

# NDSU Technology Action Plan

## I. Submittal Form

<b>NDSU ORGANIZATION OR UNIT</b>			
Residence Life Student Government			
<b>TITLE OF PROJECT</b>			
<b>Wireless Internet Expansion Through the Residence Halls</b>			
<b>Project Duration</b>	<b>From: 11/2/09</b>	<b>To: 11/2/20</b>	
<b>Type of Project (Check one)</b>	<b>New</b> <input checked="" type="checkbox"/>	<b>Previously Submitted</b> <input type="checkbox"/>	<b>Renewal</b> <input type="checkbox"/>
<b>Total Technology Fee Request \$183, 793</b>			
<b>Project Director</b> Rian Nostrum Andy Schlicksup	<b>Campus Address:</b> Rian Nostrum ( Bison Court West 104) Andy Schlicksup (Student Government office in the Memorial Union)  <b>Phone: Rian Nostrum (1-7890)</b> <b>Andy Schlicksup (1-8066)</b> <b>Fax:</b> <b>E-mail: Rian.Nostrum@ndsu.edu</b> <b>Andrew.Schlicksup@ndsu.edu</b>		
<b>Name (Type or Print)</b>	<b>Signature</b>	<b>Date</b>	
<b>Project Director</b> Residence Life Andy Schlicksup			
<b>Unit Head</b> On behalf of Residence Life, Karla Thoennes On behalf of Student Government, Andy Schlicksup			

**Executive Summary (maximum of 175 words)**

**Almost every student that comes to NDSU will live in one of the residence halls. These halls do not have wireless internet access in every room. Residence Life is currently working to expand the wireless internet access but it's a very large project. We are looking for assistance in purchasing wireless routers, switches, wiring and installation, and any other building upgrade needed to expand wireless internet access to every room.**

**This service will allow our students to have a better study environment in their home on campus. This improvement will better facilitate study groups will allow meet and allow more freedom to study throughout the buildings. Currently, if groups form in the residence halls, they will have to share a computer and leave it at the desk since they must connect directly.**

**Adding this service will greatly assist our current Reslife Students on campus and will also attract a larger number of prospective students to the University. Prospective students are very surprised when they learn NDSU does not have wireless internet access in residence life.**

# NDSU Technology Action Plan

## II. Project Overview

---

### 1. How does this project meet student needs?

There are a growing number of students bringing laptop computers to campus every year. Right now, there is not complete wireless access in the Residence Halls. Having more wireless internet access in the Residence Halls would be more conducive to students' study habits. This will allow for more collaboration through group studying in their home, on campus.

---

### 2. What audience does this project directly serve? What audience is indirectly served? How many students are affected?

This project directly serves the 3,500+ students living in Residence Halls on campus. Indirectly, every future student who lives on campus will benefit from this expansion. Since freshmen are required to live on campus, this will affect almost everyone.

---

### 3. For projects that target a subset of NDSU's students, please describe the possibility for broader application in the future.

It will benefit NDSU as a whole by attracting more prospective students to our campus. Once they are here, they will benefit from the expansion of wireless internet access in the freshman residence halls

---

### 4. Describe the both immediate and long term impact of this project.

As an immediate impact, we could use the additional funding to dramatically increase and expand wireless access in residence halls. This will improve our students' ability to study in the comfort of their home on campus. Long term, we will have fully updated NDSU to have wireless access in every room on campus. This will be a key selling point for bringing in more students to NDSU. It will help with retention and improve the experience for every freshman living on campus.

---

### 5. Who will pay for ongoing expenses following the technology fee funded portion of this project (e.g., who will replace hardware or software after it has reached it's end of life)?

Residence Life currently has a budget to maintain and expand wireless services. They will be in charge of continuing this service.

---

### 6. Describe how this project will follow best practices in information technology and who in ITS was consulted regarding this project?

Currently, Residence Life works with Terry Wieland and his staff to determine which halls need updating and what the cost for this project will be. We will continue to use their expertise and input for expanding wireless internet.

---

### 7. What service on campus is most similar to the one proposed here? How does this project differ?

There has been a movement to add wireless internet access all around campus and we feel residence halls need to be addressed next in this effort. Currently, only the common areas have access to wireless routers and the few rooms near the common areas.

### **III. Project Description**

**We are hoping to continue to provide services for NDSU students. Many prospective students are surprised to find NDSU does not offer wireless internet access in the all of the residence hall rooms on campus. It continues to be a concern of students once they arrive on campus.**

**Through this project, we want to addresses these concerns. Since it is an expensive project, we are hoping to find funding from as many sources as possible. We also recognize the strides NDSU has made over the last few years to update much of wireless access on campus. We think the next step is adding wireless internet access to every room in all of the residence halls. Students are accustomed to using laptops in the comfort of their homes and right now most students on campus are forced to connect to the internet using Ethernet cables. This limits the amount of computers that may be in a room at one time. Therefore, students are not able to form study groups in their rooms unless they want to share computers. Every year more students are bringing laptop computers to campus for the added convenience. However, if they live on campus, they lose some of this convenience. Unless they decide to buy a longer Ethernet cable, they must stay at the desk to use the internet in their room.**

**Residence Life is currently working to expand wireless internet access in the residence halls. With help from TFAC, Residence Life will be able to speed up the completion of this project. It will still take many years, but the additional funding with give an important boost. This boost will add service to many of the rooms and help address the concerns we have mentioned above.**

# NDSU Technology Action Plan

## IV. Milestones

List the date for each project milestone. These milestones should represent the *significant* accomplishments that will be associated with the action plan. For each milestone, please indicate its expected outcome and the means for assessing that outcome. (The table may be extended if the number of milestones exceed five.)

	<u>Date</u>	<u>Milestone</u>	<u>Expected Outcomes</u>	<u>Means of Assessment</u>
1.	January 1st, 2010	Purchased equipment with new funding	Purchase roughly 25% of hardware needed for the total project	Having the equipment and assessing where it will go first
2.	May 5 <sup>th</sup> , 2010	Continuing expansion into the Residence Halls with the purchased equipment	Wireless access will greatly increase in the residence halls	Using Terry's expertise to distribute on a needs basis
3.	July 31 <sup>st</sup> , 2010	Evaluate Residence Life budget to allocate as much funding to wireless internet expansion	Continuing the expansion with Residence Life's budget	Having Residence Life find the additional funding over the next 11 years

Residence Life has already allocated their budget for the year, so additional funding we may receive from TFAC will be used immediately to continue with the wireless internet expansion process. Residence Life will work with Terry Wieland and continue with the expansion if they have more funding. When they have looked through their budget in the summer, they will allocate as many additional funds as possible to keep this project moving forward. Looking at what is currently available in Residence Life's budget, it will take an additional 11 years if we receive the funding from TFAC at the requested amount. We are willing to look into any other means of funding to speed this project along.

# NDSU Technology Action Plan

## V. Supporting Documentation

There are a lot of students at NDSU that have been asking for this service. Below are some of the testimonies of NDSU students. These are the representatives of the Men's and Women's low-rise residential halls and the High-rise residential halls for Student Government. More testimonies are available upon request.

"There are two points that people bring up over and over again. First, they want to be able to use a computer anywhere in a room without having to worry about the Ethernet cable. Without an Ethernet cable, you can lie on your bed or sit in a chair and not have a cable stretched across the room or not able to reach. The way it is now pretty much forces you to sit at the desks in order to use your laptop computer.

Second, wireless would make it easier to study in groups without having to worry about sharing computers or plugging in Ethernet cables. With Ethernet cables, you're limited to either studying in pairs or in the lounge areas."

**Olivia Christenson**  
Women's Low-rise Senator

"Since most rooms don't have access to wireless internet, residents have to plug into Internet jacks that are on one side of the room. It is very easy to trip on Ethernet cables going from one side of the room to another. This can result in breaking the cable, knocking a laptop off a desk, or even injury to the person who tripped.

The installation of wireless internet will open up new opportunities for studying. Students will be able to study in group within someone's room, rather than a sometimes crowded and noisy lounge. Group studying can lead to greater understanding of material. Hence, this project will enhance the academic environment in our residence halls."

**Michael Nagel**  
High Rise Senator

"I think not having wireless internet access in all residence hall rooms has a negative impact on prospective students. Most college students have a laptop computers and will benefit from an increase in wireless internet access. We as a University need to strive to maintain national standards when it comes to technology. Ethernet cables are a thing of a past and students aren't interested in being tied down in one location for their Internet access."

**Michael Vandervoort**  
Men's Low-rise Senator

# NDSU Technology Action Plan

## VI. Budget

Edit the dollar amounts in the “clear fields.” (click in area so that it appears “gray,” then edit) The “darkly shaded fields” can perform arithmetic. Simple use Ctrl A to “Select All” and then press function key 9, F9.

<b>NDSU ORGANIZATION OR UNIT</b>		
Residence Life Student Government		
<b>PROJECT DIRECTOR(S)</b>		
Andy Schlicksup		
<b>A. Salaries and Wages (Number)</b>	<b>Number of Months</b>	<b>FUNDS REQUESTED</b>
1. Staff (TBD)		\$ 0.00
2. Graduate Students (TBD )		\$ 0.00
3. Undergraduate Students (TBD )		\$ 0.00
<b>B. Total Salary and Wages (Sum A.1., A.2., and A.3.)</b>		\$ 0.00
<b>C. Fringe Benefits</b>		\$ 0.00
<b>D. Total Salaries (Sum B and C)</b>		\$ 0.00
<b>E. Equipment (List each item; include installation and maintenance costs in your estimates)</b>		
1. Estimate of cost of wireless routers is \$675. 345 wireless routers are needed.		232,875
2. Estimate for 8 of the buildings which will need an upgrade		258,000
3. Estimate for Installation and H/W		173,000
4. Estimate for upgrading Core network to 345 access points		36,000
5. Estimate for Aux. access point power		34,100
<b>F. Total Equipment (Sum items in E.)</b>		\$ 733,975
<b>G. Materials and Supplies (List each item)</b>		
1.		
2.		
3.		
4.		
5.		
<b>H. Total Materials and Supplies (Sum items in G)</b>		\$ 0.00
<b>I. Total Salaries; Equipment; Materials and Supplies (Sum: Line D + Line F + Line H)</b>		\$ 733,975
<b>J. Total Technology Fee Request</b>		\$ 183,793
<b>K. Match (Describe in Match Section)</b>		\$ 550,182
<b>L. Total Project Expenditure (Sum: Line J + Line K)</b>		\$ 733,975
<b>Name (Type or Print)</b>	<b>Signature</b>	<b>Date</b>
<b>Project Director</b> Andy Schlicksup Residence Life		
<b>Unit Head</b> On behalf of Residence Life, Karla Theoennes On behalf of Student Government Andy Schlicksup		

# **NDSU Technology Action Plan**

## **VII. Budget Justification**

**Our budget is a liberal assessment which comes from Terry Wieland and his staff. These are the best numbers we are able to provide at this time. We are leaving off salaries because they were not included in the budget we received and I believe it will be done by individuals as part of their job description. The number of access points needed to expand the wireless internet access is broken down by hall, a listing of which building will need the building upgrade, auxiliary access point power is listed for each hall, and estimated installation and hardwiring cost is detailed more in the attached budget.**

# NDSU Technology Action Plan

## VII. Budget Match

As we can see above, we are proposing a match system. Since roughly 25% of the student body lives on campus in the residence halls listed, we are asking for 25% of the total budget to come from TFAC. The other 75% will be the responsibility of Residence Life to find additional funding. This means we hope to receive at least \$183,793 from TFAC and Residence Life will be responsible for the remaining \$550,182. All of the money will be used in the recommendation of Terry Wieland and his staff to update the residence halls through his team's assessments. This is a very important project but it is also very expensive. Even with this proposed matching system, the project will take roughly 11 years. Residence Life will continue to free as much space as possible to contribute more funding to the expansion process and we will also look to see if any other funding can be found. The more funding we receive from outside sources the faster this upgrade can be completed.