AIR Professional File

Association for Institutional Research
Enhancing knowledge. Expanding networks.
Professional Development, Informational Resources & Networking

Number 97, Fall, 2005

Making Measurement Meaningful

Julie Carpenter-Hubin
Director-Institutional Research and Planning
The Ohio State University

Eunice Ellen Hornsby
Assistant Director-Organization and Human Resource Development
The Ohio State University

Abstract

Individuals and organizations are usually so immersed in day-to-day task completion that it is impossible to step back and scan the environment to determine (a) what work is crucial, (b) quality of current and past work, and (c) how the work contributes to larger organizational priorities. This focus on "just keeping up" with what must get done today, this week, this month often causes important priorities to go unarticulated, undone, and/or not up to quality standards. This paper outlines a process to help leaders define priorities, roles, measures, and quality standards at multiple levels within organizations. The process includes (a) determining who should be involved, (b) preparing participants to begin, (c) developing performance measures, and (d) finalizing the scorecard.

Introduction

Performance scorecards measure how well organizations do their jobs and help groups discover how performance in one area may affect achievement in another. As important as such evaluation is to institutional improvement, the process of developing a scorecard is itself a powerful tool for organizational understanding and change. This paper outlines the scorecard development process used at one institution where managers reporting to a vice provost created a single scorecard for their umbrella organization and related scorecards for their individual departments. Through group discussions about what activities to measure, managers came to a better understanding of how their work supports the goals of the larger university.

Individuals and organizations are usually so immersed in day-to-day task completion that it is impossible to find the time to step back and scan the environment to determine (a) what work is crucial, (b) what is the quality of current and past work, and (c) how the work contributes to larger organizational priorities. This focus on "just keeping up" with what must get done today, this week, this month often causes important priorities to go unarticulated, undone, and/or not up to quality standards. Outlined below is the process that can help your organization define priorities, roles, measures, and quality standards.

Why Create a Scorecard?

There are two primary reasons for measuring performance: accountability and performance improvement. Performance scorecards are increasingly popular as one tool for performance measurement. Scorecards make clear the goals of an organization and provide information on the degree to which the organization is achieving its goals. These can be developed for an entire organization as well as for a small sub-unit, providing multiple levels of accountability. Performance scorecards summarize a great deal of information in a way that allows outsiders to understand, albeit at a fairly superficial level, how well the organization is functioning.

Performance scorecards can be helpful to insiders as well. The focus on critical and overarching goals helps managers to understand how their units fit into and contribute to the bigger picture, which in turn assists them in prioritizing. While anecdotal information can enhance an understanding of performance measures, the measures themselves provide critical objective information about goal attainment.

Performance scorecards are often developed because of pressure for accountability from external bodies – regents, legislatures, boards of trustees. At the author's university, for example, scorecards were initiated in the support units because a new budgeting system motivated deans to demand accountability of those units. Annual scorecards submission is now required of every college and vice presidential area. Good managers, however, recognize the potential for performance scorecards to become a helpful management tool and thus employ them for performance improvement as well. Staff from Human Resources and Institutional Research and Planning provide consultation to units in the scorecard development process. Careful planning can help ensure a performance scorecard that addresses both accountability and management.

Planning Change – Who Should Be Involved?

Before you begin developing your performance measures, it is important to identify who should be involved in the process of identifying the measures and managing the measurement system once developed. It is often helpful to involve consultants, whether they are individuals from the strategic analysis/planning area, organization development, or training office. As you consider who should be a part of the team, be sure to include individuals with organization development/change and measurement expertise.

It is also important to consider what levels of staff will be involved in the project. The level of staff involved should correspond to the level of scorecard being developed. In a large organization that represents many units, it would be wise to involve the leadership of each unit if possible. In a small unit, it would be important to involve all staff to a certain extent, so as to take advantage of everyone's expertise and to facilitate buy-in and follow-through over time.

Before you begin, you will need to consider and answer a number of questions:

1. What is the purpose of this project?
2. What are the crucial outcomes?
3. What is our timeline?
4. What are our various roles (e.g. decision-maker, facilitator/process guide, advisor, participant/input giver, etc.)?
5. Who should be involved to help identify the measures?

All individuals involved in leading or facilitating the project should meet to clarify roles, develop work session agendas, identify necessary learning experiences for participants, and to outline the scorecard development process.

Getting Started - Participant Preparation

Learning about Scorecards

Before identifying performance measures, it is important that all participants share a common knowledge base about scorecards, measures, and institutional and departmental priorities. Individuals involved in developing the scorecard should complete background readings on scorecard development prior to beginning any work. There are many appropriate resources available. As a primer, we suggest *Performance Scorecards* (Chang & Morgan, 2000), as well as an article titled *The balanced scorecard: Beyond reports and rankings* (Stewart & Carpenter-Hubin, 2000-2001). Additional resources are listed at the end.

The scorecard development team should take time to explore key points from their readings and should continue to review and discuss resources throughout the scorecard building process. Resources should focus on developing and using performance scorecards and measuring performance. It is very helpful to explicitly link (a) the learning materials to the organization's scorecard development process, (b) the scorecard and the institution's strategic plan, and (c) the role of each participant in the development and measurement process.

Prior to beginning the process of building the scorecard, the group should identify the "givens" of the project, which may include any non-negotiable issue presented by the institutional or departmental leadership or governance structure. Some examples of "givens" might be (a) a limit to the number of measures to be included on the scorecard, (b) including only measures that directly link with the institution's strategic priorities, or (c) that all measures meet predefined criteria for selecting measures.

Identifying Institutional Challenges and Priorities

While doing background reading on performance measures and scorecards, you should familiarize yourself with your institution's strategic plan. The strategic plan will identify the institution's current challenges and priorities. It will focus the institution's improvement and investment efforts, as well as guide decisions about programs and services to eliminate and/or decrease. Performance measures are a natural outgrowth of strategic planning as they help to determine the extent to which the institution is progressing towards its stated goals.

If a written strategic plan is unavailable, it is still possible to benefit from the establishment of a scorecard. Depending on the size, complexity, history, or current environment of the institution, there may be a widely agreed-upon yet unwritten set of goals and strategies embedded in the organizational culture. If this is the case, you will need to identify institutional priorities by conducting an assessment. You can do this by asking institutional leaders to respond to the following questions, which should net equivalent data that you would find in a written strategic plan:

1. What are the most crucial and overarching challenges that our institution faces during the next 3-5 years?

2. What are our most important institutional goals for the next 3-5 years?
3. What are the most pressing institution-wide problems that must be addressed during the next 3-5 years to insure we continue to thrive? Or to improve our standing as an institution?

You can also scan the environment to identify pressing issues, concerns or initiatives by reviewing information such as the following:

1. Press releases or other communication from the university to the outside community
2. Internal communication from leadership including meeting agendas, directives, special initiatives
3. Top leader (chancellor/president/provost) communication such as speeches that address organizational initiatives, challenges, changes; board meeting agendas or minutes; etc.

After gathering this information, review it for themes and repetitive messages. Distill it down to a set of five to seven overarching priorities/challenges for the institution. Present these to the leadership for their feedback on your interpretation of the institutional priorities or challenges. Finalize your list based upon their feedback.

The crucial consideration is that there is consensus about the institutional challenges, future priorities, and strategies to achieve the priorities. Without consensus about what is important to the institution, there will be no direction or standards against which to measure progress. One outgrowth of these assessment conversations could be a realization on the part of leadership that a written strategic plan could help the institution progress more effectively along its chosen path.

Identifying The Intersection of Institutional Priorities and Your Work

After identifying the institution's challenges and priorities, it is helpful to take some time to identify where the institution's priorities intersect with your organization's work. One way to do this is to create a matrix – place the organization's priorities on one axis and your organization's (1) functional areas, (2) program areas, or (3) priorities on the other axis. Work through the matrix and check each box to indicate where your organization's functions, programs, or priorities support or relate to the organization's priorities.

If the work team represents different functional or programmatic areas, it is a good idea to have everyone review and complete the entire matrix. It is often helpful to learn where others see our contributions to the organization's priorities. After all team members have completed the matrix, create and distribute a summative matrix representing all responses. An example of a completed matrix appears in Table 1.

Table 1
Intersection of Institutional Priorities and The Organization's Work

Summary of Responses							
Department Functions, Programs, Priorities							
Institutional Priorities, Goals, Challenges		Honors & Scholars	First Year Experience	Advising	Admissions	Registrar	Financial Aid
	Recruit faculty stars						
	Faculty recruitment, retention, development, compensation						
	Continue strategic investment						
	Increase research space						
	Transform the library						
	Upgrade classrooms, facilities					☑	
	Provide technology tools			☑	☑	☑	☑
	Yearlong selective admission	☑	☑		☑		☑
	Improve undergraduate education	☑	☑	☑	☑	☑	☑
	Increase undergraduate financial aid	☑					☑
	Hire diverse faculty						
	Recruit, support diverse students	☑	☑	☑	☑	☑	☑
	P-12 public education						
	The state's technology economy						
	Increase state support						
	Instructional organization & delivery	☑				☑	
	Increase organizational flexibility	☑	☑	☑	☑	☑	☑
	Improve work environment	☑	☑	☑	☑	☑	☑

Using The Data from The Completed Matrix

A review of the completed matrix will give you a good sense of where your organization supports, or does not support the institution. A concentration of check marks indicates that the program or function supports or is strongly related to the strategic priorities of the institution. When check marks are lacking, the program or function is less related to organization priorities. It is important to keep in mind that it is appropriate that the work of a specific unit within an institution may not relate to all institutional priorities.

Developing Performance Measures

To commit and invest in performance scorecards, leaders need to see specific institutional and departmental benefits that will result from their development and use. Higher education institutions often struggle with accountability and performance issues across academic and academic support units. This is often a function of many factors, not the least being a lack of clarity of goals and priorities or of where the institution is in relation to where it wants to be. Once the organization has committed to achieving particular priorities, it becomes crucial to know what progress is being made towards the goals. If leaders and managers are truly concerned about helping the institution move forward, a scorecard is a tool that is helpful for them to use to focus institutional and departmental resources and efforts.

Even when leaders see a scorecard as a benefit to them and to the institution, the time and effort that it takes to develop an effective set of measures can be daunting. It is sometimes difficult to focus the attention of leaders and others through the course of a series of short working meetings. A great deal of foundational work developing performance measures can be accomplished using a one- or two-day leadership retreat format. Using a location away from the usual workplace will result in fewer disruptions and a much more productive session.

Table 2 contains an example agenda of a one-day retreat for leaders. It is important to begin the day by identifying the agenda, purpose of the process, and ground rules (how the group will interact and work together at the retreat). Next, the group will need to spend time discussing the reading assignments or other learning activities that were completed in advance of the retreat. This will result in a shared vocabulary and understanding of performance measures and the process at hand. The facilitators need to be prepared to present any key concepts that are necessary for participants to understand.

While there are tremendous advantages to bringing leaders together in the retreat format to begin scorecard development, this may not be a viable option in all organizations. The above mentioned agenda can also be accomplished through a series of one- to two-hour meetings, though the time to "gear up" and "wind down" required for additional meeting times will increase the total amount of meeting time needed. Another approach would be to work with several key people in the organization to develop a draft scorecard. A thorough reading of the organization's strategic plan and minutes from key meetings, perusal of Web sites, and interviews of the leadership will provide this smaller group with a good understanding of the broader organization. The full group of leaders can then be convened for discussion and reaction to one or more drafts. These alternative approaches will only lead to success, however, if the reason a retreat is not possible is something other than a lack of commitment to development of performance measures.

Linking The Organization's Scorecard to Institutional Priorities

Next, the group needs to agree upon how their work intersects with and supports the institution's strategic priorities. This can be accomplished by talking through the completed matrix, an example of which is found in Table 1. The goals and priorities where there is significant intersection become the major subsections of the organization's performance scorecard. In theory, all measures developed for the organization's scorecard should fit within one of these categories.

During this part of the process, it is important that participants look past their day-to-day work and focus on their overarching goals. It is easy to fall into the trap of seeing the organization's work as an extension of the individual's tasks and it is crucial that the focus be on the big picture. As you identify where your work intersects with and supports the institution's priorities, consider how what you do impacts those priorities. During this process, group members need to be clear about a number of different concepts:

Goal	What you hope to accomplish to support institutional priorities, e.g., Improve graduation rates.
Strategy	What you will do to accomplish the goal, e.g., Recruit a better-qualified class, Provide supportive co-curricular programming, etc.
Task	A specific action step you will take to move as you implement a strategy, e.g., Implement a mentoring program for first year students in FY04
Measure	The difference in graduation rates over time.

Defining The Measures

For many university staff, this is the most challenging step in the process. It is not difficult to intuitively understand how our work/goals support the institution's priorities, and it is not difficult to describe what we do (strategies) to achieve our goals. It *is* difficult to figure out how we measure whether or not we are actually having the impact that we intend.

A great deal of data about universities exists in national databases, such as the National Center for Education Statistics Integrated Postsecondary Education Data System and the National Science Foundation's WebCASPAR. While this information is extremely important, many data are available at the aggregate university level only, and data on only a limited number of topics are available. One issue that emerges at this point in the process is the amount of time and resources that

Table 2
Example Performance Measures Retreat Agenda

15 minutes	**Introduction** (*large group*) • Facilitators introduce themselves and their role in the process • Purpose of the process • Process we'll use throughout the measures development process • Today's agenda • Ground rules: - Permission to be ignorant, it's OK to not know how to do this - Respectfully challenge each other - Think outside of your unit - Others:
30-60 minutes	**Learning discussion** *(large group)* • Share key learnings from the readings - What did you get out of the readings? - What are the benefits of using a scorecard? - What will the challenges be of creating a scorecard for this group? - What more do you need to learn about creating and using a scorecard? • Review key concepts and terms at the end if they haven't been covered already • Provide example measures to illustrate concepts
40 minutes	**Academic Plan/strategic priority matrix** (l*arge group)* • Review the summary matrix submitted by participants prior to retreat • Are there any additional relationships?
10 minutes	**Review scorecard "givens" -** (l*arge group)* • 5 measures total per unit (focus, focus, focus) • Must fit with strategic priorities of the organization • Must fulfill criteria for selecting measures (review with group)
30 minutes	**Identify desired outcomes by work area** *(individuals)* • Brainstorm desired outcomes for each work area, responding to questions: - How will we know that we've done ______ really well? - If we were excellent at _______, what would it look like? - Describe today's poor state of affairs regarding ______ and then flip it. • Print one idea on each post it note • Post on newsprint when all are completed • Read all the desired outcomes for each work area • Sort as duplicates emerge
40 minutes	**Refine desired outcomes within categories** *(large group)* • Review all post it notes for each work group • Write "summative" desired outcome for each work group reflecting post its • Add any missing outcomes • Clarify understanding of desired outcomes with large group • Prioritize outcomes (priorities on index cards, dots on newsprint)
180 minutes (3 hours)	**IIdentify ways to measure and identify data to use to measure top desired outcomes in each category** *(large group)* • Revisit norms, acknowledging this is the hard part • Work through each desired outcome, brainstorming and scribing measurement suggestions - What does this mean? (most important for all desired outcomes) - What data to collect - Refer to measures already in place • Prioritize measures (first thoughts)
20-30 minutes	**Wrap-up** • Discuss how the process worked today • Review next steps • Homework assignments: tasks, due dates - Meet with direct reports in the unit, review draft measures, refine list using established criteria

need to be invested to develop benchmarks that are not already defined industry standards or at the appropriately disaggregated levels. A good place to start is with the development of indicators that are tracked over time, with performance compared year-to-year (or other appropriate interval) internally. Managers can use changes in performance to focus process improvement efforts or to set performance improvement goals. Depending upon what is being measured and at what level within the university the measurement is important, comparing performance internally over time may require less time and fewer resources than comparing against other organizations, and can be a less stressful means of introducing benchmarking to an organization.

Benchmarking over time, however, is only a starting place. Comparing your organization's performance to the performance of other, similar organizations allows you to identify higher performers. Closer analysis of the policies, processes, and practices of these high performance organizations may help managers reassess and revise their own process improvement efforts. Continuing comparisons of performance indicators should clarify whether such efforts are, in fact, leading to the desired outcomes.

The first step in defining your measures is to identify the programs or services that you provide to support each institutional priority. Next, identify all the "desired outcomes" of those programs or services. In other words, what would be different if the program or service had its desired effect? Table 3 illustrates this process of identifying the organization's measures.

The process of identifying the "desired outcomes" of your organization's programs and services will result in a list of "potential measures" that can be refined and focused after the retreat. Participants should take the time to clarify the desired outcomes and their measures through discussion, making sure to take detailed notes to ensure that the work of the day is retained. After ensuring that all participants have a good grasp of the programs/ strategies, desired outcomes, and potential measures, the group should prioritize them to identify the most important programs/strategies, outcomes, and potential measures. This can be accomplished by a show of hands, by voting with sticky dots on newsprint, writing priorities on index cards and collecting them, or using any variety of methods to indicate priority. When the group is setting priorities, keep in mind that "public" voting measures can contribute to "group think." Individuals may observe others or leaders indicate their priorities and change their "vote" to conform to the group. This is a common tendency that can be overcome by using written or more "private" methods to indicate priority.

Identifying Criteria for Selecting Measures

An important step in the scorecard development process is identifying the specific performance measures/ indicators that will be included on the scorecard. There are no hard and fast rules as to what should be included on a scorecard. When making this determination, you need to consider the purpose of the scorecard and how it will be used. Keep in mind that the fewer measures on the scorecard, the more it will communicate the organization's focus and priorities. A good guideline is no more than 10 – 15 measures. A partial list of criteria for measure selection follows.

The services, processes, or outcomes that you select to be represented on the scorecard should be:

- Important and meaningful to stakeholders
- Viewed as important (core competencies, mission critical, overarching) to the organization
- Linked to the institution's strategic plan or priorities
- Earmarked for improvement

The measures you select should:

- Represent value-added work as opposed to work activity
- Be amenable to change and positive intervention
- Be easily understood by stakeholders
- Demonstrate efficiency, accountability and fiscal soundness
- Have data integrity, validity and not be subject to uncontrollable factors
- Be collectable without great difficulty or resource investment
- Have benchmark data, where appropriate, available or attainable without great difficulty

"Finalizing" The Scorecard

Once the planning group identifies and prioritizes the most appropriate measures, the leadership team can finalize the organization's scorecard. A group process often identifies many measures that may be interesting, but too many measures to include on the final scorecard. Leadership must finally determine which measures truly reflect *key* functions and thus which will be included on the scorecard.

Using scorecards as a tool for organization change and improvement means that the scorecard is always a work in progress…because organizations are works in progress. You may implement a set of measures that you discover are not good performance indicators You may achieve performance improvement in one area and change the emphasis of the measure from tracking improvement to maintenance within an acceptable range. The organization's purpose may change and you may discontinue a key function. A performance scorecard is

Table 3
Process of Defining Your Measures

Institutional Priority	⇨	Programs/Services (Strategies)	⇨	Desired Outcomes	⇨	Measures
Improve undergraduate education	⇨	Co-curricular programs to extend academic experience beyond the classroom Faculty and TA instructional development services	⇨	Undergraduates more satisfied with educational experience Better teaching in undergraduate classes	⇨	Change in retention rates Change in satisfaction rates Change in student evaluation of teaching scores

similar to any other tool – when it is helping to focus and improve performance, it is working. When it is not, the tool may need to be sharpened, adjusted, or replaced. The value that having a scorecard adds is found in the scorecard's *impact on performance*, not in the scorecard itself.

Managing the evolution of the institution's or unit's scorecard should happen as a natural function of the process of reporting performance results using the scorecard. Leaders and decisions makers should examine the extent to which the scorecard is providing them with relevant management and decision-making information. Additionally, institution and unit leaders should scan the environment. Are there new priorities? Has the strategic plan been updated? Is there a new leadership agenda for the institution? At this institution, the annual planning and scorecard reporting activities occur as a part of the budget cycle. During the few years that scorecards have been developed, unit leaders have increasingly integrated measures that reflect two new institutional planning documents – the Diversity Plan and the new Leadership Agenda. This naturally occurred as a part of the annual data gathering and reporting process.

Cascading The Scorecard

With your organization-wide scorecard in place, the next step is to *cascade* the scorecard to other organizational levels – colleges, top level administrative units, and departments. College and top-level administrative units have goals that contribute to the overall goals of the organization; thus, their measures will demonstrate both progress toward achieving their own goals and their contributions to the overall goals of the organization. In some cases, college and top-level administrative scorecards may have some of the very same measures that are found on the organization's scorecard. Scorecards can be further cascaded to the department level, with departments measuring their contributions to the goals of the college or top-level administrative unit to which they report.

You can use a similar process developing the cascaded scorecards as for organization-wide scorecards. Cascaded scorecards should be developed in consultation with college, top-level administrative unit, or department staff and with the approval of the leadership to which the particular unit reports. Examples of indicators used on institutional, college, top-level administrative unit, and departmental scorecards are included as Appendices A, B, C, and D.

Communicating Performance Measures

Performance measures or scorecards must drive performance to add value. To drive performance, all individuals in the organization must be aware of the measures, how these are derived, and how each individual's performance impacts the measures. Individuals also need to know what past performance was, what current performance is, and the goals or targets for future performance. This implies that all staff members understand the scorecard and that management and staff continuously communicate about performance measures. Responsibility for updating and communicating about the scorecard should fall to each line manager, with coordinating responsibility explicitly assigned to an individual in a leadership role. Finally, the organization should determine how often measures will be evaluated for effectiveness and refined.

Scorecards can be an important tool in raising staff awareness of the importance of their individual and group performance. Performance measures clearly communicate the organization's priorities and help focus employees on the most crucial work of the organization. Developed, communicated, and used well, scorecards can help an organization focus its efforts and make progress along the road of change and performance improvement.

Performance Measures Resources

Becker, B., Huselid, M., & Ulrich, D. (2001). *The HR scorecard: Linking people, strategy, and performance*. Boston, MA: Harvard Business School Press. ISBN 1-57851-136-4.

Chang, R. & Morgan, M. (2000). *Performance scorecards: Measuring the right things in the real world.* San Francisco: Jossey-Bass. ISBN 0-7879-5272-9.

Kaplan, R. & Norton, D. (1996). *The balanced scorecard*. Boston, MA: Harvard Business School Press. ISBN 0-87584-651-3.

Stewart, A., & Carpenter-Hubin, J. (2000-2001). The balanced scorecard: Beyond reports and rankings. *Planning for Higher Education*, 29(2), pg. 37-42.

Appendix A

Institutional Indicators Goal	Performance Indicator
Build a World Class Faculty	
1. Academic Honors and Awards 2. Market Share of Publications 3. Market Share of Citations 4. Market Share of Federal Research Dollars 5. Average Faculty Compensation	
Enhance the Quality of the Teaching & Learning Environment	
1. % of Faculty Satisfied Overall 2. NSSE score: Level of Academic Challenge 3. NSSE score: Active and Collaborative Learning 4. NSSE score: Enriching Educational Experiences 5. NSSE score: Student Interactions with Faculty	
Enhance and Better Serve the Student Body	
1. % of Freshmen in the Top 10% of H.S. Class 2. Freshman Retention Rate 3. Six-year Graduation Rate 4. Four-year Graduation Rate 5. Average GMAT score for MBA students 6. Average LSAT range for Law students 7. Average GRE verbal score for graduate students 8. Average GRE quantitative score for graduate students 9. Average GRE analytic score for graduate students 10. NSSE score: Supportive Campus Environment	
Create a Diverse University Community	
1. % of Women Faculty 2. % of African American, Hispanic, and Native American Faculty 3. % of Minority Staff 4. % of African-American & Hispanic Students 5. African-American Freshmen Retention Rate 6. Hispanic Freshmen Retention Rate 7. African American 6-Year Graduation Rate 8. Hispanic 6-Year Graduation Rate	
Help Build Ohio's Future	
1. Number of Invention Disclosures 2. Number of Patent Applications 3. Number of Patents Awarded 4. Number of License/Options Executed 5. Number of Start Up Companies 6. Revenue from Income Generating Licenses	

Appendix B

Institutional Indicators Goal	**Performance Indicator**
Build a World Class Faculty	
1. National Academic Honors and Awards* 2. Sponsored Grants & Contracts Separately Budgeted Research per T/TT Faculty FTE (Direct & Indirect)* 3. Refereed Articles per faculty FTE** 4. Book Chapters per Faculty FTE** 5. Books per Faculty FTE** 6. SSCI Citations per faculty FTE** 7. Average Faculty Compensation *	
Enhance the Quality of the Teaching & Learning Environment	
1. % of Faculty Satisfied Overall* 2. NSSE score: Level of Academic Challenge* 3. NSSE score: Active and Collaborative Learning* 4. NSSE score: Enriching Educational Experiences* 5. NSSE score: Student Interactions with Faculty*	
Enhance and Better Serve the Student Body	
1. Avg Class Size 000-699 (primary/secondary)* 2. Avg Class Size 700-999 (primary/secondary)* 3. Honors credit hours as a % of all credit hours* 4. GEC credit hours as a % of all credit hours* 5. Average GRE writing score for grad students* 6. Average GRE verbal score for graduate students* 7. Average GRE quantitative score for graduate students* 8. Average GRE analytic score for graduate students* 9. Refereed Articles for Graduate Students** 10. Number of Graduate School Fellowships** 11. Number of Undergraduate Theses** 12. Undergraduate Theses Credit Hours (H783) in CY** 13. NSSE score: Supportive Campus Environment*	
Create a Diverse University Community	
1. % Women Tenured/Tenure Track Faculty* 2. % Women Lecturers, Adjunct, Clinical, & Visiting Staff* 3. % Women Graduate Students* 4. % Women Undergraduate Students* 5. % Women Non-Instructional Staff* 6. % Minority Tenured/Tenure Track Faculty* 7. % Minority Lecturers, Adjunct, Clinical, & Visiting Staff* 8. % Minority Graduate Students* 9. % Minority Undergraduate Students* 10. % Minority Non-Instructional Staff*	
Help Build Ohio's Future	
1. # of Clients served at: Speech and Hearing Clinic** 2. # of Clients served at: Psychology Clinic** 3. # of Clients served at: Survey Research Center** 4. # of citations to Center for Human Resources Research data (total)** 5. # of University Press books published**	
*Indicators developed by Institutional Research & Planning in consultation with college and used by all Ohio State colleges (with test scores such as the GMAT or LSAT in addition to or in place of GREs as appropriate) **Indicators developed through discussions by the College of Social & Behavioral Sciences department chairs and school directors with the dean, associate deans, and senior fiscal officer.	

Appendix C

Institutional Indicators Goal	Undergraduate Studies Performance Indicator
Build a World Class Faculty	
Enhance the Quality of the Teaching & Learning Environment	
1. NSSE score: Student Interactions with Faculty 2. NSSE score: Level of Academic Challenge 3. NSSE score: Active and Collaborative Learning 4. NSSE score: Enriching Educational Experiences	
Enhance and Better Serve the Student Body	
1. Entering Class Preparedness Index (ACT avg) 2. Retention Rates for Total Entering Class (1 yr) 3. Graduation Rates for Total Entering Class (6 yr) 4. Career placement index 5. Student debt level at graduation 6. Number of students waitlisted for major courses 7. NSSE score: Supportive Campus Environment	
Create a Diverse University Community	
1. Regular Staff: % Minority 2. Regular Staff: % Women 3. Freshman Class: % Minority 4. African-American Freshmen Retention Rate 5. Hispanic Freshmen Retention Rate 6. African American 6-Year Graduation Rate 7. Hispanic 6-Year Graduation Rate	
Help Build Ohio's Future	
1. NSSE: Percent of students who participated in a community-based project as part of a regular course 2. NSSE: Percent of students who participated in community service or volunteer work	
The Office of Undergraduate Studies is headed by the Vice Provost and Dean of Undergraduate Studies. Indicators were determined by the Vice Provost and Dean and department administrators after broad discussion with staff and in consultation with Carpenter and Hornsby .	

Appendix D

Institutional Indicators Goal	**Student Financial Aid Performance Indicator**
Enhance and Better Serve the Student Body	
1. Amount of student aid on Autumn Quarter bills 2. Amount of student loan funds available 3. Student debt level at graduation	
Create a Diverse University Community	
1. Regular Staff: % Minority 2. Regular Staff: % Women	
Provide for Sound Management and Oversight	
1. Percent of federal and state reporting deadlines met 2. Number of secondary violations resulting from financial aid controlled by OSFA 3. Cost for Services index	
Support the University Community with a Strong Customer Focus	
1. No more than 2 re-dials per call answered 2. No more than 1 hour wait to see financial aid counselor 3. Average time from completed financial aid files to awards	
The Office of Student Financial Aid reports to the Vice President and Dean of Undergraduate Studies. Indicators were determined by the department director and associate directors after broad discussion with staff and in consultation with Carpenter and Hornsby.	

THE AIR PROFESSIONAL FILE—1978-2005

A list of titles for the issues printed to date follows. Most issues are “out of print,” but microfiche or photocopies are available through ERIC. Photocopies are also available from the AIR Executive Office, 222 Stone Building, Florida State University, Tallahassee, FL 32306-4462, $3.00 each, prepaid, which covers the costs of postage and handling. Please do not contact the editor for reprints of previously published Professional File issues.

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