Program Summary

**Task Force:** Thank you for the work that went into this report. Through the USAP process, we are working to create at IPFW a culture of continuous improvement, and we think that setting specific and measurable goals is an important part of getting individuals and units at IPFW to think differently about planning and the future.

We are excited about the director's willingness to be more involved in education.

**Other Comments:**

Each unit that is directly responsible for student learning (whether the unit is academic or academic support) should have included at least ONE unit goal (among its other goals) that aligns with EITHER Goal I.A.1 or I.A.2. Please establish this goal for your unit and ensure it is included on next year's report.

**Criterion:** #1: Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

**Question:** Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

The mission of the Wireless Technology Center is to contribute to the intellectual and economic advancement of Northeast Indiana by providing broad leadership in technology and innovation. The WTC aims to involve faculty from IPFW and other universities nationally and internationally in joint grants and publications.

**Criterion:** #2: Accomplishments - Please list significant accomplishments from the last three years as they align with Plan 2020 goals

**Question:** I. Foster Student Success - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area I: Foster student success.
1. Foster Student Success


- Providing research opportunities for several undergraduate researchers every academic year.

I.C. Process Goals: Increase interdisciplinary and graduate programs and internationalization of the curriculum.

I.C.2. Review, prioritize, and expand international agreements.

- Joint grants and publications with three other IPFW faculty, some from different departments.
- The WTC has developed and proposed several international collaborations, which have been signed by the IPFW administration. The Center has been the entity that has hosted visiting researchers under these agreements. Furthermore, this work has led to joint publications.

I.E. Process Goal: Develop signature programs

I.E.1. Identify and develop signature programs that respond to regional needs, build on faculty expertise, and uniquely distinguish IPFW from other institutions.

- The Center has received external funding of about $375,000 from Allen County and City of Fort Wayne. The goal of the project is to be the foundation for re-enlivenment of the RF electronic industry in Fort Wayne. First year goals have met with success beyond our plans.
- The Wireless Technology Center uniquely distinguishes IPFW as few peer institutions have Centers of Excellence and even fewer a Center in Wireless Communication.
- The WTC was established in response to regional needs, builds on faculty expertise, and closely partners with regional companies.

**Question:** II. Creation of Knowledge - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area II: Promote the Creation, Integration, and Application of Knowledge.
1. Promote the Creation, Integration, and Application of Knowledge

- Produced more than five journal and conference papers in the last three years.
- The Center has received funding from local government, federal government, and private industry.
- As a result of external funding the Center has added laboratory equipment worth about $750K.

**Question:** III. Regional Hub - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area III: Serve as a Regional Intellectual, Cultural, and Economic Hub for Global Competitiveness.

1. Serve as a Regional Intellectual, Cultural, and Economic Hub for Global Competitiveness

III.A. Expand meaningful collaborations and research opportunities with regional, national, and global partners.

III.E. Provide leadership in regional economic development.

- The Center provides technology and innovation leadership in regional economic development by directly contributing to start-up creation.
- The Center has sophisticated lab equipment
- The Center has built relationships with local, state, and federal government, such as the Capital Improvement Board of Allen County, Indiana Department of Homeland Security, and the Department of Defense.

**Question:** IV. - Create a Stronger Univ - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area IV: Create a Stronger University through Improving the Support of Stakeholders and the Quality and Efficiency of the Organization.
Question: Other Accomplishments - Please list any other significant accomplishments from the last three years that do not align with Plan 2020.

Criterion: #3: Accreditations - Program specific accreditation and status

Question: Accreditations - What program-specific accreditations and status do you have, if any?

Question: Constraints/Benefits - How do these accreditations constrain or benefit the work of your unit, if applicable?

Criterion: #4: Laws and Mandates - Federal and state laws or mandates that your unit addresses

Question: Federal and State Laws - What federal and/or state laws or mandates do you address, if any?

Question: Constraints/Benefits - How do these federal and state laws or mandates constrain or benefit the work of your unit?

Criterion: #5: Inefficiencies - Activities that you spend resources on inefficiently or in ways that do not support the mission.

Question: Inefficient use of resources - On what activities, if any, do you spend resources (money, time, people, etc.) inefficiently or in ways that do not support the mission of your unit or the university? List as many as apply.

Criterion: #6: IR and Budget Review - Review of your department profile and budget

Question: Contextualize IR data - Upon review of your IR Department Profile (for academic units) and FY 14-15 Budget information, are there any data you want to correct or contextualize? To view your profile or budget visit the Office of Institutional Effectiveness website: http://www.ipfw.edu/offices/ir/profiles/
Indiana University-Purdue University Fort Wayne (IPFW)
Program Write-up with Task Force Comments

WTC Wireless Technology Center

**Criterion:** #7: Goal One - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:** 1. Comment on the specificity of the goal:
   - Far too broad

2. Comment on the goal's measures:
   - Too many diverse measures for a single goal. Also quantitative objectives would improve.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):
   - Graduate students needed and the department is concerned that local pool would not provide those graduate students.

4. Comment on the goal’s relevance:
   - Possible Relevant

5. Comment on the timeline of the goal:
   - Ongoing

   Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Techonology and Innovation Leadership

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.
I. Promote the Creation, Integration, and Application of Knowledge

II. Serve as a Regional Intellectual, Cultural, and Economic Hub for Global Competitiveness

III.A. Expand meaningful collaborations and research opportunities with regional, national, and global partners.

III.E. Provide leadership in regional economic development.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

1. Publish
2. Apply for grants
3. Develop technology solutions of practical interest
4. International collaborations
5. Run for a position on the Board of Governors of IEEE Standards Association and/or a standards group

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

1. Number of citations per year (to measure the impact of the research)
2. Technology transfer milestones
3. Grants
4. Number of publications
**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

There are several challenges, each of which is significant.

The goal of technology and innovation leadership requires capable full-time graduate students. IPFW has difficulty attracting full-time graduate students. IPFW needs to become better known nationally and internationally, perhaps using PUWL for this. While the large majority of students will always come from Northeast Indiana, we cannot have a high-quality graduate program only based on local students.

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

This is an ongoing goal.

**Criterion:** #8: Goal Two - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:
   Okay—identifying the kind of start-up would make it more tangible

2. Comment on the goal's measures:
   Okay

3. Comment on the unit's ability to achieve the goal (include a consideration of the departmental profile and budget data):
   Mentions obstacle of institution's lack of entrepreneurial culture and reluctance to support.

4. Comment on the goal's relevance:
   Possibly relevant

5. Comment on the timeline of the goal:
   Optimistic
   Possible opportunities for collaboration or suggestions for addressing a gap:
   There must be something here, possibly working with School of Business.

**Question:** Unit Goal - What is your unit goal?

Create a start-up company; this would be the first Purdue start-up in Fort Wayne.

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write "NA" or clarify.

I. Promote the Creation, Integration, and Application of Knowledge

II. Serve as a Regional Intellectual, Cultural, and Economic Hub for Global Competitiveness

III.A. Expand meaningful collaborations and research opportunities with regional, national, and global partners.

III.E. Provide leadership in regional economic development.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

- Interact with venture capital companies, entrepreneurs, and Purdue Research Foundation
- Develop IPFW faculty entrepreneurship policy

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?
- Agreements with Purdue Research Foundation and IPFW signed
- Patent application(s) filed
- Business plan; revenue milestones

This goal is considered worthwhile even if ultimately unsuccessful at least because it will increase the likelihood of success for the next university start-up in Fort Wayne.

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?
The track record at IPFW in creating companies is insignificant.

At IPFW generally there is lack of knowledge about entrepreneurship; administrators have no such direct experience either currently or previously as faculty. Some even believe entrepreneurship has no place on campus. This needs to change. IPFW must support (without additional resources, but with attitude) faculty and student entrepreneurship.

The considered change to IU as the managing university does not seem helpful and may affect negatively the market value of the technology, the company, and the opportunities otherwise available to us.

Everyone, including the leadership at Purdue, must understand that research and start-ups at IPFW are not and cannot be different from research and start-up companies at other universities. This will be a Purdue start-up. It is not different from any other start-up created through PRF.

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Between one and three years.

**Criterion:** #9: Goal Three - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

Very broad, but worthy. Our concern with centers like this is their disconnect from students, so the director’s interest in being more involved in education is welcome. Action steps are VERY ambitious however. Probably could start with any one of those projects.

2. Comment on the goal’s measures:

Need more if going to measure progress toward all three action steps.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

requires external collaboration

4. Comment on the goal’s relevance:

Relevant

5. Comment on the timeline of the goal:

Reasonable

Possible opportunities for collaboration or suggestions for addressing a gap:

Honors program, Dept. of Electrical and Computer Engineering

**Question:** Unit Goal - What is your unit goal?

Increase the impact of the Center on the educational mission of IPFW.

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

1. Foster Student Success

I.B.2. Expand impact and profile of Honors Program.

I.B.3. Expand number of degree programs that have gateway courses.

I.C.1 Develop and promote interdisciplinary programs where there are sufficient university assets available and anticipated employment needs.
**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Low in the near term, but medium in the long term.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

- Develop a Wireless Revolution course for non-engineering students
- Explore the possibility of a minor/concentration in communication systems. Another program to which we can contribute together with other faculty is technology innovation and entrepreneurship.
- Develop an elective for electrical/computer engineering students

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Course proposals submitted

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?
The Department of Electrical and Computer Engineering may need adequate LTL budget.

It may be necessary for the Honors Program to be funded better.

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Currently, there is no technical elective in wireless communication due to curriculum committee/department issues.

For related reasons the engineering department does not offer any courses to non-engineering students.

The Department of Electrical and Computer Engineering must be created. The curriculum committee has to allow other technical electives.

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

three to five years

**Criterion:** #10: Goal Four - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.
**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #11: Goal Five - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.
**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #12: Goal Six - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Question: Resources - Are you able to accomplish this unit goal with your current resources?

Question: Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Criterion: #13: Goal Seven - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Question: Unit Goal - What is your unit goal?

Question: IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

Question: Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Question: Actions - What action(s) does your unit plan to take to support this unit goal?

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Question: Resources - Are you able to accomplish this unit goal with your current resources?
**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #14: Goal Eight - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?
Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Criterion: #15: Goal Nine - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Question: Unit Goal - What is your unit goal?

Question: IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

Question: Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Question: Actions - What action(s) does your unit plan to take to support this unit goal?

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Question: Resources - Are you able to accomplish this unit goal with your current resources?

Question: Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?
Criterion: #16: Goal Ten - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Question: Unit Goal - What is your unit goal?

Question: IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

Question: Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Question: Actions - What action(s) does your unit plan to take to support this unit goal?

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Question: Resources - Are you able to accomplish this unit goal with your current resources?

Question: Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?