TO: Joel Bloom, President
FROM: Fadi Deek, Provost and Senior Executive Vice President
             Chair, *2020 Vision* Steering Committee
Date: December 31, 2016

SUBJECT: ***2020 Vision Steering Committee Report***

Section 1---Narrative Overview

I. Introduction

During the past year NJIT has been engaged in the implementation of the university's strategic plan, *2020 Vision,* through a process of coordination, assessment, and reporting. The *2020 Vision* Steering Committee, chaired by Provost Deek and co-chaired by Professor Dan Bunker and Dr. Perry Deess, oversees the activities of the five priority committees. The priority committees have provided reports to the steering committee every semester describing activities, tasks, and the status of short-term objectives. In addition to the Key Performance Indicators (KPIs), the committees have expanded the assessment of plan implementation by evaluating specific strategies and tactics, in addition to reviewing KPIs.

This report offers an overview of activities and investments across the university during the past year. It includes a summary table of the KPIs, an assessment of the areas where the university is on target to achieve the goals set forth in the plan, and identifies certain areas in need of additional focus. In section 2, the report also details the strategies and tactics adopted by each division to achieve the objectives described in *2020 Vision*, plus an update on the assessment of implementation.

Over the next six months, plan implementation at NJIT has a critical goal beyond what is articulated in *2020 Vision*. As *2020 Vision* implementation efforts in 2015 linked budgeting to planning, activities this year will integrate assessment directly into planning. Establishing the link between budgeting, assessment, and planning is essential for the successful implementation and of *2020 Vision* and is an expectation of the Middle States accreditation standards.

II. Summary of Implementation Progress

The first year set the tone for implementing *2020 Vision* by organizing the responsible committees, building a common monitoring and reporting structure, integrating *2020 Vision* into shared governance, and making *2020 Vision* a dynamic document.

The second year of implementing *2020 Vision* focuses on making the most of plan-guided resource investments by assessing the quality of outcomes. This assessment will assure that investments are made in a timely manner and that projected progress is achieved. When

strategies cannot be appropriately pursued or where they do not have the intended outcomes changes will be considered. This should result in continuous improvement as defined by the plan.

As *2020 Vision* moves toward the end of its second year, the Steering Committee has set four key goals to advance plan success and to underscore the dynamic nature of the plan:

1) Develop new strategies that respond to new conditions and needs;
2) Assess the outcomes of implemented strategies;
3) Continuously improve strategies by adapting them and developing them to be more effective;
4) Link the investment of university resources directly to the plan and do so in a dynamic manner responding to assessment.

III. Key Performance Indicators (KPIs)

The KPIs presented in *2020 Vision* offer ambitious targets for NJIT. It is against these metrics that the overall success of plan implementation is measured. Because *2020 Vision* is a dynamic document the KPIs are not immutable. For example, upon the recommendation of Priority Committee 1, the Steering Committee has revised the freshman applications target upward because the five-year goal had already been exceeded by fall 2015. With the recommendation of Priority Committee 3, and approval of the Steering Committee, KPIs related to research have also been updated and expanded to reflect three categories of externally funded research, including academic research, technology and development, and educational programs. Certain other KPIs were also revised slightly for clarity and consistency.

2020 Vision-- Key Performance Indicators (KPIs)							
Strategic Priorities	**Objectives**		**Metrics**	**2014 Baseline**	**2016**	**2020 Target**	**Notes**
Students	**Admissions**	1	Freshmen applications	4,777	7,222	8,000	a,l
		2	Graduate applications	6,305	6,440	8,197	a
		3	Transfer applications	1,793	1,889	2,150	a
		4	Average composite SAT (M and CR combined)	1,192	1,219	1,220	c
		5	High school GPA	3.50	3.55	3.65	c
		6	Average GRE (quantitative) MS (FTFT)	155	158	160	c
		7	Total enrollment	10,646	11,317	12,200	c,k
	Retention	8	Retention rate	84%	88%	90%	c
	Graduation	9	Graduation rate (6 year)	59%	61%	65%	c
	Campus Quality of Life	10	Student satisfaction with campus life (UG survey)	3.1	3.25	3.4	b,j
Learning	**Curricula Assessment**	11	Programs with learning outcomes assessment	20%	50%	100%	b
	Curricular Reform	12	Educational value of the course, average	3.07	3.07	3.25	b
		13	Masters student enrollment in PSM programs	0	0	150	b,d
	Online/converged	14	Courses online/converged	8%	9%	25%	b
	Milestones	15	Undergraduate students with milestone experiences	20%	34%	50%	b,e
	Professional Success	16	Job placement of bachelors recipients (6 months)	54%	62%	65%	b
		17	Student FE passing rate	69%	71%	80%	b,f

Scholarly Research	**Increase Research**	18	Externally funded academic research (millions) (FY)	$24M	$31M	$40M	c
		19	Externally funded educational and service grants	$6M	$5M	$8M	c
		20	Externally funded technology and business development	$33M	$47M	$60M	c
		21	External academic research/faculty (FY)	$80,000	$106,000	$100,000	c
	Multidisciplinary Research	22	Externally funded research with PIs from multiple departments	5	13	20	c
	Doctoral	23	Total enrolled doctoral students	381	413	500	b
	Intellectual Property	24	Total patents/pending patents	185/133	209 115	215/150	c
	Publications	25	Refereed publications/faculty (FY)	1.54	1.73	1.75	b,g
		26	Total books published by NJIT community (FY)	14	15	20	b,h
	Faculty Recognition	27	Faculty award	2	4	10	b,i
Community	**Global Community**	28	Women students	25%	26%	30%	b
		29	International researchers collaborating with NJIT (FY)	24	52	50	c
		30	International exchange students at NJIT (FY)	43	52	96	b
	Diverse Faculty	31	Women faculty	16%	17%	21%	b
		32	Underrepresented minority faculty	8%	7%	10%	b
	Diverse Administration	33	Women administrative leadership	37%	39%	43%	b
		34	Underrepresented minority administrative leadership	20%	21%	23%	b
	Alumni	35	Alumni giving rate	8%	10%	11%	b

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Investments	**Faculty Renewal**	36	Faculty hired in past 10 years	34%	35%	43%	b
		37	Total T/TT faculty	269	293	345	c
	Educational Investment	38	Student satisfaction with instruction (UG survey)	3.52	3.42	3.80	b,j
		39	Average undergraduate time to degree (Years)	5.51	5.13	4.9	b
	Research Investment	40	Faculty satisfaction with research support	3	3.2	3.4	b
	Infrastructure	41	Faculty facilities satisfaction	3.08	3.07	3.3	b
		42	Student facilities satisfaction (UG survey)	3	3.1	3.2	b,j
		43	Faculty technology satisfaction	3.6	3.62	3.8	b
		44	Student technology satisfaction (UG survey)	3.6	3.66	3.75	b,j

Notes:

a- Data as of 06/30/2016

b- Reported in academic year 2015-16

c- Fiscal year 2016

d- In 3-5 new Professional Science Masters (PSM) programs

e- Metric includes undergraduate research experiences, co-ops, internship, learning abroad, and service learning experiences

f- NJIT passing rate for the FE exam (unweighted average of CE and ME; national unweighted average CE and ME 78%) target 80% of national average

g- This includes only academic articles

h- This includes scholarly books, poetry, and monographs

i- Faculty awards using Center standards plus nationally recognized fellowships and non-STEM awards

j- UG Student Satisfaction

k- Reporting standard changed - enrollment reduced by 129 students due to this change

l- the target of 7,000 was exceeded therefore a new target was set

IV. *2020 Vision* **Implementation Objectives for Fiscal Year 2017**

1. Ensure that *2020 Vision* responds to changing circumstances and needs.
2. Adjust targets and strategies as appropriate.
3. Develop methods to assess progress in implementing strategies, not only in achieving KPIs.
4. Continuously improve strategy implementation through rigorous and ongoing assessment.
5. Develop assessment as a consistent process guided by the needs of strategic plan implementation.
6. Simplify the committee reporting processes.

V. Assessment

A) 2020 Vision Outcomes Assessment

2020 Vision articulates detailed strategies to guide the growth of NJIT into a top ranked public research university. In setting the agenda, directing resource allocation, and guiding critical decisions, *2020 Vision* has proven its effectiveness in the past year. The tactics developed to achieve the strategies are described in Section 2 of this report, and they show that fundamental changes are being implemented at NJIT. This is evident in the focus on student success, investment in faculty, and reinvigoration of research. The KPIs in the first year of *2020 Vision* also tell the story of a university on the move. Graduation and retention rates are improving. External funding has exceeded expectations in both academic research and technology development.

In the June 2016 report, assessment focused primarily on progress toward achieving the KPIs, and this progress has continued since that report. Externally funded research in all areas has increased beyond targeted projections. Despite a shortfall in the total number of students enrolled, the number of undergraduate applications and the quality of the entering freshmen cohort continues to increase. Graduation and retention rates remain on target and other KPI goals are generally being met. The new areas of greatest concern are graduate enrollment and the challenges of recruiting international students. These are critical areas not just for meeting enrollment projections, but also for achieving tuition revenue targets built into the budget.

Assessment of *2020 Vision* in this academic year is being expanded beyond the KPIs to address the effectiveness of individual strategies employed with the objective of continuously improving plan implementation. In the previous report, assessment of progress toward achieving the targets set for KPIs was the primary goal. This remains true in this December 2016 interim report where KPIs are marked in red or yellow if progress toward achievement has been less than satisfactory. Additionally, however, the priority committees, under guidance from the Steering Committee, are moving toward assessing every strategy. This includes offering measures of completion and indicators to suggest whether the strategies are achieving the intended results.

At this juncture, much of the individual strategy assessment is in the planning phase, but this is a critical step toward using assessment tools to improve the plan. *2020 Vision* is not a static plan setting immutable goals, objectives, and strategies. As conditions change the plan must be altered. For example, the 4x4 strategy designed to simplify the curriculum and move students to graduation at a steady and predictable rate was included in the original plan. Assessment of this strategy has shown that its implementation may not be realistic given the current complexity of the curriculum. For this reason, it is anticipated that the proposal will be dropped or altered in future revisions of the plan. Other areas have also demonstrated the need for more focused attention, such as intellectual property and teaching effectiveness. As a result, new strategies have been developed to redesign the patent application process in Priority Committee 3. Similarly, Priority Committee 2 has begun the process of developing strategies, in conjunction with the Faculty Senate, to make student courses more relevant and pedagogical strategies more responsive to student needs.

Assessing *2020 Vision* requires determining the effectiveness of implemented tactics. It also requires identifying and revising the tactics not producing the intended results. Priority committees are now engaging in this level of analysis.

The comprehensive assessment plan for *2020 Vision* has an additional goal beyond plan implementation. It offers structure for a comprehensive assessment strategy at NJIT. This will frame and guide the assessment of institutional effectiveness as necessary for continuous improvement. This means assessment will not be guided by propitious request but rather by the consistent structure of strategic plan review. By linking assessment directly to the strategic plan NJIT is meeting the new standards for accreditation and making more effective use of assessment resources toward the end of continuous improvement.

Section 2 of this document details the status of strategies and tactics and reflects all changes approved by the Steering Committee. It should be noted that most strategies in Section 2 now include a description of assessment methods associated with them. Although some assessment efforts are still in development, they reflect the determined effort of all committees to ground change in continuous improvement.

B) 2020 Vision Process Assessment

2020 Vision is developing as a dynamic and flexible document responsive to changing conditions and differences in the success of implementation strategies and tactics. By linking assessment directly to the strategies and tactics of the plan, changes are made promptly. Resources are invested more effectively and the plan develops in a dynamic way. This is the essence of continuous improvement. The documentation of this assessment, as now happens through the implementation committees and their reports is vital to successful reaccreditation under the new Middle States standards.

Implementing *2020* Vision relies on individual committees to develop and coordinate the implementation of strategies. Toward this end, we reviewed the operation of each committee based on the activity reports they submitted to the Steering Committee.

Priority Committee 1—This committee has broad oversight over strategies related to students and student life. It has, in general, effectively developed detailed strategies and dynamically responded to changing conditions. The integration of assessment into the strategies is underway. To continue this work, the assessment strategies emerging from the committee must be refined over the coming six months and developed into feasible projects with appropriate indicators.

Priority Committee 2—This committee has the challenging task of addressing learning at NJIT. This involves many aspects of the university, particularly the Faculty Senate and the committees reporting to it. Developing and implementing strategies related to learning depends on their timely cooperation. This means speedy and decisive changes in pedagogy and curricula will be difficult. On the other hand, the Priority 2 Committee has the advantage of a longstanding program review process and numerous other assessment strategies for student learning outcomes therefore assessment in this area is more advanced and the potential exists for assessment driven improvement in pedagogy and curricula.

Priority Committee 3—This committee oversees research activities at NJIT and has produced the most impressive results over the past 18 months. As a more focused priority area, changes are developed and implemented more swiftly. The new strategies used to address shortfalls in the patent application process show the possibility for nimble responses. The information technology available to track and monitor research projects also gives the committee advantages in developing assessment indicators. It may be noted, however, that the assessment strategies being proposed do not match the sophistication of assessment in Priority 2. This reflects the more recent embrace of assessment in the area.

Priority Committee 4— The Community priority committee addresses such areas as faculty and staff diversity, international research collaborations, student diversity and exchanges, and university advancement. Achieving results over such a broad range presents special managerial challenges. As may be noted from Section 2, this committee reports only limited development and implementation of strategies. Addressing the needs of the Community priority and focusing on the implementation of strategies will be a key objective of the Steering Committee over the coming six months.

Priority Committee 5—The committee overseeing investments faces unusual management challenges because the investments are being made in all divisions and areas of the university. No individual, or even small group, could command oversight of all areas in which investments are made. The areas for significant investments range from faculty hiring to progress in constructing the Wellness and Events Center. In general, however, the committee has offered effective strategies and developed reasonable assessment strategies. Not all areas have complete assessment plans and the committee participants may be expanded to bring in additional expertise or more use may be made of joint committee meetings to assure that the goals of investment are kept consistent with the priority committees guiding plan implementation in other areas.

VI. Conclusion

The *2020 Vision* December 2016 report shows notable progress toward meeting the KPI targets and developing a dynamic planning vision. The KPIs quantify progress in many areas. From scholarly research to students, learning, global community, and investments; NJIT is on the move. Academic research, private partnerships, graduation and retention rates, as well as alumni giving, applications, and undergraduate enrollment have all exceeded expectations. These successes speak to the dedicated effort of many people as they pursue the common goals articulated in *2020 Vision.*.

The Steering Committee's management objective for the past semester was to develop assessment for each of the plan strategies. This has two objectives. It positions *2020 Vision* as a document responding to new conditions and flexibly adjusting strategies. Furthermore, by linking planning to assessment, as it has previously linked budgeting, the plan offers a logic to what will be assessed and how the results of plan guided assessment will be used to improve the university. Strong linkage between planning and assessment is important for continuous improvement and meets an imperative of the redesigned Middle States accreditation process. Articulating this clearly in the planning process provides documentation needed for a successful Middle States accreditation review in 2021-22.

Going forward through the next year, the Steering Committee is focused on developing *2020 Vision* as a dynamic document. This entails the consideration of emerging challenges for NJIT and developing appropriate objectives and strategies to address them. It also requires the use of assessment and evaluation to make necessary changes and sometimes hard choices. The plan cannot remain static if it is to serve as a guide in the face of changing circumstances.

Section 2--Description of Strategies and Tactics

Priority 1 - Students

Objective: 1.1 Admissions

1.1.1 Expand Communication and Information Channels

1.1.1.1 Implement focused, data-driven marketing and recruitment strategies for admissions by working closely with 'Spark' (a vendor to help facilitate communications with prospective Fall 2017 students). Spark will also help to identify the prospective student pool and target marketing for Fall 2017 incoming freshmen and graduates. KPI for freshmen was set for 6,000. Freshmen applications have expanded from 4,769 (Fall 2015) to 7,223 (Fall 2016), an increase in applications of 2,454. The next phase will be to focus on tracking effectiveness of Open Houses and on-campus recruitment events, and to continue using predictive analytics to predict and monitor enrollment. *(Ongoing)*

1.1.1.2 Communicate the benefits of an NJIT degree more effectively, creating awareness of the academic community and articulating the rigor of the NJIT curriculum. The Offices of Admissions and Strategic Communication have identified key marketing points that all marketing materials are based on, including academic reputation, research, location, cost, and student life. Working closely with Spark, Admissions has developed data-driven strategies for selecting a prospective student pool and targeted marketing starting Fall 2017. This tactic will be assessed by analysis of the increase in applications. (*10% Complete*)

KPI for the freshmen 2-part combined SAT score was set for 1220. The freshmen 2-part combined SAT score has increased from 1190 (Fall 2015) to 1219(Fall 2016), an increase of 25 points. The next step is to observe how the new SAT scoring system will potentially impact the ability to meet the KPI goal. This tactic will be assessed by the freshmen applicant pool in Fall 2017. (*25% Complete*)

1.1.1.3 Expand pipeline programs, including pre-college activities and outreach, to increase the application pool by centralizing pre-college records in Banner so they can be analyzed and followed. Expand targeted recruitment programs. Efforts have been undertaken to increase and expand outreach to students, teachers and school administrators throughout New Jersey.

Review, update, and expand offerings and services to attract targeted groups by ensuring that offerings and services reflect cutting-edge STEM concepts, curricula, practice, and learning experiences. Actively promote programs and services through all media and direct outreach at school/district level meetings, association conferences and other education gatherings. Phase-in increases in fee schedules for all programs and services to address budget deficit and make appropriate adjustments as the deficit is reduced/eliminated. Engage the services of a consultant to increase grant applications for funding to support the continuation and expansion of program offerings, services and staffing. This tactic will be assessed by the number of students who apply and enroll. *(20% Complete)*

1.1.1.4 Refine articulation agreements and increase the number of joint programs with community colleges by strengthening NJIT's historical relationship with community colleges in the state and region. We have expanded partnerships with Ocean Community College, Bergen Community College and Hudson Community College; a dual degree agreement has been signed with Ocean Community College and articulation agreements have been signed with Bergen Community College and Hudson Community College.

Proactively, outreach is continually being conducted to local community colleges to develop comprehensive partnerships. In progress is development of dual admission agreements with Mercer Community College and Bergen Community College; and development of articulation agreements with Middlesex Community College, Brookdale Community College, Essex Community College, Mercer Community College, Union Community College, and Community College of Morris. This tactic will be assessed by the number of articulation agreements signed. *(30% Complete)*

1.1.1.5 Centralize applicant information using digital technology to analyze and identify characteristics of successful NJIT students, target recruitment toward students with that profile and support academic advising. Admissions implemented Common App and Document Manager, a digital document manager, starting in Fall 2014. *(100% Complete)*

1.1.2 Strengthen Graduate Student Recruitment

1.1.2.1 Recruit graduate students at the department level more effectively through student-point-of-contact, peer outreach and individual faculty outreach. Through the combined efforts of the Offices of Admissions, Strategic Communication, and Graduate Studies, departmental-centric marketing and communications materials to prospective students have been developed. The individual academic website has been updated as of Spring 2016. Admissions is working with NCE, CoAD, and SOM to schedule college-specific fairs in Spring 2017. Collectively with Graduate Studies, Admissions will provide funding to incorporate faculty in its recruitment effort for Fall 2017. This tactic will be assessed by the number of graduate applications and the number of graduate students enrolled. *(10% Completed)*

1.1.2.2 Admit graduate students using competitive practices, including an earlier application deadline, timely offer letters, and attractive graduate stipends. Graduate Studies and Admissions have implemented new admission processes which resulted in an earlier application deadline, and timelier offer letters. Graduate Studies and the Provost's Office have also allocated funds to provide more attractive graduate stipends. Admissions will greatly expand its prospective pool of graduate students for fall 2017. This tactic will be assessed by the number of graduate applications and the number of graduate students enrolled. *(50% Complete)*

1.1.2.3 Analyze graduate students' success by departments and programs to develop a graduate student success profile informing future admissions. Graduate Studies will work with Institutional Research and Admissions to create the profile. This tactic will be assessed by a review of future graduate admissions and student success. *(Planned)*

1.1.2.3 Recruit online and graduate certificate students and recruit Professional Science Masters PSM students. *(New Tactic)*

An online and graduate-certificate-focused communication plan and marketing strategy has been developed. This tactic will be assessed by the number of online graduate program applications and the number of online graduate students enrolled. *(10% Complete)*

1.1.2.4 Enter into agreements to increase partnership with corporate partners. *(New Tactic)*

Currently, we are working on developing agreements with corporations to promote domestic graduate enrollment. In November 2016, a partnership agreement was signed with EdAssist; and in December 2016, an agreement was signed with the Prudential Center. Currently, we are in final negotiations with GP Strategies representing Bank of America and Boeing. This tactic will be assessed by the number of corporate partnership agreements. *(50% Complete)*

1.1.2.5 Enter into joint degree agreements with local colleges to increase our domestic enrollment. *(New Tactic)*

There has been initial outreach to seven local colleges to promote NCE joint degrees. An initial meeting with Manhattan College is scheduled for January 2017. This tactic will be assessed by the number of joint degree agreements entered into and the number of domestic students enrolled. *(10% Complete)*

1.1.3 Improve Web and Social Media Presence

1.1.3.1 Create a high-impact website to improve recruitment and better serve the needs of the NJIT community through increased communication and functionality. All academic websites have been updated. A New Enrollment Management website is expected to be implemented by Spring 2017. Admissions started to incorporate webinars as part of its recruitment strategies. This tactic will be assessed by completion of the website. (20% Complete)

1.1.3.2 Enhance NJIT's social network presence to highlight accomplishments and help student recruitment. Admissions started to communicate to students via texting, autocalls, Facebook, and Twitter in 2015 and 2016; Blogger started in Fall 2016. There has been outreach to Fall 2017 freshmen using PURL. A Guidebook App for Freshmen Open Houses was started in Fall 2016. This tactic will be assessed by social media activity. (50% Complete)

1.1.4 International Partnerships (New Strategy)

1.1.4.1 Enter into partnerships with international recruitment agents preferably outside of NJIT's primary feeder countries.

NJIT has signed partnership contracts with 15 recruitment agents in 2016. This tactic will be assessed by the number of partnerships with international recruitment agents. *(50% Complete)*

1.1.4.2 Enter into partnerships with super agents to provide high quality customer services to prospective students and focus on degrees with seat capacity.

NJIT has signed a partnership contract with EduCo in early October 2016. The contract has yielded twenty graduate applications for the Spring 2017 semester. At its full capacity by Fall 2017, it is expected that the agent will bring in upward of three hundred highly qualified undergraduate and graduate students per semester. This tactic will be assessed by the number of partnerships with super agents signed and number of undergraduates and graduates brought in by the super agents. *(20% Complete)*

Objective: 1.2 Persistence and Retention

1.2.1 Designing a Comprehensive and Engaging First Year Experience

1.2.1.1 Implement a comprehensive and engaging freshmen seminar by offering a course that allows students to receive credit for the course and gives them a firm grasp on all areas of the college experience. Currently, the re-designed first year seminar curriculum is being utilized, which includes specific and measurable learning outcomes, as well as the utilization of faculty in the classroom. The committee will act as advisors to the administrative body tasked with first year seminar. A proposal is being drafted for credit to be awarded to the first year seminar, and support is being generated from faculty and members of CUE. This tactic will be assessed through student course evaluations of first year seminar and through the ability to achieve a minimum of one degree credit for the course. *(50% Complete)*

1.2.1.1a The Learning Communities Assessment Report has been completed and reviewed. Currently, the Dean of Students Office is programming changes for the Fall 2017 term. *(100% Complete)*

1.2.1.2 Connect the student community through increased personal interactions and appropriate technology to create a stronger NJIT identity among students. NJIT has been utilizing the use of social media, specifically Instagram, Facebook, and Snapchat to connect with students on campus regarding the various academic and social events. Staff and faculty have been notified as well and encouraged to attend so they may interact with the students on a personal level. *(100% Complete)*

1.2.1.3 Utilize an intense online tracking system for students – Student Success Collaborative (SSC). SSC will assist in tracking students by better management and identification of the at-risk student population. This tactic will be assessed by tracking student success after more timely identification of the at-risk student population. *(50% Complete)*

1.2.2 Intensify and Create Consistent Academic Advisement

1.2.2.1 Develop consistent university guidelines for advisement across academic departments to achieve more timely graduation. The Provost's Office in conjunction with the Division of Academic Support and Student Affairs will collaborate on this. The committee is working on a draft report for the Provost's Office and the academic deans. There should be more

accountability on advisement standards through the use of the SSC. This tactic will be assessed through the advisor usage of SSC and designated reports to be run by each undergraduate advisor through the SSC in Spring 2017. *(75% Complete)*

Academic advisors will meet monthly with the Provost's Office regarding policies and procedures that should be consistent across departments, along with discussion on best practices in advisement for the student population set forth by the National Academic Advising Association and professional development activities. There is currently a Committee for Academic Advisors that meets regularly. This tactic will be assessed through the advisor usage of the calendar/appointment system and designated reports to be run by each undergraduate advisor through the SSC in Spring 2017. *(50% Colmplete)*

1.2.2.2 Increase the use of software tools in advising through SSC. This will be utilized by all academic advisors to establish regular reporting systems to monitor student retention and progress toward graduation to facilitate timely intervention. The technical foundations and strategies will be implemented in Spring 2017. This tactic will be assessed through the advisor usage of the calendar/appointment system and designated reports to be run by each undergraduate advisor through the SSC in Spring 2017 *(75% Complete)*

1.2.2.3 Admit NJIT students to a college or school of their choice with the option of indicating a provisional major. Beginning with NCE, incoming students should apply and designate the major they are looking to pursue. There is currently research being conducted on what other universities plan as a common first year curriculum. The method of assessment will be developed when full implementation is closer. *(10% Complete)*

1.2.2.4 Intensify first year advisement by centralizing advising in the Center for Student Success. All academic departments will also have their students complete a short feedback survey on their advisement regularly in order to review and make changes as needed. A draft is being prepared for the Provost's Office, which will include the need for feedback surveys soon after a visit with an advisor. The transfer student survey is completed. This tactic will be assessed through the advisor usage of SSC and designated reports to be run by each undergraduate advisor through the SSC in Spring 2017 *(75% Complete)*

1.2.2.5 & 6 & 7 & 8 Enhance student advising by utilizing an online tracking system for our students – SSC. SSC and will improve identification and management of our at-risk student population.   It will also offer students information necessary for them to make better educational decisions. This tactic will be assessed through the advisor usage of the calendar/appointment system and designated reports to be run by each undergraduate advisor through the SSC in Spring 2017 *(75% Complete)*

1.2.3 Enhancing Tutoring, Mentoring, and Student Support

1.2.3.1 Coordinate tutoring, mentoring, adaptive learning and student support through academic departments and a structure created for this purpose. Physics, Chemistry, and the Math departments already provide their own tutoring for their subject areas. Other academic departments will also begin offering these support services. SSC is also being used to coordinate

and assess tutoring. This tactic will be assessed through the student evaluation and final grades in key courses for students who completed the supplemental instruction in those courses. *(80% Complete)*

The Learning Center is providing workshops and tutoring in many subject areas, and this will continue until all academic departments begin to tutor their own subjects. The Learning Center is currently providing supplemental instruction for FTFTF in Math 108 and Math 110. *(100% Complete)*

1.2.4 Continuous Assessment of Persistence Efforts

1.2.4.1 Create a system of accountability to monitor the academic progress, retention and persistence efforts of the university; this can be assisted by the university-wide utilization of the SSC. A report is being drafted for the Provost's Office emphasizing the need for one oversight body for retention and persistence efforts put forth by the university. This tactic will be assessed by reviewing methods used for each strategy and compiling and reviewing them annually. *(75% Complete)*

Utilization of the SSC, along with a system of accountability through the Provost's Office can continuously collect, analyze and report retention data. This tactic will be assessed be reviewing methods used for each strategy and compiling and reviewing them annually. *(75% Complete)*

1.2.5 Continuing to Market and Reformat Co-Op

1.2.5.1 The Committee will assess the results of the NCE pilot for co-op by surveying students, companies and academic department leads as well as other assessment strategies envisioned, such as following up with students to determine if they are retained and graduated from the university. This tactic will be assessed by the report provided by NCE on the model used. *(0% Complete)*

1.2.6 Establishing a Flexible Bachelor of General Sciences

1.2.6.1 Working to create a comprehensive degree proposal that will be brought to the Committee on Undergraduate Education (CUE) and then all other governing education bodies. The proposal will include specific degree requirements. This tactic will be assessed through the number of students earning the degree. *(0% Complete)*

1.2.7 Create a Smoother Transition for Transfer Students

1.2.7.1 Survey transfer students, specifically targeting their top obstacles from completion at NJIT. These assessments should be run through the academic department of their current transfer student population. A survey has been created and transfer students are completing it. This tactic will be assessed by reviewing the transfer student survey completed in Fall 2016. *(75% Complete)*

1.2.7.2 Create and implement a seminar series that meets the needs of transfer students based on the survey referred to in 1.2.7.1. The Advising Success Center offers three workshops for transfer students to attend in their first semester at NJIT. Expansion is being considered and ways to get more transfer students to attend are being reviewed. This tactic will be assessed by reviewing the transfer student survey completed in Fall 2016. *(75% Complete)*

1.2.7.3 Continue to build effective in-person working relationships with the community colleges in New Jersey in order to update articulation agreements and provide accurate updated course information to faculty, staff, and students of the community colleges. The Advising Success Center, in conjunction with the Office of Admissions, is working to visit community colleges monthly to discuss program coordination and articulation agreements. This tactic will be assessed through the number of articulation agreements executed. (90% Complete)

> *1.2.8 Improving Performances in Gateway Courses through Diverse Teaching Techniques*

1.2.8.1 Create a thorough assessment of the Gardner Institute Gateway program through the Physics courses piloted in the program from the Fall 2015 term, to include the courses, number of students involved, new teaching techniques used, how the students performed at the end of the term, and any other pertinent information. CSLA, and specifically professors in Physics and Chemistry, has been working with the Gardner Institute to gather data on NJIT and its students to assist with new teaching initiatives to help academically at-risk students. This tactic will be assessed by a review of students' final grades in Gateway courses, as well as discussion with students and faculty of the new techniques implemented. *(90% Complete)*

1.2.8.2 Create a comprehensive steering committee to assist with the further assessment and utilization of the Gardner Institute Gateway program through the academic departments. CSLA is currently working on this and should have a steering committee in place shortly. This tactic will be assessed through discussion with students and faculty of the new techniques implemented *(90% Complete)*

> *1.2.9 Summer Bridge Program for Entering First Time Full-Time Freshmen*

1.2.9.1 Complete a SWOT review of the Educational Opportunity Program Summer Program and the pilot Pre-Calculus Summer Boot Camp. Being considered is a review of other bridge programs at the university in order to learn how to best proceed with one for all incoming first year students. This tactic will be assessed by a review of the current EOP and Math Boot Camps to identify what works, and through the first term GPAs, specifically Math grades, of the first time full-time first year students. *(50% Complete)*

1.2.9.2 Create a committee to work on how to fund a program that can look into diverse grants available, possibly through the National Science Foundation. Currently, the committee is reviewing the cost of summer boot camp per student. This tactic will be assessed by a review of the current EOP and Math Boot Camps to identify what works, and through the first term GPAs, specifically Math grades, of the first time full-time first year students. *(60% Complete)*

Observe and analyze the Pre-Calculus Summer Boot Camp Program. Assessment of the program is complete, and the committee will review the information further. This tactic will be assessed by a review of the current EOP and Math Boot Camps to identify what works, and through the first term GPAs, specifically Math grades, of the first time full-time first year students. *(50% Complete)*

Objective: 1.3 Graduation

1.3.1 Implement Curriculum-Guided Course Scheduling

1.3.1.1 Allocate instructional resources by offering courses in the semesters when they are needed by maximizing student course sequencing to help avoid scheduling conflicts for required courses, promote timely graduation, and increase persistence & retention, therefore increasing graduation rates. The Registrar will also provide a university calendar of four year, projected course offerings by building a multi-year academic and course calendar. Students will be able to predict their full four years by knowing when courses are offered within their degree. *(100% Complete)*

1.3.1.2 Expand the scope of winter and summer sessions by developing alternative and additional course offerings, particularly online. More courses will be offered in the winter and summer. This will help expedite graduation. The target for completion is April 2017; however, it will be ongoing due to changes each term of courses needed to be offered for winter and summer. This tactic will be assessed by tracking the number of sessions offered and the number of students on the wait list. *(50% Complete)*

1.3.1.3 Coordinate course scheduling and registration and reduce administrative obstacles for cross-registration with Rutgers-Newark, Rutgers Biomedical and Health Sciences and Essex County College. This will increase the opportunity for students to fulfill their graduation requirements. A meeting with stakeholders is planned for Spring 2017. This tactic will be assessed by more course offerings through cross-registration. *(10% Complete)*

1.3.2 Streamline the Graduation Process

1.3.2.1 Notify students that they are nearing completion of their degree requirements by having the Registrar send out early alerts to students nearing graduation (35-40) credits allowing the student to be aware of potential obstacles. The first letter was sent out in November 2016. Student Success Collaborative goes live in January 2017 and will help with this initiative. This tactic will be assessed by graduation rates. *(75% Complete)*

1.3.2.2 Eliminate the student-initiated application for graduation by creating a process to proactively certify students for graduation. Any student who has completed the requirements toward their degree will be awarded their degree. This was completed in November 2016 for the May 2017 class. *(100% Complete)*

1.3.2.3 Expand advising for students by utilizing the functions of SSC to promote timely graduation. Using SSC, students will be notified through their advisors, faculty, and

administrators each term keeping them on track toward graduation. SSC goes live January 8, 2017. This tactic will be assessed by graduation rates. *(80% Complete)*

Objective: 1.4 Campus Quality of Life

1.4.1 Build a Supportive Environment

1.4.1.1 Cultivate a courteous, welcoming and supportive campus climate, enhancing student satisfaction and success, by working with the Office of Institutional Effectiveness to redesign and expand the student satisfaction survey to better identify areas of student satisfaction and dissatisfaction. Additionally, several customer service trainings have been conducted for all members of the Division of Academic Support and Student Affairs and for the Department of Public Safety. *(100% Complete)*

1.4.1.2 Develop a service-focused philosophy for all faculty and staff after a systematic examination of current practices. A philosophy statement that contains "Tenets of Service" is being refined for broad distribution. This tactic will be assessed by measuring student satisfaction. *(25% Complete)*

1.4.2 Improve Administrative Processes and Practices

1.4.2.1 Systematic examination and regular ongoing review of the effect of current policies by an "owner" review of every policy. On the university webpage should be the most updated version of the policy and each department will be responsible to timely update its pages. This tactic will be assessed by regular review of policies. *(Ongoing)*

1.3.2.2 Develop virtual and in-person service centers to better meet student needs by utilizing web managers to create a better search engine with multiple, intuitive search words, increase ease of navigation, remove outdated material, and update software changes. In-person student service is expected of all university personnel and training should be expanded to offer all employees customer service training. This tactic will be assessed by the results of the student satisfaction survey. *(Ongoing)*

1.4.3 Support Student Activities

1.4.3.1 Facilitate sustainable and supported campus events, including competitive academic teams and experiences by adopting a Signature Events Model for students to support major student focused events and to build academically competitive teams. This tactic will be assessed by student participation in events. *(75% Complete)*

1.4.3.2 Develop an "Events Center" that will provide space and support for student activities, by constructing the Wellness and Events Center. Construction is underway. *(Ongoing)*

Objective: 1.5 Institutional Effectiveness

1.5.1 Improve Institutional Effectiveness through Continuous Assessment

1.5.1.1 Deploy key metrics for university performance, particularly retention and graduation rates by creating a systematic schedule for data analysis that will facilitate reporting on outcomes and help to build dashboards to support decision-making. This tactic will be assessed by the ability to analyze data and fulfill reporting obligations accurately and on time. *(Ongoing)*

1.5.1.2 Use student satisfaction as an indicator of student success by transforming the Student Satisfaction Survey process to better gauge levels of student satisfaction. This tactic will be assessed by results of the student satisfaction survey. *(Ongoing)*

1.5.1.3 Develop Assessment plans with learning goals for all programs by aligning them with Council for the Advancement of Standards in Higher education (CAS) standards. This tactic will be measured by development of, and compliance with, assessment plans. *(Ongoing)*

1.5.2 Make Evaluation Effective

1.5.2.1 Implement independent evaluations for student support programs by using CAS to provide the mechanism for this independent evaluation as guided by nationally accepted norms. This tactic will be assessed by the results of evaluations. (Ongoing)

1.5.2.2 Communicate assessment results to instructional and support personnel by using a range of tools including dashboards to make information available to decision makers. Survey results will also be communicated to decision-makers and the NJIT community to convey confidence in operations. This tactic will be assessed by tracking administrators' satisfaction with the information available for decisions. *(Ongoing)*

Priority 2 - Learning

Objective: 2.1 Curricular Assessment

2.1.1 Evaluate the Curriculum

2.1.1.1 Continuously assess the curriculum by using the program review process to promote curricular assessment across the university. This includes an external review component conducted by experts in the degree disciplines assessing the nature, content, delivery, and student progress in the core requirements for each degree. A systematic study will be undertaken to determine the course(s) causing delays in the graduation of students. Progress on this tactic will be assessed by the completion of the aforementioned study as well as by the number of degree programs that have sought input from external reviews. *(Ongoing)*

2.1.1.2 Use assessment to guide curricular reform through the review of individual programs. This has been led by an external consultant's review of the Physics program. The delivery of introductory courses in Physics and Chemistry is being modified through participation in the Gateway to Completion (G2C) program. This tactic will be first assessed by the analyzing the impact of the G2C program. *(Ongoing)*

2.1.2 Raise the Prominence of Academic Assessment

2.1.2.1 Establish yearly program assessments and cyclical program reviews using the recently implemented program review template. All colleges, departments, and academic programs are now aware of the cyclical program review process and cooperating with its continuing implementation. This tactic will be assessed by the number of programs undergoing satisfactory review as per the determined cycle. (*Ongoing*)

2.1.2.2 Highlight the importance of curricular assessment and its impact on learning by rigorously applying the current process for curricular review. During the 2015-2016 academic year, NCE began the Program Review of its graduate degree programs. This tactic will be assessed by the number of programs that have completed the curricular assessment process. *(Ongoing)*

Objective: 2.2 Curricular Reform

2.2.1 Improve Undergraduate Education

2.2.1.1 Update the GUR by establishing a subcommittee of CUE charged to review/update GUR. The committee proposed 10 competencies for all NJIT undergraduate students during the 2015 – 2016 Academic Year. Competencies are currently related to courses. A complete proposal for a new policy on GUR is expected to reach Faculty Senate in April 2017. This tactic will be assessed by the adoption of a new policy by the end of the current academic year. *(Ongoing)*

2.2.1.2 Modify credit requirements and semester load to facilitate retention and graduation and reduce the costs of attending NJIT. Curriculum review and change in GUR are expected to lead to new curricula. Progress on this tactic will be assessed by the number of curricula that have completed modifications. *(Ongoing)*

2.2.1.3 Implement a 4X4 curriculum in which students take four courses at four credits across four years of undergraduate study. Due to anticipated complications with transfer students and current MOUs with Community Colleges, this tactic will most probably be abandoned.

2.2.1.4 Train students in the competencies of current digital technology related to their majors and integrate this into the GUR. This will be met by the GUR update. This tactic will be assessed from data on assessment of the digital technology competency which will be part of the GUR. *(Ongoing)*

2.2.1.5 Establish learning outcomes for all degree programs and for the GUR by making the definition of learning outcomes a part of the comprehensive program review process. *(Completed)*

2.2.2 Innovate Graduate Education

2.2.2.1 Create professional science master (PSM) degree programs. . A Cyber Defense Option within the MS in Cyber Security and Privacy degree program in YWCC has been approved by all relevant NJIT bodies and the Academic Issues Committee of the NJ Presidents Council was informed about it in December 2016. This Option will be submitted for the PSM designation by the PSM National Office. Additional proposals for PSM degrees within CSLA and NCE are currently being reviewed by departments and/or the corresponding Dean. This tactic will be assessed by the number of degree programs that will have the PSM designation. *(Ongoing)*

2.2.2.2 Create applied master's programs by advancing a preliminary proposal for a new MS degree in Data Science to be offered by the Department of Computer Science. A program announcement (PA) is currently prepared and an external reviewer is anticipated to visit NJIT in late January 2017. This tactic will be assessed by the number of new MS programs of an applied nature. *(Ongoing)*

2.2.2.3 Enhance doctoral financial support by increasing stipends for FY 2016. A further increase was implemented for FY 2017. This tactic will be assessed by comparing the stipends we offer with those offered by peer institutions. *(Ongoing)*

2.2.2.4 A doctoral program has been developed and fully approved in the Martin Tuchman School of Management. Admission will begin in fall 2016. *(Completed)*

2.2.3 Update the Curriculum Continuously

2.2.3.1 Incorporate feedback from professional organizations and accrediting agencies. BArch and ET programs have recently introduced curriculum changes to ensure compliance with their

accrediting bodies. This tactic will be assessed by the success during accreditation visits. (*Ongoing*)

2.2.3.2 Incorporate feedback from industry advisory boards (IABs) and employers. NCE has started a systematic process of seeking input from IABs regarding all undergraduate curricula. PSM degrees will also have their own IAB as per the requirements for the national PSM designation; these IABs will be also providing input for curriculum revisions. This tactic will be assessed by the number of degree programs that have sought and gotten IAB input. *(Ongoing)*

Objective: 2.3 Convergence through Digital Technology

2.3.1 Create an Instructional Culture of Digital Technology

2.3.1.1 Converge face-to-face and online modes of course delivery by pilot testing the idea of convergence. This pilot study, overseen by the TLT Committee of Faculty Senate, is underway. This tactic will be assessed by the number of courses offered in the converged mode. *(Ongoing)*

2.3.1.2 Increase the use of digital technology in the classroom by developing online programs based fully on internal NJIT capabilities. Eight online MS programs are currently being offered by NJIT without collaboration with outside entities. A fully online program in Industrial Engineering is currently under development using only NJIT capabilities. This tactic will be assessed by the number of fully online degree programs developed and offered based exclusively on NJIT capabilities. *(Ongoing)*

2.3.1.3 Encourage the development of additional online graduate programs to expand the catalogue of NJIT online offerings. An incentives program for the creation of online versions of MS programs is in its final stages of preparation/adoption. This tactic will be assessed by the number of fully online programs developed based fully on NJIT capabilities. *(New strategy; ongoing)*

2.3.1.4 Deploy adaptive learning systems to provide at-risk students personalized digitally based instruction. This tactic will be reassessed as efforts concentrate on helping students with a new approach of a centralized Math and Science Tutoring Center. *(Ongoing)*

2.3.2 Assure Academic Rigor

2.3.2.1 Achieve uniformity of academic standards, regardless of delivery mode by establishing a sub-committee of TLT charged with providing guidelines to be followed for online, hybrid, and converged courses. The TLT subcommittee in collaboration with the Institute for Teaching Excellence is working on document that will provide appropriate guidelines. This tactic will be assessed by the number of courses successfully using the NJIT Quality Assurance in eLearning Rubric. *(Ongoing)*

2.3.2.2 Create a digital repository for learning artifacts. The Institute for Teaching Excellence has started collecting teaching and learning artifacts that will be made available to faculty and students. This tactic will be assessed by the number of artifacts in the repository. *(Ongoing)*

Objective: 2.4 Milestone Experiences

2.4.1 Integrate Milestone Experiences into Undergraduate Programs

2.4.1.1 Expand the Undergraduate Research and Innovation (URI) program. The UPR program has been expanded and now involves URI Phase-1 and Phase-2 Seed Grants, TechQuest Innovation Competition, Newark Innovation Acceleration Challenge, NSF Research Experience for Undergraduates (REU), and Provost Summer Fellowship programs. These programs are supported by NSF, PSE&G, several foundations and internal funds. During the 2015 – 2016 Academic Year and Summer 2016 over 120 undergraduate students participated and $400 K went to student stipends and project support. Progress with this tactic will be assessed by the number of undergraduate students participating in the URI program. *(Ongoing)*

2.4.1.2 Increase the number of curricular-based co-ops and internships. A new policy for NCE students, both undergraduate and graduate, is in the final stages of preparation. It will allow students to be admitted to programs selecting or not the co-op option. While on co-op, students will maintain their full-time student status; co-op experiences will be formally recorded on the student transcripts. This tactic will be assessed by the number of students selecting the co-op option for their engineering degree. *(Ongoing)*

2.4.1.3 Develop a robust study abroad program to increase the number of students that will have international experiences before graduating from NJIT. Inventory our current MOUs with foreign universities to identify study abroad opportunities for our students. New MOUs have been signed with universities overseas (Germany, Greece, Italy, China, Thailand, Spain, and Lebanon) and more are in final stages before signing. Additional opportunities are to be identified by the Office of Global Initiatives which, in coordination with academic departments, will also start creating a course equivalency inventory. This tactic will be assessed by the number of MOUs and the number of NJIT students taking advantage of them. *(Ongoing)*

2.4.1.4 Integrate service-learning projects in the Newark community, and, beyond into the curriculum. An agreement has been signed by NJIT and the New Jersey Judiciary for students in the capstone course in Computer Science to complete part of the course requirements by serving in the NJ Judiciary. This tactic will be assessed by the number of students in courses that include a service learning component. *(Ongoing)*

2.4.2 Develop Milestone Experiences for Graduate Programs

2.4.2.1 Foster research, industrial, service and international learning experiences by increasing the number of destinations and majors served for undergraduate and graduate students through expanded MOUS. See tactic 2.4.1.3 as the MOUs with foreign universities cover graduate students as well. *(Ongoing)*

2.4.2.2 Expand research and service, including civic engagement opportunities for graduate students. Students in PSM programs may have the opportunity to pursue (for credit) research as well as service or civic engagement projects. This tactic will be assessed by the number of MS students pursuing research and/or service projects. *(Ongoing)*

2.4.3 Support Personal Milestone Experiences

2.4.3.1 Provide a framework allowing students to pursue personal milestone experiences by developing an extracurricular NJIT music program. A wind ensemble, a string ensemble, and a jazz band have been formed. Conductors have been hired and equipment has been purchased. This tactic will be assessed by the number of students pursuing personal milestone experiences at NJIT. *(Ongoing)*

2.4.3.2 Coordinate additional joint milestone initiatives between NJIT and Rutgers-Newark. No progress reported on this tactic.

Objective: 2.5 Professional Success

2.5.1 Promote Paths to Professional Success

2.5.1.1 Prepare students to attain their first-choice destination upon degree completion. This has been achieved by changing doctoral degree credit requirements to require earlier and more substantive input from doctoral committees. Additionally, the PSM and applied MS degrees will help students meet their professional objectives faster. Undergraduate students selecting the co-op option in NCE will have better chances getting the jobs they desire. This tactic will be assessed by the average reduction in time to complete doctoral NJIT degrees and by the number of undergraduate students getting a job offer from the place of their co-op experience. *(Ongoing)*

2.5.1.2 Provide professional development workshops. The Department of Civil and Environmental Engineering offers every semester a workshop on review and preparation for the FE exam. This tactic will be assessed by the percent of junior and senior CE and ME students attending the workshop. *(Ongoing)*

2.5.2 Promote Engagement with Intended Professions

2.5.2.1 Promote and support student engagement with professional societies on campus. Various student chapters of professional societies (especially in engineering) get financial support from the corresponding department and the NCE Dean's discretionary funds used for their on-campus meetings as well as in support of projects through which students participate in regional and national competitions. This tactic will be assessed by the number of student members of the on-campus professional societies and the placement of student teams in competitions. *(Ongoing)*

2.5.2.2 See 2.5.1.2 This tactic will be assessed by the number of students opting to take the exam while still at NJIT as well as the average passing rate for those attempting the exam. *(Ongoing)*

2.5.3 Assess Student Professional Success

2.5.3.1 Track alumni to periodically assess their success and satisfaction in their professional careers by initiating a comprehensive survey with an outside vendor. This tactic will be assessed by the average value of the satisfaction reported in the survey. *(Ongoing)*

2.5.3.2 Effectively survey alumni to determine their satisfaction with their experiences at NJIT through a review and revision of the annual alumni survey process. This tactic will be assessed by the increase in the satisfaction reported in successive surveys. *(Ongoing)*

Priority 3 - Scholarly Research

Objective: 3.1 Faculty Roles in Research

3.1.1 Increase Participation of Current Faculty in Research

3.1.1.1 Develop policies to encourage research by sharing indirect income among primary investigators and academic units and assuring start-up funds for new faculty. This tactic will be assessed by growth in external funding and the number of faculty with active funding. *(Completed).*

3.1.1.2 Increase efforts to fully recover associated research expenditures with a policy on Indirect Costs Return (Overhead) developed through the Faculty Research Advisory Board (FRAB), faculty senate and administration. In FY17, $311,164 was returned to 125 eligible faculty, department chairs, and college deans in overhead return. Progress on this tactic will be assessed by an increase in number of faculty with active funding. *(Completed)*

3.1.1.3 Establish a competitive internal seed-funding program for innovative and exploratory research. Forty-two (18 in Fy15 and 24 in FY16) Faculty Seed Grants have been awarded involving 66 faculty members. In FY17, 22 Faculty Seed Grants were awarded involving 33 faculty members. Progress will be assessed by the number of external grants received by the recipient of faculty seed grants. *(Completed)*

3.1.1.4 Re-engage faculty not currently active in scholarly research by integrating them into existing or emerging projects by setting up faculty seed grants and undergraduate student seed grants. Many faculty who have not been active in research have started projects alone or with undergraduate students through faculty seed grants. Progress will be measured by the number of new proposals submitted and grants received by faculty who have not been active in past 3 or more years. *(Ongoing)*

3.1.2 Integrate Research into the Curriculum

3.1.2.1 Advance faculty research in conjunction with academic curriculum content by encouraging research active faculty to offer opportunities for team based research with other faculty, graduate students, and undergraduate students. The PhD in Business Data Science was also approved this year and it will enable the Martin Tuchman SOM faculty to advance their research objectives while also educating graduate students. Assessment of this tactic will include the number and growth of students in these programs. *(Ongoing)*

3.1.2.2 Develop a faculty research lecture series open to all students by supporting departments that have established research lecture series linked with graduate level seminar requirements. Progress on this tactic will be measured by the number of institutional and college/departmental seminars and showcase events. *(Ongoing)*

Objective: 3.2 Academic Research Enterprise

3.2.1 Foster Regional, National, and International Collaboration

3.2.1.1 Strengthen collaboration among researchers at NJIT and other universities in the region by establishing more collaborative research centers, adding significantly to the existing group of NJIT research centers which involve faculty from other universities. Assessment of this tactic will be based on the increase of number of proposals involving two or more institutions/universities. *(Ongoing)*

3.2.1.2 Support international collaborative research and exchange programs by developing a streamlined process and protocol to facilitate establishing MOUs, contractual agreements policies, and protocols for international visiting research scholars and students. This has been implemented. Measurement of progress will be based on the number of international collaborative projects and its growth. *(Ongoing)*

3.2.2 Improve Communication with Faculty on Research Opportunities

3.2.2.1 Disseminate grant and fellowship opportunities by distributing a description of grant opportunities to members of the university community. Program Directors from funding agencies have been invited to provide information on current and future funding programs to NJIT faculty and staff. Assessment of this tactic will be based on the increase of external funding. *(Completed)*

3.2.2.2 Communicate NJIT researcher accomplishments through a weekly newsletter sent to all faculty featuring recent grants, events and grant opportunities. Assessment will be based on the increase of external funding. *(Completed)*

3.2.3 Support Research Activities and Infrastructure

3.2.3.1 Refine and streamline the administrative infrastructure for research support by integrating grant management and accounting operations. Sponsored Research Administration and Grant & Contract Accounting offices have been merged into the Office of Research to provide seamless support from the identification of grant opportunities to grant closing. Streamlining of purchase requisitions and personnel requisition processes have been planned. Assessment of progress will be based on the efficiency of the tasks including purchase requisitions, personnel requisitions, budget transfer and timely billing. *(Ongoing)*

3.2.3.2 Offer training and support in grant-proposal preparation by providing workshops and grant writing assistance. Open House events are being offered to address and answer questions related to all functions of proposal submission and grant management. The Faculty Research Advisory Board (FRAB) meets to discuss grant management at multiple events organized by the Office of Research every semester. Faculty Development Workshops are offered covering research proposal preparation and submission training, scholarly research publications and professional development over 6 weeks to new faculty. Specific workshops on target funding opportunities such as NSF CAREER funding program have been offered to faculty with follow

up mentoring with senior faculty at the department and college levels. Assessment will be based on the increase of external funding *(Completed)*

3.2.3.3 Develop searchable databases of all records of research awards by purchasing and implementing Streamlyne to improve quality of the research database. The Streamlyne research proposal submission system has been implemented and is being used by faculty for proposal submissions. Assessment will be based on the increase of external funding and efficiency of approval and monitoring processes. *(Ongoing)*

3.2.3.4 Improve the NJIT research grant management and accounting information by developing and delivering training sessions to faculty and staff on the use of Streamlyne Grant Management Software system for proposal submission and online grant billing. Assessment will be based on the efficiency of the grant billing and monitoring system to follow up pro-actively. *(Ongoing)*

3.2.3.5 Reserve the "center" designation for consistently successful research initiatives and develop productive labs into centers by implementing a policy and protocol for the establishment of new research centers and the review and renewal of existing research centers. Three new research centers and one research institute (Institute of Brain and Neuroscience Research) have been established. Assessment will be based on the increase of external funding. *(Completed)*

Objective: 3.3 Multidisciplinary Research

3.3.1 Adopt Multidisciplinary Academic Research Approaches

3.3.1.1 Promote multidisciplinary research through internal meetings to foster building collaborative research teams. Several meetings have been conducted with faculty internally as well externally to promote core and multidisciplinary research as well as multi-institutional collaborations. Assessment will be based on the increase and number of multi-disciplinary and multi-institutional proposals. *(Ongoing)*

3.3.1.2 Assure recognition and reward for faculty engaged in multidisciplinary research using Streamlyne to provide a database, which makes possible recognition and reward for collaborative research. The collaborative research through research centers and institutes is being rewarded by increased overhead return and operating budgets for increased infrastructure support. Letters to faculty, chairs and deans are sent when a grant award is received. Assessment will be based on the research satisfaction surveys. *(Ongoing)*

3.3.1.3 Integrate research into academic experience at all levels encouraging doctoral students into multidisciplinary research efforts, provide teaching assistants across departments, and developing interdisciplinary and multidisciplinary curricula. The doctoral dissertation committees require members from different departments and/or other institutions. Teaching assistants are assigned to colleges to be re-allocate to department and interdisciplinary programs. Number of courses across different academic programs and number of interdisciplinary academic programs such as programs in data science have been increased. Assessment will be based on the number and percentage of students involved in research. *(Ongoing)*.

Objective: 3.4 Economic and Technology Development Partnerships

3.4.1 Economic and Technology Development Partnerships

3.4.1.1 Engage the private sector through the university's nonprofit corporation, NJII. NJII now has launched 12 industry-facing business units (iLabs and coreLabs), each of which is generating program activity in partnership with the private sector and government. It has a growing portfolio of innovation services, several of which capitalize on matching large companies with small ones and technologies with markets. NJII work with NJIT academic units is expanding as its relationships and assets grow. Some of the notable private sector partners include Hackensack University Medical Center, Lockheed Martin, Prudential, Panasonic, the US Air Force, Nokia, Lutron, and the State of New Jersey to name a few. Assessment will be based on the number of external partnerships and the amount of funding. *(Ongoing)*

3.4.1.2 Faculty members have also been encouraged to engage in entrepreneurial activities on behalf of the university. NJIT was designated an NSF I-Corps site in 2015 and, to date, 76 small awards have been granted to NJIT student and faculty inventor teams to explore commercialization of technologies. Several faculty members have obtained approval to participate in startup activities related to technology that they have developed at NJIT, including nano-probes for diagnostic testing, thin films, membranes, biomaterials, and data mining to name a few. Assessment will be based on the number of teams in translational/entrepreneurial phase. *(Ongoing)*

3.4.1.3 Reorganize the patent application structure to move it into the Research Office. Patent filings grew slightly from last year and patents issued increased from 17 in FY15 to 22 in FY16, reversing declines in recent years. The upward trend may well have resulted from the FY 15 review of administrative structures, reorganization of staff, and improvement of processes in support of this activity. This strategy was introduced to generate additional focus on this important area. Assessment will be based on the number of intentional disclosures, provisional patents and full patents. *(Ongoing)*

3.4.2 Serve as a Catalyst for Regional and Economic Growth

3.4.2.1 Capitalize on state and federal funding to develop large-scale technology projects through the NJIT Business Engagement Team (BET), which has expanded to include interested academic deans and identified eight high priority companies with whom to engage for the purpose of deepening its relationship with NJIT. NJIT and NJII are leading an effort to launch a New Jersey-wide I-Corps effort to extend this NSF program across the state's universities and incubators. Assessment will be based on the number of technology projects. *(Ongoing)*

3.4.2.2 Expand the university's presence in state, regional, and national economic development activities by inviting faculty members and students to participate in economic and technology development programs. NJIT hosts three NJ Talent Network programs, including advanced manufacturing. NJIT continued to lead the NJ MarketShift program with its focus on diversifying NJ's aerospace and defense companies. NJII ramped up its Healthcare Delivery

Systems iLab's work ($15M+/yr.) including assisting physicians to transform their practices by using electronic medical records. NJII hosts the NJ Unmanned Aerial Systems Test Site and the JP Morgan Chase-funded Healthcare IT cluster development program. As well, it also launched its Smart City Test Bed partnership with Newark and a dozen or more companies. Finally, NJII submitted and awaits final word on a well-received $240M, 5-year federal application to found the Innovative Medicines Manufacturing Institute in partnership with Rutgers, the State of NJ, Healthcare Institute of NJ, NJIT, and many others. Assessment of this tactic will be based on the number of economic development programs and funding. *(Ongoing)*

Objective: 3.5 Facilities and Administrative Planning

3.5.1 Optimize Start-up Processes and Resources

3.5.1.1 Provide flexibility of start-up funds usage for all new hires throughout their pre-tenure period by insisting that start-up packages provide access to funds for three years and may be extended in special circumstances. Progress on this tactic will be measured by the investment in start-up packages and successful completion of third-year and tenure reviews. *(Completed*)

3.5.1.2 Ensure that new faculty have fully functional research laboratory space upon appointment by assigning lab space at the time or right after the offer of acceptance. Additionally, new faculty hired in FY15-16 have had their laboratories set-up and ready in early September for Fall, and in the first week of January for Spring semester. In Fall FY17 lab renovations for new faculty for most faculty were completed by early September. Assessment will be based on the number of renovations labs ready within two months of the start of the semester when new faculty is hired. *(Completed).*

3.5.2 Assess and Prioritize infrastructure

3.5.2.1 Assess infrastructure and document capacity to determine ability to support scholarly research through the assessment and systematic evaluation of research labs and center spaces. Specific lab spaces have also been upgraded to meet research needs. Assessment will be based on research satisfaction surveys. *(Ongoing)*

3.5.2.2 Optimize existing infrastructure use and the prioritizing of needs for new facilities, equipment, and institutional infrastructure. By assessing research lab space, research needs and faculty hiring plan, specific research lab/center spaces will be identified and prioritized to meet high priority needs. Assessment will be based on research satisfaction surveys *(Complete; protocol is implemented and ongoing on yearly basis)*

3.5.3 Share Facilities with Council for Higher Education in Newark (CHEN)

3.5.3.1 Expand shared-use facilities, equipment and institutional support infrastructure, by expanding the University Heights Science and technology park. NJIT is also pursuing a "High technology Incubator" to promote collaboration between the universities. Progress will be measured by the number of companies in the incubator and total funding. *(Completed)*

3.5.3.2 Collaborate with industry to offer faculty and student access to equipment not otherwise available on campus, by arranging for the first piece of equipment, courtesy the Stryker Corporation, to be shared through the NJIT Makerspace. The Makerspace at NJIT will continue to foster relations with industry to provide shared-use equipment. Assessment of this tactic will be based on the number of users and projects associated with Makerspace. *(Completed)*

Objective: 3.6 Improve External Recognition on Scholarly Research (New objective)

3.6.1 Enhance Professional Recognition

3.6.1.1 Encourage and increase the number of faculty activities such as service on editorial boards, conference organizing committees, review panels and chairing teams/groups of professional experts on site visit teams, and recognize and reward these activities in a variety of ways. Progress on this tactic is based on the increase and number of faculty serving on conference committees, editorial boards and review panels. *(Completed but ongoing protocol for faculty nominations)*

3.6.1.2 Recognize and reward professional awards and honors. Help identify faculty and assist in submitting their nomination packages for state and national honors, such as National Academy of Inventors, NJ Hall of Fame of Inventors. Progress on this tactic will be measured by the increase and number of faculty receiving professional awards and honors. *(Completed but ongoing protocol for faculty nominations)*

3.6.1.3 Encourage initiatives that organize and promote conferences at NJIT. Progress will be measured by the number of professional conferences and events at NJIT. *(Completed but ongoing protocol for faculty nominations)*

Priority 4-Community

Objective: 4.1 Global Community

    4.1.1 Value Diversity

4.1.1.1 Adopt an NJIT definition for diversity that includes: race, sex, sexual orientation, gender identity and expression, marital status, age, religion, national origin, ancestry, citizenship, disability and veteran status. Following the April 2016 Diversity Plan Committee meeting we drafted a broad and inclusive definition of diversity, which, once approved, will be incorporated into the university's diversity plan. *(Ongoing)*

4.1.1.2 Accept diversity as a core value of NJIT by focusing on the creation of visible activities in support of diversity and multi-cultural affairs on the campus. The first "day of dialogue" was held in Jan 2016 as a tabling event in which the Diversity Committee and Residence Hall Association presented a mechanism for students to identify issues that they believe impact diversity on campus. As a result of the responses from the students, the most common themed response was related to micro-aggressions. A second program, dealing specifically with micro-aggressions, is being planned for February 2017. *(Ongoing)*

Theme week/month programming is coordinated by The Office of Campus Life and in conjunction with student organizations, campus departments and/or administrative offices. Activities include Hispanic Heritage Month; LGBTQ Awareness Month; Diversity Week; Black Heritage Month; One World Week; DiversiTEA conversation series; Customized/Interactive Diversity Workshops; Women's History Month (held in conjunction with the Murray Center).

    4.1.2 Support Student Diversity

4.1.2.1 Foster a safe university environment that respects differences and encourages inclusiveness. First Year Seminar has been expended from 10 to 15 weeks with attendance of 659 students. Expert instructors presented workshops on diversity, multi-cultural awareness, and inclusion. In addition, Title IX training for responsible employees is being conducted by Student Affairs and Human Resources has launched the new on-line Title IX training for all faculty and staff, which over 1,000 faculty and staff have completed.

4.1.2.2 Ensure that the university's academic curriculum creates global awareness and promotes tolerance and understanding among students. Issues of tolerance and understanding among students are addressed in Freshman Seminar courses.

4.1.2.3 Train dedicated staff in departments, schools and colleges to enhance understanding and communication with international students. Student staff participate in a week long training (prior to the beginning of each semester), as well as a summer reading, blog and a book club programs focusing on self-awareness, understanding multiple identities, social justice and event planning. Student staff participate in weekly staff meetings, biweekly individual supervision meetings and on-going professional development (e.g. guest speakers, local conferences, monthly training, etc.). *(Ongoing)*

    4.1.3 Simplify the Process for International Collaboration and Exchanges

4.1.3.1 Establish larger-scale, long-term exchange programs with universities in other countries. *(No progress reported)*

4.1.3.2 Streamline the approval process and assign individual responsibility for international agreements. The policies and protocols for international agreements and visiting scholars have been established and posted on the website. To date, we have more than 52 international collaborators through projects/agreements and visiting scholars program. The assessment will include the number and growth of international agreements. *(Completed)*

The Office of Global Initiatives is in charge of promoting these agreements through outreach programs to the entire student body. Examples of the outreach are: classroom presentations, study abroad fair, workshops, and one-on-one meetings with students. During the fall semester six workshops and 40 in-class sessions have been conducted.

4.1.3.3 Encourage and simplify visiting and courtesy appointments. The policies and protocols for visiting scholars and courtesy appointments have been established and posted on the website. At present, NJIT has 31 visiting international scholars. The assessment will include the number and growth of visiting scholars and courtesy appointments. *(Completed)*

4.1.3.4 Promote significant research projects between NJIT and international researchers. The Office of Research has been promoting international collaborative research through NJIT research centers. At present, NJIT has 52 international projects. The assessment will include the number and growth of international projects. *(Completed)*

4.1.4 Appoint NJIT Faculty as International Community Representatives

4.1.4.1 Leverage the globally diverse NJIT faculty as spokespersons on campus and abroad. *(No progress reported)*

4.1.4.2 Cultivate and communicate the global perspective of NJIT. *(No progress reported)*

Objective: 4.2 University Governance

4.2.1 Facilitate the Integration of Shared Governance

4.2.1.1 Acknowledge the importance of the faculty's role in the university community through the Faculty Senate. *(No progress reported)*

4.2.1.2 Recognize the importance of all other campus stakeholders and ensure their voice is heard through the University Senate. *(No progress reported)*

4.2.2 Cultivate an Atmosphere of Civility and Mutual Respect Across the University Community

4.2.2.1 Emphasize the dignity of all members of the university community and the respect they deserve. Respect, including "demonstrating cultural awareness and sensitivity in all interactions and Acts without bias in all interactions" is a core competency in the new, online non-aligned staff performance review process. *(Ongoing)*

4.2.2.2 Acknowledge the importance of the voice of the student body. *(No progress reported)*

Objective: 4.3 Diverse Faculty Leadership

4.3.1 Support Diversity

4.3.1.1 Establish a baseline for diversity assessment. The NJIT demographic data for 2016 Affirmative Action Program for Women and Minorities (AAP) has been gathered and the 2016 AAP statistics, analysis, and plan are being prepared. *(Ongoing)*

4.3.1.2 Expand the NJIT Affirmative Action Plan to include a comprehensive Diversity Plan. Over the last six months, the following diversity plan activities have been accomplished:

- Fifteen university diversity plans have been reviewed for process and content.
- Following the April 2016 Diversity Plan Committee meeting, the beginning of the diversity plan's introduction, including a statement of commitment, definition of diversity, and a statement of diversity excellence and expectations were drafted.
- A consultant produced a "business case" statement for diversity (HERC), a draft diversity plan outline (table of contents), and a draft "charge" to the diversity committee. In addition a map/matrix was created that shows the overlapping membership on four separate diversity related committees.

4.3.2 Coordinate Recruitment and Retention

4.3.2.1 Engage college and school deans to develop plans for achieving faculty diversity. Plan development pending completion of 2016 AAP. *(No progress reported)*

4.3.2.2 Increase coordination of efforts to recruit and retain women and minority faculty by appointing a diversity liaison officer at college and university levels. The Dean of each school has named a Diversity Liaison to act as a search committee resource in their school/college. The Diversity Liaisons work together to coordinate implementation of strategies to increase faculty diversity. *(Completed)*

4.3.2.3 Coordinate resources and information to recruit diverse faculty at college, school and department levels. The Faculty Senate voted unanimously to adopt guidelines in the Faculty Handbook which are designed to ensure that NJIT is able to attract a broad pool of outstanding candidates and to provide resources. The guidelines will help Faculty Search Committee members optimize the effectiveness of their time and effort.

4.3.2.4 Cultivate potential faculty through conferences and speaking engagements. *(No progress reported)*

4.3.2.5 Train search committees for accountability, especially in implicit bias awareness. Implicit bias awareness training for faculty search committee chairs was conducted September 21, 2016, by Dr. A.T. Miller, Vice Provost for Diversity and Inclusion at Cornell University. The university has committed to procuring web-based training in Implicit Bias awareness for all faculty search committee members for use throughout the coming academic year. *(Ongoing)*

In addition, HR attended the faculty meetings for SOM and CCS to introduce each school's Diversity Liaison for faculty search committees, and announced the official release of the approved Faculty Search and Selection Guidelines. We also shared the demographics of each school in order to encourage faculty to utilize the guidelines for their searches. *(Ongoing)*

Objective: 4.4 Diverse Administrative Leadership

4.4.1 Analyze the Availability of Potential Candidates

4.4.1.1 Develop a hiring program to promote diversity among administrators. *(No progress reported)*

4.4.1.2 Improve utilization of university databases containing administrator rank and diversity data. *(No progress reported)*

4.4.2 Develop and Sustain a Diverse Talent Pool

4.4.2.1 Establish a diverse administrative talent pool to yield opportunities and pathways for professional growth and advancement. We continue to establish a diverse talent pool of administrators, through targeted recruitment utilizing open-position advertising. Recruitment of women and underrepresented minority candidates through targeted open-position advertising is ongoing. *(Ongoing)*

4.4.2.2 Build relationships with professional organizations to diversify participation on the university's volunteer leadership boards and include a statement of commitment to diversity in all volunteer boards. *(No progress reported)*

Objective: 4.5 Alumni Engagement

4.5.1 Promote Alumni Engagement

4.5.1.1 Promote a culture of alumni engagement and satisfaction built on passion and pride for NJIT. Formed Golden Highlander Society; mailing to about 5,000 alumni with custom benefits and events; Golden Highlander pins distributed to all GH alumni.

New graduate letter sent to all new graduates with Alumni Membership Card and list of benefits and upcoming events. Corporate clubs at Mott MacDonald, UPS, PSEG, Microsoft, Stryker, Schneider, and AECOM. *(Ongoing)*

4.5.1.2 Engage alumni in student recruitment, campus life and career services. Formed Highlander Alumni Recruitment Network (HART) in conjunction with Admissions to participate in admissions fairs. Alumni staff participate in career fair check-ins; all alumni at career fairs are tracked, greeted by alumni staff, sent thank-you notes by Alumni Relations after attendance. Young Alumni Club hosted first Senior Soiree event for graduating seniors in Eberhardt Hall (approx. 60 students in attendance). Seniors invited to Speaking of Career event in New York; networking events throughout the year. PSEG and UPS participated in Freshman Learning Cohorts; included online mentorship, panel discussion in class; on-site visit. *(Ongoing)*

4.5.1.3 Develop a strategic plan for alumni relations that employs best practices from across higher education and at peer institutions. Developed plan of work for alumni staff members, part of FY17 objectives. *(Ongoing)*

4.5.2 Continuous Improvement of Alumni Engagement

4.5.2.1 Set clear, measurable goals and objectives for the improvement of alumni engagement. Goal of 700 unique alumni attending events for FY17; approx. 600 to date. Developed a standard operating procedure based on industry best practices to enhance alumni engagement before, during and after an event. *(Ongoing)*

4.5.2.2 Create metrics and establish standard reports on alumni engagement. Instituted Alumni Directory Project in FY15, about 4,000 new pieces of information for alumni new or verified. Developed Alumni Satisfaction Survey; sent to 55,000 alumni; 900 responses so far; plans to develop engagement ranking based on results. *(Ongoing)*

4.5.2.3 Use social media to build a digital alumni contact list. Purchased iWave research software. Purchased Evertrue social media software to measure and increase social media engagement. Increased LinkedIn members from 5,000 to 5,700. Created Throwback Thursdays for Facebook, Instagram. *(Ongoing)*

Priority 5-Investments

Objective: 5.1 Educational Investment

5.1.1   Promote Teaching Excellence

5.1.1.1 Develop the Institute for Teaching Excellence which held its inaugural lecture in September. The Center was opened in a temporary location in Cullimore Hall for Fall 2015 semester. It is actively providing resources and programs to develop faculty, lecturers, adjuncts, and graduate students. The Institute will move to its permanent home in the Central King Building in spring 2017. Completion of the permanent location of the Institute for Teaching Excellence will be the assessment for this tactic. *(Ongoing)*

5.1.1.2 Provide guidance to instructors in developing their course learning outcomes and syllabi, using the appropriate surveys and assessments. This will help monitor and guide curricular change. *(Ongoing)*

5.1.2   Improve Academic Support

5.1.2.1 Develop a 'university commons' by constructing such a space in the Central King Building. This facility will provide an integrated learning space for collaboration and tutoring. This space is set to open in January 2017 and will include the writing center and the math emporium. Currently, the feasibility of relocating the Learning Center to the commons is being studied and costs are being developed. Completion of the university commons will be the assessment for this tactic. *(Ongoing)*

5.1.2.2 In the Martin Tuchman School of Management, two recently completed labs provide student interaction and collaboration in a technology rich environment. The College of Engineering is completing the design of the Makerspace, which will allow hands-on collaboration for students in all disciplines. Additional spaces will be constructed in subsequent fiscal years. Completion of the Board approved capital projects related to this tactic will be the assessment outcome. *(Ongoing)*

5.1.3   Revise Non-Tenure Track Compensation and Career Tracks

5.1.3.1 Revise the current compensation and advancement structure for non-tenure track instructors through the formation of the Subcommittee on Non-Tenure-Track Instruction of the Faculty Senate Committee on Faculty Rights and Responsibilities (CFRR) which addresses issues of hiring and promotion policy for lecturers. It does not address adjunct status nor does it discuss compensation levels for lecturers. It does propose moving hiring and promotion policy to the Faculty Handbook and the Provost's Office, in line with how Faculty Promotion and Tenure are now handled. *(Ongoing)*

5.1.3.2 Create a non-tenure track full-time Professor of Practice position and seek the position's endorsement by the Faculty Senate. The Professor of Practice position engages individuals who possess contemporary expertise in fields such as business, industry, government, the arts and the

professions. The will be assessed the number of Professors of Practice hired and by student satisfaction with courses offered by them. *(Ongoing)*

Objective: 5.2 Faculty Renewal

5.2.1 Engage in Strategic Hiring

5.2.1.1 Develop five-year hiring plans for each department, college, and school. A comprehensive hiring plan spanning FY17 – FY21 has been developed at the college/department level. This list further defines the number of Tenured/Tenured Track, Performance/Opportunities Hires, University Lecturers, Professors of Practice, and Research Professors. This tactic will be assessed based on the actual faculty hiring versus the plan for each year. *(Ongoing)*

5.2.1.2 Encourage joint academic appointments and the development of clear guidelines for rewarding faculty who engage in research and education in multiple departments. In the past two years there have been 4 joint appointments. In addition, the Associate Provost for Research has identified research clusters which foster interdisciplinary research: Center for Brain Imaging, Big Data Center, Cybersecurity Center, Center for Solar Research, Center for Heliophysics, Center for Natural Research Development and Protection, and Center for Building Knowledge. Progress on this tactic will be assessed based on the completion of the guidelines and number of joint appointments made per fiscal year. *(Ongoing)*

5.2.1.3 Develop a plan to hire tenure-tenure track and tenured faculty in interdisciplinary areas. The current faculty recruitment process is competitive and our faculty start-up packages are competitive given the STEM fields that we are recruiting for. This tactic will be assessed by examining the number of tenure-tenure track faculty hired versus the established hiring plan per college. *(Ongoing)*

5.2.1.4 Maintain an appropriate balance between faculty ranks by addressing the issue in the current hiring plan. As mentioned in the first tactic, the comprehensive hiring plan spanning FY17 and FY21 promotes balance among the ranks and also promotes opportunity hiring. Progress will be assessed against targets set in 2020 Vision. *(Ongoing)*

5.2.1.5 Enhance faculty diversity through targeted recruitment and retention, by setting up a pool of funds for targeted hires. NJIT is a member of Higher Education Recruitment Consortium (HERC), which advances the ability of member institutions to recruit and retain the most diverse and talented workforce and to assist dual-career couples through: comprehensive regional and national higher education jobs websites, partnerships with associations, societies, and publications that serve women and minorities, and conference attendance to reach out to women and minority jobseekers with a special emphasis on STEM professionals. Traditional diversity metrics, such as the number and percentage of underrepresented minority and women faculty hires, will be used to assess progress. *(Ongoing)*

5.2.1.6 Develop family-friendly hiring practices by becoming a member of the Higher Education Recruitment Consortium (HERC), which works to connect academic spouses and partners with employment. As a member of the New Jersey - Eastern Pennsylvania - Delaware chapter of the Higher Education Recruitment Consortium (HERC), which supports the efforts of each of its member institutions to recruit and retain outstanding faculty, administrators, and staff through the sharing of information and resources. NJIT's HERC membership allows us to facilitate connections with other local colleges and universities that can help with dual-career issues. HERC maintains its own list of dual-career resources and provides a dual-career search engine as well. Faculty hiring outcomes will be examined to determine if academic spouses and partners were able to obtain employment if requested. *(Ongoing)*

5.2.1.7 Develop a mentoring plan for both faculty and instructional staff by setting up specific plans within each college. CSLA reports 4 out of 6 departments have developed department-specific mentoring plans for research and instruction. The remaining 2 departments are working on development. This tactic will be assessed based on the completion of the mentoring plan in each of the Colleges. *(Ongoing)*

5.2.2 *Refine Metrics for Faculty Assessment*

5.2.2.1 Understand the key factors in faculty success by asking colleges to offer suggested metrics to identify useful indicators by the end of the year. *(Planned)*

5.2.2.2 Benchmark teaching load based on scholarly research and funding at comparable institutions by analyzing the national Delaware Cost Study. *(Completed)*

5.2.2.3 Implement a transition-to-retirement program where faculty can reduce hours, responsibilities, and compensation by offering a Faculty Separation Incentive Program (FSIP). *(Completed)*

Objective: 5.3 Research Investment

5.3.1 *Automate Pre- and Post-Award Administration*

5.3.1.1 Achieve excellence in the delivery of services in sponsored research through automation by fully implementing the Ekualiti KC – Grant Management Software system which was purchased at the end of FY15. Training started February 2016. Future Modules such as IBC IAUCUC will go live in January 2017. Streamlyne-based proposal submission process was implemented and more than thirty proposals have been submitted this semester. This tactic will be assessed based on the percentage of submissions being made through the system versus the total number of submissions *(Ongoing)*

5.3.1.2 Streamline grants management by launching electronic processing of grant expenses. A Banner Finance module will expedite grant invoicing and the collection of grant receivables, improving the university's 'grant-related' cash-flow. A protocol is being developed to proactively manage and follow-up on grants and contracts expenditures versus elapsed duration

of the awards to ensure optimal grant management. The process of linking Banner to online grant billing and invoices has been started but still requires some manual intervention. Percent complete progress on the implementation of the Banner Finance module will be the assessment for this tactic. *(Ongoing)*

5.3.2   Improve Research Resources, Services, Equipment, and Facilities

5.3.2.1 Strengthen research resources and services by submitting a proposal to the National Science Foundation for a S-STEM Scholar Program–Pathway to a STEM educated workforce. Two Letters of Intent were filed with the National Science Foundation to be able to compete for the Inclusion across the Nation Communities of Learners of Undergraduate Underrepresented Discoveries in Engineering and Science. *(Completed)*

5.3.2.2 Collaborate with other universities for enhanced sharing of assets by initiating multi-institutional collaborations. These include the establishment of NJIT Institute of Brain and Neuroscience Research and its partnerships with Rutgers University, Robert Wood Johnson Medical School, NJ Medical School and Princeton University. NJIT participates with RUN and RWJMC in the multi-institutional Faculty Seed Grant in Neuroscience. One grant was awarded to NJIT and the NJ Medical School. *(Completed)*

5.3.2.3 Promote environmental health and safety programs by appointing a new Director of Environmental Health and Safety in March 2016. Health and Safety programs are being re-written as a part of an overall Environmental Management System for NJIT. *(Completed)*

5.3.2.4 Update existing common equipment through the Facilities Master Plan which is being re-examined and aligned with *2020 Vision*. Space planning has been ongoing for the past several months with a recent modification of the total student population and associated faculty and research metrics to the year 2030. The final plan is anticipated to be completed in June 2017. Annual expenditures on common equipment versus the departmental requests for such equipment will be utilized to assess progress on this tactic. Completion of the updated Facilities Master Plan will be used to assess this tactic. *(Ongoing)*

5.3.2.5 Develop a university policy on lab space by updating the Facilities Master Plan. Laboratory space metrics have been scrutinized during the space planning effort. These will be the basis for future research space needs planning within the Facilities Master Plan. The progress on this tactic will be assessed based on the actual development of new and renovated labs versus the recommended space metric. *(Ongoing)*

5.3.3 Enhance Institutional Support for Non-faculty Research Staff
5.3.3.1 Establish policies and guidelines for appointments of research professors. *(Completed)*

5.3.3.2 Develop a policy for professional growth and institutional support of post-doctoral fellows, research professors, and other non-faculty research staff by fully engaging them with the Research Office in promoting their research. They participated in the Faculty Research Showcase, and NJIT Research Center Showcase events. *(Ongoing)*

Objective: 5.4 Infrastructure Support for Facilities and Technology

 5.4.1   Update the Facilities Master Plan for Physical Planning Decisions

5.4.1.1 Update the Facilities Master Plan, including the evaluation of space utilization for effective physical planning decisions process by aligning it with the 2020 Vision. This began in January 2016. Collaboration on the master plan has occurred through shared governance committees and campus interviews. The senior administration requested the process be expanded to include facilities planning to 2030. Student headcount, faculty, staff, and research space is being examined to that end. The updated facilities master plan is expected to be completed by June 2017. Completion of the Facilities Master Plan will be the metric to assess this tactic. *(Ongoing)*

5.4.1.2 Ensure facilities development includes considerations for digitally-enabled common, instructional and collaborative spaces; short term major construction projects; construction of an event center, renewal of capital assets, and parking. Construction of the Wellness and Events Center began in the Fall 2015 and is expected to be completed in the Fall 2017. There is also a financial plan for the renewal of capital assets which will provide for over $20M annually by 2020. Collaborative instructional spaces are planned and are being constructed in the Life Science and Engineering Building and the Central King Building. A new parking garage opened in the summer of 2016 to provide safe, convenient parking for the NJIT community. The Facilities Condition Index, which will be produced through the facilities condition assessment effort being undertaken currently, will be the metric used to assess this tactic going forward. *(Ongoing)*

 5.4.2   Use the Technology Plan for Campus Technology Decisions

5.4.2.1 Update the Technology Plan for campus technology by establishing an IST Capital Replacement and Renewal Schedule with original funding sources. This has been produced and shared with the Finance division. It is reviewed every six months. Restructuring of the digital learning and technology support functions for alignment with 2020 Vision is being implemented with formal announcement to the campus community planned for the new academic year. The technology plan document is being updated for shared governance review during the new academic year. Progress on this tactic will be assessed based on the actual versus planned IST Capital Replacement and Renewal Schedule improvements. *(Ongoing)*

5.4.2.2 Evaluate the current use of funds for technology decisions by allocating $500K in the FY2017 capital budget for the renewal of technology equipment. Equipment is being installed at the Washington Street colocation facility (Old Macys building) to provide redundancy for the campus Internet services. Equipment ordered and planned for spring 2017 deployment. IT service continuity –Backup servers and storage systems being removed from GITC5 Data Center and moved to CKB and Student Mall. This will provide for continuity of some key IT services in the event the GITC5 Data Center is unavailable. Installation is scheduled for late spring 2017. In addition, lifecycle replacement of the virtual private network (VPN) servers which are at end

of life, will be deployed in spring 2017. Progress on this tactic will be assessed based on the completion of the planned renewal of technology equipment versus actual. The consideration of technology equipment renewal will continue in subsequent fiscal years. *(Ongoing)*