhance data offerings. The IR website provides aggregate data reports and trends through publications such as the Fact Book, Quick Facts, the Environmental Scan, LLCC Performance Reports, and survey reports and tables (CCSSE, SSI, ACT Faces of the Future, and graduate follow-up studies) to support the college community. Under the direction of the Academic Assessment team, data are collected and analyzed

specifically for assessment activities. Faculty and staff are provided with feedback from the assessment activities via the faculty Assessment Coordinators and workshops through CELT (Center for Excellence in Learning and Teaching).

Data and performance information needs are communicated to IR and ITS in two ways. Formal requests are submitted through College teams or Academic Deans. More often, however, the request is informal and initiated by direct contact with the IR office. Procedures for submitting a data request are outlined in the IR [Operational Guidelines](#). All reasonable data requests from committees/teams, faculty, students, staff, and external constituents for which data and processing time are available are typically honored. Such requests are fulfilled after deemed appropriate and practical by the requester's dean, supervisor, or administrator.

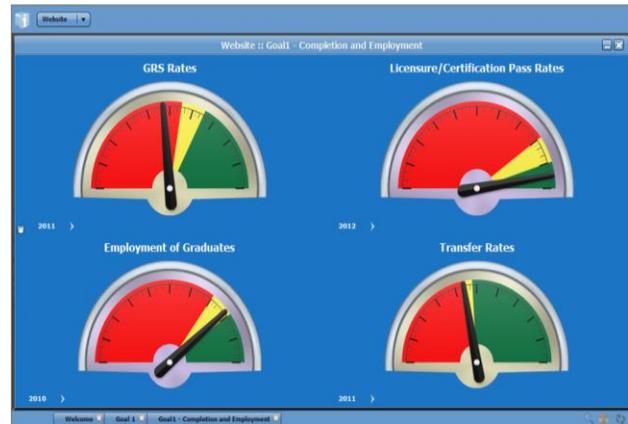
### 7P2. How do you select, manage, and distribute data and performance information to support your planning and improvement efforts?

Selecting, managing, and distributing data and performance information for planning efforts begins with the compilation and distribution of the College's Environmental Scan. The scan provides a means of understanding the College's external and internal environment. It is assembled primarily by LLCC's Institutional Research office using contributions from other functional areas. Topics covered in both the external and internal portions of the document include demographics; regulatory issues; economic development and employment information; education data from kindergarten through higher education; industry and workforce data and trends; and socio/cultural information. The internal environment information includes LLCC's student profile, financial aid information, enrollment trends, and student and employee survey outcomes. The environmental scan is completed periodically, with the latest update occurring in 2011 prior to the annual review of the College's Strategic Plan.

The environmental scan with annual plan updates, the Fact Book, the Strategic Planning and Performance Indicators Dashboard (see Figure 7.3), performance indicator scorecards, and departmental/unit/program effectiveness data support the formation of a revised Strategic Plan. For example, the Library requested and received headcount data to

support their collection allocation decisions. The Social Sciences department examined the reading and writing proficiencies of students enrolled in common core courses to determine how prerequisite changes might impact student success. Data sources such as these are also used to analyze Plan strengths and challenges, identify target benchmarks, and assess core indicators of the Plan. The Plan is updated annually through the LLCC Planning Database, which houses all departmental/unit strategies for supporting the College goals. Desired outcomes/improvements are established with the results and planned remedies assessed and updated semiannually. The planning strategies are tied to the College's annual budget, and planning resources are subsequently allocated. [crit.5D1]

**Figure 7.3 – Strategic Planning and Key Performance Indicators Dashboard: Goal 1 – Completion and Employment**



### 7P3. How do you determine the needs of your departments and units related to the collection, storage, and accessibility of data and performance information?

The College's IR and ITS staff members determine the needs of departments and units related to collecting, storing, and accessing data through their representation on various teams such as Academic Assessment, Program Review, and AQIP Steering teams. In addition, the IR Director communicates regularly with Education Service Area directors to respond to their data needs. Figure 7.2 lists reports emerging from such conversations. ITS also works closely with Financial Aid, the Business office, Human Resources, and Registration staff to ensure that their data requirements are met. As stated in the IR office's [Operational Guidelines](#), *ad hoc* requests are prioritized by requesting unit (with priority of response given the LLCC

President), immediacy of need for the data/information, resources demanded by the request, complexity of the project, and consideration of IR’s other active requests. Institutional data are made accessible to all authorized users and systems, as defined in institutional policies. The data warehouse and web-based reporting system serve as additional tools from which departmental staff can access data.

**7P4. How, at the organizational level, do you analyze data and information regarding overall performance? How are these analyses shared throughout the organization?**

LLCC documents evidence of its operational performance through the Strategic Planning and Performance Indicators Dashboard and Scorecards. The Dashboard illustrates annually the progress achieved within the strategic plan. Progress towards achieving the College’s goals is reported in the Dashboard via a pictorial representation (see Figure 7.3). These Dashboard indicators, represented by gauges (i.e., speedometers and tachometers), are linked to the College’s Performance Indicator Scorecard (see Figure 7.4). [crit.5D2]

The President’s Cabinet developed these key performance indicators to measure progress within the College’s six goal areas. Each performance indicator includes an analysis of trend data associated with a goal. Data for the indices are listed on the scorecard along with weighted values, target range sets, data sources, and pertinent notes. The resulting indicator data are analyzed

by the President’s Cabinet and shared with the Board of Trustees annually. [crit.5D2] The IR office plans to create an additional dashboard that compares LLCC to peer institutions at the state and national level.

While much performance data is shared through the dashboard, the Institutional Research (IR) department also maintains a robust webpage. This site provides quick access to a wide variety of reports including College “quick facts”, enrollment trend reports, graduate surveys, and reports from standardized administrations such as the CCSSE. In addition to maintaining much data on the webpage, the IR staff utilizes distribution lists to send current reports or analyses directly to pre-determined groupings at the College. For instance, detailed census enrollment reports are emailed to all staff who indicate an interest based on a schedule of pertinent census dates (from the beginning of registration through the end of the term).

**7P5. How do you determine the needs and priorities for comparative data and information? What are your criteria and methods for selecting sources of comparative data and information within and outside the higher education community?**

The methods used for data comparison are determined by the specific measure and data availability. Most often, the College uses internal methods and trend analyses. However, state and national comparisons are used in College analyses when possible. For statewide comparisons, LLCC uses the peer group determined

**Figure 7.4 – Performance Indicator Scorecard for Goal 1 – Student Access and Success**

Goal 1 - Student Access and Success Key Performance Indicators FY12 Update	Weight	Reading					Range sets (Low bound)		
		Reading 1	Reading 2	Reading 3	Reading 4	Reading 5 (most current)	Red	Yellow	Green
		FY08	FY09	FY10	FY11	FY12			
<b>Persistence-30%</b>	<b>30%</b>								
Retention within Term	30%	86%	85%	86%	85%	85%	0	60%	80%
Fall to Fall	20%	47%	47%	50%	49%	47%	0	50%	60%
Semester to Semester (Fall to Spring)	20%	73%	73%	72%	73%	72%	0	50%	60%
Demographic Retention Data (Within Term)	15%								
Age 31-55	33%	87%	86%	85%	86%	85%	0	60%	80%
Gender	33%								
Male	50%	84%	85%	85%	85%	85%	0	60%	80%
Female	50%	86%	86%	86%	86%	86%	0	60%	80%
Ethnicity	33%								
Asian	20%	85%	81%	81%	89%	93%	0	60%	80%
American Indian	20%	85%	95%	95%	90%	90%	0	60%	80%
Black	20%	76%	73%	74%	85%	84%	0	60%	80%
Hispanic	20%	87%	82%	82%	93%	91%	0	60%	80%
White	20%	86%	87%	87%	92%	93%	0	60%	80%
Distance Learning, retention within term	15%	82%	81%	83%	80%	79%	0	60%	80%
<b>Completion and Employment-20%</b>	<b>20%</b>								
GRS Rates (% of students who, at 150 percent of program length, have graduated, transferred or are still enrolled)	25%	FY07	FY08	FY09	FY10	FY11			
		65%	68%	64%	53%	47%	0%	55%	65%
Licensure/Certification Pass Rates	20%	FY08	FY09	FY10	FY11	FY12			
		97%	89%	93%	93%	95%	0%	80%	90%
Employment of Graduates	30%	FY06	FY07	FY08	FY09	FY10			
		83%	84%	82%	80%	78%	0%	70%	80%
Transfer	25%	FY08	FY09	FY10	FY11	FY12			
		43%	36%	43%	44%	39%	0%	45%	48%

by the Illinois Community College Board (ICCB). LLCC's peer group – Group IV: Located Downstate and in Urbanized Area – consists of eight community colleges selected for similarities in enrollment size, staffing, and geographic location. Peer group analyses are utilized regularly in all reports prepared for the ICCB and are especially helpful in preparing performance reports. The ICCB typically offers not only peer group data, but data for all of the Illinois community colleges. This facilitates comparing LLCC data annually to statewide mean and median statistics. In addition, this availability allows LLCC to (a) widen comparisons to Illinois community colleges outside the ICCB-determined peer group or (b) further narrow comparisons to peer institutions most similar to LLCC for the issue in question. State comparisons are available on a limited number of nationally standardized instruments such as the Community College Survey of Student Engagement (CCSSE) through participation in an Illinois consortium.

National peer comparisons based on institution size are provided with nationally standardized instruments such as CCSSE, Noel-Levitz SSI, and CAAP. Realizing the need to expand national comparisons, LLCC participated initially in the Kansas Study. After two years, however, the IR office concluded that the data collected and compared in that particular study were not a good fit. Consequently, the College joined the National Community College Benchmark Project (NCCBP) in fiscal year 2011. Peer group analyses are also available with the National Center for Education Statistics (NCES) through the Integrated Postsecondary Education Data System's (IPEDS) Executive Peer Tool. Although it is a means not utilized often, it does provide comparison data for all post-secondary institutions. Additionally, LLCC staff members access US Census and Department of Labor data for District-wide, county, state and national comparative information through an online data software program. These data are used extensively in the academic program and course approval process and program analyses.

**7P6. How do you ensure department and unit analysis of data and information aligns with the organizational goals for instructional and non-instructional programs and services? How is this analysis shared?**

Prior to each planning year, faculty and staff discuss and brainstorm strategies during workshops at the College's annual Institutional Improvement Day. Ideas are also

generated through the Academic Program Review process and the Planning Leadership Roundtable described in 5P6. All submitted strategies must be (a) supported by data and (b) advance LLCC's mission by aligning with one or more institutional goals. Strategies are reviewed and moved forward by department and unit managers for final review by the President's Cabinet. Strategies with budgetary implications are reviewed and earmarked for inclusion in the budgeting process. Approved strategies are finalized in the College's planning database for inclusion in the overall annual plan. Once the planning year goes into effect, staff are required to update the outcome status of each of the strategies semi-annually in the planning database.

**7P7. How do you ensure the timeliness, accuracy, reliability, and security of your information systems(s) and related processes?**

Much of the data extracted from Datatel Colleague is submitted to the ICCB based on an annual schedule. The ICCB requires an extensive amount of data to be collected and submitted year-round. In turn, the ICCB provides an editing process that effectively alerts LLCC to any data quality issues. Additionally, the Registration Services area (specifically the Data Centralization Specialist) systematically runs edit reports to ascertain that course information entered into Datatel Colleague is complete and accurate. Many departmental internal checks also occur regularly. For example, after the official midterm enrollment data are extracted each semester, the final reports are tracked back to a random selection of course section rosters. This cross-check ensures the process is producing accurate results. Midterm enrollment totals are also reconciled back to the total billing hours. At the end of the reporting year, midterm counts are reconciled to the Administrative Service's data tuition totals in order to ensure that no systemic problems are present. An external audit process (i.e., part of the College financial audit) checks the validity of these processes annually.

LLCC employs the ICCB schedule to keep other processes current in the IR office. When the ICCB data files are submitted, associated reports and data tables (e.g., the Fact Book, enrollment trend reports, dashboard data) provided by the IR staff are updated and replaced on the website. This ensures that faculty and staff working from these reports have access to the most current data.

The College’s Information and Telecommunication Systems (ITS) division oversees security of college-wide systems by operating according to the Policies and Procedures Manual. The Policies and Procedures Manual outlines extensive network security procedures, back-up processes, and user ID/password expiration guidelines. Datatel Colleague’s security is maintained for each user, restricting access to modules, screens, and fields on an as-needed basis that is determined by the user supervisors. Patches to the data system are reviewed and tested prior to installation. Finally, an extensive ITS audit is performed annually by an external firm. The IR office’s [Operational Guidelines](#) provides standards for data confidentiality. Data are held in strictest confidence and are used only for fulfilling the mandates and duties of LLCC and are not inappropriately released. Data held in the IR network files are accessible only by authorized IR staff.

**RESULTS**

**7R1. What measures of the performance and effectiveness of your system for information and knowledge management do you collect and analyze regularly?**

The timeliness, accuracy, and format of LLCC data files and reports submitted to the Illinois Community College Board (ICCB) are analyzed every five years during the state coordinating board’s Recognition Evaluation. LLCC student, faculty/staff, financial, and facilities data submissions are evaluated for compliance pursuant to ICCB Rule 1501.201. Referencing accountability through reporting performance, this rule states that “complete and accurate reports shall be submitted by the District/College to the ICCB in accordance with ICCB requirements, on forms provided by the ICCB, where applicable.” As indicated in Figure 7.5, LLCC provides annually a wide variety of data for the ICCB. The IR office monitors timely submission of these reports by utilizing the ICCB’s online “Data Due Report.” Here, the ICCB tracks submission dates for each required report/data file and provides an easily accessible list. The IR staff regularly monitors this site to determine whether reports are being submitted in a timely manner college-wide.

The College also underwent a comprehensive audit of Datatel Colleague in the spring of 2012. Datatel Colleague is the College’s student administrative database and therefore the source for the majority of data analysis. The purpose of the Datatel Colleague audit was to better understand areas such as: how LLCC is

**Figure 7.5 – Data Submission and Reports Provided Annually to the Illinois Community College Board**

Student Data Reporting
<ul style="list-style-type: none"> <li>• Annual Completions Data</li> <li>• Annual Course Data</li> <li>• Annual Enrollment and Completion Data</li> <li>• Annual Student Identification</li> <li>• Career &amp; Tech Ed Graduate Follow-Up</li> <li>• Fall Enrollment Data</li> <li>• Fall Enrollment Survey</li> <li>• Noncredit Course Enrollment</li> <li>• Spring Enrollment Survey</li> <li>• Students with Disabilities Annual Data</li> <li>• Summer Graduates for IPEDS</li> </ul>
Faculty/Staff Data Submissions
<ul style="list-style-type: none"> <li>• Faculty, Staff &amp; Salary – Fall Individual</li> <li>• Faculty, Staff &amp; Salary – Fall Summary</li> <li>• Faculty, Staff &amp; Salary – Annual Individual</li> </ul>
Financial Data Submissions
<ul style="list-style-type: none"> <li>• Audit</li> <li>• Audit/Unit Cost Reconciliation</li> <li>• Audit/UFRS Reconciliation</li> <li>• Budget</li> <li>• Certificate of Chargeback</li> <li>• Certificate of Publication for Annual Financial Statement</li> <li>• Certificate of Tax Levy</li> <li>• Course Enrollment Data</li> <li>• Uniform Financial Reports</li> <li>• Unit Cost</li> <li>• Budget Survey</li> </ul>
Facilities Data Submissions
<ul style="list-style-type: none"> <li>• Facilities Data</li> <li>• Square Footage of Planned Construction and Owned Land</li> <li>• Construction Project Status Report</li> <li>• RAMP – Resource Allocation Management Plan (Capital Budget Request)</li> <li>• Facility Utilization Data</li> </ul>
Other Data Submissions
<ul style="list-style-type: none"> <li>• Program Review Report</li> <li>• Program Review Listing</li> <li>• Underrepresented Groups Report</li> <li>• Performance Report</li> </ul>

*Source: LLCC Evaluation of ICCB Recognition Standards, October 2008*

currently using Datatel Colleague; what gaps exist between the functional areas available and those actually used at LLCC; and how LLCC should use Datatel Colleague to provide the best return on its investment. The audit team visited the campus and conducted interviews with groups organized by functional area. The focus of the audit included current use of Datatel Colleague's Finance, HR/Payroll, Student, and WebAdvisor systems as well as the reporting environment. A report offering recommendations that have the potential to enhance efficiencies while optimizing use of Datatel Colleague was provided to the College.

**7R2. What is the evidence that your systems for Measuring Effectiveness meets the organization's needs in accomplishing its mission and goals?**

Performance Indicator Scorecards and the Strategic Planning and Key Performance Indicators Dashboard are providing numeric evidence of the College's progress in meeting its mission and goals while measuring the success of its planning efforts. Each has assisted the President's Cabinet in identifying targets and measures for the College's strategic goals. The data sources used to measure the College's effectiveness include the LLCC Fact Book, reports compiled and submitted to the ICCB (or select reports from Figure 7.5), and other data reports. Year-end planning reports then provide specific outcomes information on all of the strategies tackled throughout the fiscal year in support of the College's mission and goals.

**7R3. How do your results for the performance of your processes for Measuring Effectiveness compare with the results of other higher education organizations and, if appropriate, of organizations outside of higher education?**

The College understands how its reporting performance (e.g, timeliness, accuracy, using correct reporting format) compares with other community college in Illinois through continual use of ICCB's "Data Due Report." In addition, feedback from the last Recognition Evaluation reported that "Overall, Lincoln Land Community College's final data submissions have been accurate and complete." In each instance, the results pertained to LLCC's reporting performance with its state agency (i.e. the ICCB). Comparisons that lead to a better understanding of how LLCC's processes for Measuring Effectiveness compare with that of other institutions are not available currently through the NCCBP. But as noted in 3P1, the College's processes and methodologies

utilized in collecting and analyzing data align with state (ICCB) and national level (NCES) as well as NCCBP guidelines.

**IMPROVEMENTS**

**7I1. What recent improvements have you made in this category? How systematic and comprehensive are the processes and performance results for Measuring Effectiveness?**

LLCC's Institutional Research office, working jointly with the Information and Telecommunication Systems staff in many instances, has implemented the following improvements to Measuring Effectiveness processes at LLCC.

*Performance Indicator Scorecards.* The College developed scorecards to measure institutional effectiveness. Several years were invested in determining the parameters of each indicator. A scorecard exists for each of the College's six goals. Each delineates the measures and targets for performance related to the respective goal. Data for the indices are listed on each scorecard along with weighted values, target range sets, data sources, and pertinent notes.

*Strategic Planning and Key Performance Indicators Dashboard.* The Strategic Planning and Key Performance Indicators Dashboard was developed to measure the College's strategic planning efforts at the institutional level. The dashboard includes several key performance indicators for each of its six goals: Student Access & Success, Diversity & Cultural Competency, Economic Responsiveness, Community Engagement, Financial Strength, and Operational Strength. Each indicator is measured and target values are illustrated using a speedometer- or tachometer-like feature. The target values were determined by an analysis of the College's historical data for each indicator and, where applicable, benchmarking data.

*Data Warehouse.* Institutional Research (IR) and Information and Telecommunications Systems (ITS) began the process of implementing a data warehouse at the College in 2009. The initial phase of implementation involved software implementation, training IR and ITS staff, identifying widely used reports, building the report templates, verifying the accuracy of the reports (i.e. confirming that the data warehouse reports mirrored standardized reports produced through Datatel Colleague) and ensuring data integrity. College staff were trained to use the warehouse template reports in

summer 2012. The warehouse reports provide staff quicker access to class retention, course performance, graduation, student progression data, and other enrollment management information.

**7I2. How do your culture and infrastructure help to select specific processes to improve and to set targets for improved performance results in Measuring Effectiveness?**

The culture at LLCC has moved towards data-informed decision making, increasing the amount of data requested, accessed, and analyzed. To support this movement, the College invested heavily in software to (a) facilitate access to data and (b) measure institutional effectiveness. Under the direction of the Board of Trustees, the President's Cabinet began developing a Strategic Planning and Key Performance Indicators Dashboard in the summer of 2009. The Cabinet and IR staff worked with others inside the College to develop the measures, the weighted averages for each indicator, the target values, and other content that is visual in the Dashboard. At the same time, the IR and ITS offices were beginning the implementation of a data warehousing software tool. LLCC used both the data warehousing and dashboard software tools to create its dashboards.

The first dashboard originated with several performance indicator scorecards designed by the President's Cabinet. Each is data intensive and illustrates a measure of the College's planning strategies. The Strategic Planning and Performance Indicators Dashboard provides (a) an annual look into the College's strategic plan and (b) a review of the successes and on-going challenges of planning efforts. While the Dashboard's purpose is to promote continuous improvement and gauge the College's planning efforts, it is also an information source for LLCC's many stakeholders.